

*Woodside Creek Bridge* (56 m. 50 ch.).—A start has been made with the erection of the permanent bridge at this creek. This bridge consists of six 25 ft. plate-girder spans on concrete-pile piers and abutments. The girders are at present in use on the temporary bridge and ten pier piles have been cast.

*Waima Creek Bridge* (59 m. 27 ch.).—This bridge will consist of four 25 ft. plate-girder spans on concrete-pile piers and abutments. Fifteen piles have been cast and the main girders are also in use at present on the temporary bridge.

A considerable amount of marram-grass planting has been carried out during the season in order to reinforce previous planting, and also to replace portions that had been damaged in the heavy gales of the last few years.

Additional accommodation for sixty-five single and thirteen married men has been provided, a recreation hall erected at the Blue Slip, office, store, workshop, and two staff cottages at the Shades, while all accommodation has been generally brought up to the standard required by the workers' agreement.

*Kaikoura Section* (76 m. 6 ch. to 103 m. 48 ch.; length, 27 m. 43 ch.).—Marram-grass planting has been carried out extensively between 77 m. and 82 m. in order to stabilize the numerous sand-drifts.

Formation is in hand up to 91 m. 36 ch., and work is proceeding vigorously both by hand and machine over what is the roughest and most difficult portion of this section. 3 m. 77 ch. of formation have been completed since the work has been restarted.

Owing to the comparatively narrow shelf along the coastal cliffs over a large portion of this section it has been necessary to deviate the main highway very considerably in order to accommodate both road and rail with the minimum of sea-walling.

In spite of this general rearrangement there will still be a fair amount of protective work to carry out in order to protect either the road or the railway from the encroachment of the sea. 66½ chains of deviation have been completed, and 3 m. 5 ch. are in hand. Eight hundred lineal feet of culverts 36 in. and under have been completed, a 6 ft. flat-top culvert has been constructed at 77 m. 21 ch. and 90 m. 63 ch., one 10 ft. at 78 m. 68 ch., and one 4 ft. 6 in. × 3 ft. 6 in. at 85 m.

A contract has been let for the substructure of the Clarence River Bridge at 76 m. 40 ch.; this bridge will consist of twelve 120 steel truss-deck spans and two 30 ft. end spans carried on concrete-cylinder piers and pile abutments.

Temporary trestling has been erected across the river. Piers B, D, E, G, and M have been excavated as far as possible in timber to remove the boulders, and the cavities have been back-filled with shingle and sand to water-level to provide easy sinking for the cylinders.

Form-work has been assembled for pier B, and the reinforcement has been fabricated, but no concreting had been completed at the end of the period.

The starting of tunnel-work has been somewhat delayed on account of the large amount of plant and machinery required, and which had to be obtained from overseas; however, the majority of this is now installed and a start has been made on the tunnels as under:—

No. 1—Okiwi Bay at 82 m. 42 ch.: The top bench is being excavated.

No. 2—Ohau at 84 m. 40 ch.: The north portal and 6 ft. of lining have been completed, and driving for the next length has been commenced.

No. 3—Half-moon Bay at 85 m. 72 ch.: The south portal and 33 ft. of lining have been completed in the open, and driving of the first length underground has been commenced.

The main camp has been established at Aniseed, and to date 142 married men's quarters and twenty four-roomed cottages have been erected. The camp has been roaded and an electric-light generating-plant has been established and a water-supply provided, and a sanitary service established.

Small camps have also been established along the route as required for construction purposes, and accommodation has been provided on this section for approximately 400 single and married men, including staff officers.

An up-to-date recreation hall has been built at Aniseed Camp, and is controlled by the Y.M.C.A. This building, which has a total floor space of 4,000 ft., contains picture and social hall, reading, billiard, supper, and committee rooms, as well as canteen, stage, and offices for the staff.

Two schools, one with two large class-rooms and one with a single room only, have been erected at Aniseed, and the necessary workshops, stores, &c., for the repair and housing of stores have been provided.

In addition to motor-trucks and workshop machines, the following plant is in operation on the section:—

Two air-locks with hoist and generator sets.

Nine air-compressors.

Three Diesel excavators.

Two Diesel locomotives.

Three ventilating-fans and engines.

Five concrete-mixers.

Eight pumps.

A total of 462 men have been employed on the whole of the northern end of this railway, and up-to-date plant is being brought into use wherever possible in accordance with the Government's policy of speeding-up the work.

The survey from Kahautara River northwards to 98 m. is in hand, as well as the alterations necessary to bring the Kaikoura Station closer to the heart of the town.