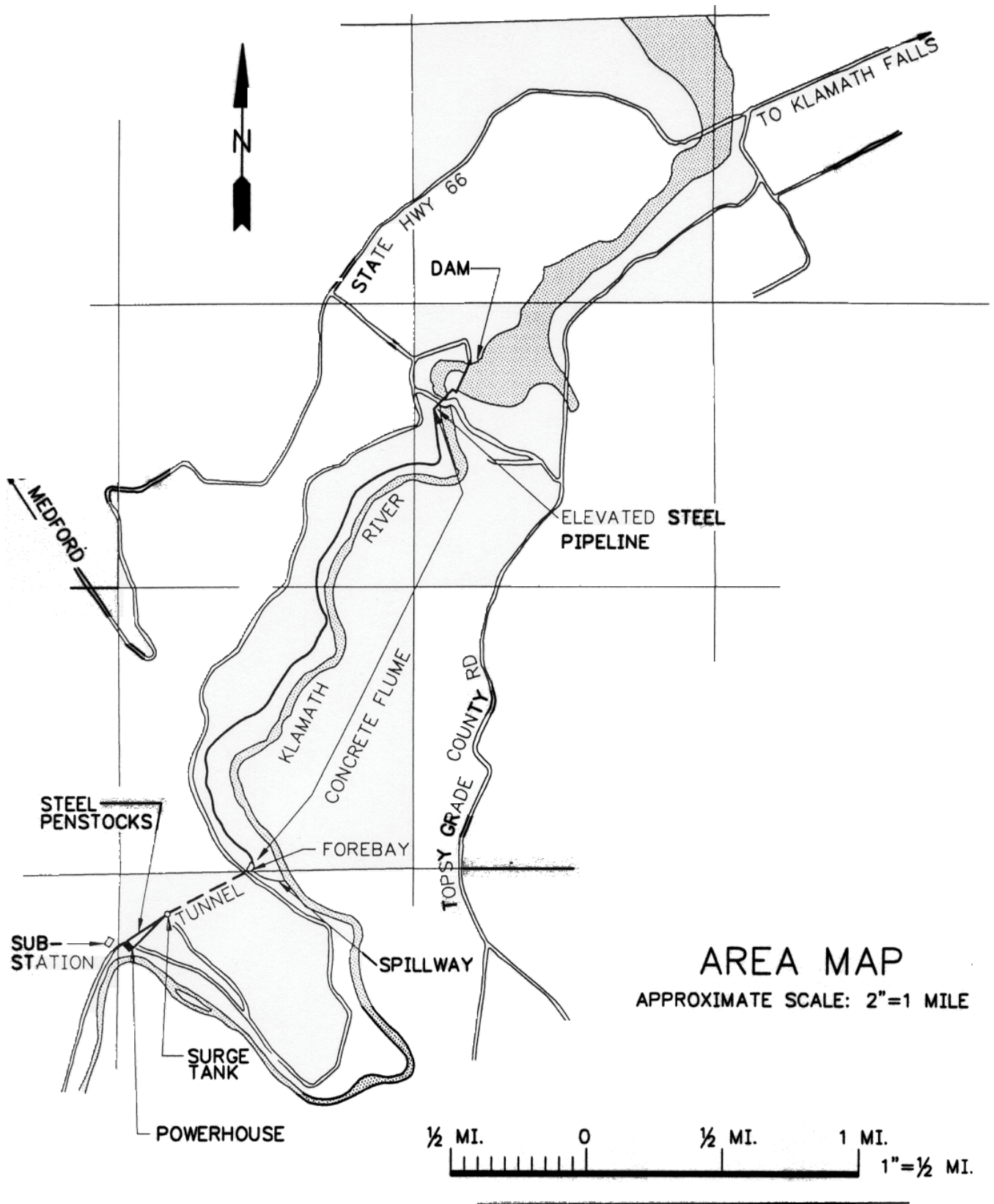


OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Development

OREGON INVENTORY OF HISTORIC PROPERTIES  
**SECTION 106: SUPPLEMENTAL PHOTOGRAPHS**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Dam and Spillway



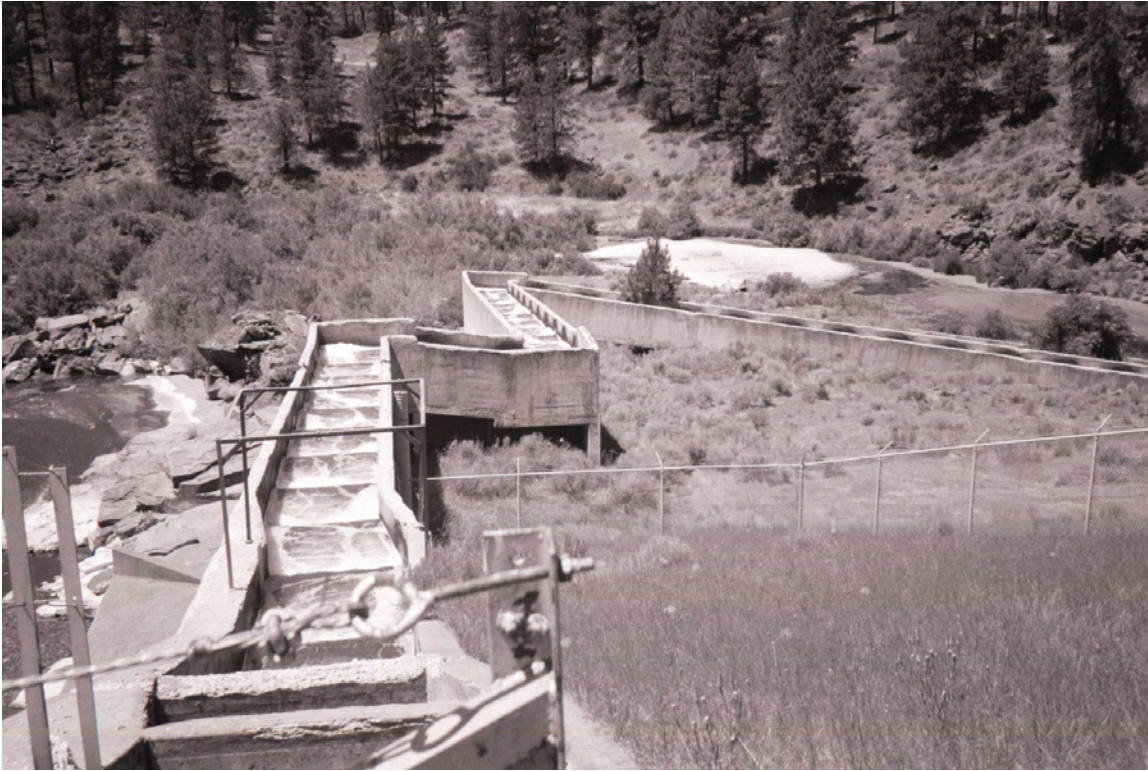
View: J. C. Boyle Dam Fish Screen Housing



OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Dam Fish Ladder



View: J. C. Boyle Dam Communications Building



OREGON INVENTORY OF HISTORIC PROPERTIES  
**SECTION 106: SUPPLEMENTAL PHOTOGRAPHS**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Dam Fire Protection Building



View: J. C. Boyle Dam "Red Barn" - view from northeast



**OREGON INVENTORY OF HISTORIC PROPERTIES**  
**SECTION 106: SUPPLEMENTAL PHOTOGRAPHS**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Dam "Red Barn" – view from southeast



View: J. C. Boyle Dam Waterway – pipeline from dam and beginning of canal (flume)



OREGON INVENTORY OF HISTORIC PROPERTIES  
**SECTION 106: SUPPLEMENTAL PHOTOGRAPHS**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Waterway Canal (flume) and Canal Road



View: J. C. Boyle Waterway Canal (flume) at forebay



OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Waterway Forebay with Spillway House



View: J. C. Boyle Waterway Forebay – Floating Spill Gates



OREGON INVENTORY OF HISTORIC PROPERTIES  
**SECTION 106: SUPPLEMENTAL PHOTOGRAPHS**

Street Address: J. C. Boyle Developoment

City, County: Klamath County, OR



View: J. C. Boyle Generators, Penstocks and Surge Tank



View: J. C. Boyle Water Conveyance System Penstocks and Surge Tank



OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Developoment

City, County: Klamath County, OR



View: J. C. Boyle Powerplant Generators and Crane



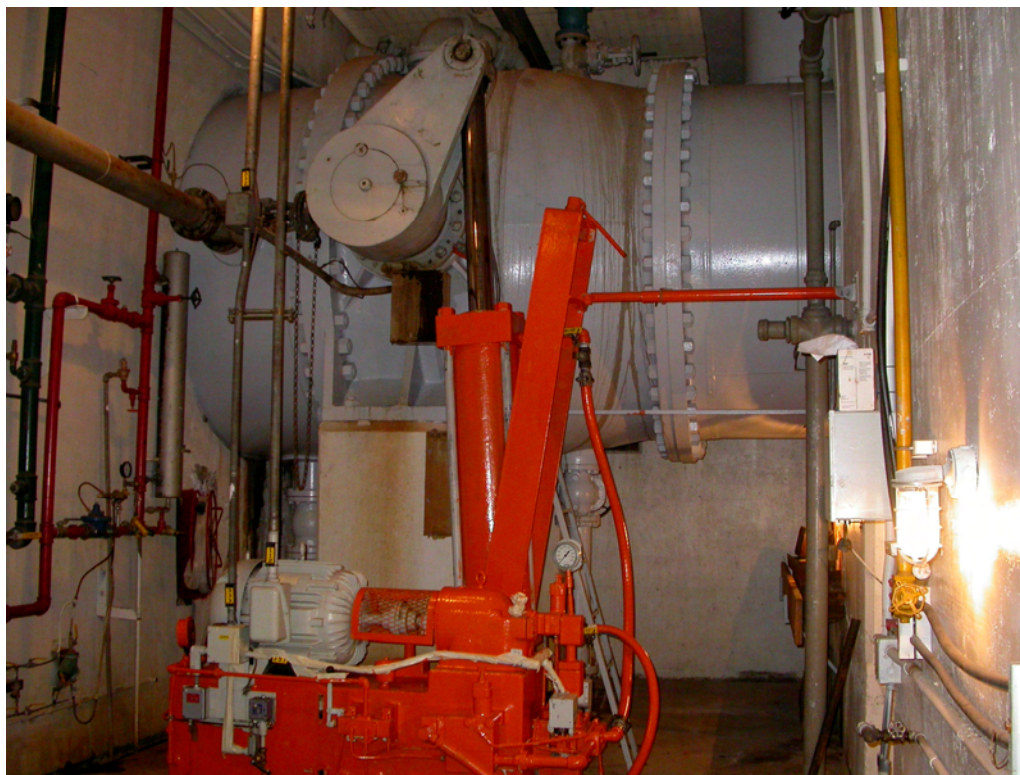
View: J. C. Boyle Generator



OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Development – Penstock entering the Powerplant basement



View: J. C. Boyle Turbine



OREGON INVENTORY OF HISTORIC PROPERTIES  
SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Street Address: J. C. Boyle Development

City, County: Klamath County, OR



View: J. C. Boyle Powerplant Site – Metal Maintenance building (1957)



View: J. C. Boyle Development – Foundation of worker's cottage (representative sample) – Note penstocks and generator visible through the trees



**OREGON INVENTORY OF HISTORIC PROPERTIES**  
**SECTION 106 DOCUMENTATION FORM**  
**Continuation Sheet**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR

**3.0 J. C. Boyle Development**

The J. C. Boyle Development consists of the J. C. Boyle Dam, Powerplant, water conveyance system (waterway), accessory buildings, and worker's cottages remains. Originally named Big Bend, the J. C. Boyle Development was constructed in 1958. It was rededicated in honor of John Boyle on June 25, 1962.

The **J. C. Boyle Dam (3.1)** is located on the Klamath River approximately one mile downstream from Oregon State Highway No. 66 crossing. It is an earth fill structure with a clay core wall, a 113.6-foot concrete gravity section, a 48.5-foot waterway intake, and a 117-foot gated spillway section. The overall crest length is 714.3 feet and the height is 68 feet. The ogee-shaped concrete spillway contains three gates. The resulting reservoir, J. C. Boyle Reservoir, covers 420 surface acres. The dam also incorporates travelling fish screens and a fish ladder. The waterway intake includes four trashracks, the four vertical travelling fish screens and a wheel-mounted intake gate with a motor-operated wire rope hoist. A 24-inch pipe provides instream flows below the dam.

There are several accessory buildings at the dam. Only one of these is historic and it is severely compromised. Starting at the dam, the first building is the **communications building (3.2)**. It is modern construction with vinyl-clad metal wall panels and a very shallow R-panel metal roof. The front facade has a metal door shaded by a metal shed awning. The function of this building is to communicate electronically with Hydro Control Central at Merwin Dam. The second accessory building is the **fire protection building (3.3)**, a modern, rough-faced concrete block structure with a shallow shed roof. It has a metal door and a metal louvered vent on the north façade. Located near the reservoir, it houses a pump. It is very similar in appearance to the communications buildings at Keno Diversion Dam and Link River Dam. Progressing away from the dam, the third accessory building is known as the **Red Barn (3.4)**. Originally a barn used for vehicular and equipment storage, it has been converted into an office, retaining some vehicular and equipment storage. This is the only historic building remaining within the dam complex and is the last remnant of pre-automation. It is in excellent physical condition but its integrity is poor. It is a two story, wood-framed building with a rectangular footprint and corrugated metal gable roof. It has been clad in red R-panel siding, and most of the windows have been replaced with 1X1 sliding sash in aluminum frames (ca.1978). All of the doors have also been replaced, and the large door openings now have rolling metal overhead vehicular doors. On the front façade, an addition contains the entry door. The two second floor windows on this façade retain 8/8 wood sash. Other modern buildings on the dam site include a large modern metal building that functions as a **maintenance shop (3.5)** (1991), and two **modern homes (3.6)** (post 1985).

The **J. C. Boyle waterway (3.7)** consists of 616 feet of 14-foot diameter, elevated steel pipeline beginning at the dam, and 11,484 feet of two-wall concrete and concrete/rock flume that extends to the forebay. There is a new intake flume headgate (2002-03) where the pipeline ends and the canal (flume) begins. The flume hugs the hillside as it winds its way to the forebay, most of it lined with concrete but some of it with simply an earthen bottom. The Canal Road, a narrow maintenance road, runs between the canal and the river for the entire length of the flume. At the end of the flume, the concrete intake structure at the forebay has two floating spill gates. At this site is also a small spillway house, wood-framed and clad in corrugated metal. It has a concrete foundation and a corrugated metal roof. From the forebay, a 16-foot diameter concrete tunnel, lined alternately with steel, concrete and unlined, extends 1,662 feet to the centerline of the surge tank. The surge tank is 30 feet in diameter and 56 feet tall. The two penstocks extend 925 feet from the surge tank to the entrance to the powerplant. Penstock diameters range from 10.5 feet at the surge tank to 9 feet at the powerplant entrance. In summary, the waterway runs from the dam through an elevated pipeline, through a new intake gate into the concrete flume. At the end of the flume, it passes through the forebay and its spill gates, into a steel-lined tunnel to the surge tank, then into the twin penstocks and down to the powerplant.

The **J. C. Boyle Powerplant (3.8)** is located about 5 river miles downstream of the dam. Placed in service on October 1, 1958, the J. C. Boyle Powerplant is the single largest generating facility within the Klamath Hydroelectric Project. The plant has two outdoor-type generation units with a steel gantry crane system for repair and maintenance.

(cont.)



**OREGON INVENTORY OF HISTORIC PROPERTIES**  
**SECTION 106 DOCUMENTATION FORM**  
**Continuation Sheet**

Street Address: J. C. Boyle Development

City, County: Klamath County, OR

The powerplant is a reinforced concrete structure housing two turbine-generators, which are vertical-shaft, Francis-type hydraulic turbine and synchronous generator sets. Unit 1 of the original Baldwin Lima Hamilton turbines was replaced in 1994 by American Hydros. The second unit remains intact. The generators are manufactured by General Electric. The original governors, generators and exciters have also been replaced. A substation, a metal maintenance building (1957) and the **foundations of workers' housing (3.9)** are also located on the site. Originally built as a manned facility, it is now automated. As a result, the five worker's houses that were located just downriver from the substation were demolished in 1995. Large cottonwood, poplar and crab apple trees, and the remains of foundations and driveways mark the location. The **Armco metal maintenance building/warehouse (3.10)** was constructed in December 1957. Wood-frame construction on a concrete foundation, it has a rectangular footprint and a shallow gable roof. The structure is clad in galvanized steel with a corrugated metal roof punctured by two roof vents. Large roll-up doors dominate both gable ends, and a small metal pedestrian door is located to the right. The building is in fair condition.



