

PAP-44

PAP 44

OFFICE
FILE COPY

BUREAU OF RECLAMATION
HYDRAULIC LABORATORY

HYDRAULICS BRANCH
OFFICIAL FILE COPY

PAP 44

Office Memorandum • UNITED STATES GOVERNMENT

Memorandum

TO : Hydraulic Laboratory Files

Denver, Colorado

DATE: October 31, 1952

FROM : R. B. Dexter

SUBJECT: Proposed prototype test installation in Glen Anne Dam Spillway stilling basin--Cachuma Project, California

The installation of four piezometer orifices in Glen Anne Dam Spillway stilling basin was proposed by Thomas and Lancaster. This installation was proposed because of severe frequent pressure fluctuations detected during model studies of the structure; something of the order of 0 to 80 feet of water in a fraction of a second.

Locations of the piezometer orifices were to be the same as those in the model, i.e., three in the side wall of the basin, plus one not included in the model on the centerline of the triangular-shaped pier on the downstream side. The approximate locations are shown on attached print 368-D-249.

Gordon Johnson of the Hydrology Branch of Project Planning was contacted concerning the possibility of there being enough flow of water through this structure for field tests in the next few years. He said the average flow in this stream is about 10 cfs and a flow of 100 cfs would be in the 50-year flood class. Hydrology's records also showed that this stream had been dry for several years prior to the heavy California rains during the Spring of 1951, and there was only a trickle of water in the stream during the run-off resulting from these rains.

Since the structure under consideration has a maximum design capacity of 950 cfs, a flow approaching this magnitude would be needed for satisfactory field tests. Also, the spillway crest is uncontrolled, so any attempt to store water for release during tests would have to be done with a temporary structure.

In view of the above information, the plan to propose, to the Spillway and Outlets Section of the Dams Branch, the installation of prototype test facilities was abandoned.