

DESIGN OF IRRIGATION SYSTEM FOR CITRUS FARM

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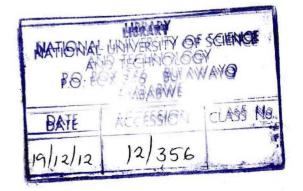
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Abstract

Citrus farm is a commercial farm owned by the Hwange Colliery Company Limited (HCCL) located 12km South of Hwange town along the Victoria Falls – Hwange Road. According to the HCCL Projects Engineer and support staff, Citrus farm has an area of 20.8ha of which only a third is currently being utilized. An irrigation system has been proposed in order to utilise the property more effectively and to allow agricultural practices to continue all year round.

A comparative study of all irrigation methods is carried out in relation to their adaptability to the site variables. A design of the two most favourable irrigation systems is carried out and a final recommendation made to the client is made. The furrow irrigation system has been found to be very economical though the sprinkler system will give a higher yield.