

course of rock was placed prior to metalling because of the tendency of the subgrade to soften during rain. A petrol-station on the old section of highway has been shifted to a new site on the deviation.

A new bridge across the Pokaiwhenua Stream near Horahora was completed and opened for traffic in November, together with the adjacent road deviation.

The Maungatautari deviation across the Waikato River was opened to traffic last April on completion of the Maungatautari Bridge. Much work was carried out during the year on this notable bridge; the whole of the steel-plate girders were erected and the reinforced-concrete deck was laid. The Hauoira deviation of the Maungatautari Road has also been opened.

Traffic commenced to use the Pairere deviation in December.

Rock amounting to 33,500 cubic yards was won from the Horahora Quarry for road-works.

With the near completion of the project, the number of workmen on the job has been considerably reduced, the average number during the year being 663.

A total of 146 married quarters and 150 single quarters have been transferred to Mangakino construction village.

Maraetai Development.—Much of the preliminary work on this project had been completed at the end of the year.

Formation of the 16-mile access road from Tokoroa to the dam-site was finished and base course metalling done. Five miles of the road received top course metal and 2 miles were sealed. A road to Whakamaru, site of the next projected power-station upstream from Maraetai, has been formed and culverted and base-course metalling is in hand. Formation of the Maraetai Power-house access road (left bank) is finished. In addition, works service roads and a temporary crossing of the Waikato River near the dam-site by means of a Bailey bridge are complete.

Headquarters for construction of Maraetai and adjacent hydro-electric projects will be at Mangakino, near the Maraetai site, originally a bare plain. Not only have various works buildings to be erected there, but also housing complete with all the amenities necessary for a small town. Up to 31st March, 4 miles of street-formation, $3\frac{1}{2}$ miles of water-mains and reticulation, $1\frac{1}{2}$ miles of sewers, and a water-supply reservoir and pump had been completed or installed. Of the new Mangakino type of married quarters, 37 were complete, and 117 married quarters had been transferred from Karapiro and enlarged. For single men a 200-man camp has been erected complete with messing and ablution blocks and recreation building. Other amenities completed are a temporary shop and two school buildings.

Of the works buildings, three (each 100 ft. by 60 ft.) have been erected for the sawmill, the timber-dressing, and the joiners' shop; the sawmill is being equipped with machinery to cut 12,000 superficial feet a day. A bulk store (100 ft. by 85 ft.) and several smaller service buildings have been erected.

Work on the major scheme is proceeding actively, the first big job to be tackled being the diversion tunnel. Both portals have been opened up and 100 lineal feet of tunnel has been excavated to full size. An extensive grouting programme has been undertaken in order to reduce flow of water into the tunnel workings.

At the dam-site preparatory work for the cableways, concrete-batching plant, and tunnel-aggregate plants is proceeding.