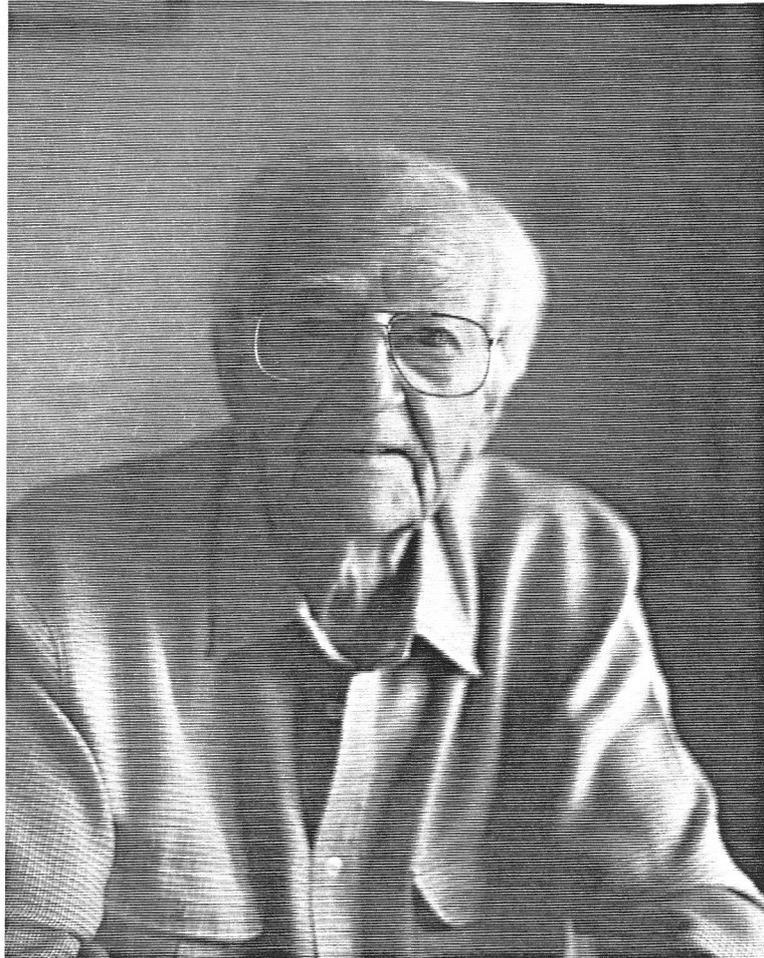


GEORGE REDMOND

George was born in Charters Towers in 1913. The son of a consulting engineer, he studied engineering at the University of Queensland. He went to Cairns, had some involvement with tin mining and then went to Brisbane in 1939 to enlist in the army. George was seconded to various wartime construction projects. He married Adelaide in 1941; they had two children. In 1950 he went to New Guinea with the Commonwealth Department of Works, and he came to Canberra in May 1958. During construction of Bendora Dam George was the department's Principal Engineer and acting Executive Engineer for Major Development. He was involved with other Canberra projects as well. In 1962 he went to Darwin as the Director of Works in the Northern Territory. George was awarded the ISO in 1970 and in 1979 Newcastle Waters Crossing on the Stuart Highway was named George Redmond Crossing. George returned to Canberra in 1977 and retired the following year. He prepared notes prior to the interview and spoke from these during much of the interview.



Tape 1 Side A

George outlines how he came to Canberra in 1958. That year Keith Jack, Executive Engineer Major Development in Canberra, went temporarily to the NSW office so George filled his position. (Eventually Jack became First Assistant Director General, Engineering, in the Melbourne head office of the department.) During construction, George was responsible for the design and standard of construction for Bendora Dam, though not the contract administration which was under the Assistant Director, Construction, within the department.

When George arrived the design and specifications had been completed. Jack told George he had selected the dam site. On Jack's staff was Ken Harding who had 'an

extraordinary interest in dam design'. Neither Jack nor Harding were given the credit they deserved for Bendora. Harding, says George, was largely responsible for the choice of a thin arch dam and for its detailed design. At the time the dam was thought to be the first of its type in Australia. 'The design was complicated. To assist in the involved stress calculations, full use was made of Utecom, a digital computer in the University of NSW. Computers at that time were not developed to a stage where they were readily available for engineering design. And this was probably the first one used by the Department of Works in engineering design'. The Snowy Mountains Authority and the US Bureau of Reclamation assisted the project, as did Professor Oberti in Italy.

E.S.Clementson offered the lowest tender for the dam and was accepted in October 1958. During the tendering process Doug Maunder (Director [or Assistant Director] of Works in the ACT) asked George to interview Clementson himself. George had doubts as Clementson had not done similar projects before. But the doubts were unrealised as the job went well. Some of the other tenderers may have loaded their quotes in view of the difficult access.

Dug Tonissen, departmental resident engineer for construction of the dam, had come from the Northern Territory (where he'd been since 1948) in early 1959. His considerable engineering resourcefulness was shown in many ways. Once when he had a car accident on the Bendora Road, he made sufficient temporary repairs to his Commonwealth car to get himself home rather than wait for the repair gang which for Dug was too slow in arriving. This almost caused a demarcation dispute with the union whose job it was. After Bendora, Dug supervised construction of Scrivener Dam, and later was Director of Works in Papua New Guinea in 1970 and in Queensland in 1975.

Design changes are usual on big projects. A bridge had to be built below the dam for vehicles to cross the river. Norm Sneath, structural engineer in the Principal Engineer's Section, designed it.

Bendora was designed before, but built after, the NCDC came into being. NCDC did not get seriously involved. It became responsible for funding, and during construction of Bendora it included in its budget money for the construction of the Bendora Gravity Main. George arranged for Arn Fokkema [also interviewed], a structural engineer under Norm Sneath, to design the main but before it was complete the project was deferred and Arn remained in the Major Development Section. Both Arn and Ken Harding were involved with Scrivener [as well as Bendora], and Arn with Corin and Googong as well. In March 1962 George went to Darwin as Director of Works in the Territory and so was not involved with later projects such as Corin and the gravity main.

During construction George went out to liaise with Dug 'quite a few times', although Dug did not need much guidance as he was 'pretty self-contained'. 'The road was pretty difficult, in those days it was a narrow dirt road and a fairly dangerous road. And to inspect the dam was a full day's trip, more or less...Sometimes the road was snowed under.'

The job went well. George says there were no great problems involved with it. Once pouring of the wall commenced, things were straightforward. The formwork for the wall was not so difficult to make as the curves of each section of the formwork for the wall are relatively slight. The Snowy involvement was mainly in the early stages before construction and before George's time; the Snowy did assist with Scrivener Dam however, by carrying out foundation drilling.

Asked if Bendora was exciting, George says it was an important project and therefore very interesting. It went well. Lots of jobs don't go smoothly, especially if a contractor fails and you have to award a new contract. Bendora was a big project within the Canberra context at the time. Then came construction of the Printing Office

by Clementsons, the Mint, the lake bridges and Scrivener Dam. It was a busy time, and 'a good time to be here'.

George described Clementson the man as 'fairly direct' and not all that big physically. The interview they had was in the old 'woolshed' offices of Works at Barton.

George also had quite a lot of contact during his career with (Sir) Leslie Thiess whose firm later built Corin. George gave him a contract in the 1940s for earthworks for the foundations of a marine engine factory site in Brisbane; Thiess had quoted very low for the job. Thiess was one of the first contractors to use earthmoving equipment. He'd previously built earth dams.

George doesn't think there was an official opening at Bendora. Bendora was low key, perhaps explaining why Jack and Harding didn't get recognition.

Digressing to Scrivener Dam, George was project officer for the design of the dam, and allocated the detail design of the dam to Ken Harding in the Major Development Section and the bridge over the dam to Norm Sneath in the Principal Engineers Section. Harding and George went to Tasmania to inspect dams as part of their search for gates which would look good on Scrivener. They selected drum gates because of aesthetic considerations. The tender awarded was for flap gates which had the same attractive appearance in that they both were operated from within the wall.

Discussing working conditions at Bendora, George comments again on the poor access, and says communications were difficult. He did not stay at the camp but feels it was 'fairly comfortable'. The workforce was enthusiastic, which helped the project to go well. He cannot recall any bad accidents (and seems unaware of Rom Katauskas's accident).

Tape 1 Side B

George describes the division between the design side and the construction side in the department. Once a contract was let, the Principal Engineer and the Major Development engineer did not converse with the contractor, only with the Works engineer in charge. This avoided too many people giving instructions to the contractor. Instructions were all given by the construction side.

The interview concludes with brief mention of the materials testing laboratory in Canberra.