

Numerous concrete culverts, earthenware and concrete pipes, and also reinforced-concrete pipes, have been placed along this section.

Permanent bridges have been erected at 112 m. 25 ch., 113 m. 66 ch., 115 m. 35 ch., and 118 m. 38 ch., and bridges at 113 m. 0.6 ch., and 120 m. are in course of construction.

All the materials have been procured for the Northern Wairoa River Bridge (118 m. 77 ch.) which will consist of two 105 ft., two 45 ft., and fifteen 30 ft. spans, with the larger ones on cylinders and the smaller on piles. It is hoped to make an early start with the sinking of the cylinders and the driving of the pile piers, and arrangements are being made to carry out these two operations simultaneously.

Both the Omana and the Tokatoka Tunnels, which are 31 chains 72 links and 17½ chains 25 links in length respectively, were completed in the early spring, and this has enabled better progress to be made with the work ahead, as all materials can now be railed through the tunnels instead of having to be hauled over two ridges by means of a jig tramway. Both tunnels were driven through very unstable country, involving great care in construction and the use of very heavy concrete lining. No signs of movement have been apparent in the Omana Tunnel, but the Tokatoka Tunnel has developed some cracks for a few chains at the south end, involving a certain amount of reconditioning.

Two miles of line have been fenced on both sides, and the remainder of fencing is nearing completion.

Permanent rails have been laid from Waitotira station-yard to 110 m. 70 ch., and a temporary track from here to 112 m. 23 ch. The permanent track has also been laid from 112 m. 23 ch. to 118 m. 41 ch. with the exception of a few small lengths of temporary track over temporary bridges and wet country, while a certain amount of platelaying has also been undertaken in Pikiwahine, Omana, and Pukehuia station-yards.

The first lift of ballast has been completed from Waitotira to the end of the permanent line at 110 m. 70 ch., and two lifts have been laid from the Omana Tunnel in short lengths aggregating half a mile in the worst places and soft banks onwards to the Wairoa River. Rough scoria ballast has been laid on the remainder of the track between 110 m. 23 ch. and the Wairoa River, as a suitable foundation for the permanent ballasting, and to enable the track to be kept safe.

Two miles and a quarter of approach road, 24 ft. wide, has been formed at the Kirikopuni terminus.

One permanent platelayer's cottage has been completed at Omana station-yard, and a second one (as well as a goods-shed) is now in course of erection. A goods-shed and station-buildings are completed at Pukehuia. Numerous extra huts for married quarters have been provided along the length, and most of them have been lined.

WHANGAREI BRANCH RAILWAY.

Oakleigh Section (5 m. 27 ch. to 7 m. 60 ch.; length, 2 m. 33 ch.).—The track has been maintained with a good running top, and walls and drains of a total length of 60 chains have been constructed in cuttings which required protection. The approaches to the bridge at 7 m. 32 ch. have been stone-pitched, and concrete wing walls and aprons were added to twenty culverts. All the above are additional to what is usually found necessary in railway-construction, and are necessitated by the particularly treacherous nature of the country.

The formation of the Oakleigh station-yard has been widened, trimmed, and metalled, and the station-building, latrines, platform, loading-bank, cattle-yards, and buffer-stop erected.

Tauraroa Section (7 m. 60 ch. to 14 m. 67 ch.; length, 7 m. 7 ch.).—The track has been maintained, cuttings cleaned out, and a total length of 37 chains of stone wall and drain constructed where necessary. The metalling of the Mangapai station-yard has been completed, as well as the erection of goods-shed, latrines, and cattle-yards. The Tauraroa station-yard is metalled, and the erection of station-building, extra platelayer's cottage, latrines, loading-bank, buffer-stop, and two 6,000-gallon vats with water-supply have been completed.

Tauraroa Quarry and Crushing Plant.—The output for the year was 5,182 cubic yards of spawls and 76,955 cubic yards of crushed metal. The greater part of the metal was used by the Department on the railway, chiefly for metalling station-yards and access and approach roads; the balance was supplied to local bodies for metalling approach roads. Another complete crushing unit, consisting of a 24 in. by 12 in. crusher, steam-engine, and metal-bin was added to the plant in December last, and a crusher in one of the other units which was found to be too small for the work was replaced by a larger one. A screen was erected for the purpose of producing fine metal suitable for blinding. The tracks in the No. 2 quarry were completely rearranged, and improved facilities provided in both quarries for loading spawls.

Waitotira Section (14 m. 67 ch. to 19 m. 75 ch.; length, 5 m. 18 ch.).—The track has been maintained, banks made up to correct width, and cuttings cleaned out. A total length of 31 chains of stone wall and drain has been constructed in various cuttings, and concrete wing walls and aprons added to ten culverts. A large slip at 16 m. 35 ch. has been cleared with a steam-shovel. The large filling at 15 m. 10 ch. has been subsiding since the commencement of wet weather, and a deep stone drain is being constructed with the object of further draining the seat of the bank.

An overbridge was previously erected at 16 m. 33 ch., but owing to a large slip carrying away the abutment pier it was considered best to re-erect it with an additional span at 16 m. 28 ch. rather than attempt to stabilize the approach. The approaches of the new bridge are practically complete, and a repetition of the trouble now seems improbable.

Through passenger and goods traffic has been run between Huarau and Portland, which comprises part of the North Auckland Main Trunk and of the Whangarei Branch, and during the twelve