



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

SITKA FIELD OFFICE
Regulatory Division (1145)
CEPOA-RD
Post Office Box 16
Sitka, Alaska 99835

PUBLIC NOTICE DATE: July 26, 2012
EXPIRATION DATE: August 27, 2012
REFERENCE NUMBER: POA-2012-0441
WATERWAY: Blue Lake

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

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact **Linda Speerstra** at (907) 747-0658, or by email at linda.speerstra@usace.army.mil if further information is desired concerning this notice.

APPLICANT: City and Borough of Sitka 105 Jarvis Street, Sitka, Alaska 99835

POINT OF CONTACT: Dean Orbison, Project Manager

LOCATION: The project site is located within Section 35, T. 55 S., R. 64 E., Copper River Meridian; USGS Quad Map Sitka A-4; Latitude 57.06232° N., Longitude 135.20033° W.; at the terminus of Forest Road 7577 in Sitka, Alaska.

SPECIAL AREA DESIGNATION: The project is located within the Tongass National Forest.

PURPOSE: The applicant's stated purpose is to provide adequate and reliable electric service for all consumers connected to the Sitka electric power distribution system by upgrading the existing Blue Lake Hydropower facility. Additional hydroelectric power would be generated by upgrading the following components:

- 1) Increase the Blue Lake dam crest height by 83 feet. For and overall spillway crest elevation of 425 feet mean sea level (msl) and a parapet elevation of 439 feet msl. The increase in dam height would:

- a. Expand the Blue Lake inundation area by 362-acres which would increase the hydraulic head (energy per unit weight of water) of the Blue Lake Reservoir.
 - b. Increase the current generation capacity from 7.5 megawatts (MW) to 16.9 MW.
- 2) Replace the existing Blue Lake dam intake structure and power conduit line with a higher elevation structures to provide:
 - a. Warmer water for fish habitat in Sawmill Creek
 - b. Minimal sediment intake
 - c. Improved maintenance access
 - 3) Construct a new 2600 square foot tailrace to accommodate:
 - a. A larger capacity powerhouse.
 - b. Lower tailrace elevation

PROPOSED WORK: The applicant requests authorization for the following work below the Ordinary High Water Mark (OHWM) of Sawmill Creek and Blue Lake.

- 1) Discharge 8,000 cubic yards of concrete at the OHWM of the existing Blue Lake dam structure resulting in the inundation of 362-acre parcel of land described as the proposed Blue Lake Hydroelectric Dam Inundation Area to increase the height of the dam by 83 feet. The inundation area would result in the loss of 47.9 acres of waters of the U.S., specifically, 15.2 acres of wetlands, and 32.7 acres of stream channels (approximately 20,129 linear feet).
- 2) Discharge approximately 1,165 cubic yards of rock fill material below the OHWM of Sawmill Creek to create a scour wall and plunge pool area resulting in the loss of 0.005 acres of waters of the U.S.
- 3) Discharge approximately 2,400 cubic yards of rock fill material below the OHWM of Sawmill Creek to permanently fill the existing tailrace resulting in the loss of 0.05 acres of waters of the U.S.

ADDITIONAL INFORMATION: The following upland attendant features would also be associated with the Blue Lake Dam expansion project:

- 1) Replace the existing 7-foot diameter penstock with a new 9-foot diameter penstock between the lower portal and the new powerhouse.
- 2) Decommission equipment in the existing powerhouse.
- 3) Construct a new powerhouse that would house three new generating units.
- 4) Replace the existing 670-kW fish valve unit with a new 1-MW generating unit.
- 5) Decommission the existing 870-kW pulp mill feeder unit.
- 6) Replace the existing powerhouse transformers with new transformers.
- 7) Install an underground 20-ft diameter surge chamber along the power conduit with venting to the surface at elevation 465 feet msl.
- 8) Develop a 1.50 acre upland staging area for equipment access and dam site staging.
- 9) Install a 1,400 foot long dam site power distribution line from the fish valve unit along Blue Lake road to the dam site.

- 10) Re-align portions of the Blue Lake road to accommodate heavy equipment transport.
- 11) Develop two upland overburden sites
 - a. Green Lake Road staging area
 - b. Sawmill Creek Industrial Park

All work would be performed in accordance with the enclosed plan (sheets 1-8), dated July 25, 2012.

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

a. Avoidance: The applicant states: "The City is avoiding additional impacts to waters of the U.S. by constructing and designing the raising the existing dam instead of impacting a new site which would potentially cause greater impacts to waters of the U.S. Additionally, the new powerhouse site was selected based on its upland location and proximity to Sawmill Creek further avoiding impacts to waters of the U.S."

b. Minimization: The applicant states: "The Blue Lake Project Expansion was selected over other hydroelectric alternatives to minimize impacts to waters of the U.S. by utilizing an existing reservoir and infrastructure. Additionally, timing windows would be conditioned to ensure impacts to EFH are minimal."

c. Compensatory Mitigation: The applicant states: "The City proposes a "Permittee Responsible Mitigation Plan" as outlined in the Federal Energy Regulatory Commission (FERC) License Article 405, Draft Mitigation and Monitoring Plan. The parcel is described as a 48-acre tract located adjacent to the West Chichagof-Yakobi Wilderness Area. The City would donate the parcel to the United States Forest Services (USFS) for inclusion into the Wilderness Area."

The City has also provided a primary habitat functional analysis dated April 17, 2012 for the 362-acre inundation area. The inundation area would convert 314.9 acres of uplands into Lake littoral and pelagic habitat types.

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

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There is an unevaluated property in the vicinity of the worksite. It has been designated **SIT-733**.

In a letter dated April 6, 2012, the Alaska State Historic Preservation Office (SHPO) concurred with the determination that SIT-733 was not eligible for the National Register of Historic Places. As there are no historic properties (as defined at 36 CRF 800.16(I)) located within the "Area of Potential Effect" SHPO concurred that a finding of no historic properties affected is appropriate for the proposed undertaking.

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

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

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

The project area is within the known range of the Chum salmon - *Oncorhynchus keta*, Pink salmon - *O. gorbushca* and Coho salmon - *O. kisutch*.

Preliminarily, we have determined the described activity would not adversely affect EFH in the project area. This application is being coordinated with the NMFS. Any comments they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Sitka Tribe of Alaska and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

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

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

any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

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

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

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

Project drawings, and Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

Site Plans
Notice of Application
State Water Quality Certification

STATE OF ALASKA

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

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WQM/401 CERTIFICATION
410 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1795
PHONE: (907) 465-5321/FAX: (907) 465-5274

NOTICE OF APPLICATION
FOR
STATE WATER QUALITY CERTIFICATION

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

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. **POA-2012-0441 - Blue Lake**, serves as an application for State Water Quality Certification from the Department of Environmental Conservation.

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

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

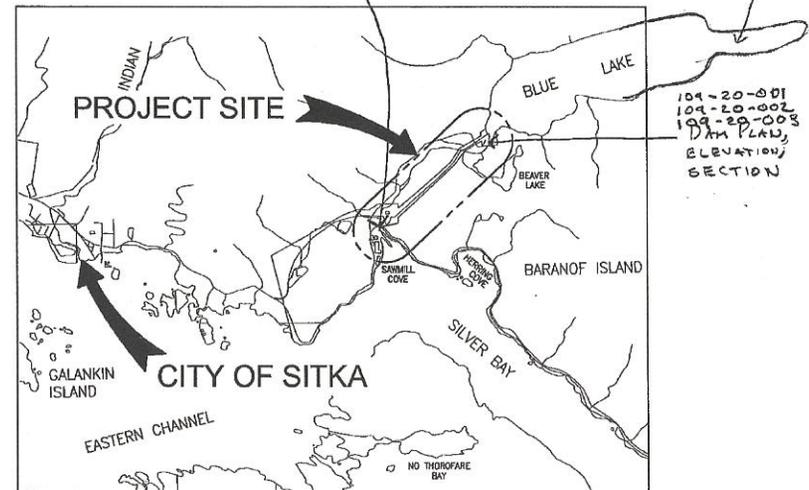
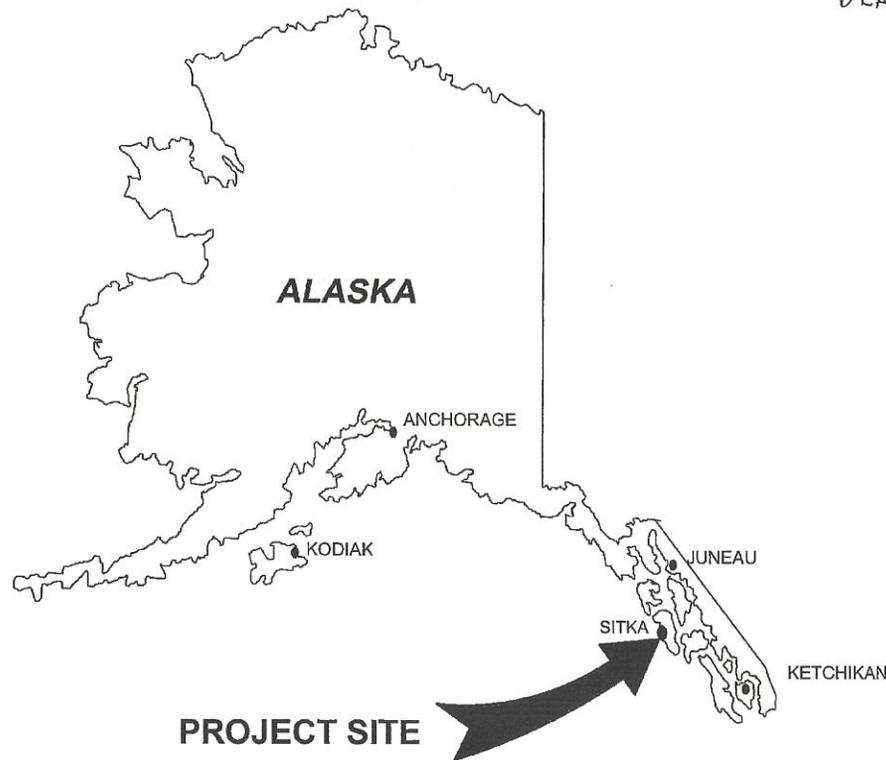
BLUE LAKE EXPANSION PROJECT

CITY AND BOROUGH OF SITKA, ALASKA

CONTRACT No. 9 - GENERAL CONSTRUCTION

DRAWING 109-45-009
POWER HOUSE AND
AFTER BAY LOCATION

DRAWING 106-06-001
INUNDATION
AREA



VICINITY MAP
SCALE: 1"=3000'

TS55, R64E

DATE	REV	DESCRIPTION OF ISSUES & REVISIONS	M.I.R.	SWP	PRR	DATE
03-23-12	1	ISSUED FOR BID				

ANY USE TO WHICH A PROFESSIONAL ENGINEER HAS APPLIED THEIR SEAL UNDER THE "PROFESSIONAL ENGINEERING, LAND SURVEYING, AND LANDSCAPE ARCHITECTURE REGULATIONS" OF THE STATE OF ALASKA AND ANY USE IN CONNECTION WITH ANY PROJECT, UNLESS AS TO SUCH USES THE ENGINEER HAS SPECIFICALLY AGREED TO IN WRITING, SHALL BE LIMITED TO THE PROJECT AND DATE OF THE ORIGINAL SEALING OF THE DRAWING BY THE ENGINEER. ANY OTHER USE OF THIS DRAWING, OR ANY PART OF THIS DRAWING, OR ANY REPRODUCTION OF THIS DRAWING OR ANY PART THEREOF, WITHOUT THE WRITTEN CONSENT OF HATCH ASSOCIATES CONSULTANTS, INC. IS STRICTLY PROHIBITED.

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CITY AND BOROUGH OF SITKA, ALASKA

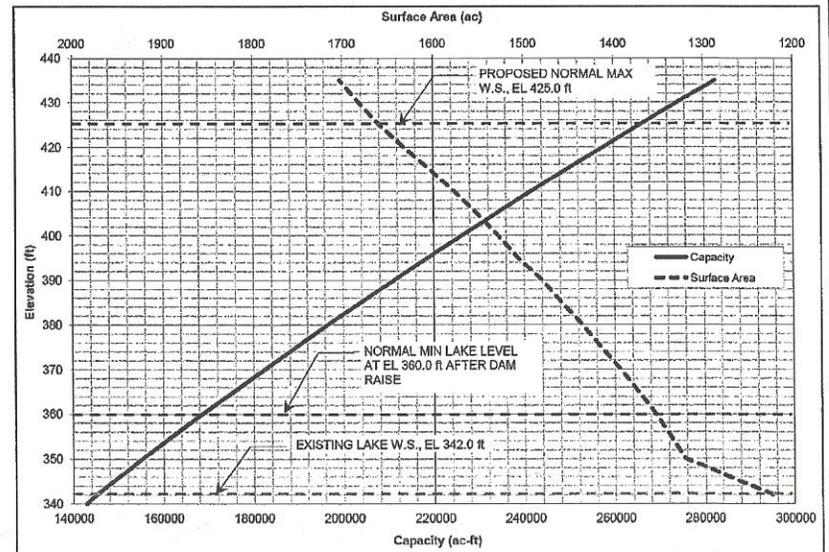
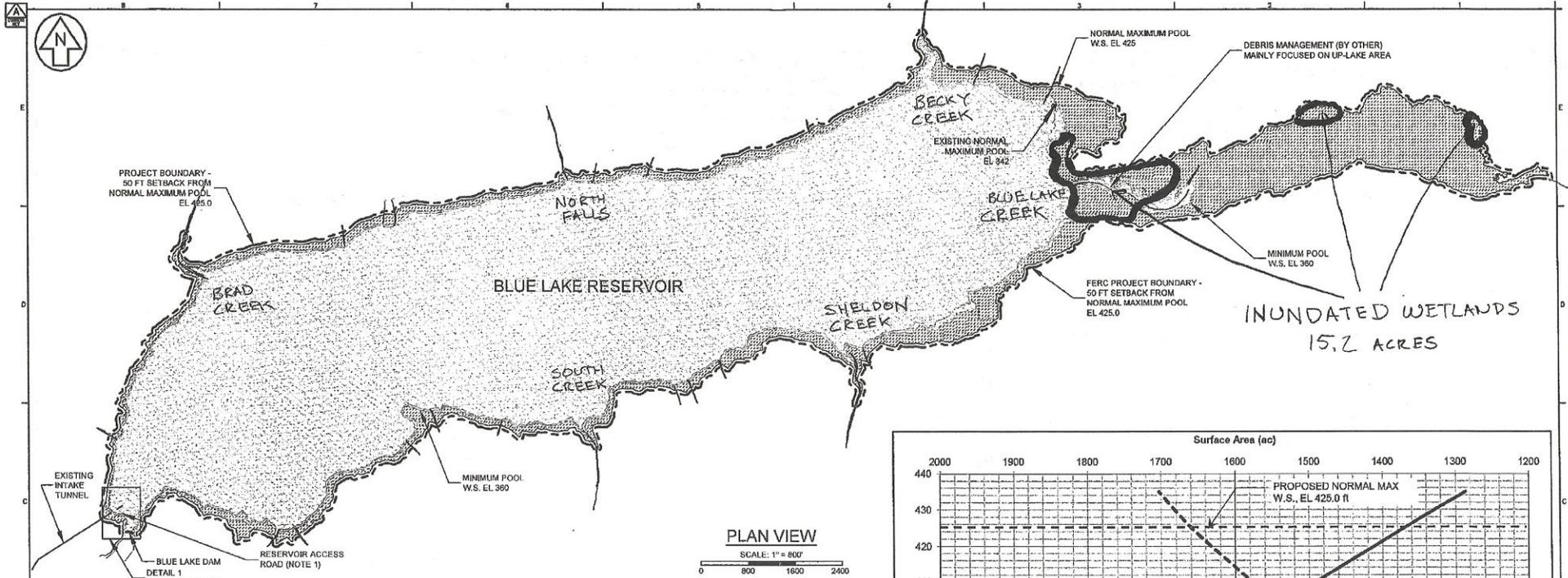
BLUE LAKE EXPANSION PROJECT

POA-2012-0441 BLUE LAKE
PAGE 1 OF 8
JULY 2012

DRAWING NUMBER
109-01-000

PROJECT No. 1033290

1 SAVED: 03/22/2012 2:02pm by aad@hatch



NOTES:

1. MAINTAIN ACCESS TO RESERVOIR FOR DEBRIS MANAGEMENT CONTRACTOR (CONTRACT 8) DURING CONSTRUCTION.

LEGEND:

Current Reservoir (EL 342)

Inundated Area with Dam Raise (EL 425)

Project Boundary

Normal Maximum Pool

MAJOR TRIBUTARIES ARE NOTED BY NAME, INTERMITTENT TRIBUTARIES ARE NOTED BY ONLY.

POA-2012-0441 BLUE LAKE
PAGE 2 OF 8
JULY 2012

DATE	BY	DESCRIPTION OF ISSUES & REVISIONS	DATE	BY	DESCRIPTION OF ISSUES & REVISIONS
03-23-12	J.H. RUTHERFORD	ISSUED FOR BID	03-23-12	J.H. RUTHERFORD	
	R.S. TRUDGSON		03-23-12	R.S. TRUDGSON	
	D.C. JOHNSON		03-23-12	D.C. JOHNSON	
	J.H. RUTHERFORD		03-23-12	J.H. RUTHERFORD	
	P.R. RODRIGUE		03-23-12	P.R. RODRIGUE	
	S.M. HART		03-23-12	S.M. HART	

FOR EACH PROJECT, HATCH ASSOCIATES CONSULTANTS, INC. HAS EMPLOYED PROFESSIONAL ENGINEERS AND SURVEYORS WHO ARE LICENSED IN THE STATE OF ALASKA. THE ENGINEERS AND SURVEYORS HAVE REVIEWED THE DESIGN AND CONSTRUCTION OF THIS PROJECT AND HAVE FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ALASKA ENGINEERING AND SURVEYING ACT. HATCH ASSOCIATES CONSULTANTS, INC. IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THIS PROJECT.

HATCH HATCH ASSOCIATES CONSULTANTS, INC.

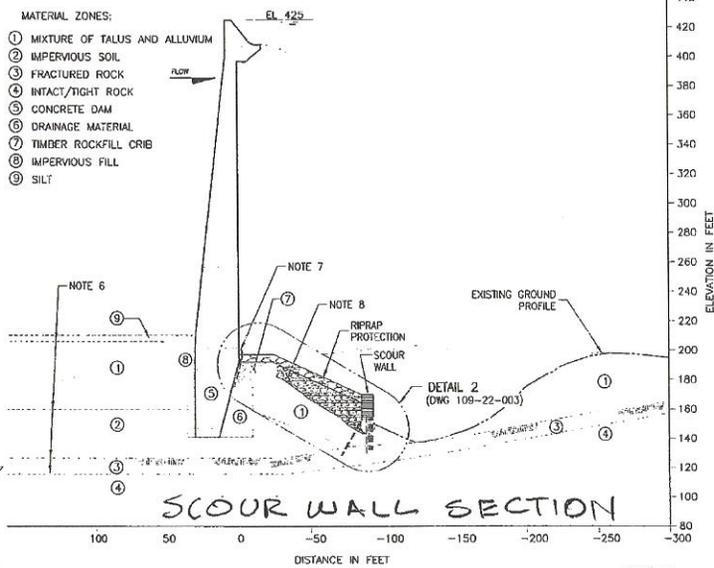
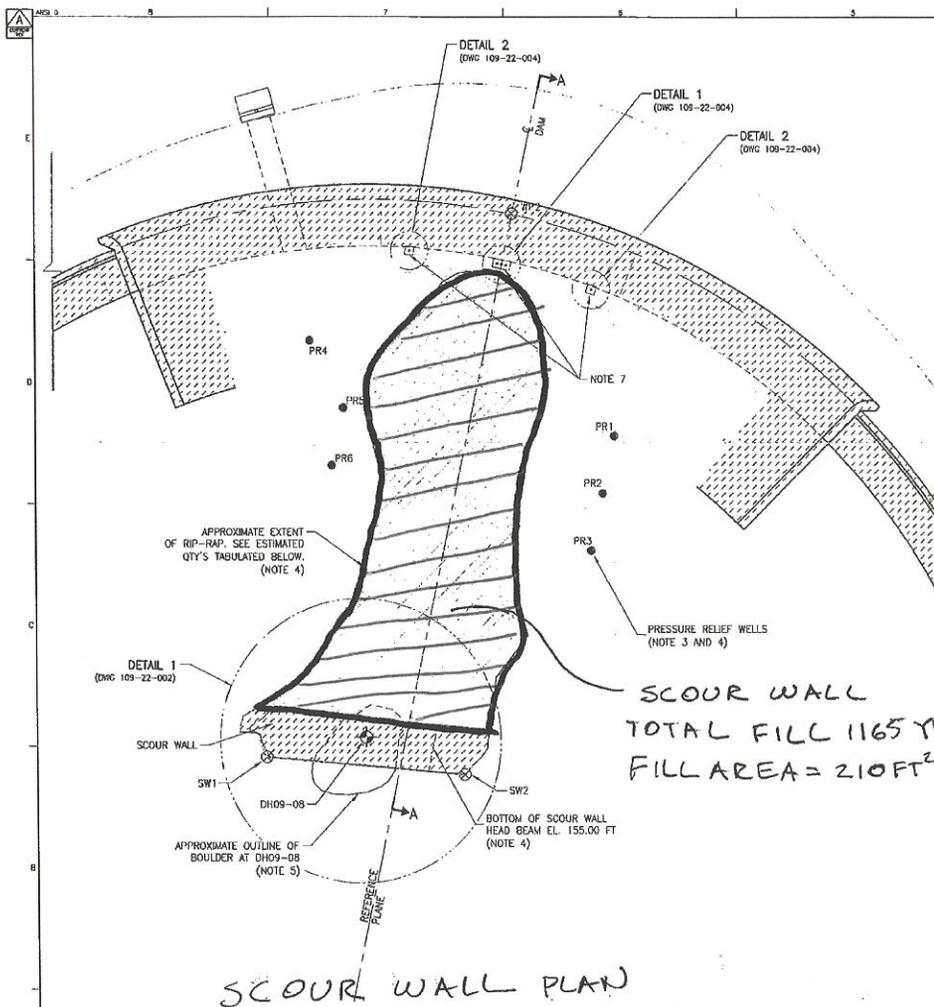
CITY AND BOROUGH OF SITKA, ALASKA

BLUE LAKE EXPANSION PROJECT

PROJECT No. H332360

ISSUING NUMBER: 109-06-001

Page 2



- NOTES:**
- LOCATION OF SCOUR WALL TO BE CONFIRMED BY RPR INSPECTION AFTER EXCAVATION.
 - SEE DWG 109-20-005 FOR DAM SITE SURVEY CONTROL.
 - SEE DWG 109-20-083 FOR PRESSURE RELIEF WELL DETAILS.
 - SCOUR WALL CONSTRUCTION CONSTRAINTS:
 - REMOVE LOGS AND ORGANIC DEBRIS IN THIS AREA TO EXPOSE LOOSE ROCK AND ALLUVIUM MATERIALS PRIOR TO PLACING RIP-RAP. DO NOT DISTURB TIMBER CRIB AT THE BASE OF THE DAM.
 - PLACE EXCAVATED TUNNEL ROCK OVER EXISTING ROCK AND ALLUVIUM MATERIAL. FACILITATE RPR INSPECTION PRIOR TO PLACEMENT.
 - DO NOT REMOVE THE LARGE BOULDER AT THE BASE OF THE SCOUR WALL. MINIMIZE DISTURBANCE OF THE BOULDER.
 - LOCATION AND EXTENT OF MATERIAL ZONES HAVE BEEN INFERRED FOR DESIGN PURPOSES AND ARE APPROXIMATE.
 - PROTECT EXISTING DRAINS DURING SCOUR WALL CONSTRUCTION AND PLACEMENT OF FILL BETWEEN DAM AND WALL. COMPLETE REINF CONC ENCASEMENT PRIOR TO PLACING FILL AND RIPIRAP BEHIND WALL.
 - NO MORE THAN 30% OF MATERIAL BY WEIGHT SHALL BE LESS THAN 6 INCH DIAMETER.

SCOUR WALL
TOTAL FILL 1165 YD³
FILL AREA = 210 FT²

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JULY 2012

SCOUR WALL REFERENCE POINTS

NUMBER	NORTHING	EASTING
SW1	1912946.13	2380707.67
SW2	1912943.17	2380742.02

ESTIMATED QUANTITIES

RIPIRAP	450 CY
EXCAVATED TUNNEL ROCK	715 CY



NO.	DATE	REV.	DESCRIPTION OF ISSUES & REVISIONS	BY	CHKD	APP'D
04-20-12			ISSUED FOR BID	DJ	KM	RT

DESIGN SCALE

S. HAMBURGER	03-23-12	DR
DESIGN SCALE		DR
P.S. TONKESON	03-23-12	DR
DR		
D.C. JOHNSON	03-23-12	DR
DESIGN SCALE		DR
L.H. RUTHERFORD	03-23-12	DR
DESIGN SCALE		DR
L.H. RUTHERFORD	03-23-12	DR
DESIGN SCALE		DR
P.R. RODRIGUE	03-23-12	DR
DESIGN SCALE		DR
E.M. HART	03-23-12	DR

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CITY AND BOROUGH OF SITKA, ALASKA

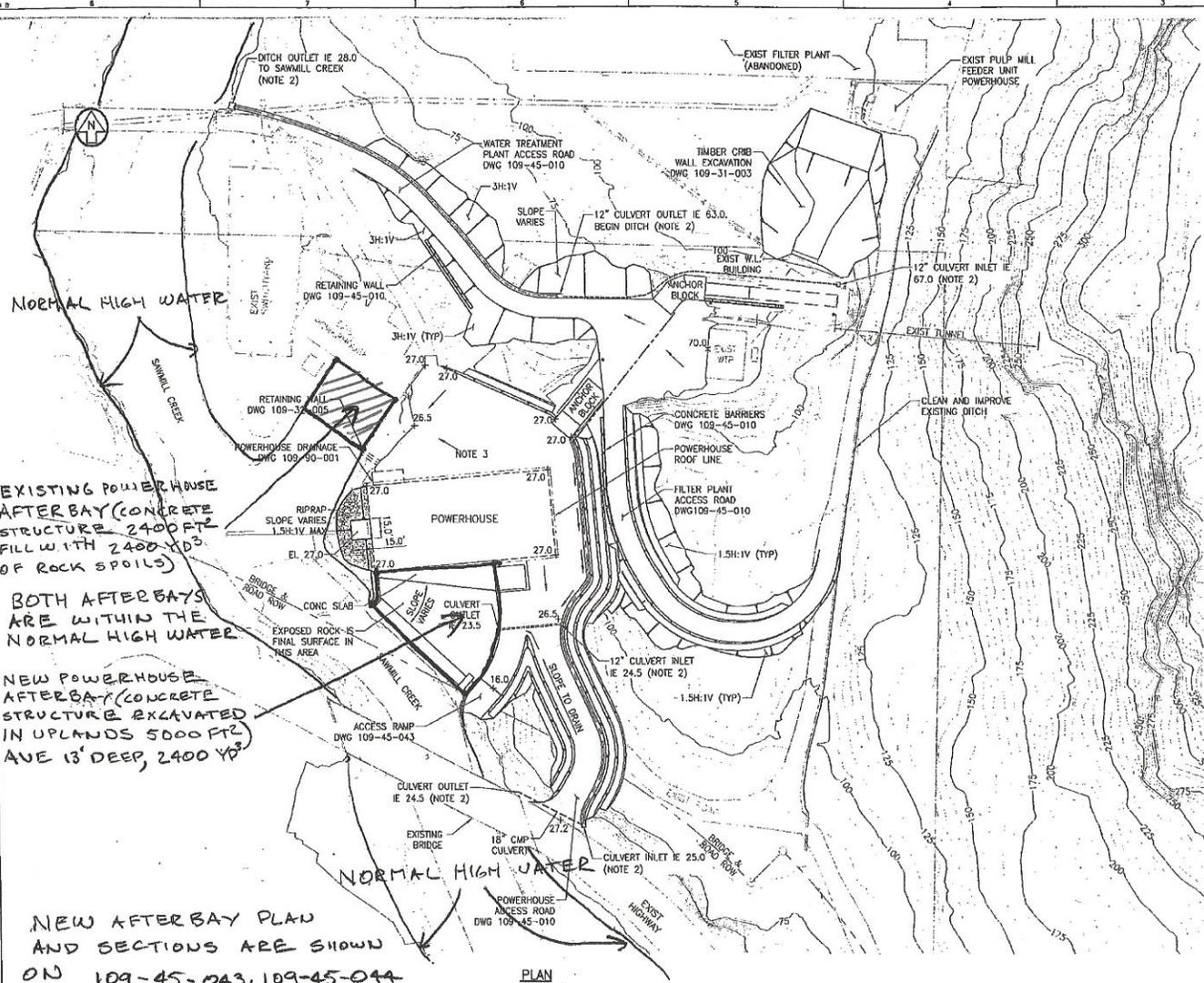
BLUE LAKE EXPANSION PROJECT

SPILLWAY PLUNGE POOL SCOUR WALL GENERAL ARRANGEMENT PLAN AND SECTION

PROJECT NUMBER: 109-22-001

PROJECT No. 109-22-001

ALUTIAK-2012-0441-0504
 FILE NAME: 109-22-001.dwg



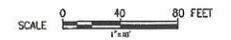
NOTES

1. ACCESS TO WTP SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD.
2. SEE 109-90-028 FOR DRAINAGE DETAILS.
3. GRADE POWERHOUSE PARKING AREA TO DRAIN TOWARDS SAWMILL CREEK.
4. CULVERT TO DISCHARGE DIRECTLY ONTO ROCK ACCESS RAMP.

LEGEND

- DITCH
- - - - - CULVERT
- - - - - SUBSURFACE PENSTOCK DRAIN SYSTEM

POA-2012-0441 BLUE LAKE
 PAGE 6 OF 8
 JULY 2012



PLAN
 SCALE 1"=40'

NO.	DATE	BY	DESCRIPTION OF ISSUES & REVISIONS	APP'D	DATE	BY	DESCRIPTION
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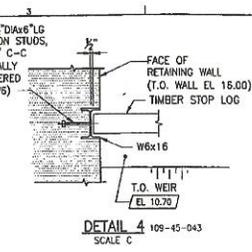
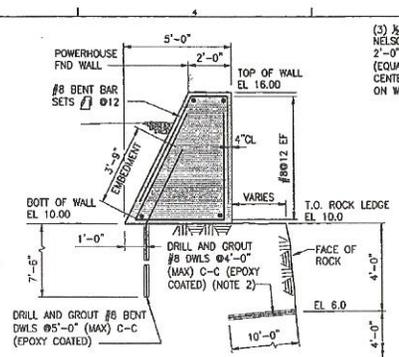
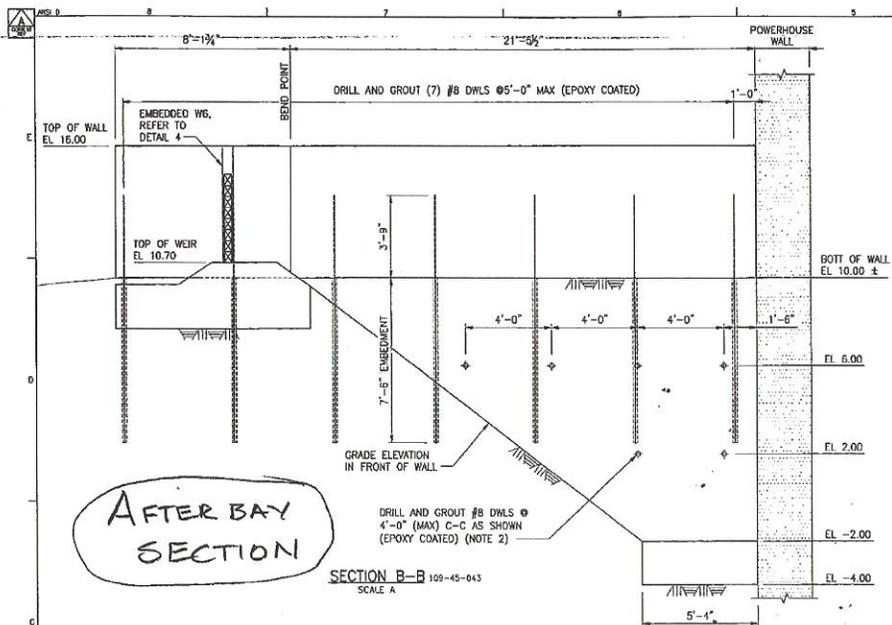
DESIGNER	DATE
K.C. MOER	03-23-12
DESIGNER	
L.A. JOHNSON	03-23-12
DESIGNER	
L.S. WEN	03-23-12
DESIGNER	
P.D. RODRIGUE	03-23-12
DESIGNER	
I.S.M. HART	03-23-12

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 CITY AND BOROUGH OF SITKA, ALASKA
 BLUE LAKE EXPANSION PROJECT

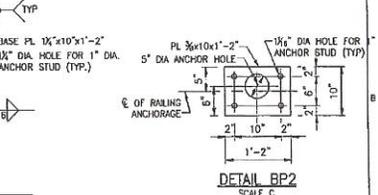
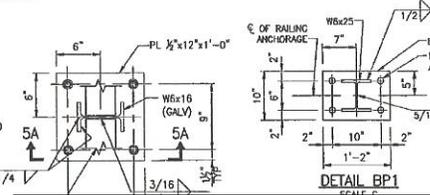
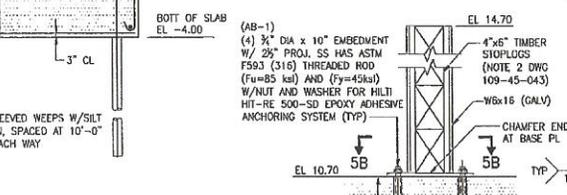
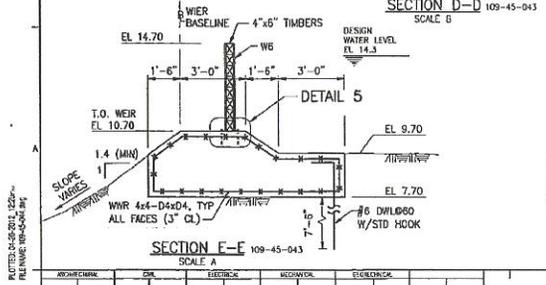
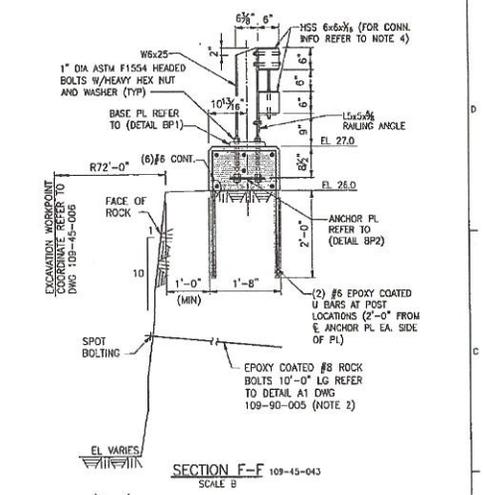
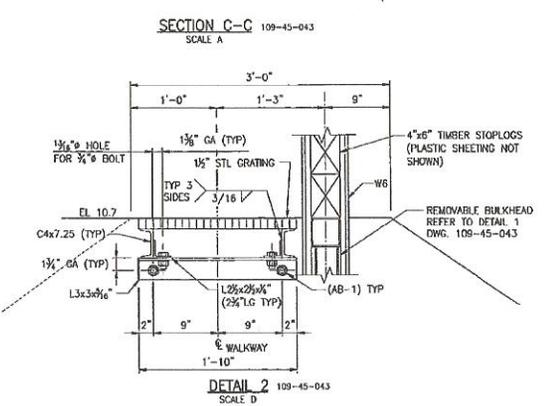
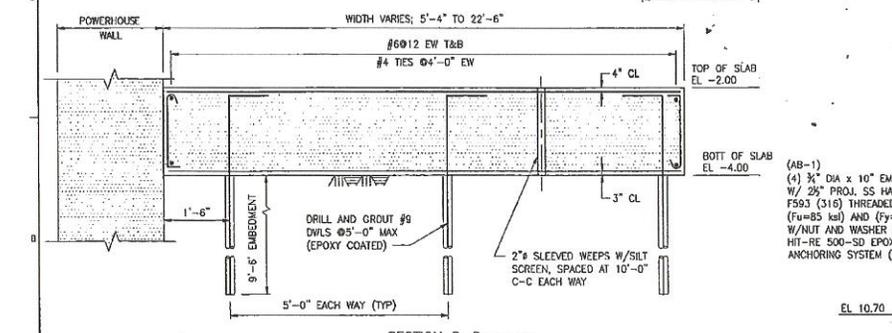
POWERHOUSE GRADING PLAN

DRAWING NUMBER: 109-45-009
 PROJECT No.: H332390

FILED: 04-25-2012 12:49 PM
 FILE NAME: 109-45-009.dwg
 PROJECT: 109-45-009
 DRAWING: 109-45-009
 SHEET: 6 OF 8
 SCALE: 1"=40'
 DATE: 07/20/12
 TIME: 10:00 AM
 USER: JRM
 PLOTTER: HP DesignJet 2400



- NOTES:**
1. RETAINING WALL, CONCRETE SLAB, AND CONCRETE CURB SHALL BE CONCRETE MIX "B".
 2. PROVIDE EPOXY COATED ROCK BOLTS FOR AFTER BAY ROCK SUPPORT IN ADDITION TO THE SPECIFIED ROCK DOWELS AS DIRECTED BY THE RESIDENT PROJECT REPRESENTATIVE.
 3. EXCAVATION TOLERANCE SHALL BE $-0' +6"$ FROM NEAT LINES.
 4. REFER TO DWGS 109-90-013 AND 109-90-014 FOR TRAFFIC RAIL DETAILS.
 5. RAIL DIRECTION CHANGES MAY BE ACCOMPLISHED UTILIZING SHOP CURVING OF THE HSS "BOX BEAMS" OR THE FLARE SPLICE ASSEMBLY DETAILS AS SHOWN ON DWG. 109-90-013.
 6. REFER TO DWG 109-01-011 FOR CML/STRUCTURAL GENERAL NOTES.



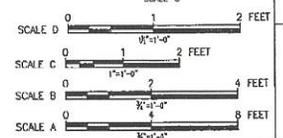
POA-2012-0441 BLUE LAKE
PAGE 7 OF 8
JULY 2012

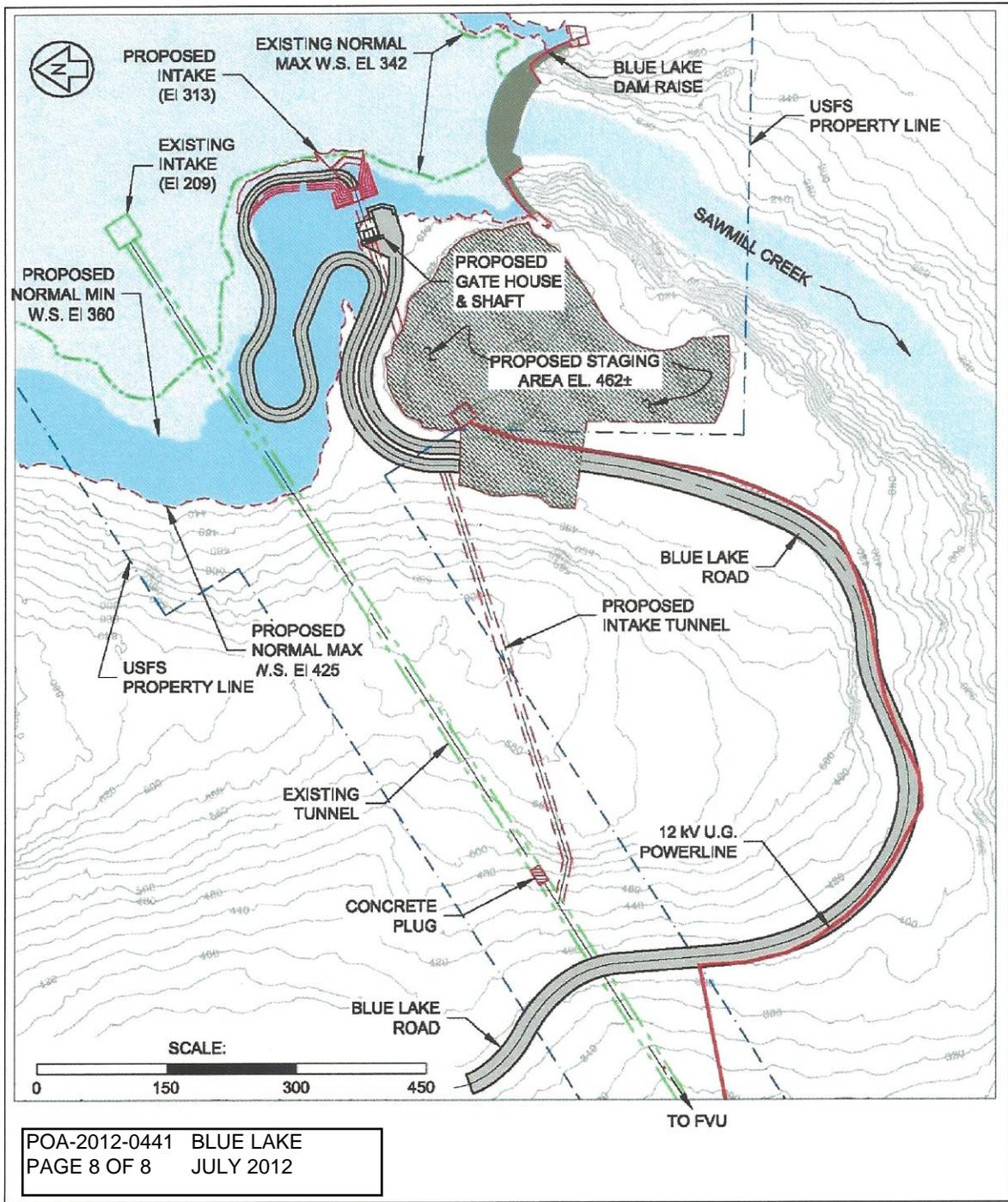
NO.	DATE	DESCRIPTION
04-20-12	ISSUED FOR BID	

NO.	DATE	DESCRIPTION
03-23-12	J.R. MONN	DESIGNER
03-23-12	D.M. SUTHERLAND	DESIGNER
03-23-12	M.L. RICHARDSON	DESIGNER
03-23-12	M.D. ISHAMAN	DESIGNER
03-23-12	S.W. PERDINS	DESIGNER
03-23-12	P.P. ROYBOURG	DESIGNER
03-23-12	S.M. HART	DESIGNER

HATCH HATCH ASSOCIATES CONSULTANTS, INC.
CITY AND BOROUGH OF SITKA, ALASKA
BLUE LAKE EXPANSION PROJECT

POWERHOUSE AFTER BAY POOL CONCRETE SLAB AND TRAINING WALLS SECTIONS AND DETAILS
DRAWING NUMBER: 109-45-044
PROJECT No. 11332360





Proposed project changes near the existing dam and intake. (Source: City of Sitka, 2010)