Puget Power’s employee magazine last week carried pictures and the full story on the construction of a new powerhouse at the lower Baker plant in Concrete. With the story was the project drawing shown here of the construction under way. Their story, in part:

“Bechtel Engineering Corporation of San Francisco designed the powerhouse and has begun construction on the site at Concrete in Skagit County. Cost of the project is estimated at $4,750,000. The powerhouse design allows installation later of a second generation unit if it proves desirable. An undamaged generator salvaged from the old powerhouse will produce the initial power in the restored project. Bechtel engineers say the original unit number 3 turbine and shaft head cover do not appear to be damaged. The new powerhouse will rise over this turbine. The schedule calls for the walls and roof of the powerhouse structure to be completed by early next fall.

The snowshed-like powerhouse will permit use of remaining facilities, such as foundations and the existing water tunnel from the dam to the turbines. An alternative plan to relocate the powerhouse in an underground cavity carved from the rock wall of the canyon was rejected as too costly – an estimated $2 million more.

Debris from the 1965 landslide remains in the tunnel and in the river bed itself, where it blocks the draft-tube outlet channel. The tunnel will be cleared, an old

Re-typed verbatim from the original microfiche obtained from the Washington State Archives.
underground surge chamber rebuilt, and the river bed dredged for some 1,500 feet below the powerhouse. Destroyed switching equipment will be replaced in a switchyard to be built on the bank above the powerhouse some 700 feet downstream. The powerhouse crane will be located on tracks atop the sloping roof with access provided by a large hatch.

The project will include additional improvements in the area. All 23 of the spillway gates on Lower Baker dam will be modified to permit their operation by remote control from the powerhouse. At present, only three are so equipped. The others are manually opened and closed. The reconstructed plant will be designed for remote operation from the Company’s Eastside operation center at Kirkland via the microwave system. Remote operations will be supported by local 24-hour “at-call” attendance at the plant.

To replace facilities lost in the original building, a new building, will be constructed some 1,800 feet downstream next to the barrier dam and fish trap. It will house maintenance and workshop facilities, office and storage space, wash rooms and a room for displays and public viewing of the “fish taxi” operation.

Bechtel’s project superintendent at Lower Baker is Robert Laws. He has been in construction business for nearly 40 years, the last 25 as project manager. He was in charge of Puget’s recent consolidation of the Shuffleton plant. Laws’ most recent job was a $140 million steel mill in West Virginia. Bechtel has had 32 men doing preliminary work at the site since January under a letter agreement from Puget. They have been cleaned off the rock face which will form the rear wall of the new powerhouse, installing rock bolts and anchors bolts as well as removing some old concrete and taking out old piping and electrical work. Laws estimated the major construction work force will peak at 96 men in the latter part of August this year.”