

Kohatu-Westport-Reefton.—In addition to the usual maintenance-works a considerable sum has been expended on re-formation, new metalling, metal-patching, &c. Bridges were erected at Deep Creek (a concrete arch, 46 ft. span), Deep Creek No. 22 (one 34 ft. and one 24 ft. rolled-steel joist spans), and Eight-mile (similar to No. 22). A deviation of the road at Four Rivers Plain is in course of construction.

Arthur's Pass-Kumara-Ross-Waiho.—This road has been maintained for a distance of about 160 miles, and in addition a considerable amount of metalling and improvements has been carried out.

Waiho to Karangarua.—Dray-road formation has been carried out for a distance of 166 chains; also 153 chains metalling, 141 chains bushwork, clearing of slips, &c.

Parnassus to Kaikoura.—The improvement of alignment and grades and the widening and metalling of this road are in hand. The section between Kaikoura and the Conway River is practically completed, 25 miles having been re-formed and metalled. A contract has been let for the erection of three bridges (Goose Bay, Oaro, and Okaralia), which will avoid the interruption of traffic owing to floods in the rivers. The Conway and Hundalee bridges are completed, and the approaches are in hand. South of the Conway the work is practically finished, with the exception of the bridge over the Leader River and its approaches, which are in hand.

Tokatoka Swamp Stop-banks, Drainage, and Tramway.—The stop-banks have been repaired and are now in good order. Stone protection has been carried out, and is being continued. The tramway has been completed.

Helensville Swing-bridge.—The Waitemata County Council has completed the erection of a reinforced-concrete bridge consisting of seven 30 ft. spans. The total length of the bridge is 217 ft., and the width 18 ft.

Taikata Creek Bridge.—The Waitemata County Council has in hand the erection of a reinforced-concrete bridge, comprising two 27 ft. 6 in. and one 30 ft. spans, also 36 chains of approaches.

Waikato River Bridge (Rangiriri).—A bridge 438 ft. long is being erected under contract. Thirty-nine reinforced-concrete piles have been driven, and several piers completed.

Wairoa River Bridge (Tauranga).—This ferro-concrete structure, of eleven 45 ft. spans, was completed last year, but a subsidence in the river-bank caused the bridge abutment to settle down about 1 ft. Additional piles have therefore been driven, and the end span is being raised to its proper level.

Rangitaiki River Bridge (Te Teko).—A reinforced-concrete bridge, of seven 45 ft. spans, on the Whakatane-Te Teko Road, has been erected by the Department.

Te Reinga Falls Bridge (Wairoa River, Hawke's Bay).—This bridge, comprising one 151 ft., two 41 ft., one 20 ft., and one 15 ft. spans, on concrete and pile piers, has been completed during the period.

Awakino River Bridge.—A bridge comprising one 81 ft. and one 18 ft. spans, with 12 ft. roadway, was completed.

Kiwi Road.—The improvements on this road include the construction of a tunnel 314 ft. long, with approaches.

Manganui-a-te-ao River Bridge (Hoihenga).—The erection of this bridge was commenced in December last. Two concrete abutments have been constructed, and the necessary falsework and plant fitted up. The timber is being worked up.

Opawa River Bridge.—The construction of this reinforced-concrete bridge, consisting of eight 70 ft. bowstring spans, is well under way, the piers for six spans having been completed, and one span erected. The work has been hampered owing to the unusual height of the water in the river.

Branch River Bridge.—This structure, comprising fourteen 25 ft. spans on pile piers, has been erected under contract, and the approaches are now being formed.

Kowhai River Bridge.—This bridge, which is similar to the Branch River Bridge, has been completed, including the approaches.

Hurunui River Bridge (Lower).—A contract has been let by the Waipara County Council for the erection of a bridge comprising three 52 ft., one 51 ft., one 25 ft., and one 11 ft. spans, on pile piers.

IRRIGATION.

OTEKAIKE SETTLEMENT.

A new concrete intake was constructed for the stock-race, and the siphon at 3 m. 69 ch. was repaired. Three miles of race were surveyed, and construction is in progress.

IDA VALLEY SCHEME.

Manorburn Dam.—This dam has been brought up to finished level, and all lifting gear has been fitted up. The concrete placed during the year was 402 cubic yards, making a total for the dam of 8,190 cubic yards.

Race-construction.—In the German Hill race some 5 miles 66 chains was constructed during the year, and of the Black's No. 3 race 66 chains was completed. The Lower Bonanza race was deepened for a distance of 1 mile 4 chains. On the Upper Bonanza race dry stone walls have been constructed in many places to prevent scour. This race will be lined with concrete for about 3½ miles, to prevent leakage through artificial stone walls and broken-rock formation. The work is in hand.

Water-supply.—A limited amount of water was supplied to settlers during the summer months for irrigation.