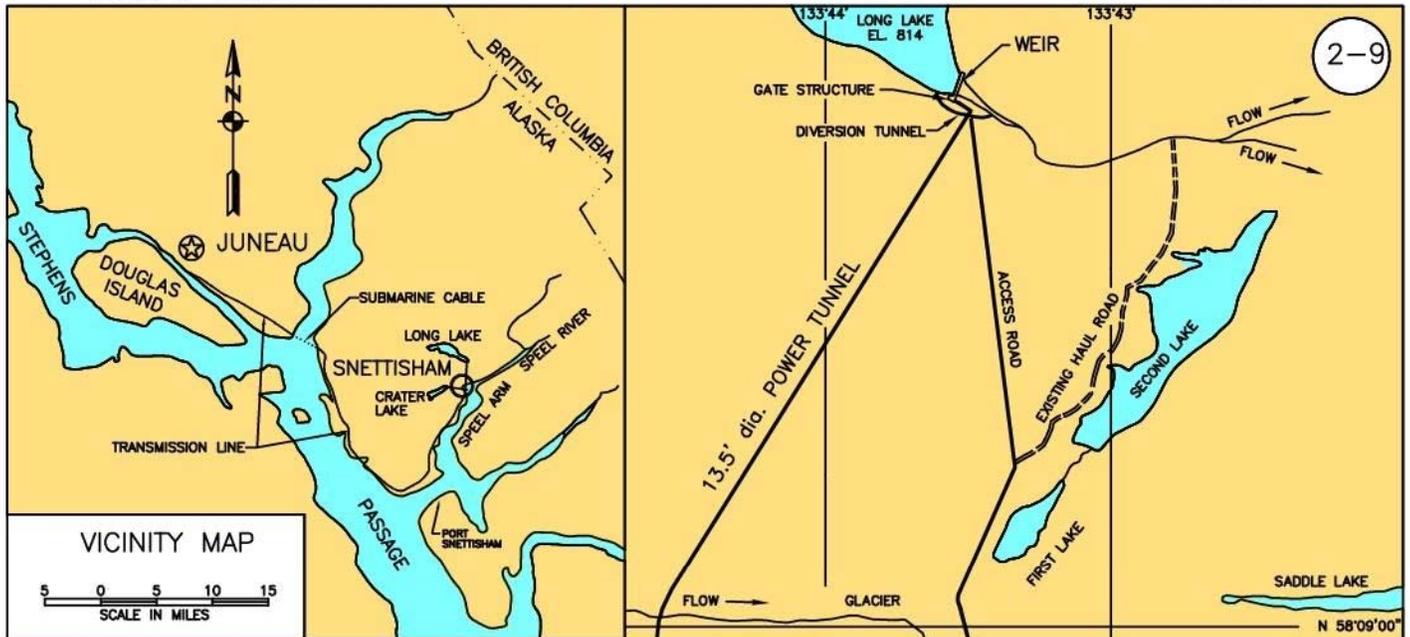
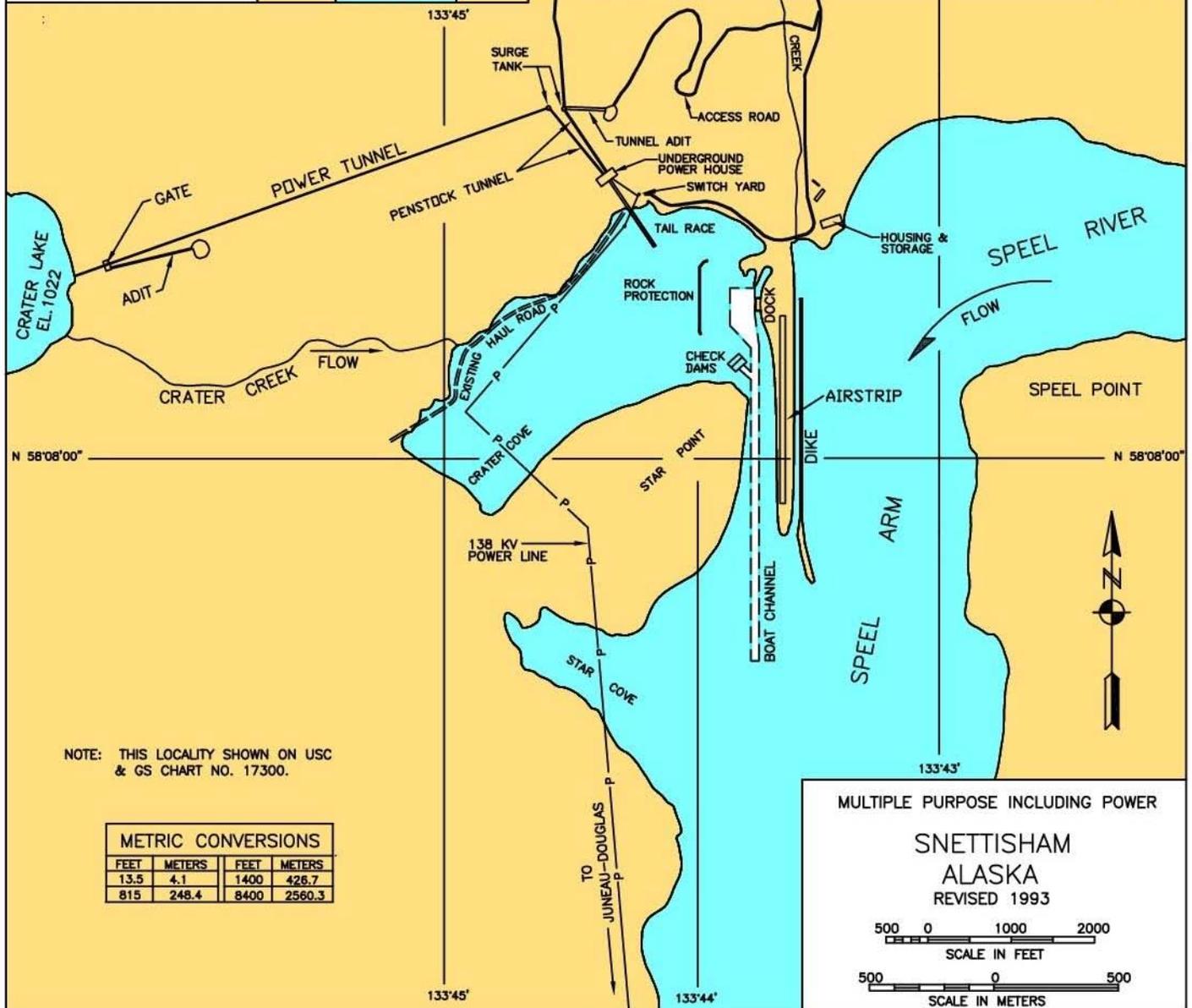
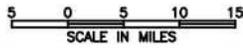


SNETTISHAM

2-9



VICINITY MAP

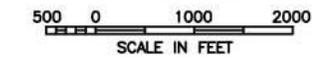


NOTE: THIS LOCALITY SHOWN ON USC & GS CHART NO. 17300.

METRIC CONVERSIONS			
FEET	METERS	FEET	METERS
13.5	4.1	1400	426.7
815	248.4	8400	2560.3

MULTIPLE PURPOSE INCLUDING POWER

SNETTISHAM
ALASKA
REVISED 1993



SNETTISHAM, ALASKA
(CWIS NO. 17020)

Condition of Improvement 30 September 1997

AUTHORIZATION: Flood Control Act, 23 October 1962 (House Doc. 40, 87th Congress, 1st Session) as adopted, provides for construction of a power generation facility in two phases at Long Lake and Crater Lake to provide 46,700 and 27,000 kilowatts of power respectively. The development provides for a concrete gravity dam at the outlet of Long Lake to raise the lake level 80 feet (to 815 feet), for drilling of tunnels 8,200 feet long from Long Lake and 6,000 feet long from Crater Lake, and for separate penstock tunnels 1,710 and 1,690 feet long from respective power tunnels to convey water to the 70,000 kilowatt power plant. Tunnel intakes, gate shafts, trash racks, and surge tanks are included in the construction. A 138,000 volt transmission line will convey power 44.5 miles to the Thane substation near Juneau, Alaska. The project will be turned over to the Alaska Power Authority for operations and maintenance.

EXISTING PROJECT:	<u>LENGTH</u>	<u>HEIGHT</u>	<u>WIDTH</u>
• Power tunnel (Long Lake)	8,230 ft	13.5 ft	13.5 ft
• Power tunnel (Crater Lake)	7,118 ft	11 ft	11 ft
• Penstock tunnel (Long Lake)	1,400 ft		
• Penstock tunnel (Crater Lake)	1,540 ft		
• Transmission line	45 mi.		
• Boat channel	3,920 ft		100 ft
• Boat basin	800 ft (max)		300 ft
• Airstrip	2,500 ft		
• Power House	81,200 kW		
• Other facilities (see Progress of Work)			

PROJECT USAGE: The finished project provides 81,200 kilowatts of power to the Juneau-Douglas area.

PROGRESS OF WORK:

- 1965 - The General Design Memorandum is approved by higher authority.
- 1966 - Preliminary construction activities are completed in November.
- 1967 - The first construction contract is awarded in June and work begins on access and construction facilities in July.
- 1968 - Engineering and design is approximately 65% complete; preliminary construction is on-going.
- 1969 - Plans and specifications are complete for all major phases of work. Work is progressing satisfactorily with access and construction facilities completed in August.
- 1970 - The main construction contract is awarded in May to excavate all underground waterways, access tunnels, and the powerhouse. Various supply contract documents are finalized.
- 1971 - The first phase of the project is 56% complete during FY 1971 with all underground excavation work, including the tailrace facilities, completed under the main construction contract. Initial clearing for the transmission line is also completed.

SNETTISHAM, ALASKA (continued)

30 September 1997

- 1972 - The first phase of the project is 57% complete during this fiscal year with the installation of the unit one turbine. Clearing and foundation work for the transmission line continues.
- 1973 - Construction of the towers for the transmission line and the cable terminal buildings is on-going. All other features of Phase I (Long Lake) are virtually complete.
- 1974 - Power goes on-line in December 1973, but winter storms destroy three towers along the transmission line in February. A contract for repairs is awarded in April.
- 1975 - Restoration of the transmission line is completed, however numerous outages occur in the winter months. Negotiations for relocation of a portion of the line are concluded.
- 1976 - Transmission line relocation is completed in October.
- 1977 - Power plant deficiencies are corrected.
- 1978 - Warehouse construction contract is completed in December. Repair of the Juneau substation roof is completed in June.
- 1982 - Engineering and design work are underway for Phase II, Crater Lake.
- 1984 - Initial contract for construction of the Crater Lake Phase I is awarded in September.
- 1986 - The Crater Lake Phase II initial construction contract is awarded in August.
- 1989 - Crater Lake power goes on-line in May, but is shut down for repairs until November. The Remote Supervisory Control and Data Acquisition (SCADA) Contract is awarded in September.
- 1990 - The Additions 2 Contract is awarded in May, and the Transmission Line Improvement Contract is awarded in June. Crater Lake generator repairs are underway; power remains on-line.
- 1992 - The SCADA Contract and the Transmission Line Improvement Contract are completed.
- 1996 - The process of transferring the project to the Alaska Power Administration continues; some real estate issues are pending.
- 1997 - Transfer of the project to the federal APA is completed.

COST TO DATE:	<u>New Work</u>	<u>Maintenance</u>	<u>Total</u>
	\$ 213,502,000	\$ 3,958	\$ 213,505,958

Snettisham Hydroelectric Project near Juneau, Alaska



Snettisham turbines near Juneau, Alaska 1974