

All sidings and crossings at Tutira station-yard have been laid, while a temporary dead-end siding has also been put in at the Matahura Viaduct to facilitate the handling of the steel.

During the period ballasting has been pushed on continuously, and the final lift and boxing-in has been completed from Eskdale to Waikoau, with the exception of 5 m. which still require boxing in. From Waikoau to Tutira the first lift only has been completed.

At 24 m. 56 ch. a new ballast-pit is being opened up, and special ballast-wagons are being hired from the Railway Department with the object of vigorously pushing ahead with the ballasting of the track from Waikoau to Putorino.

At Waipunga Station a shelter-shed has been erected, and the stockyards which had been dismantled at Westshore were re-erected here, together with holding paddocks and gates complete. At Waikoau Station shelter-shed, stockyards, 6,000-gallon vat, and permanent water-supply have been completed. At Tutira Station a goods-shed, stockyards, and three platelayers' cottages have been built during the period.

A regular passenger and goods service has been maintained between Waikoau and Eskdale, connecting with the railway service at the latter station, and as soon as the Waikoau Viaduct was completed a service was instituted from Tutira.

The Department's sawmill has proved invaluable in connection with the construction work generally. During the year 826,767 sup. ft. of timber was cut, supplying all timber for accommodation, bridges, concrete-work, &c., as well as that for the permanent station buildings and cottages.

In May last the main office, together with the engineering and clerical staff, was shifted to Tutira, but the store and store's staff are still at Waikoau, where it is proposed to leave them until the section is completed.

*Wairoa Section* (37 m. 35 ch. to 70 m. 67 ch.; length, 33 m. 32 ch.).—This section consists of two subsections—Kotemaori (37 m. 35 ch. to 53 m. 15 ch. and Wairoa subsection (53 m. 15 ch. to 70 m. 67 ch.). The work on the Kotemaori subsection consists mainly of driving and lining tunnels and the excavation with steam-shovels of approach cuttings to tunnels. During the first half of the period the section was fully manned, but for the latter half activities were confined solely to steam-shovel excavations and portion of the Mohaka Tunnel. At present six steam-shovels are in operation on this section. The tunnel approaches generally are now well in hand and as the shovels become available they are placed in the larger block cuttings, several of which involve very heavy excavation.

Preliminary investigations have been made on the site of the Waikare, Mohaka, and Maungaturanga Viaducts, and during the coming year it is anticipated that the foundations for the Waikare Viaduct and, possibly, the Mohaka Viaduct will be in hand.

Chimney Creek No. 1 tunnel, at 46 m. 25 ch., was proceeded with from the north end until about 6½ ch. of the whole tunnel was completed. The bottom heading is now being pierced from both ends to solve the ventilation problem. When the heading is through, excavated material from tunnel will be hauled to bank at 45 m. 55 ch., and this tunnel should be completed in nine months. Chimney Creek No. 2 tunnel, at 47 m. 9 ch., was also worked from the north end. The work was then finished back to 47 m. 4 ch. A total of 12½ ch. of tunnel was completed when work was discontinued for a few months. Work has just been restarted with a single shift, and tunnel should be completed in seven months.

Road-deviation at 47 m. 67 ch. to 48 m. 8 ch. is being formed with scoops. Cutting at 47 m. 79 ch. was taken out to 47 m. 18 ch., and the material used to form bank at 48 m. 3 ch.

The Mohaka Tunnel, at 53 m. 2 ch., has been in progress throughout the year. This is the wettest tunnel on the Wairoa section. Just after Christmas a bad fall occurred in this tunnel and stopped progress for some months. Completed work is now at 53 m. 9-50 ch., and just over 10 ch. of the tunnel is complete.

Extensive investigations were made during the summer to ascertain the nature of the foundations for the Mohaka Viaduct. Six bores were put down and the solid papa found to be at a depth of from 45 ft. to 60 ft. below low water.

Practically all culverts, side drains, and water-drives on this length are now complete.

Fencing has been completed between the following points: On the right, 38 m. 31-50 ch. to 39 m. 18 ch., 42 m. 53 ch. to 43 m. 0 ch.; on the left, 38 m. 50 ch. to 38 m. 62 ch., 42 m. 53 ch. to 43 m. 12-50 ch., and 47 m. 16 ch. to 47 m. 65 ch.

On the Wairoa subsection there have been four steam-shovels engaged on formation, in addition to a number of hand gangs and scooping teams, the formation work being spread over approximately 11 m. between 53 m. and 64 m.

208 ch. of fencing were erected on railway reserve between 55 m. 28 ch. and 62 m. 10 ch.; 45 ch. were erected on road-deviation 57 m. 71 ch. to 58 m. 36 ch.

The excavation and lining of the Waihua Tunnel was completed from 60 m. 72-75 ch. to 60 m. 66-25 ch., and the bottom heading driven right through. This leaves a balance of 3¼ ch. to be completed, exclusive of bottom heading. This tunnel has been closed down since December, but it is expected to have it in hand again by the beginning of next month.

The road-deviations at 59 m. 7 ch. and 60 m. 7 ch. were completed and handed over to the Wairoa County.

Good progress is being made with the Wairoa River Bridge at 68 m. 59 ch., consisting of two 107 ft. 6 in., two 106 ft. 3 in., and two 15 ft. 2 in. spans. 180 lin. ft. of temporary pile staging has been erected and 50 ft. of concrete cylinder has been cast and placed in position. Twenty-four 40 ft. reinforced-concrete piles have been cast, and all reinforcing-steel bent. The steel trusses for the four 100 ft. spans have been delivered at Wairoa and are being scraped and painted ready for erection, and 1,000 yards of shingle has been delivered on the bank near the bridge site.

All culverts, water-drives, &c., between 53 m. 45 ch. and 62 m. 0 ch., with the exception of the 3 ft. arched culvert at 54 m. 15 ch. and several small pipes, have been completed.