

many men as possible were employed in breaking down and stacking stone from the cuttings for the approaches and protective works. The big cutting at 3 m. was partly avoided by a deviation. After removal of the slips at 3 m. the work of filling in the approaches to Soldier's Creek bridge was commenced with engine and wagons.

Formation of the Ngahere Station yard has been completed, and the buildings are well in hand.

Permanent-way is laid to the commencement of Blackball Station yard, and most of the sidings in Ngahere Station yard are laid and ballasted.

Ballasting is complete up to Grey River bridge.

Extensive protection-works necessary to save the line from damage by slips have been carried out at 2 m. 15 ch. and 3 m. Groins are being put in to protect banks against encroachment by the Grey River.

#### HOKITIKA-ROSS.

*Rautapu-Ross Section (31 m. 17 ch. to 38 m. 38 ch.).*—At the beginning of the year rails were laid and formation more or less complete up to Totara River, and platelaying in the Ross Station yard was in hand. The Totara bridge was commenced, fifty-six piles having been driven. Very poor progress was made with this bridge, which was let by contract, and it was not until Christmas time that a train could pass over. In the meantime ballasting had been proceeded with in the Ross Station yard with shingle obtained on that side of the river. Ballasting on the main line was done from a pit near Rautapu. This material turned out to be of such poor quality that its use was discontinued, advantage being taken of the extreme lowness of the Totara River in October to secure sufficient shingle to complete ballasting of the section from there.

Station-buildings at Ross being completed, the section was handed over to the Railway Department on the 1st April, 1909.

Fencing of the line under an arrangement made with adjoining landowners is now in hand.

#### GREYMOUTH—POINT ELIZABETH COLLIERIES EXTENSION.

*Coal Creek Extension (3 m. 53 ch.).*—Work was commenced on this extension in July, 1908, with bushfelling and clearing along the first mile. At the same time formation of a service road extending as far as 5 m. 75 ch. was put in hand, and completed in August, 1908. The first railway-formation work undertaken after the necessary clearing was at the cuttings on the first mile, all of which were put in hand. Several service bridges with a view to subsequent provision for waterways were also erected. In order to work the cutting at 5 m. 42 ch. a loop-line was laid to that point from 5 m. 35 ch. Pipe-culvert construction was commenced in August, but considerable difficulty was experienced in procuring pipes. Bushfelling and clearing continued without interruption until January of this year, when this work was practically completed. Extra felling and clearing has been done as the nature of the ground required, especially at 6 m. 20 ch. to 6 m. 30 ch. and 7 m. 40 ch. to 7 m. 60 ch., where heavy slips threatened.

It was considered advisable to push on the formation-work at the bin-site, and to this end a service track was formed, connecting the service road at 5 m. 75 ch. with the work at the top end. This roadwork proved to be very heavy. Formation-work was put in hand on the bin-site early this year, and required considerable preparatory work in forming drains, &c.

No. 1 tunnel was begun with a 9 ft. by 8 ft. bottom heading in bad ground in October. The timbering, especially in breaking down to full size, has proved very troublesome. The heading of No. 2 tunnel has since been pierced. Gravel for the concrete lining had to be obtained from the Grey River.

Extensive slips have added considerably to the cost of construction.

Contracts for the supply of the timber and iron for the permanent bridges have been prepared, and tenders will be called shortly.

#### WESTPORT—INANGAHUA.

*Te Kuha Section (5 miles 74 chains in length).*—During the year formation-work on this section of the line has been completed, with the exception of trimming on the last 2 miles. Plate-laying is finished to 4 m. A ballast-pit near 4 m. 40 ch. proved unsatisfactory, and a new pit has been opened at 2 m. 50 ch., and is ready for work as soon as the ballast-train is available. The entrance roads into Te Kuha Station yard at 5 m. 60 ch. have been completed. Formation of the yard generally is finished.

The bridges on this section comprised in the Orowaiti Bridges contract, five in number, together with two extra bridges, containing in all seventy-nine 20 ft. spans of hardwood timber, have been completed.

Formation-work is now being started on the next 2 miles, but is no longer on flat country. The line at this place hugs the foot of the steep hill against which the Buller River runs, and is chiefly in granite-rock country.

#### BLENHEIM—WAIKARA.

##### *South End.*

*Mackenzie Section.*—Work was discontinued on this section after the line had been completed to Domett in 1907. In September, 1908, after some preliminary survey-work had been completed,