

DEPARTMENT OF MINESSOUTH AUSTRALIAFOUNDATION DRILLING FOR PAYNES BRIDGEROBE - LUCINDALE ROAD.INTRODUCTION.

Five shallow percussion test bores were sunk at the proposed new Paynes Bridge on the Robe - Lucindale Main Road No. 295, for the Highways & Local Government Department during the period 4/3/54 - 6/3/54.

The locations of these bores, which have been indentified as A,B,C,D& E respectively, are indicated on the attached sketch plan together with a geological section prepared from the logs of the bores.

BORES LOGS.

Details of the bores were prepared by D. Thatcher, Assistant Geologist, and are as follows:-

Bore A.Bore Serial No. PD506/54

Drilling commenced 5/3/54, completed 5/3/54. Driller O. S. Till.

0 - 3' Black clay and silt.

3' - 6' Travertine.

6' - 12' Sand cemented by  $\text{CaCO}_3$ . Broken lamellibranch shells.

End of Bore at 12 feet.

Bore B.Bore Serial No. PD 507/54

Drilling commenced 4/3/54, completed 4/3/54. Driller O. S. Till.

Bore Profile similar to that of A, but 6 - 12' is a tougher rock being better cemented in Bore B.

End of Bore at 12 feet.

MICROFILMED

Bore C.

Bore Serial No. PD 508/54

Drilling commenced 4/3/54, completed 4/3/54. Driller O. S. Till

Bore profile similar to that of A.

End of Bore at 12ft.

Bore D.

Bore Serial No. PD 509/54

Drilling commenced 5/3/54, completed 5/3/54 Driller O. S. Till

0 - 5' Heavy black clay and silt.

5' - 7' Travertine: compact fine grained limestone

7' - 13' Grey illconsolidated calcareous sandstone ( $\text{CaCO}_3$  Cement to sand). Becoming very rich in shells of gastropods and lamellibranches near base.

13' - 15' Finer sandy illconsolidated rock.

End of bore at 15 ft.

Bore E.

Bore Serial No. PD 510/54

Drilling commenced 5/3/54, completed 5/3/54 Driller O. S. Till

Bore profile similar to A.

End of Bore at 12ft.

FOUNDATION CONDITIONS.

As can be seen from the logs and as illustrated in the profiles of the geological sections, the geological conditions are very uniform throughout the area tested. A shallow layer (3-5ft.) of soft black clays and silt lies directly upon a 3ft. thick fairly compact travertine limestone crust which in turn gives way in depth to shelly calcareous sandstone or sandy limestone at a depth of 6-7ft.

The travertine and underlying limestone should be a stable formation of adequate bearing strength for normal bridge footings.

.....

(K. R. MILES)

SENIOR GEOLOGIST

ENGINEERING GEOLOGY & MINERAL RESOURCES  
SECTION.

KRM:AGK  
7/4/54.