

*Kirikopuni-Parakao (Hobson and Whangarei Counties).*—3½ m. metalling were completed during the year. A maintenance gang has been employed continuously over the whole length of 12 m. A tractor and grader have also been employed periodically for the purpose of retopping and reconditioning metal surface. The metalling is now complete to the Parakao junction.

*Pakotai Road (Hobson County).*—35 ch. of heavy formation 13 ft. wide, together with two small bridges, have been completed.

*Waimamaku-Donnelly's Crossing (Hobson and Hokianga Counties).*—9 m. 31 ch. bottom-course and 16 m. 27 ch. top-course metalling have been laid down. Several bridges have been erected and four others are under way. Through traffic has used this road continuously since last October. Metalling operations have been continued under extremely difficult conditions in this wet area. The road service is an excellent one, and it is due primarily to the use of cemented gravel, which is well rolled, and was assisted by the wet conditions and to the extensive draining which has been done in the kauri swamps.

*Horeke-Taheke (Hokianga County).*—This road has been formed 18 ft. wide for a distance of 4 m. 30 ch. Five bridges were erected, totalling 270 lin. ft.

*Iwitaia Road (Hokianga County).*—90 ch. road have been widened from 10 ft. to 16 ft. and 48 ch. widened to 14 ft. 59 ch. of road have been metalled.

*Mangamuka-Victoria Valley (Hokianga County).*—The Mangamuka River Bridge has been extended by four 40 ft. spans, and corners have been extensively cut back. 2,976 cub. yd. of gravel has been spread on the road.

*Whakarapa-Te Karaka (Hokianga County).*—2 m. 42 ch. have been widened to 16 ft. The Lower Waihou Bridge, 160 ft. long, and Whanganamu Bridge, 80 ft. long, have been erected and approaches completed. 7 ch. sea-wall was also built, and 3 m. 30 ch. of road metalled.

*Whangape-Rotokakahi (Hokianga County).*—1 m. 30 ch. metalled. Materials for Awaiti and Mangonuiwae Bridges are being carted to the site.

*Whirinaki-Taita (Hokianga County).*—2 m. 74 ch. formed 14 ft. wide, 70 ch. being in rock, have been formed.

*Diggers' Valley Road (Mangonui County).*—This road has been widened from 9 ft. to 16 ft. over a distance of 7 m. 32 ch.; 57 ch. metalled 9 ft. by 9 in.

*Kaingaroa-Lake Ohia (Mangonui County).*—2 m. 40 ch. widened to 14 ft.; 36 ch. metalled 9 ft. by 9 in.

*Lake Ohia-Merita (Mangonui County).*—4 m. 50 ch. formed 12 ft. wide, and 2 m. 20 ch. formed 14 ft. wide.

*Oruru-Fern Flat-Mangamuka (Mangonui County).*—1 m. 15 ch. road widened to 18 ft., 43 ch. widened to 16 ft., and 12 ch. formed 32 ft. wide; 56 ch. have been metalled. Four bridges, totalling 295 ft., were erected. Numerous slips have been cleared during the period.

*Takahue-Herekino (Mangonui County).*—This road was widened to 12 ft. over 3 m. 30 ch., and to 14 ft. over a distance of 3 m. 27 ch.

*Waipapakauri-Tangoake (Mangonui County).*—The road was widened to 16 ft. over 7 m. 10 ch., and 3 m. 67 ch. of road was sanded.

*Mareretu-Waikiekie (Otamatea County).*—Four bridges were erected, totalling 250 ft., and approaches were formed.

*Carter's Valley Road (Whangarei County).*—1 m. 20 ch. of road metalled 9 ft. by 7½ in.

*One Tree Point-Ruakaka (Whangarei County).*—3 m. 68 ch. drains constructed and 1 m. of road formed 20 ft. wide.

*Russell-Whangaruru (Whangarei County).*—3 m. 53 ch. of road cleared and 4 m. 30 ch. formed 18 ft. wide; 2 m. 66 ch. metalling 12 ft. by 6 in. was completed. Three bridges erected, totalling 130 ft.

*Taumaterau-Whangarei Heads (Whangarei County).*—1 m. 72 ch. widened to 18 ft.; 2 m. 18 ch. metalled with rock from excavation, 10 ft. by 9 in.; 10 ch. retaining-wall built. Engineering surveys in hand.

*Waiotira-Ararua (Whangarei County).*—2 m. 69 ch. road formed 16 ft. wide, and 2 m. metalled. Two bridges erected, totalling 115 ft.

*Waipu Gorge Road (Whangarei County).*—3 m. 29 ch. are now widened to 18 ft. and 3 m. 43 ch. metalled 12 ft. by 6 in. The necessary materials for bridges are being carted to the sites. Most of the formation work has been finished in this gorge. It is proposed shortly to commence the manufacture of concrete piles for the bridges, which have now to be two-way bridges.

*Whakapara-Helena Bay (Whangarei County).*—4 m. 10 ch. widened from 9 ft. to 18 ft.; 3 m. 61 ch. metalled 10 ft. by 9 in.

*Omaunu Block Roads (Whangaroa County).*—1 m. 23 ch. of road has been formed 12 ft. wide and culverted.

*Oakleigh-Waipu Road (Whangarei and Hobson Counties).*—Some considerable difficulty was experienced with the first coat of sealing which was used from 0 m. to 7 m., and during the year this had to be repeated on more than one occasion. The final treatment was given sealing of bitumen for 6 m. out of 7 m., and on the other mile proper penetrated road was placed. From 7½ m. to 8½ m. semipenetration method was adopted. It is intended next season to finish the semipenetration from 8½ m. to the end at Waipu at the 16½ m. peg. A considerable quantity of metal has been carted on to the road in preparation for the summer programme.

*Colville to Port Jackson (Coromandel County).*—Formation work extending over a total distance of 8 m. 32 ch. has been carried out during the period.

*Coromandel to Whangapoua Road (Coromandel County).*—New formation work has been carried out over a distance of 3 m. 5 ch. A deviation has been formed of 51 ch. The total length now completed is 5 m. 26 ch. This road, when completed, will give access across Coromandel Peninsula.