

KOURIS DAM – ENGINEERING ASPECTS

Kouris Dam is constructed on the Kouris river some 15 km northwest of Limassol and 6 km north of the village of Ypsonas.

The dam has a central clay core zoned earthfill embankment with a height of 110 metres and a crest length of approximately 550 metres providing a water storage volume of 115 million cubic metres.

The reservoir at 247m above sea level will extend about 5 km upstream of the dam with a surface area of approximately 3.6 km². The village of Khalassa which was located within the reservoir area has been relocated on a site overlooking the reservoir between the Kouris and Limnatis valleys.

The site was originally recommended by the WDD - Cyprus Water Planning Project study of 1968 and the WDD carried out site and fill material investigations during 1970-71.

Various feasibility studies were performed by consultants Howard Humphreys and Partners and the final feasibility report was completed in 1979.

The detailed design was commenced in 1981 by SOGREAH of Grenoble France in association with Hydroconsylt of Cyprus. Further field investigations were performed by the WDD and GSD.

An international panel of experts was appointed as advisers to the WDD and all major decisions concerning design and safety were the subject of discussion and agreement between the panel and the consultants.

A contract for the construction of the dam was awarded in July 1984 to a joint venture comprising IMPREGILO S.p.A of Italy and Joannou and Paraskevaides of Cyprus. Work commenced on the 1st September 1984.

CONSTRUCTION

Recognising the importance of storage of water at the earliest practical moment, construction was programmed so that impounding of the river flows could commence in time for the winter of 1987/88 approximately 10 months before construction was due to be completed.

Despite difficult foundation conditions which necessitated a significant increase in the volume of construction work, the impounding target of the 1987/88 winter was achieved by the use of additional earthmoving equipment.