D.M. 1857/54 RB 39/13

DEPARTMENT OF MINES SOUTH AUSTRALIA

RUBBLE AND GRAVEL FOR ROADMAKING AT GAWLER.

A request was received from the Municipality of Gawler for assistance in locating deposits of rubble and gravel for roadmaking. The Corporation does not possess crushing and screening equipment.

A reconnaissance survey was made, partly in company with the Town Clerk, on 25th January, 1955.

SUPPLIES CLOSE TO THE TOWN.

Small deposits of river sand and gravel are available along the beds of the North Para and South Para Rivers within the town. These would be suitable only for use in concrete for lowstress application, such as curbing, road base and footpaths. The sand is mixed with much organic matter. Both sand and pebbles are well-rounded and smooth and these would not be sufficient binding material to permit its use for road surfacing. Water would be a nuisance during digging.

Fairly large deposits of Tertiary pink and white sands are available within and close to the town. Two quarries were visited, one in the eastern part of the town and the other off the Main North Road just north of the town. These are both run privately, the first for making sand-cement building blocks and the second for building sand. The latter operator also digs some river sand, from which he extracts the pebbles, but this type of rubble is available elsewhere to the Corporation without charge. The pink and white sands are coarse and slightly clayey and may be suitable for footpaths. No other sources of gravel were seen within a distance of three to four miles of the town.

-2-

OTHER SOURCES.

A good quality gravel suitable for roadmaking is available in fairly large deposits near the Barossa Reservoir. The closest one is a mile south of Sandy Creek, or 6 miles easterly from Gawler. These gravels are clearly indicated on the Gawler one-mile Geological Map. ("Tertiary" - stippled blue on orange) Most of these deposits are on private land.

Abundant travertine limestone occurs on the surface of the ground between the Gawler aerodrome and Two Wells. This is soft and friable but is suitable for road surfacing. The closest supply would be about four miles from Gawler on the main road to Two Wells. As the limestone is thin, the digging of it involves the destruction of large areas of fertile land to obtain even small quantities of stone. Most of the land is private property.

Should the Corporation be able to obtain a crushing and screening plant, large quantities of quartzite could be quarried and used for road surfacing including tarmac and for concrete aggregate. These quartzites are within the Adelaide System (Proterozoic). The closest quarry is a mile east of the Main North Road, 3 miles south of Gawler, on private land.

C. J. R. Kengstunn

(C.J.R. KINGSBURY) Assistant Geologist.

ENGINEERING GEOLOGY AND MINERAL RESOURCES SECTION.

CJRK:AGK 27/1/55