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WATER SUPPLY FOR PROPOSED AREA SCHOOL AT DOVER

The site of the proposed Area School is on the Northern outskirts of Dover, just south of the Church of Christ.

No rock outcrops on the property but behind it rises a dolerite ridge and boulders of this rock appear on the surface. In the bed of the Dover Rivulet, to the east, are outcrops of Permian Mudstone; this rock also outcrops to the south and all along the foreshore at Dover.

Some holes dug on the property show clays mixed with sand of alluvial origin.

As far as the geology is concerned then, the rocks consist of Permian mudstone, intruded by dolerite and overlain by a few feet of alluvial material. The form of intrusion is not quite clear and is probably not in any simple form of sill or dyke but a combination of these and irregular transgressive bodies. However, whatever form it takes, it does not affect the question of underground water supply as neither the mudstone nor the dolerite are aquifers and thus drilling for underground supplies is not recommended.

Many of the small holdings in the neighbourhood rely on shallow wells and water holes for their water supply. Behind the Church is a marshy patch which is apparently never dry. This extends into the school property. All along the base of the hill, in the vicinity of the main road, water may be obtained in shallow wells. This is not underground water, but surface water seeping down the hill side. Some of it may work its way through cracks in the dolerite and come near the surface (in the alluvium) when it reaches the flat bedded impervious mudstone.

It is recommended then that this near surface water be exploited by shallow wells and ditches. A ditch should be dug to about ten feet (or bedrock, if that is shallower) across the top of the marshy patch. If this supply is not sufficient, further wells may be dug in the lowest lying portions of the property.

Drilling is not recommended and if shallow supplies are insufficient, consideration will have to be given to some scheme of pumping from the Dover Rivulet.

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