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

Gustavus Electric Company
Proposed Lease
ADL 107234
Finding and Decision
AS 38.05.035(e)

I. Proposed Action:

The Gustavus Electric Company (GEC) has requested an upland lease for constructing and operating a hydroelectric facility in the vicinity of Kahtaheena River (Falls Creek), located 3 miles east of Gustavus. The development plan is shown on Attachment A. The lease area, estimated to be 160.11 acres, is defined as all State land within the project boundary as set by the Federal Energy Regulatory Commission (FERC) license, and will not exceed 200 acres in size.[1]

II. Authority:

Alaska Statutes AS 38.05.035(e), AS 38.05.070, AS 38.05.075, AS 38.05.810(e) and the Alaska Administrative Code 6 AAC 80, 11 AAC 55, and 11 AAC 58. The Director of the Division of Mining, Land and Water is authorized by AS 38.05.035(a) (6) to act on behalf of the State in this matter. The Director has subsequently delegated his authority under AS 38.05.035(b) (1) to the Regional Manager, Southeast Regional Office.

III. Administrative Record:

Casefile ADL 107234 is the administrative record for this case. The DNR Northern Southeast Area Plan, adopted May 31, 2002, is incorporated by reference.

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[1] The applicant originally requested a 100-foot wide corridor for the access road and 50 feet of clearance around other project features. Based on that assumption, the applicant estimated needing an area comprising 75.39 acres. However, Article 202 of the FERC license states that the "project boundary shall include a 200-foot buffer from the following project features: the access road, the diversion dam and intake facilities, the water conveyance pipelines and the powerhouse." Additionally, Article 416 of the FERC license requires GEC to complete a Land Management Plan that provides for the maintenance and management of a 200-foot buffer around all project features, and Article 422 requires GEC to "have the authority to grant permission for certain types of use and occupancy of project lands and water and to convey certain interests in project lands and waters for certain types of use and occupancy." Under the FERC license GEC is required to obtain leasehold rights from the State of Alaska that include all State land within the FERC boundary. GEC submitted an amendment to the development plan, as seen in Attachment A. This lease area is estimated by the revised project map, Exhibit G-1 of Attachment A, to be 160.11 acres. The exact acreage will be determined through an as-built survey, and will not exceed 200 acres.

IV. Location:

Geographic: The associated lands are located east of the City of Gustavus in the proximity of Kahtaheena River (Falls Creek), within Sections 1, 2 and 12 of Township 40 South, Range 59 East, Copper River Meridian, and Section 36 of Township 39 South, Range 59 East, Copper River Meridian.

Municipality: None

Native Corporation: Sealaska Corporation

Alaska Coastal District: None

V. Title:

Acquisition Authority: The State of Alaska does not currently hold title to the land. Through an exchange process and under the authority of the Glacier Bay National Park Boundary Adjustment Act of 1998, the land is in the process of being transferred from the National Park Service (NPS) to the State of Alaska. A preliminary report and best interest finding for the proposed land exchange was released by the Alaska Division of Mining, Land and Water on December 15, 2005. The subject lease is contingent upon the State acquiring title to the associated lands.

Title Restrictions: Unknown at this time. The lease shall be subject to any title restrictions. A reservation will be included in the patent granting FERC the authority to authorize the licensee to occupy and use the parcel in perpetuity for power project purposes (see paragraph 3, Section XII, below).

VI. Background:

The Glacier Bay National Park Boundary Adjustment Act of 1998 (Public Law 105-317) provided for an exchange of lands between the State of Alaska and the federal government to facilitate a proposed hydroelectric project on Falls Creek near Gustavus, Alaska.

A Final Environmental Impact Statement was jointly completed for the Falls Creek Hydroelectric project and Land Exchange by FERC and NPS in June 2004. The preferred alternative, pending issuance of the FERC license, recommended that certain lands be exchanged with the State of Alaska.

FERC released an Order Issuing License to GEC on October 29, 2004 providing for the construction, operation, and maintenance of the 800-kilowatt Falls Creek Project No. 11659 pending a land exchange between NPS and the State of Alaska.

A land exchange between NPS and the State is being processed concurrently with this preliminary decision to lease land to GEC. The lease is contingent upon the State receiving title to the associated lands.

VII. Planning and Classification:

The Division of Mining, Land and Water has adopted the Northern Southeast Area Plan, which covers this area. The requested lease parcel is located in Unit G-17 and is jointly designated Habitat (Ha) and Water Resources and Uses (W), and is co-classified at Wildlife Habitat and Water Resources land. The water resources and use designation applies to areas of important water sources, watersheds or hydropower sites and these areas are intended to be retained in State ownership. The management intent language states that the parcel "is to be managed to protect habitat resources and enable the development of a hydroelectric facility within portions of the parcel together with necessary support uses and structures for that facility. Certain development uses, to include extraction sites, may be appropriate if related to the support of the hydroelectric facility or community development needs. All significant development proposals are to be discussed with the community prior to authorization by DNR."

The proposed development is consistent with the classification and management intent. The City of Gustavus is being provided the opportunity to comment on the proposed development. All comments will be considered prior to final approval and authorization by DNR.

VIII. Waterbodies:

The lease parcel is located adjacent to Falls Creek, which flows into Icy Passage. There are no navigable bodies of water in or abutting the proposed lease area.

IX. Access, including access to and along public waters:

The applicant shall provide the State of Alaska with permanent legal access, acceptable to the State, across private lands from Rink Creek Road to the lease site for administrative and maintenance purposes. The grant of access shall be in the form of a limited State holding issued to the State and providing for perpetual administrative and maintenance access, with no association with the term of the lease. The easement width shall be the minimum necessary to construct a one-lane road with a 14-foot wide working surface and a 24-foot total clearing width, constructed to Forest Service standards, and shall conform to the easement width obtained by GEC from the private landowner, if wider than this minimum. The grant of easement will be binding on the landowner, its heirs and assigns. The applicant shall provide the grant of easement during the early entry permit period as described in Section XVI of this decision.

Pursuant to AS 38.05.127, the lease will be subject to a public access easement along and on the bed of Falls Creek and extending 100 feet upland from the ordinary high water mark of the stream. This public access easement can be temporarily and intermittently closed if required for construction, maintenance, operation and use, consistent with State and federal regulations, and for purposes of protecting public health and safety and maintaining security.

X. Alaska Coastal Management Program and Agency/Municipal Review:

The proposed project was found consistent with the Alaska Coastal Management Program on April 21, 2005 (AK0412-03J). Additional public review will be conducted regarding the proposed long term lease. Comments will be addressed in the final finding.

DNR is not obligated to provide notice to the City of Gustavus under AS 38.05.945(c)(1) because the land is outside of the boundaries of the municipality. However, the Northern Southeast Area Plan states that "all significant development proposals [within the planning unit] are to be discussed

with the community prior to authorization by DNR." DNR is providing this opportunity through the public notice and comment process, and through a public hearing on the Falls Creek Land Exchange in Gustavus on Tuesday, January 17, 2006. Testimony on this preliminary lease decision will be taken at the hearing.

XI. Environmental Risk:

Environmental risk associated with this project is expected to be minimal. During construction the applicant proposes to use diesel fuel, gasoline, hydraulic fluid and lubricating oils for construction equipment, as well as concrete, paints, cleaning solvents and epoxy. During operation, lubricating oil will be used for the generator bearings and insulating oil will be used in the main power generator. The applicant has not proposed any fuel storage or other uses that would pose a serious risk to the environment. The applicant has developed a *Fuel and Hazardous Substance Plan* under Article 412 of the FERC license that contains spill prevention, response and notification procedures.

XII. Lease Term:

The lease will have an initial term that extends to October 1, 2054, the date when the FERC license for the Falls Creek Hydroelectric Project (FERC project No. 11659) expires. After the initial term of the lease, this proposal provides the following provisions related to extending and reauthorizing the lease term as necessary to meet the requirements of the FERC license. If FERC or a successor State or federal power project regulator renews the power project license, the term will be automatically renewed to a term identical with the term of the renewed power project license. If FERC ceases to regulate the power project and no successor State or federal power project regulator is designated, the term will be extended for so long as the real property is used for hydroelectric power project purposes. Prior to the term being renewed or extended and during review and re-issuance of the FERC license, the State shall evaluate and reconsider the lease conditions not governed by the FERC license to ensure they remain in the best interest of the State.

FERC requires that the licensee hold fee title or a perpetual interest to all non-federal lands that comprise the power project. FERC has permitted deviation from the general fee title requirements and allowed a licensee to hold non-federal land subject to a lease, only if the lease term is perpetual (i.e. automatically renewable), expressly authorizes FERC to exert control over the leasehold, and otherwise is shown to be sufficient for all project purposes. See, e.g., Linweave, Inc 23 FERC 61,391. Under Sections 14 and 15 of the Federal Power Act, this control must include FERC's ability to order the lease term to be renewed and extended, and lease transferred if the FERC license is renewed, extended or transferred. See 16 U.S.C. §§ 807 and 808. If a lease was not issued, DNR would have to convey these interests in land by patent or other conveyance vehicle. DNR considers this action inappropriate for this transaction because it would be contrary to the Water Resources and Use designation requiring the land to remain in State ownership and would not be in the best interest of the State.

Further, the project is already subject to FERC jurisdiction and control, which will include FERC's ability to authorize the licensee to occupy and use the parcel in perpetuity for power project purposes without DNR's approval under a reservation that will be included in the patent from the United States to the State of Alaska. The DNR lease term must be structured to accommodate the FERC requirements.

XIII. Survey and Appraisal:

The applicant will be required to have a registered land surveyor complete and record an Alaska State Land Survey (ASLS) plat under instructions from the Department to define the boundary of the parcel to be leased prior to the issuance of the lease. The applicant shall submit a request for survey instructions to the Southeast Regional Office. The lease area must include all improvements and include all State lands within the FERC project boundary as set by Article 202 of the FERC license. The area shown on Exhibit G-1, Attachment A will be the basis for the survey.

The applicant will be required to provide an acceptable current fair market appraisal of the lease parcel per DNR instructions, subject to the review and approval of DNR. The appraisal should not be initiated until the survey defines the boundary and shall be done in accordance with the State's General Appraisal Requirements. The applicant shall acquire a qualified appraiser from an appraisal firm appearing on the Department's Current List of Appraisers.

The cost of the survey and appraisal shall be borne by the applicant. The applicant shall provide the survey and appraisal within the time frames set forth in the early entry permit, described in Section XVI of this decision.

XIV. Performance Guarantees and Insurance:

It is the policy of the Division of Mining, Land and Water that all authorizations for State land use (except land sold by fee title) require the consideration of performance guaranties and insurance. This policy is necessary to defray costs that may be incurred as a result of legal actions, broken contracts, or any activity on State land that would not otherwise be covered by normal fee arrangements. Liabilities may be incurred through various activities that could run into millions of dollars in costs to the State. Oil or petroleum product spills, industrial accidents, and other problems that result in injury to persons or resources can be very costly to remedy. Performance guarantees and insurance protect the State from these burdensome costs, and provide incentive for users of State land to comply with stipulations and conditions that are meant to preserve State resources and protect human health.

PERFORMANCE GUARANTEES assure performance and to provide ways to pay for corrective action if the Lessee fails to comply with the requirements set forth in the lease document. They are also used to protect State land from damage and to make certain that improvements are removed and that the land is returned in a usable condition upon termination of the lease. Performance guarantees may also be referred to as bonds, or surety bonds. Performance guarantees should equal the possible costs the State would incur to terminate an agreement authorizing use of State land, and return the land to a marketable and environmentally sound condition. If appropriate, performance guarantees should also include the amount required on a large deductible for an insurance policy. Performance guarantees should allow for periodic adjustments to be made during the term of the authorization to address increases or decreases in the costs of rectifying problems and rehabilitating State land due to inflation, changes in the level or nature of development, or other appropriate factors.

The improvements proposed to be located on State land will consist of (1) 14-foot wide access roads totaling approximately 2.5 miles in length; (2) a diversion/intake structure estimated to cover approximately 3,600 square feet of area; (3) a 24" - 30" diameter 7,680-foot long polyethylene pipeline, connected to a 20" diameter 1,720-foot long steel pipeline, both of which comprise the

penstock; (4) a powerhouse structure estimated to cover approximately 1,575 square feet of area; (5) an approximately 150-foot long tailrace pipeline, and (6) a buried power line approximately 1.9 miles in length. The Division of Mining, Land and Water has determined that a performance guarantee of $375,000.00 will be sufficient to defray the cost of site restoration should the Lessee not abide by the terms of the lease.

INSURANCE protects 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. The Division of Mining, Land and Water and the Division of Risk Management, Dept. of Administration have determined that in order to protect the State from potential liabilities resulting from the lease operation, it is in the State's best interest that the Lessee be required to accomplish the following:

1) Consult, as appropriate, with an insurance professional licensed to transact the business of insurance under Alaska Statute, Title 21, to determine what types and levels of insurance are adequate to protect the Lessee and Lessor (the State, its officers, agents and employees) relative to the liability exposures of the Lessee's commercial operations.

2) Secure or purchase at Lessee's own expense, and maintain in full force at all times during the term of the lease, adequate insurance policies and coverage levels recommended by an insurance professional, licensed to transact the business of insurance under Alaska Statute, Title 21, and acceptable to the Lessor. The Lessor requires, at a minimum, the following types of coverage:

   Commercial General Liability Insurance: 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, Alaska Department of Administration.

   Workers' Compensation Insurance: The Lessee 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 (e.g., U.S.L.H. or Jones Act) or other State laws, for employees engaged in work on the leased premises. The insurance policy must contain a waiver of subrogation clause in favor of the State of Alaska.

3) Ensure that the State of Alaska, Department of Natural Resources is included as an additional insured on all liability policies held by the Lessee that provide coverage for liabilities connected to the operations of the Lessee on or in conjunction with the leased premises, referred to as ADL 107234.

4) Provide proof of insurance to the Lessor on a yearly basis. The certificate must provide for a 30-day prior notice to the State of Alaska in the event of cancellation, non-renewal or material change of conditions. Failure to furnish satisfactory evidence of insurance or lapse of the policy are material breaches of the lease contract and shall be grounds, at the option of the Lessor, for termination of the lease agreement. Generally, the Lessor will rely upon the best professional judgement of the licensed insurance agent and, at renewal, the agent's

annual re-assessment of the insured's liability exposure for determination of adequate levels of coverage. The Lessor will reserve the right in the lease to require additional coverage if, in its discretion, it determines that it may be warranted. Any changes in the approved lease development and operations plan, or the existence of significant claims against the liability coverage, would warrant examination of the insurance by the State to determine adequacy.

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

Certificates of Insurance must be furnished to the Leasing Officer prior to lease execution and occupancy. All insurance policies shall comply with, and be issued by, insurers licensed to transact the business of insurance under Alaska Statute, Title 22.

XV. Lease Compensation:

AS 38.05.840(a) provides, in part, that "Land may not be sold or leased for less than the approved, appraised market value ..." In addition, AS 38.05.810(e) allows a licensed common carrier to directly negotiate a lease of State land at fair market value. AS 38.05.075(a) provides, in part, that "The lease compensation method shall be designed to maximize the return on the lease to the State and shall be a form of compensation set out in AS 38.05.073(m)." AS 38.05.073(m) states that "The compensation to be paid to the State for a lease ... may include, in the discretion of the commissioner, (1) a percentage of annual gross receipts as reported to the United States Internal Revenue Service; (2) a guaranteed annual minimum rent or a percentage of gross receipts, whichever is greater; (3) the fair market rental value; (4) a fixed annual rent that is not less than the fair market rental value of the land; (5) a fee for each user; (6) other compensation acceptable to the commissioner; or (7) a combination of the above." By approving this decision, the Regional Manager finds that it is in the State's best interest and in the public interest that lease compensation is set at a level commensurate with the growing success and rewards derived by the Lessee's beneficial use of public land. It is recommended that the lease contain the following compensation provisions:

A. Annual Compensation. Compensation will be based upon AS 38.05.073(m)(7); the annual rental charge shall, at the State's discretion, be the greater of:

(1) an amount equal to 2.5% of the annual gross receipts from the business or businesses deriving income from the lease facility as reported to the IRS,
(2) an amount equal to the fee that would be charged for this use under the Division's current land use permit fee schedule,
(3) a rental value determined by the Division by a remote leasing appraisal schedule or, if that is not available, appropriate or acceptable to the Lessee, a DNR approved fair market value appraisal provided by the Lessee,
(4) a fixed annual rent that is not less than the fair market rental value of the land, or
(5) a minimum amount established under 11AAC 58.410(b).

Gross receipt records are not available to assist in determining the initial annual compensation as a percentage of gross revenue, and the division does not have an appraisal schedule that applies to this location and use. Therefore, the applicant will be required to provide a DNR approved fair market value appraisal of the lease site, and annual compensation for the initial 5 years shall be

either the greater of this approved fair market value or the amount established under the Division's current permit fee schedule.

The Director's estimate of fair market rent is $14,115.00 per year. This amount is based on an annual rental rate of 8% of land value. The lease area is estimated to be 160.11 acres. The land value is estimated to be $1,102.00 per acre, as established by the recent federal appraisal for the Falls Creek land exchange which valued the 1,034.45 acre surrounding parcel at $1,140,000.00. Multiplying 8% of $1,102.00 per acre by 160.11 acres yields $14,115.30, rounded to $14,115.00.

B. Compensation Adjustment. AS 38.05.105 requires the annual lease compensation to be reevaluated and adjusted at five year intervals. The adjusted annual rent shall not be less than the greater of (1) the minimum lease rental established under 11AAC 58.410(b); or (2) an appraised market value rent. The adjusted annual rent shall be designed to maximize the return on the lease to the State. At an adjustment interval, the Lessor, at its discretion, may adjust the amount and method of determining compensation. To determine the adjusted lease compensation, the division may:

(a) require the Lessee to provide an acceptable current market appraisal of the lease parcel, with the appraiser and appraisal subject to the review and approval of DNR and the cost of appraisal borne by the Lessee;
(b) adjust the annual compensation based on an appropriate DNR lease fee schedule in effect at that time;
(c) require compensation based on a percentage of gross business revenues, up to 2.5% of the annual gross receipts from the business or businesses deriving income from the lease facility as reported to the IRS;
(d) require compensation based on a per client amount or other method equivalent to (c) above;
(e) require an amount equal to the fee that would be charged for this use under the Division's current permit fee schedule, or
(f) use a combination of these or other methods stated in AS 38.05.073 (m).

Adjustment of the amount of annual lease compensation is not limited to the appraised fair market rental value of the land, but shall be not less than this value.

C. Sublease and Rental Agreements. The lease shall be subject to a provision which allows the Lessor the right to require an increased annual compensation as a condition of a sublease approval. The increase shall be determined by negotiation between the Lessee and :essor, but shall not be less than 25% of all compensation paid annually to the Lessee by the sub-Lessee. Neither the terms of this sublease provision nor any actual compensation derived from a sublease shall have any effect upon a determination of appraised market value pertaining to AS 38.05.840 and or this lease parcel. Sublease shall be defined to include any lease, rental, storage or accommodation agreement between the Lessee and another individual, business or corporation utilizing or benefiting from the lease parcel. Sub-Lessee shall be defined to mean any individual, business or corporation executing an agreement, as above, with the Lessee. The amount of sublease compensation shall be subject to change at the same time as the lease compensation adjustment discussed in (B) above, and whenever the terms or conditions of the agreement between the Lessee and sub-Lessee change. Approval of a sublease shall also be conditioned upon (a) submission by the Lessee of a signed copy of the agreement(s) which govern the relationship and compensation provisions between the Lessee and the Sub-Lessee; (b)

submission by the Lessee of a complete "plan of operations and development" for the subleased area and if changed, an amended plan to replace the approved "plan of operations and development" for the entire lease area; and (c) a Lessor best interest finding and amendments to the lease contract as necessary, if significant changes to the use and development are proposed.

XVI. Temporary Entry and Use Authorization:

Entry onto State land for site development and beneficial use prior to lease execution is a privilege that DMLW should consider granting only to applicant's willing to commit to a reasonable timeframe for delivery of the final survey and appraisal products, thus allowing the lease to be issued by the end of the entry permit period. Past experience with expired early entry permittees who lack completed survey and appraisal products at permit expiration has created the need for an appropriate incentive to encourage applicants to deliver the survey and appraisal requirements in a timely manner. A monetary penalty for late delivery has been devised for that purpose.

An early entry permit should allow entry onto the project site for the purpose of continued use of the facility, and should allow time to complete the survey, appraisal and execution of the lease. In addition to the standard State land use permit conditions, the approval of an early entry permit shall be subject to the following conditions:

1) **Term.** The term of the early entry permit shall be 20 months.

2) **Survey Commitment.** Applicant shall submit to DNR, within two months of the permit beginning date, a fully completed and executed Request for Survey Instructions with a statement that the chosen surveyor (registered to practice in the State of Alaska) understands the deadline as outlined in Attachment B for submittal of the final Alaska State Land Survey plat of the proposed lease area (within 14 months of entry authorization). These Attachment B deadlines are designed to ensure that all the tasks necessary to execute the lease can be reasonably completed prior to the expiration of the entry permit. The cost of the survey shall be borne by the applicant.

3) **Appraisal Commitment.** Applicant shall submit to DNR, within two months of the permit beginning date, a copy of a signed contract or letter of intent between the applicant and a firm appearing on the department's "Current List of Appraisers" who is qualified to appraise State tidelands. The Contract or letter shall indicate that the appraiser has read the DNR general appraisal instructions, is qualified and willing to complete and submit the required fair market value appraisal within the deadline shown in Attachment B (within 16 months of the issuance of the early entry permit). The cost of appraisal shall be borne by the applicant.

4) **Rent.** Payment of rent shall be equal to the fair market rental value of the proposed lease parcel. Initial payment of rent shall be based upon the Director's estimate of market rent, determined in this case to be $14,115.00 per year, for a total of $23,525.00 for the 20 month term of the entry permit. Payment for the full term of the permit shall be required prior to issuance of the entry permit. If the appraisal establishes a fair market rent value in excess of this annual amount, the applicant shall be required to pay the difference between the appraised amount and the estimated amount, prorated for the term of this permit. If the appraised value is less than the estimated value, the difference will be credited or refunded to the applicant.

5) **Performance Guarantee and Insurance.** The entry permit shall be subject to the performance guarantee and insurance provisions specified in Section XIV of this decision. Applicant shall submit the performance guarantee and proof of liability insurance coverage to DNR prior to entry permit authorization.

6) **Access Easement.** The early entry permit shall be subject to the access provisions specified in Section IX of this decision. The applicant shall diligently work with the Department during the early entry permit to finalize a grant of easement document which is acceptable to the State. DMLW staff will provide a draft grant of easement at the time early entry is authorized. Before the early entry permit term expires, the applicant will provide DNR with an executed Grant of Easement and final as-built easement diagram of the easement grant area acceptable to the State. The State will then accept and record the easement at the time of lease execution, which will then be recorded.

7) **Penalty.** Applicant shall submit to DNR, prior to permit authorization, a $5,000.00 cash deposit as a guaranteed default penalty to be assessed if, by the expiration date of the entry permit, the applicant has not returned any payments or the signed lease contract prepared by the Division following receipt of completed and approved survey and appraisal products. In assessing a penalty DNR shall, in its discretion, make allowance for circumstances which are beyond the ability of the applicant or the applicant's agent or contractor to control. Penalty for failure to complete the requirements before the 20 month deadline shall be as follows:

   a) In the event that either the survey, appraisal or other applicant requirements are not met by the deadlines stated in Attachment B, causing a delay in subsequent DNR review, approval, recording, and contract drafting functions and ultimately failure to return a signed lease contract along with fees prior to the expiration date of the early entry permit, the applicant shall agree as a condition of the early entry permit to the following penalty schedule:

      i) Automatic forfeiture of 50% ($2,500.00) of the cash deposit to DNR for failure to submit the signed lease by the deadline.

      ii) Automatic forfeiture of the remaining 50% ($2,500.00) of the cash deposit to DNR for failure to provide the signed lease by the end of the 30th day following the entry permit expiration date.

   b) If the lease agreement is signed, notarized and submitted to DNR by the permit expiration date, the cash deposit will be released to the applicant.

   c) If upon expiration of the early entry permit and the passing of 30 additional days with penalties assessed per (a) above, the applicant fails to meet the terms of the entry permit, the regional manager may, in his or her discretion, give notice of termination of the entry permit and closure of the lease application casefile. Upon termination and closure, the permittee shall immediately cease all use of the site and remove all improvements within 60 days. Under these circumstances, the permittee's acceptance of the provisions of the entry permit together with a failure to remove improvements within the 60 days shall result in an automatic transfer of ownership of any remaining improvements, the performance guarantee and any remaining deposits to the State of Alaska. As an alternative to the above action, the regional manager, in his or her discretion, may agree to an additional amount of time,

beyond the 30 days, to provide the signed lease agreement and require additional monetary assurance to ensure performance.

8) **DNR Timeframes**. DNR will track and record the time it takes to issue survey instructions, review drafts, approve the survey, review and approve appraisal, prepare and deliver lease agreement to applicant, and shall commit to not taking longer than 11.5 months total time to accomplish its role in the process. This period includes two reviews of draft plats. See Attachment B for a proposed 20 month timeline indicating reasonable target deadlines for the various steps in order to deliver the signed lease by the permit expiration date deadline. The amount of total time taken by DNR survey staff in excess of 11.5 months shall be credited to the permittee in determining deadlines for penalty assessments described above.

DUE TO THE SUBSTANTIAL PENALTIES REQUIRED FOR FAILURE TO MEET SURVEY AND APPRAISAL REQUIREMENTS IN SUFFICENT TIME TO EXECUTE THE LEASE WITHIN THE TERM OF THE EARLY ENTRY PERMIT, THE FOLLOWING ADVISORY IS GIVEN:

The survey requires the issuance of specific instructions to the surveyor from the DMLW Cadastral Survey Section. Following the field survey, a draft plat must be prepared and sent to the DNR survey section for review by a limited number of DNR review surveyors with statewide review responsibilities. If the surveyor has been diligent and efficient in performing the survey and following survey and platting instructions, few changes or corrections will be necessary. The surveyor may then be instructed to incorporate the changes into the final mylar survey plat, obtain approval signatures and return the plat with field notes, rubbings, etc. Depending on the surveyor's efficiency and compliance with instructions and review comments, multiple reviews by DNR staff may be required. DNR approval of the final mylar plat is followed by filing in the proper district recorder's office. The lease contract can not be drafted until the plat is recorded. During the survey process the surveyor is responsible for submitting the required filing fees to the DMLW Cadastral Survey Section. These fees are as follows. (1) request for survey instructions: $225.00; (2) plat review fee: $200.00 per tract or lot and $50.00 for each additional tract or lot (this covers review of the first draft plat and, if necessary, the second draft plat; an additional fee is charged in the unlikely event that more than two reviews are necessary); (3) district recorder plat filing fee: $20.00 for the first sheet and $5.00 for each additional sheet.

In order to allow adequate time for DNR to approve the final survey and prepare and send the applicant the lease contract two weeks prior to the permit expiration, the final signed survey plat mustbe submitted to DNR no later than 14 months following the starting date of the entry permit. Likewise, the appraisal report valuing the land depicted in the approved plat must be submitted to DNR no later than 16 months after the starting date of the early entry permit. Failure to adhere to these time frames may result in failure to execute the lease within the term of the early entry permit and result in penalties as stated above.

XVII. Recommendation:

Pursuant to AS 38.05.830, and after due consideration, the Department finds that the proposed lease is likely to have little to no effect on the density of the population in the immediate vicinity and that there is little potential for conflict with known traditional uses of the land. If, through public review of the preliminary finding, the department becomes aware of traditional uses with the

potential for conflicts with the proposed use, the department will, if necessary, develop a plan to resolve or mitigate the conflicts.

To qualify for a preference right to lease under AS 38.05.810(e), an applicant must be a licensed public utility or a licensed common carrier. The applicant is a licensed common carrier. As noted in Sections VII and X of this decision, the proposed use is compatible with the land classification order and the Alaska Coastal Management Program.

The Southeast Regional Office of the Division of Mining, Land and Water recommends issuance of a negotiated lease for approximately 160.11 acres, but not to exceed 200 acres, of uplands in the vicinity of Kahtaheena River (Falls Creek), located 3 miles east of Gustavus, subject to the conditions stated below:

1. The lease shall be subject to the standard DNR DMLW Lease Agreement, form 102-111, as revised (last revised 9/25/01). This agreement is available upon request.

2. The lease and early entry permit shall contain modifications and/or provisions that are justified by public comment.

3. The lease will have an initial term that extends to October 1, 2054, the date when the FERC license for the Falls Creek Hydroelectric Project (FERC project No. 11659) expires, and shall be further defined as follows:

    a. The term of the lease shall be coextensive with the FERC license applicable to the Falls Creek Hydroelectric Project, and shall be automatically renewed to a term identical with the terms of the FERC license at such time as the FERC license is renewed or until a request to surrender the license is granted.

    b. In the event that FERC ceases to regulate the hydroelectric power project, "FERC" shall mean the successor state or federal agency to which regulatory jurisdiction over the power project is transferred, and the term of the lease shall be automatically renewed to a term identical with the terms of the license of the successor regulatory agency at such time as the license is renewed or until a request to surrender the license is granted.

    c. In the event that FERC ceases to regulate the hydroelectric power project and regulatory jurisdiction is not transferred to a successor state or federal agency, the term of the lease shall extend thereafter for so long as the real property is used for hydroelectric power project purposes.

    d. Prior to the term being renewed or extended and during review and re-issuance of the FERC license, the State shall evaluate and reconsider the lease conditions not governed by the FERC license to ensure they remain in the best interest of the State.

    e. In the event that the term of the lease is automatically renewed or otherwise modified, Lessee shall notify Lessor of the basis for the renewal or modification, and Lessee and Lessor shall execute an amendment to the lease that reflects the new lease term.

f. In the event that FERC ceases to regulate the hydroelectric power project and regulatory jurisdiction is not transferred to a successor state or federal agency, Lessor may impose additional special stipulations regarding the use and occupancy of the leasehold property that are reasonably necessary or desirable as a result of the absence of FERC regulation.

4. The applicant shall complete an Alaska State Land Survey of the lease area prepared to department standards, as specified in Section XIII of this decision.

5. The lease shall be subject to the insurance and performance guarantee provisions specified in Section XIV of this decision.

6. Limits of Development. The lease agreement shall limit the Lessee's right to occupy, develop and use the lease area to that described in the approved "plan of operation and development", shown as Attachment A to this decision. The use of the lease area for purposes other than those specified in the approved plan of operation and development or use of land outside the lease area is a violation of the lease contract. Before starting new operations, making any new improvements or constructing any new structures, the Lessee must propose revisions to the approved plan of operation and development and the revised plan must be approved in writing by the Lessor before any changes in use or development occurs. The lease must be utilized for the purpose described in the approved plan. Failure to make substantial use of the land consistent with the approved plan within five years will, in the Lessor's discretion, constitute grounds for termination of the lease. Any changes to the approved development plan may require commensurate adjustments to the performance guarantee and insurance levels authorized by a lease amendment.

7. The lease agreement shall be subject to the compensation, compensation adjustment, sublease, and rental provisions as specified in Section XV of this decision.

8. The lease shall be subject to a requirement that the Lessee complies with the stipulations contained in the Alaska Coastal Management Program, Conclusive Consistency Determination, AK 0412-03J dated April 21, 2005, and all other government agency requirements and permits.

9. Approval of early entry is recommended subject to the terms and conditions as stated in Section XVI of this decision.

10. Material Sale. The Lessee, upon application and DNR approval of a material sale, may excavate and remove material from the lease parcel. The Lessee shall pay the State a fair market value for the material removed from the lease parcel. The Lessee may obtain a fair market appraisal of the material, in which case the cost of the appraisal shall be borne by the Lessee. If no appraisal is provided, the material fee per cubic yard will be determined based on DNR's representative pricing method (currently $1.25 per yard, subject to change). Regardless of the method selected to establish the cubic yard value, the value must be approved prior to material removal. Volume of material removed shall be determined by the Lessee based on cubic yards of vehicle bed conversion to loose cubic yards, or cubic yards based on cross sections before and after excavation. This volume

shall be reported and payment shall be made in full within 30 days after completion of material removal operations.

11. Merchantable timber cut during clearing of the lease area and/or for use in the project development shall be paid for at Division of Forestry standard rates and shall be coordinated with the Division of Forestry prior to clearing of trees.

12. The lease agreement shall be subject to the access provisions specified in Section IX of this decision.

XVIII. Preliminary Finding and Decision:

The finding presented above has been reviewed and considered. I find that the recommended action may be in the State's best interest and is hereby approved to proceed to public notice.

Brady Scott
Natural Resource Manager

December 29. 2005
Date

Ed Collazzi
Regional Manager, SERO

December 29, 2005
Date

As 38.05.035(e) to Commissioner DNR to
Director To Regional Manager SERO
Delegated Authority

April 15, 1981
Date

PUBLIC NOTICE, FINAL DECISION AND APPEAL PROCESS:

A public notice seeking comments on this preliminary decision will be published in the Juneau Empire in accordance with AS 38.05.945 (b). Notice will also be given to the City of Gustavus and to those parties having an interest in the adjacent land. In addition, the Gustavus Post Office will be requested to post the notice per AS 38.05.945 (b) (2) and the notice will appear in the Alaska Online Public Notice System, available at www.state.ak.us.

The Public is invited to comment on this preliminary decision and any comments must be received in writing by the Division of Mining, Land & Water at 400 Willoughby Ave., Suite 400, Juneau, Alaska 99801, by fax at 907-586-2954, or by electronic mail to brady_scott@dnr.state.ak.us by 5:00 pm on Thursday, **February 2, 2006** in order to ensure consideration (please include mailing address and a telephone contact). In addition to written comments, public testimony may be provided at a public hearing being held in Gustavus on Tuesday, **January 17, 2006**. All persons interested in this decision and in establishing their appeal rights, are now required by law to meaningfully participate in the decision process by commenting on the decision, in writing by the above deadline. Following the comment deadline, all written responses will be considered and this decision may be modified to incorporate public comment.

If public comment in response to this notice indicates the need for significant changes in the decision, additional public notice will be given on or about **February 15, 2006**. If no significant change is required, the preliminary decision, including any minor changes, will be issued as the final decision. A copy of the final decision including instructions on filing an appeal will be sent to any person who comments on the preliminary decision. Persons who do not submit written comment during the comment period will have no legal right to appeal the final decision.

ATTACHMENTS:

Attachment A: Development Plan for the Falls Creek Hydroelectric Project

Attachment B: Tentative Timeframes for Performance Under Early Entry Permit

Attachment A
Proposed Finding and Decision
ADL 107234

DEVELOPMENT PLAN

FOR THE

FALLS CREEK

HYDROELECTRIC PROJECT

Submitted For:

Gustavus Electric Company

P.O. Box 102

Gustavus, Alaska 99826

November, 2004

This Development Plan is part of the land use application for access road easements and lease of state lands for the intake and powerhouse for the Falls Creek Hydroelectric Project.

RELATIONSHIP TO PUBLIC LANDS

a. Lands transferred to state ownership

The State of Alaska will receive from the NPS all lands in the project area described in Glacier Bay National Park Boundary Adjustment Act of 1998, with the exception of 90 Acres North of the intake, 1050 acres. The act requires the land exchange to be consummated within 6 months of the Issuance of a hydropower license.

The effect of this land transfer is to:

- remove from the park all lands down-gradient from the project, and those lands surrounding the Native allotments;
- establish a new park boundary that is easily described; and
- provide both the state and the park with reasonable management units.

LAND REQUESTED FOR EASEMENT OR LEASE

The Project Map, Exhibit G-1 of the Application for a Hydroelectric Project Power License is enclosed as part of this application. This map includes a Project Boundary Description. This boundary description generally includes a 100-ft. width for the access road and a 50-ft. clearance around project features. This area as described on Exhibit G-1 that is in future State Lands (existing Glacier Bay National Park) is 75.39 acres. This is the total land requested for non-exclusive easement and for lease. Please note that this project boundary is unsurveyed and preliminary. A final boundary survey will be completed at the end of project construction. A 100 foot easement, 50-ft. each side of centerline, should be adequate for road width, ditches, slope cuts and fills and clearing limits. Please note on page 39 of the FERC Order, Article 202 that FERC selected a 200-ft. buffer from the access road, diversion dam, powerhouse, and water conveyance pipelines. Not all the land within the FERC project boundary is required for project construction and operation. Other uses of the land within the project boundary are permitted as described in Article 422 of the FERC Order.

The Diversion/Intake Structure Plan, Exhibit F-3, and the Power Plant Site Plan, Exhibit F-5, are included as part of the submittal. These plans show the area GEC is requesting to lease for exclusive use. This area will be enclosed by chain link fence, for the most part. As shown in these plans, GEC requests to lease 0.66 acres at the intake structure and 0.50 acres at the powerhouse, for a total lease of 1.16 acres. The non-exclusive access easement would then be 74.23 acres.

The outlet structure does not have a final design or location. This will be done at least 6 months before construction begins in accordance with Article 401 of FERC's Order. We

will prepare these plans after consultation with DNR, in addition to the other agencies and groups required by FERC.

The outlet structure is not expected to require an exclusive lease. If it turns out that it does, GEC will file an amendment to this application for an additional approximately 0.06 acres of lease boundary.

GEC PROPOSES TO ACCESS THE PROJECT AS FOLLOWS:

- In Gustavus, use the existing Rink Creek Road to its terminus; thence construct a new one-lane extension north and east through private property to the park (state lands) boundary at a point above the lower flats.

- Serve all portions of the hydro development within the state lands (present park) via one lane gravel road, consisting of these segments:
  -An access road that angles east-northeast across-slope to a point just west of the Strip Fen.
  -A service road that begins at the intake site; thence follows a grade south along the west wall of Falls Creek Canyon, through The Horseshoe and to the head of the Strip Fen, at which point the Falls Creek Watershed is exited; thence Southwest along the brow of Riser #3, through the Old Clear-cut; thence back within the Falls Creek Watershed roughly parallel with eastern boundary of Mills Allotment to a point approximately opposite the Lower Falls; thence via a steep grade along the canyon wall to the powerhouse. This road will generally have a 14' drivable surface with a drainage ditch on its uphill side and cross drains at frequent intervals as appropriate to maintain present drainage patterns. The base will be constructed with woody debris and gravel or shot rock; the surface will be shot rock. Where the road runs within the Falls Creek Canyon, it will be constructed in a full bench cut blasted into bedrock. Total cleared width will vary from 45' to 81', depending on the steepness of the slope to be traversed.

- Acquire gravel or shot rock for the initial pioneer road up as far as Riser #2 from private or state lands in Gustavus. Place a 0.5 acre borrow pit at base of Riser #2 along access road for shot rock. Plan for optional additional pits in The Horseshoe and Old Clear-cut vicinities (but these are not expected to be needed, given the volume of shop rock expected to be produced in making full rock cuts along the road). If other good quality material sources, which are conveniently located, are discovered during construction, they maybe utilized. It is estimated that road construction will require 20,000 cubic yards of shot rock and 300 cubic yards of concrete aggregate.

- Salvage all sawlogs from road and facilities clearing. Avoid side casting along all portions of roads inside the Falls Creek Canyon, and on other steep slopes considered slide-prone. Back-haul all waste material not used in road construction, from these segments to a disposal site to be selected in negotiation with the Corp of Engineers.

On other road segments, dispose of all waste materials in roadbed construction or by side casting.

- Restrict vehicular access to that necessary to construct, operate and maintain the hydro project. Seek a lease agreement with the Alaska Department of Natural Resources that restricts public access to the sorts described above.

DEVELOPMENT DETAILS

- Select a penstock intake site approximately 350 feet downstream of The Islands, (300 feet downstream of the NPS boundary), such that the associated impoundment that would not alter fish habitat in The Islands vicinity.

- Use an intake structure that employs an impoundment of 6 to 10 feet deep; a fish screen & bypass capable of excluding Dolly Varden Fry from the penstock intake and allowing free fish movement downstream; and an automatically operated gate to allow throughput of bedload during high flows.

- Conduct water to the powerhouse site in a high density polyethylene pipe 7,680 feet long varying in nominal diameter from 30" to 24"; thence via a 20" steel pipe 1,720 feet long to the powerhouse, with an automatic pressure activated valve at its upper end to interrupt the flow in the event of a pipe rupture.

- Run the penstock from the intake to the powerhouse site generally following the service road route, except in places where the road will follow a grade inappropriate for the penstock; these places include: a) at final approach to the powerhouse, b) down through the Old Clear-cut, and c) just north of the Strip Fen. Bury the penstock in a 30 foot wide clearing where the penstock is routed away from the road; along the road, bury the penstock at edge of roadbed in areas where windthrow or rockfall might damage it, or where it crosses major mammal trail. Overall the penstock would be buried for about half its length.

- Construct the powerhouse on the toe of stabilized colluvial lobe creekside 75' east of the Mill's allotment boundary & 300 yards downstream from the Lower Falls. Construct the powerhouse as a two-story structure on fill. Build a vehicle turnaround pad partially on fill and partially incised into the colluvial lobe.

- Pipe the tailrace via gravity flow into Falls Creek at a site to be determined just below the Lower Falls (see FERC Order, Article #401), at the head of anadromous fish habitat. Employ an outflow structure that precludes entry of fish.

- Bury the main powerline underground along an undeveloped off-road vehicle trail from the southeast tip of the Gustavus runway to the northeast corner of Sec. 9, thence along the south boundaries of Sec's 3&4, crossing under Rink Creek, thence to Rink Creek Road; thence in the access road and service road to the powerhouse. Fill in ruts in off-road vehicle trail, as they develop to avoid any drainage alteration.

- Bury a secondary power line and control cable in the road from the powerhouse to the intake site to operate equipment there.

Plans submitted with this application are Exhibit F drawings #1 through #8 as submitted to FERC and described on page 38 of the FERC Order. Final plans will be submitted to FERC at least 60 days before starting construction, as required by FERC articles #302 through #304.

As a condition of their Order issuing a hydropower license, FERC has placed conditions on the license, which requires FERC-approved plans for:

- Sediment transport monitorium and management
- Erosion control
- Construction period water quality monitoring
- Evaluating the effectiveness of fish passage facilities
- Evaluating project impacts on fisheries
- Hire an Environmental Compliance Monitor during construction
- Monitoring and compliance with streamflow requirements
- Prevention and remediation of fuel and hazardous substance spills
- Avoidance of bear-human conflicts
- Management of the access road
- Controls on public access and recreation
- Management of project lands

GEC is required by FERC to prepare these plans in consultation with various government agencies and groups. The land management plan is the only plan GEC is required to include consultation with the ADNR. However, GEC will request comments and recommendations from the ADNR for all the above plans. The specifics that these plans entail are described in FERC's Order.

These plans will apply to lands within the FERC boundary. The remaining lands being transferred from the NPS to the State outside this boundary are not intended to be covered by these plans. The ADNR may plan for any user in these non-project lands. GEC will work with the ADNR to develop any plans within the project boundary in conjunction with any plans the ADNR wish to develop for lands outside the project boundary.

CONSTRUCTION DETAILS

- Construct the project over 24-month period. Stagger construction projects to keep the labor demand at any one time within the capacities of the local Gustavus labor force and existing housing opportunities. Maintain a labor force on the order of 15 persons.

- Carry on construction in river only between June 1 to August 7 to avoid impacts to spawning and rearing fish below the Lower Falls; and only from June 1 to September 15 and November 1 to April 30 above the Lower Falls.

- Avoid felling live trees and snags during the May-August murrelet and passerine nesting season.

- For road construction: 1) minimize root disturbance of adjacent trees in areas of moderate gradient by building roadbed atop intact root mat; b) minimize potential for slope failure in steep areas by employing full-rock roadcuts, cutting some of the trees along roadsides to reduce loading on the soil mat.

- Salvage topsoil and vegetation during construction and use for revegetation of roadcuts and sidecast slopes. Supplement with native grass seed as necessary to ensure quick establishment of a complete ground cover.

- Avoid road construction through wetlands to extent possible; where not possible, minimize changes in wetland hydrology by frequent cross drains.

- Minimize cutting of large trees with high murrelet nesting potential, and removal of large snags and large woody debris.

- Maximize use of natural topography and vegetation to screen the powerhouse from view of visitors to the Lower Falls.

- During construction, have environmental monitor(s) in field with construction crew to suggest minor route and construction alterations to optimize tradeoffs between such environmental variables as wetlands, murrelet trees, snags, large woody debris, and animal trails.

- During construction, notify nearby residents and users of schedule for machinery operation and blasting to minimize conflict with other uses and values.

OPERATION DETAILS

- Service the intake and powerhouse sites approximately weekly via road vehicle, or snowmachine during deep snow items.

- Use road vehicles for access to all installations other than the powerline during summer, and snowmachines during snow periods. Use ORV's for powerline surveillance inside Gustavus.

- Disallow the discharge of firearms along the service road, powerhouse and intake vicinities.

- Retain status quo diesel as backup (see no action alternative for elaboration).

- Maintain full natural flows to the anadromous reach of Falls Creek, and to all resident fish habitat at & above The Islands. Provide instream flows of at least 5 cfs during

December - March and 7 cfs during April - October in the bypass reach, which equal or exceed 1.5X the lowest recorded natural flow for the creek.

- Monitor these aspects of Falls Creek:
  - Water quality (at powerhouse yearly; and daily during construction)
  - Streamflow (continuous from gauging station at powerhouse)
  - Bedload throughput a) past intake structure, b) to delta
  - Resident Dolly Varden population indexes and winter physical factors (bypass reach compared to upstream of intake site, yearly).
  - Downstream fishway and fish exclusion from the penstock.
  - Employ an environmental Compliance monitor during construction.

CLOSURE / RECLAMATION PLAN

Develop a reclamation plan in cooperation with the state and the community of Gustavus for the disposition of lands and facilities should the hydroelectric facility cease to operate or fail to be re-permitted. GEC agrees to remove all facilities, and advocates that roads be reduced by natural revegetation to hiking trails, and that a land use designation compatible with adjacent park lands be adopted by the state.

This project has been licensed by FERC for 50 years, and hydroprojects are commonly relicensed indefinitely. At this time, it is impossible to predict what the public will want to do with the hydro facility and associated roads so far in the future. At a minimum, however, GEC will agree to return project lands to as near a natural condition as possible.

Gustavus Electric Company
P.O. Box 102 Gustavus, Alaska 99826
(907) 697-2299 Fax (907) 697-2355

January 31, 2005

05 FEB 7 AM 10:56
SE REGIONAL OFFICE

Brady Scott
State of Alaska Department of Natural Resources
Division of Mining, Land and Water
400 Willoughby, #400
Juneau, Alaska 99801
(907) 465-3400

Dear Brady,

This is an amendment to my application for easement or right-of-way over state lands for the Falls Creek Hydroelectric Project (FERC-11659). The purpose of the amendment is to increase the requested amount of land to include all of the state land within the FERC boundary. This includes all lands within 200 feet of any project feature. Exhibit F-1, General Plan, of the application is revised to show that the FERC boundary and the requested state easement boundary are the same. Exhibits F-3 and F-5 are revised to remove any reference to the easement boundary. This is because the new extended easement boundary is off of those pages. Exhibit G-1, Project Map, is revised to show the new boundary requests. It also shows the amount of land requested is changed from 75.39 acres to 160.11 acres. The amount of land requested for exclusive lease remains unchanged.

In the Development Plan of November 2004 submitted with my application, the first paragraph of the section LAND REQUESTED FOR EASEMENT OR LEASE is changed as follows:
The Project Map, Exhibit G-1, of the project boundary, as filed with FERC in response to Article 202 and Article 203 of the Order Issuing License, is enclosed as part of this application. The map includes a Project Boundary Description. As described in Article 202, the project boundary includes a 200-foot buffer from the following project features: the access road, the diversion dam and intake facilities, the water conveyance pipeline and the powerhouse. This area, as described on Exhibit G-1, that is in future State lands (existing Glacier Bay National Park) is 160.11 acres. Please note that the project boundary is unsurveyed and preliminary. A final survey will be completed at the end of project construction. Other uses of the land within the project boundary are permitted as described in Article 422 of the FERC Order.

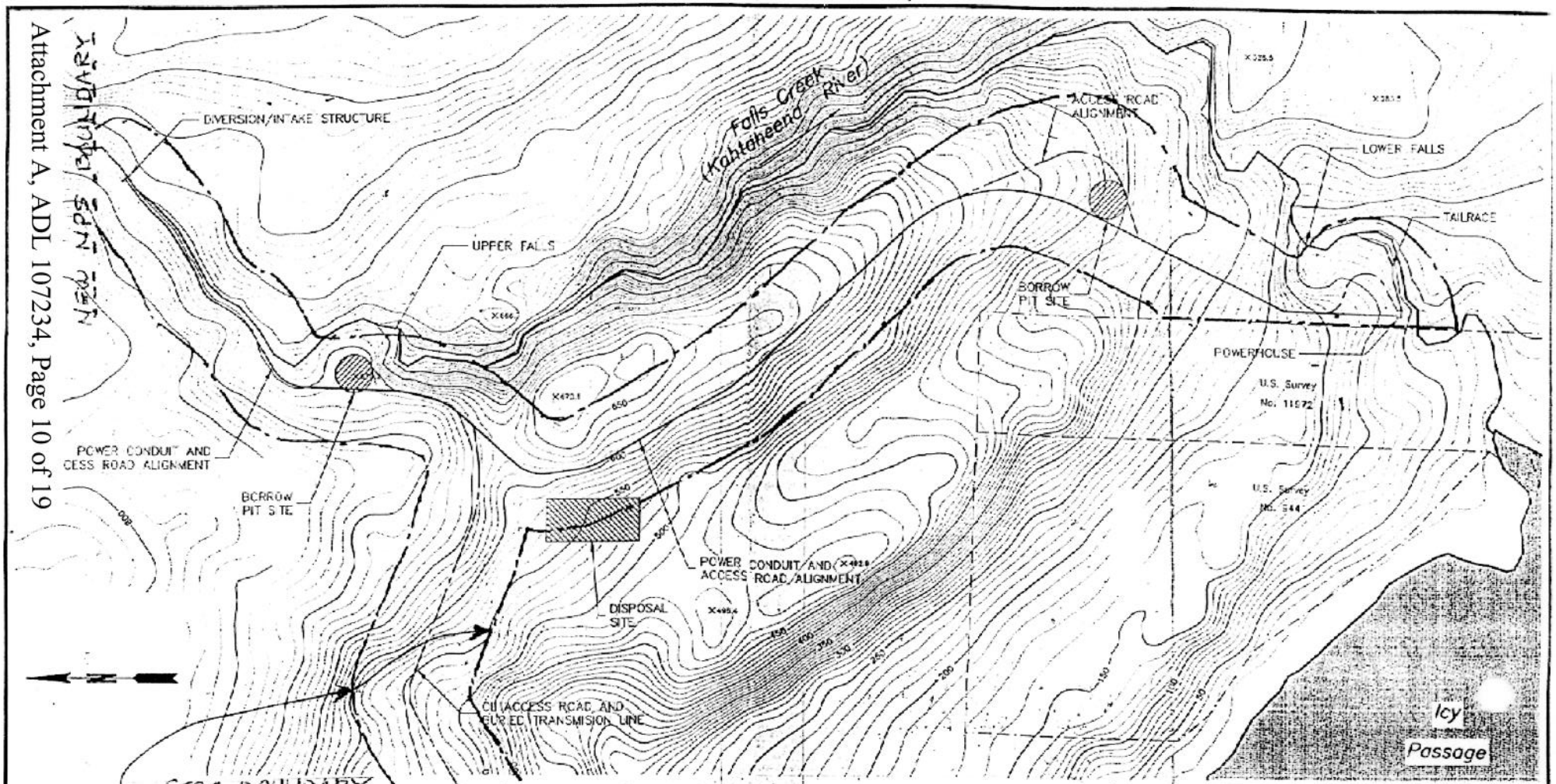
Also enclosed is a copy of part of the Beartrack Ridge Subdivision showing a 24-foot easement heading north of Rink Creek Road. It also shows some legal description of Rink Creek Road you were curious about. Also enclosed is a copy of the 30-foot easement to Glen Shrank's property. Part of this easement runs adjacent to the Beartrack Ridge subdivision easement. I am enclosing a separate map showing these two easements and the private easement we need to get.

Sincerely,

Richard H. Levitt
President

EXHIBIT F
PRELIMINARY DESIGN DRAWINGS

F-1 General Plan
F-2 Access Road - Typical Sections
F-3 Diversion/Intake Structure Plan
F-4 Diversion/Intake Structure – Sections
F-5 Power Plant – Site Plan
F-6 Power Plant – Sections
F-7 Power Conduit – Profile
F-8 One-Line Diagram



TO GUSTAVUS INTERCONNECTION:
ACCESS ROAD – – 1.2 MILES
TRANSMISSION LINE – – 2.6 MILES

NOTES

1. TOPOGRAPHY BY CRAZY MOUNTAIN JOINT VENTURE, 1999.
2. ADDITIONAL BORROW PIT SITES AND PARKING AREA LOCATED ALONG ACCESS ROAD. SEE FIGURE 4 OF POEA FOR LOCATIONS.

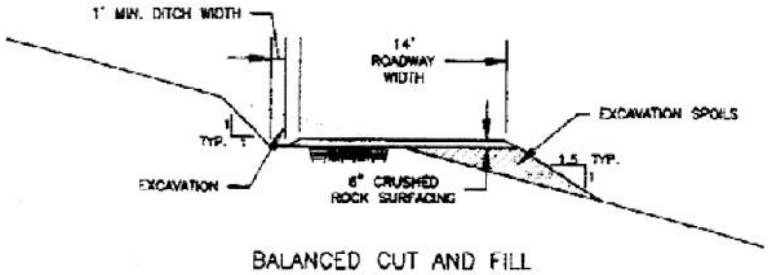
This drawing is a part of the application for license made by the undersigned this ____ day of _____, 2001.

RICHARD LEVITT, PRESIDENT
GUSTAVUS ELECTRIC COMPANY

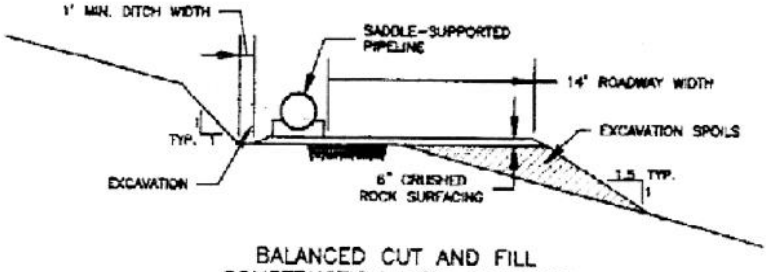
600 0 600
SCALE: 1" = 600'

GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

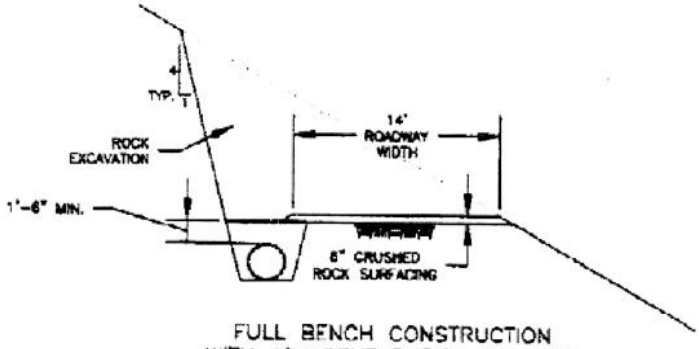
EXHIBIT F–1
GENERAL PLAN



BALANCED CUT AND FILL CONSTRUCTION



BALANCED CUT AND FILL CONSTRUCTION WITH ADJACENT PIPELINE



FULL BENCH CONSTRUCTION WITH ADJACENT BURIED PIPELINE

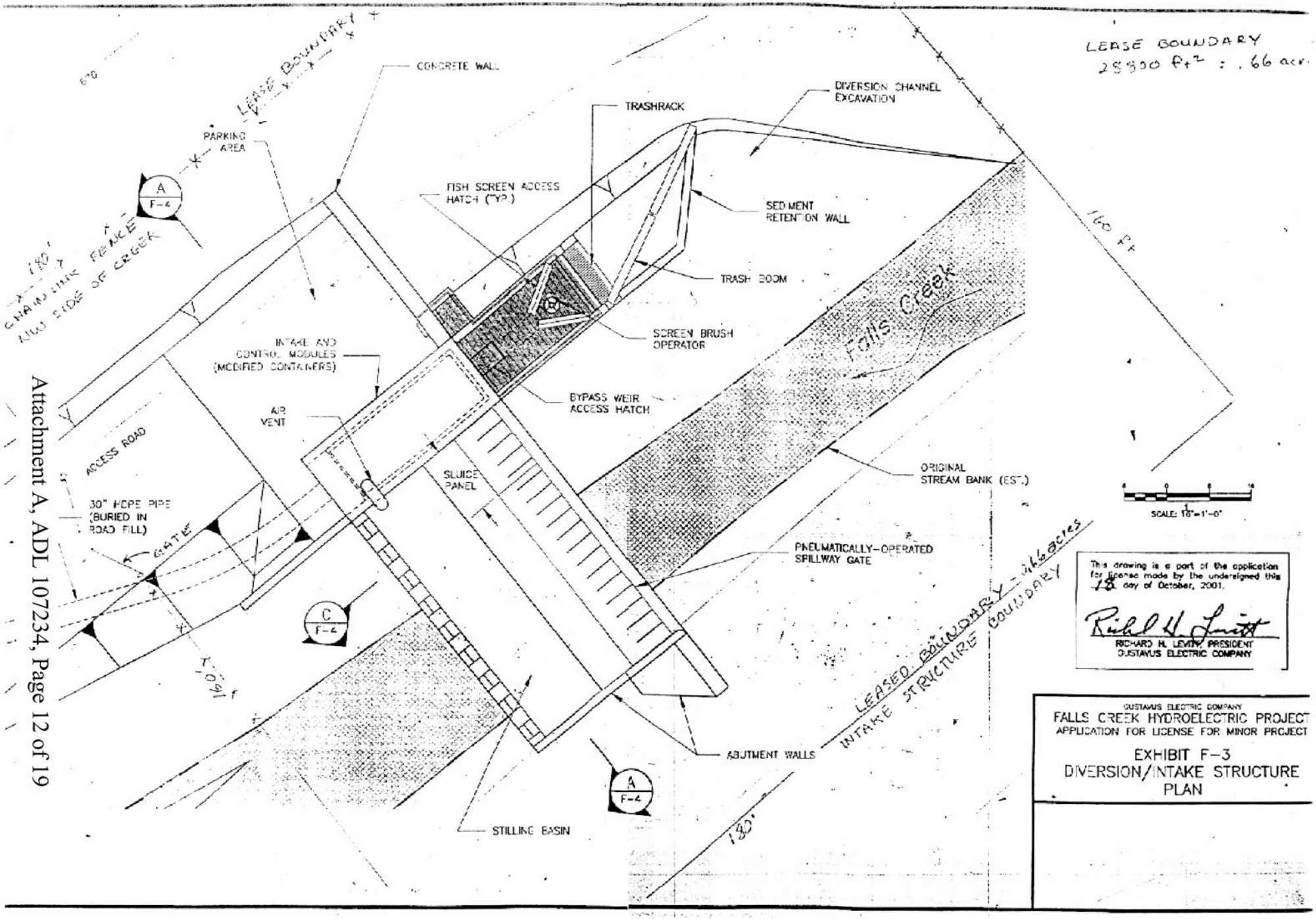
This drawing is a part of the application for license made by the undersigned this 18 day of October, 2001.

RICHARD H. LEVITT, PRESIDENT
GUSTAVUS ELECTRIC COMPANY

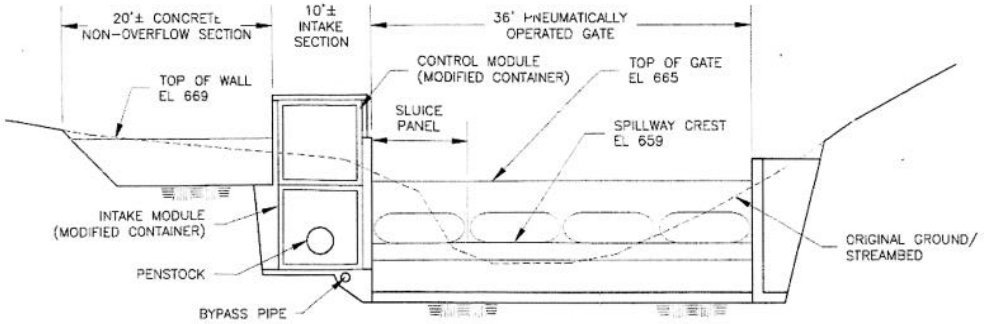
SCALE: 1"=8'-0"

GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

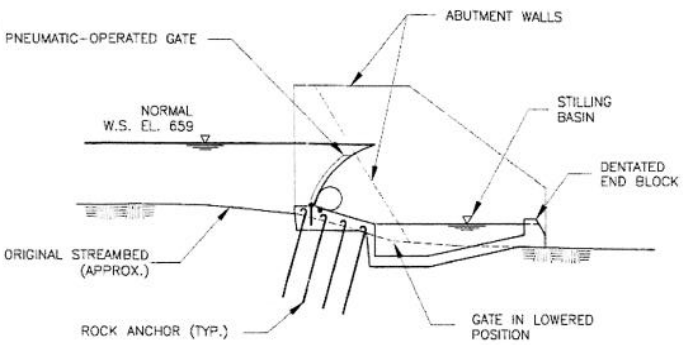
EXHIBIT F-2
ACCESS ROAD
TYPICAL SECTIONS



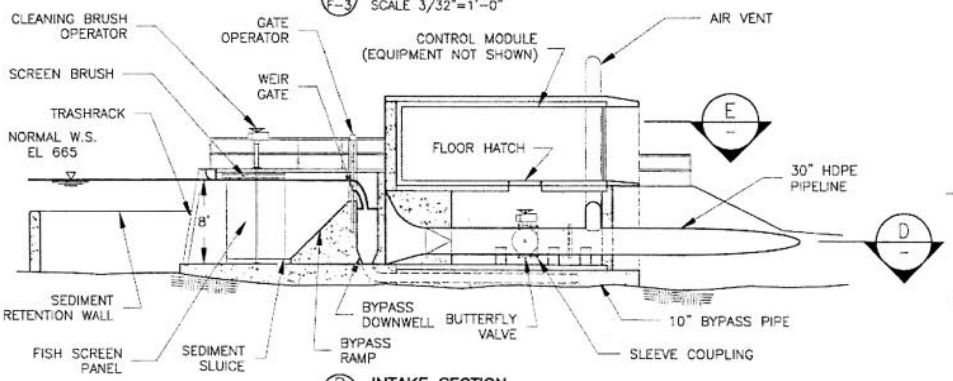
Attachment A, ADL 107234, Page 12 of 19



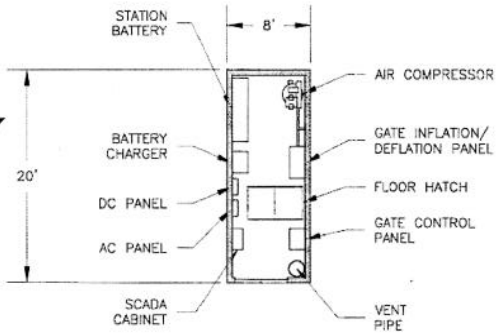
B F-3 **INTAKE SECTION** SCALE 3/32"=1'-0"



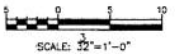
C F-3 **SPILLWAY SECTION** SCALE 3/32"=1'-0"

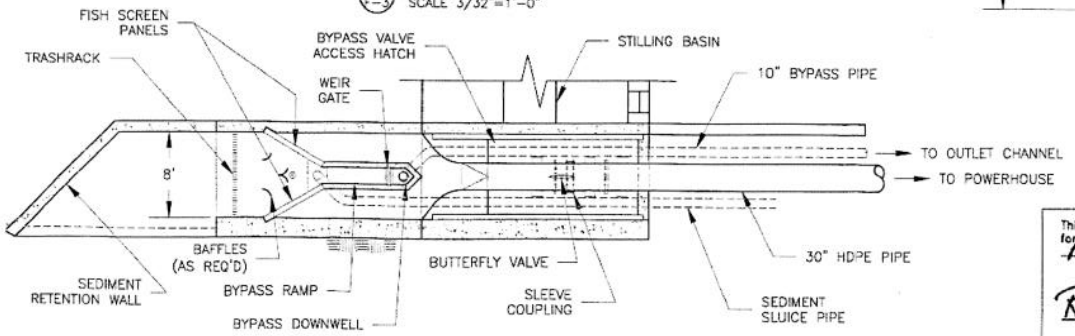


B F-3 **INTAKE SECTION** SCALE 3/32"=1'-0"



F F-3 **CONTROL MODULE PLAN** SCALE 3/32"=1'-0"





D – **INTAKE PLAN AT EL 659** SCALE 3/32"=1'-0"

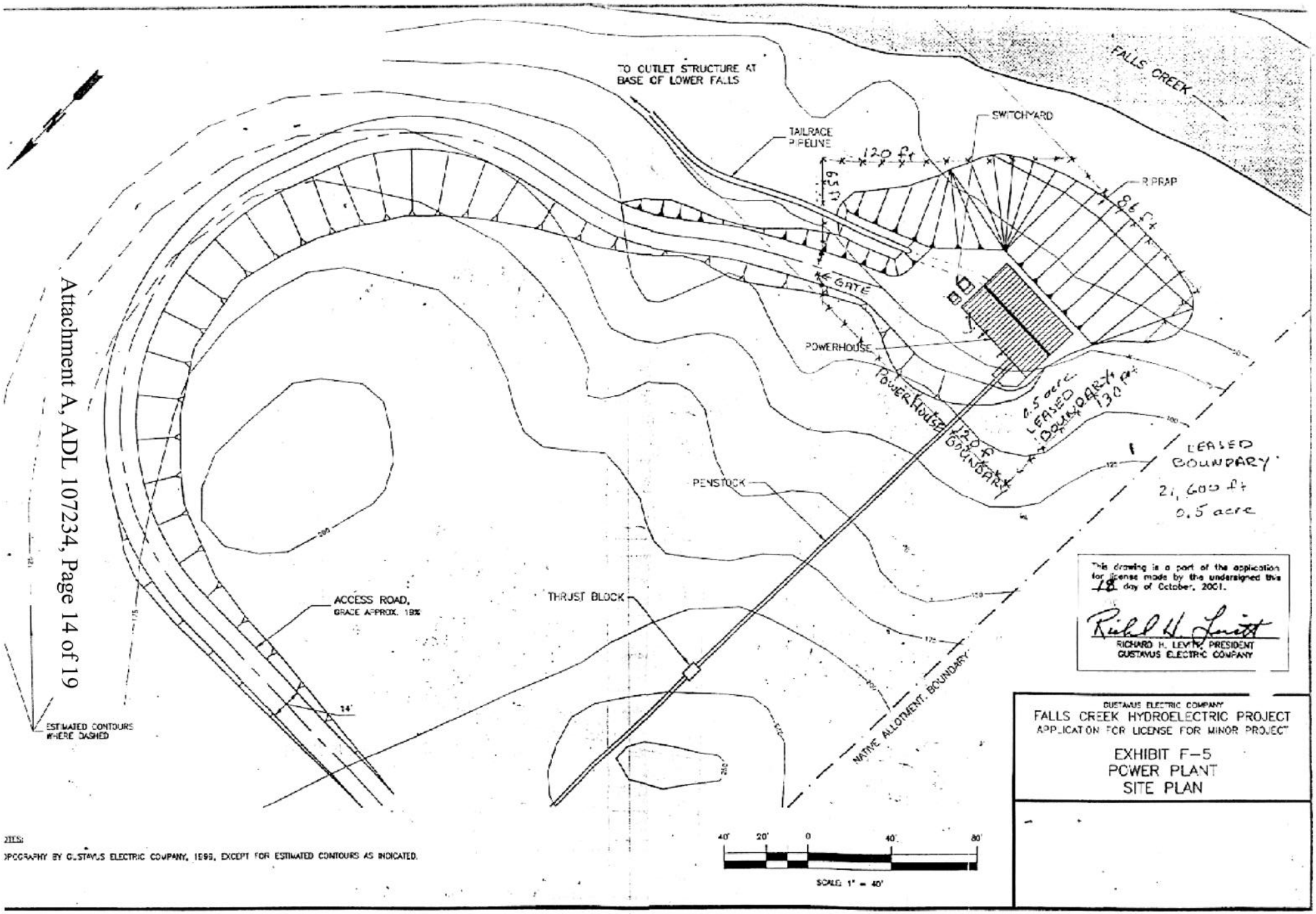
This drawing is a part of the application for license made by the undersigned this 18 day of October, 2001.

RICHARD H. LEVITT, PRESIDENT
GUSTAVUS ELECTRIC COMPANY

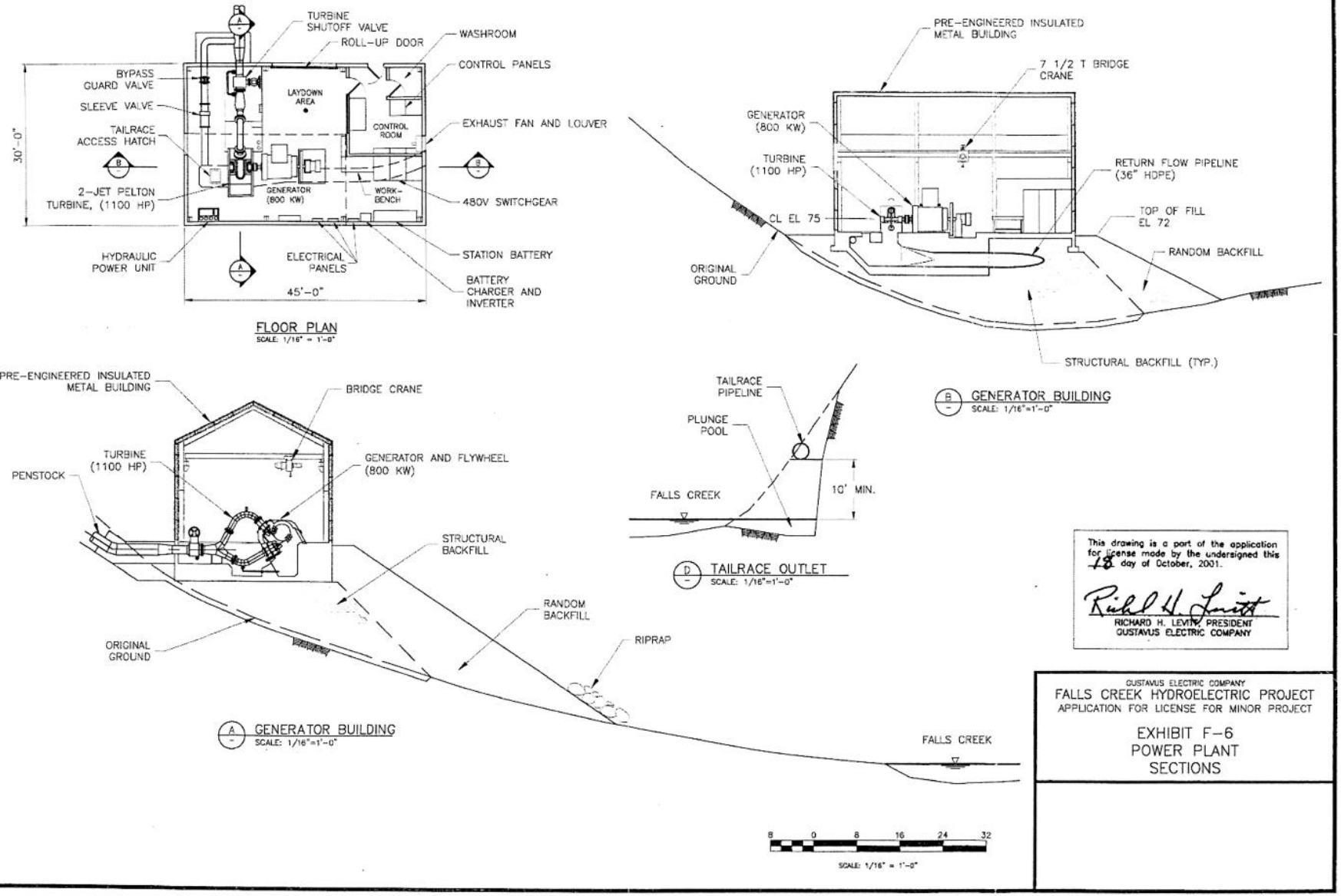
GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

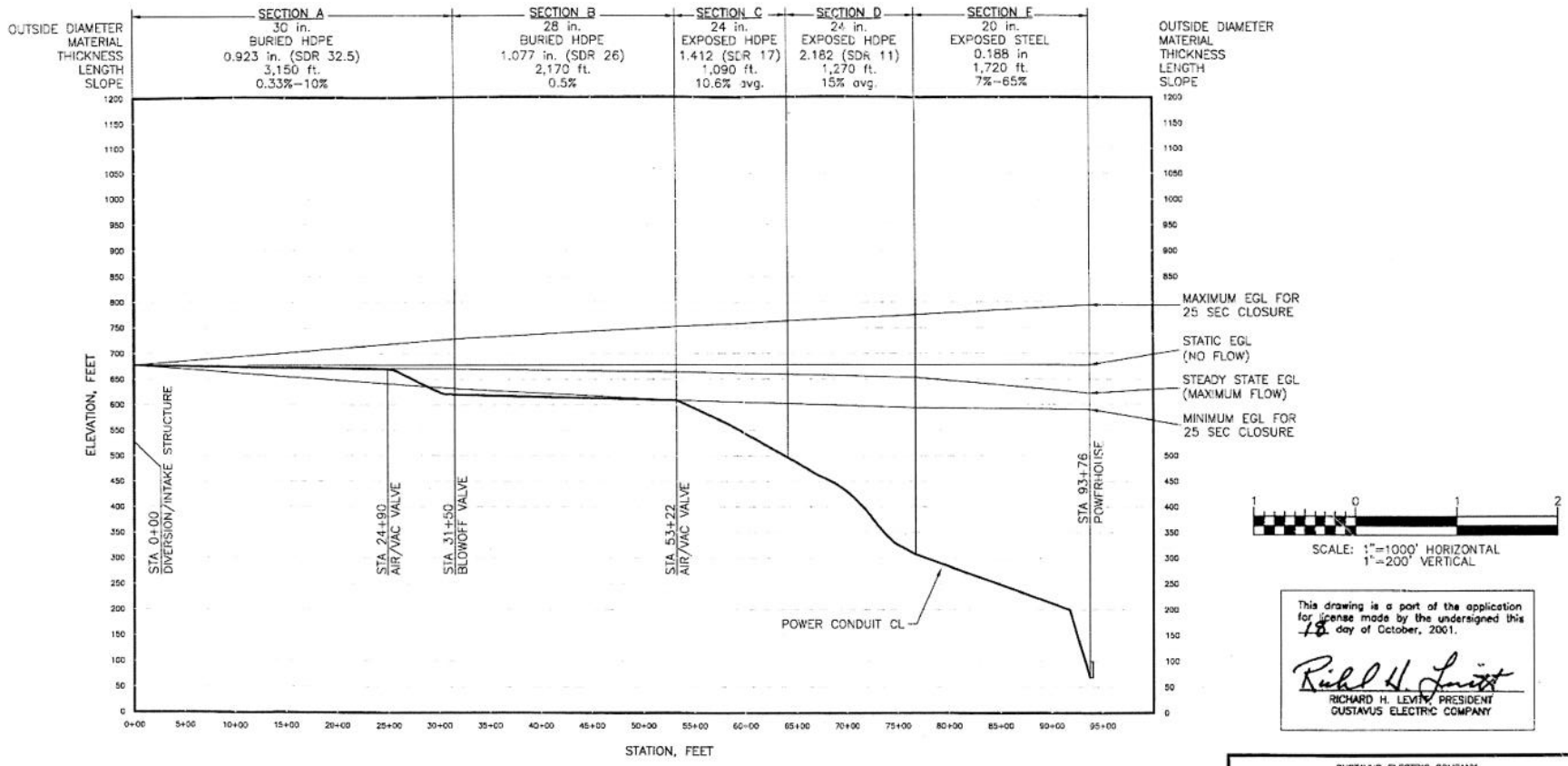
EXHIBIT F-4
DIVERSION/INTAKE STRUCTURE SECTIONS

Attachment A, ADL 107234, Page 13 of 19



NOTES:
TOPOGRAPHY BY GUSTAVUS ELECTRIC COMPANY, 1999, EXCEPT FOR ESTIMATED CONTOURS AS INDICATED.


TURBINE SHUTOFF VALVE
ROLL-UP DOOR
WASHROOM
CONTROL PANELS
BYPASS GUARD VALVE
SLEEVE VALVE
TAILRACE ACCESS HATCH
LAYDOWN AREA
CONTROL ROOM
EXHAUST FAN AND LOUVER
30'-0"
2-JET PELTON TURBINE, (1100 HP)
GENERATOR (800 KW)
WORK-BENCH
480V SWITCHGEAR
HYDRAULIC POWER UNIT
ELECTRICAL PANELS
STATION BATTERY
BATTERY CHARGER AND INVERTER
45'-0"
FLOOR PLAN
SCALE: 1/16" = 1'-0"
PRE-ENGINEERED INSULATED METAL BUILDING
7 1/2 T BRIDGE CRANE
GENERATOR (800 KW)
TURBINE (1100 HP)
RETURN FLOW PIPELINE (36" HDPE)
CL EL 75
TOP OF FILL EL 72
RANDOM BACKFILL
ORIGINAL GROUND
STRUCTURAL BACKFILL (TYP.)
B GENERATOR BUILDING
SCALE: 1/16"=1'-0"
PRE-ENGINEERED INSULATED METAL BUILDING
BRIDGE CRANE
TURBINE (1100 HP)
GENERATOR AND FLYWHEEL (800 KW)
PENSTOCK
STRUCTURAL BACKFILL
RANDOM BACKFILL
RIPRAP
ORIGINAL GROUND
FALLS CREEK
A GENERATOR BUILDING
SCALE: 1/16"=1'-0"
TAILRACE PIPELINE
PLUNGE POOL
FALLS CREEK
10' MIN.
D TAILRACE OUTLET
SCALE: 1/16"=1'-0"
8 0 8 16 24 32
SCALE: 1/16" = 1'-0"
This drawing is a part of the application for license made by the undersigned this 18 day of October, 2001.
RICHARD H. LEVIN, PRESIDENT
GUSTAVUS ELECTRIC COMPANY
GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT
EXHIBIT F-6
POWER PLANT
SECTIONS

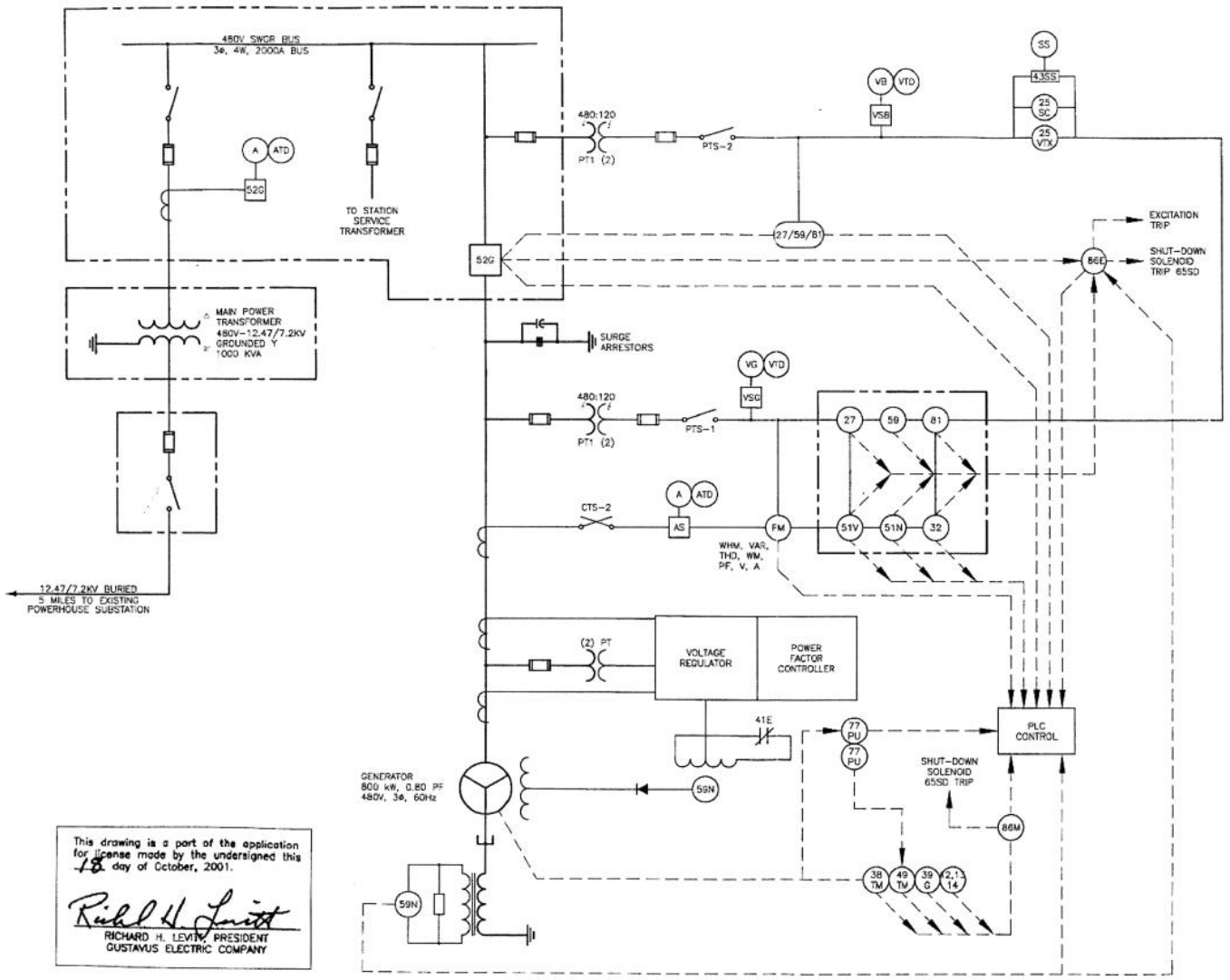


This drawing is a part of the application for license made by the undersigned this 18 day of October, 2001.

RICHARD H. LEVITT, PRESIDENT
GUSTAVUS ELECTRIC COMPANY

GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

EXHIBIT F–7
POWER CONDUIT
PROFILE



This drawing is a part of the application for license made by the undersigned this 18 day of October, 2001.

Richard H. Levitt
RICHARD H. LEVITT, PRESIDENT
GUSTAVUS ELECTRIC COMPANY

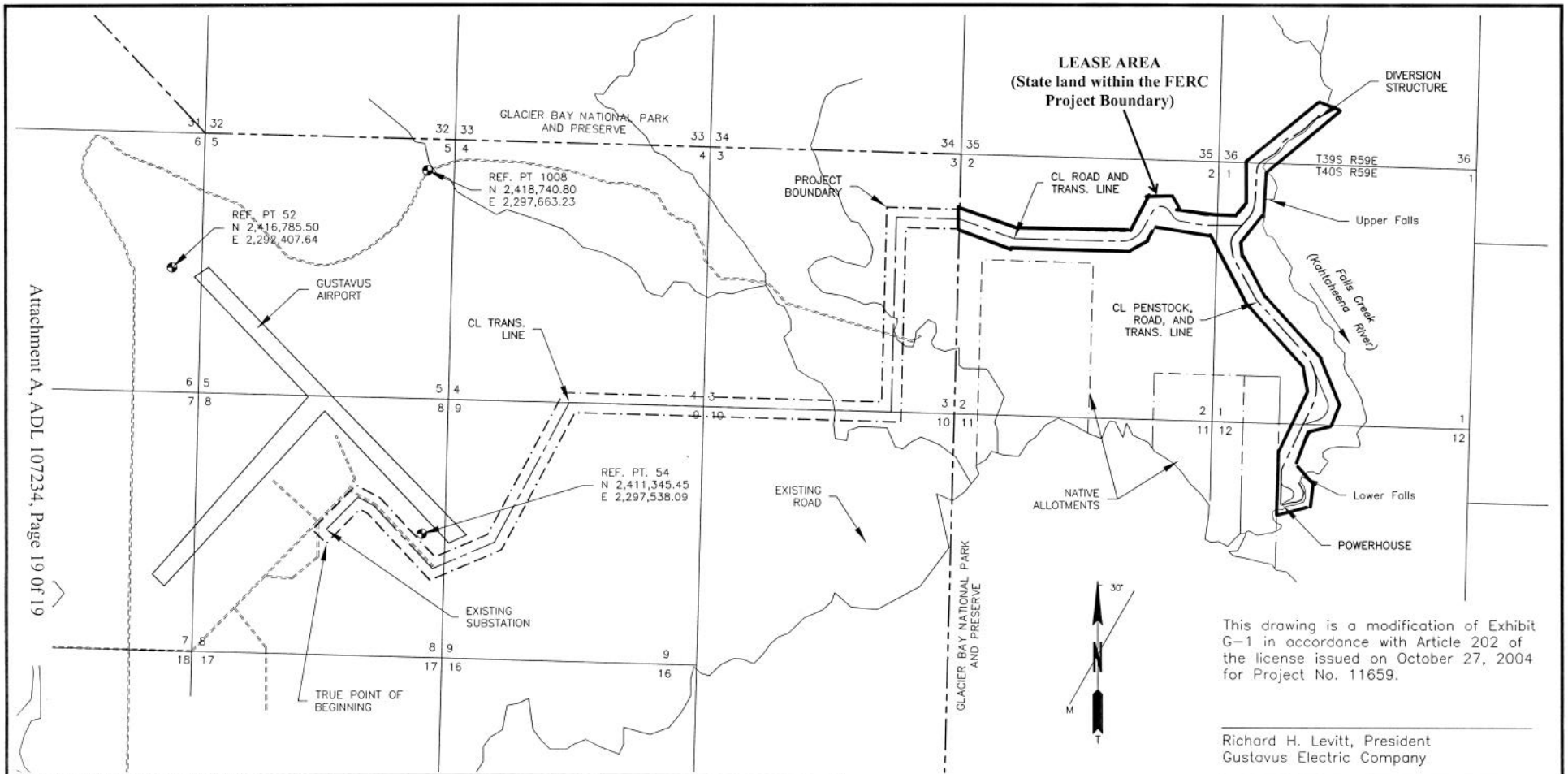
ABBREVIATIONS

12	GENERATOR OVERSPEED
13, 14	GENERATOR SPEED SENSING
25	SYNCHRONISM CHECK DEVICE
25A	AUTOMATIC SYNCHRONIZER
25VTX	SYNCHRONIZING VOLTAGE TRANSDUCER
27	UNDERVOLTAGE RELAY
32	DIRECTIONAL POWER RELAY
38	BEARING TEMPERATURE RELAY
39	VIBRATION MONITORING DEVICE
40	FIELD RELAY
41	FIELD CIRCUIT BREAKER
43	MANUAL TRANSFER OR SELECTOR DEVICE
46	REVERSE PHASE OR PHASE-BALANCE CURRENT RELAY
49	TEMPERATURE RELAY (G=GENERATOR, T=TRANSFORMER)
51B	AC TIME OVERCURRENT RELAY (B=BACKUP)
51TN	AC TIME OVERCURRENT RELAY (TN=TRANSFORMER NEUTRAL)
51V	AC TIME OVERCURRENT RELAY (V=VOLTAGE RESTRAINT)
52	AC CIRCUIT BREAKER
59	OVERVOLTAGE RELAY
59N/27	100% STATOR GROUND RELAY
60	VOLTAGE BALANCE
63	PRESSURE SWITCH
64F	FIELD GROUND PROTECTIVE RELAY
65SD	SHUTDOWN SOLENOID
71	OIL LEVEL SWITCH LOW
77	TACHOMETER PICKUP AND TRANSMITTER
81	FREQUENCY RELAY (O/U=OVER/UNDER)
86	LOCK-OUT RELAY (E=ELEC., M=MECH.)
A	AMMETER
AS	AMMETER SWITCH
ATD	AMP TRANSDUCER
CT	CURRENT TRANSFORMER
F	FREQUENCY METER
G	GENERATOR
HS	SYNCH SELECTOR SWITCH
PF	POWER FACTOR METER
PM	POWER LOGIC MONITOR
PT	POTENTIAL TRANSFORMER
SC	SYNCHRONISM CHECK
SS	SYNCH SCOPE OR SELECTOR SWITCH
THD	TOTAL HARMONIC DISTORTION
TL	TIE LINE
V	VOLTMETER
VAR	VOLT AMPERES REACTIVE METER
VARTD	VAR TRANSDUCER
VFI	VACUUM FAULT INTERRUPTER
VS	VOLTMETER SWITCH
VTD	VOLT TRANSDUCER
W	WATT METER
WH	WATTHOUR METER
WTD	WATT TRANSDUCER
VB	BUS VOLTAGE
VG	GENERATOR VOLTAGE

GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

EXHIBIT F-8
ONE-LINE DIAGRAM

EXHIBIT G
PROJECT MAP



This drawing is a modification of Exhibit G-1 in accordance with Article 202 of the license issued on October 27, 2004 for Project No. 11659.

Richard H. Levitt, President
Gustavus Electric Company

PROJECT BOUNDARY DESCRIPTION

BEGINNING AT THE S.W. CORNER OF SECTION 8, T39S, R59E, COPPER RIVER MERIDIAN, BEARING N 51°45' E 3.548 FEET TO THE TRUE POINT OF BEGINNING. FROM THE TRUE POINT OF BEGINNING AN AREA OF 341.14 ACRES BOUNDED BY THE FOLLOWING BEARINGS AND DISTANCES

N 44°39' E	980	N 29°23' E	350	N 44°59' W	535'	N 11°08' E	145	N 88°37' W	2248'
S 61°24' E	186	S 80°32' E	1138	N 25°52' E	722'	N 78°51' W	400'	N 70°25' W	1182
S 42°43' E	1858'	S 28°46' E	1600	N 71°36' E	462'	S 50°55' W	1895'	N 88°22' W	1516'
N 67°05' E	1592'	S 42°12' E	1712'	N 24°11' E	439'	S 02°45' W	915'	S 01°37' W	3959'
N 28°28' E	3188'	S 07°57' E	497'	N 23°13' W	1165'	S 40°54' W	246'	N 88°22' W	6520'
S 88°22' E	6674'	S 25°52' W	1395'	N 41°46' W	1658'	S 90°00' W	650'	S 28°28' W	3294'
N 01°37' E	3959'	S 01°38' W	1242'	N 28°46' W	879'	N 80°32' W	492'	S 67°05' W	1170'
S 88°22' E	1053'	N 90°00' E	174	N 08°16' W	263'	N 36°02' W	385'	N 42°43' W	1643'
S 70°25' E	1183'	N 73°32' E	514'	N 40°54' E	742'	S 86°40' W	437'	N 61°24' W	553'
S 88°37' E	2423'	N 18°52' E	252'	N 02°45' E	874'	S 29°23' W	703'	S 44°39' W	1281'
N 60°23' E	388'	N 180°00' W	251'	N 50°55' E	1861'	S 60°22' W	166'	S 45°20' E	400'

TOTAL FEDERAL LANDS WITHIN PROJECT BOUNDARY (TO BE EXCHANGED PURSUANT TO P.L. 105-317) = 160.11 ACRES

THIS PROJECT BOUNDARY IS UNSURVEYED AND PRELIMINARY, AND IS BASED ON A BOUNDARY OFFSET OF 200 FEET FROM PROJECT FEATURES. A FINAL BOUNDARY SURVEY WILL BE COMPLETED AT THE END OF PROJECT CONSTRUCTION.

REFERENCE POINTS BASED ON STATE PLANE COORDINATES, NAD83 MAP PROJECTION, UNIT OF MEASUREMENT IS FEET. SECTION LINES ARE BASED ON USGS JUNEAU B-6 QUADRANGLE.

2000 0 2000
SCALE: 1" = 2000'

GUSTAVUS ELECTRIC COMPANY
FALLS CREEK HYDROELECTRIC PROJECT
APPLICATION FOR LICENSE FOR MINOR PROJECT

EXHIBIT G-1
PROJECT MAP

FERC No. 11659-9

Attachment A, ADL 107234, Page 19 of 19