ground, heavy, closely-placed timbering was necessary for the entire length, and the complete section was encased in concrete. It was only by vigorously pushing on the excavation, followed closely by the concrete lining, that construction was at all practicable.

About three miles of temporary line has been removed and replaced with permanent rails, and a commencement made with laying the sidings in Waiotira station-yard. It is anticipated that the permanent rails will reach Kikowhiti Bridge by the end of the year; and by March, 1923, rail connection should be established between Whangarei and Auckland.

Ballasting (first and second lifts) is proceeding at a rapid pace.

Both passenger and goods traffic has been heavy over the length north of Mareretu Tunnel, and it will increase in volume as the permanent rails are extended southward, especially when through connection has been established with Auckland.

Kirikopuni Section.—Operations have been confined to the northern end of this section. A temporary tram-line has been laid from the Wairoa River to Omana Tunnel. The northern approach to this tunnel has been opened, but owing to the treacherous nature of the country it was impossible to commence driving in the usual way, and three lengths of reinforced-concrete section-lining had to be built at the entrance.

It is proposed to construct a jig-line over the tunnel hill for the transport of material for driving operations at the southern end.

Kaikohe Northwards, Okaihau Section.—Slips on this line have caused trouble, but I am pleased to say that the measures taken to cope with these have proved effective. Rails are being laid in Okaihau station-yard.

Goods traffic has been commenced, and within a few weeks it is intended to commence a passenger service, which will be a great benefit, particularly to Hokianga residents. Mails will also be carried between Kaikohe and Okaihau. A concrete water-reservoir has been commenced at Okaihau, and it is hoped to have yards erected before November next, to facilitate the transport of sheep and cattle from Hokianga to the freezing-works at Moerewa.

## WAIUKU BRANCH.

Both sections of this line have been finally completed and transferred to the New Zealand Railways Department for regular traffic purposes.

## HUNTLY-AWAROA.

Steady progress has been made with this line. Formation, bridge and culvert construction, drain-cutting, and access-road formation are in hand from 7 miles 20 chains to 9 miles.

The earthworks on this line are heavy. The nature of the material to be excavated renders it economically necessary to employ large plant, and three steam-shovels have been installed. Considering the difficulties to be overcome good progress has been made.

It is proposed to let a contract for the Summit cutting to the owners of the coal-mines at the terminus of the line. The advantage of this is that material from the cutting will be used for the special mine sidings.

## WAIKOKOWAI BRANCH.

A contract has been let for the land-plan survey of this railway, and this should be completed shortly.

## East Coast Main Trunk Railway. Waihi-Taneatua (including Mount Branch).

Athenree Section.—Formation is practically complete. Several cuttings and banks having been completed. Athenree station-yard has been widened, and filling around abutment "A" of Mangatoetoe Bridge is in hand. Seven bridges are in various stages of construction. Adams Street subway is well advanced, and subway at 8 miles 62 chains has been completed.