

vanced up to 15 m. 40 ch. An approach-road over  $\frac{1}{2}$  mile in length has been made to Otuhi Station, 13 m. 60 ch., from the Mangakahia Road. Temporary trestles are being erected over the majority of the culverts. The material for the culverts will be brought up by train when rails are laid.

#### HUNTLY-AWAROA RAILWAY.

*Huntly-Awaroa Section (7 miles 34 chains in length).*—The first 3 miles of formation are in hand, but high water in the swamps has retarded progress. The work on the bridge over the Waikato River is somewhat behind, owing to the contractor's difficulty in obtaining suitable labour. All the ferro-concrete piles are driven, seven piers are completed, two 40 ft. spans are in place, and one 100 ft. span in progress, which is very slow indeed generally.

#### EAST COAST MAIN TRUNK RAILWAY.

##### *Waihi-Tauranga.*

*Waihi Southwards.*—Work was started on this line in March, 1912, and formation and culverts are in hand for a distance of 4 miles.

##### *Tauranga-Opotiki.*

*Maunganui-Te Puke Section (13 miles in length).*—The formation on this section is practically completed, but the subsidence which has taken and is taking place on the swamps crossed by the line renders a large amount of work in lifting the banks necessary. Stability will not be reached for some time yet. Drifting sand has caused some trouble, but is being successfully coped with. The rails have been laid for a distance of  $8\frac{3}{4}$  miles. A ballast-quarry was opened up on Moturiki Island; 1 mile of line constructed thereto; crushers, elevator, and bins have been installed; and ballasting started. The first lift of ballasting has been done for a distance of 3 miles 45 chains, and also a quantity of metal for culverts and road-crossings has been supplied. The telephone-line has been laid from the Mount to Te Puke and from the junction at 45 m. to the Tauranga office, including a cable across the harbour.  $7\frac{1}{4}$  miles of fence (both sides) with gates have been completed. In order to push on with the platelaying and ballasting an additional crusher is being installed, and two locomotives with ballast-trucks are at work.

*Te Puke-Paengaroa Section (5 m. 65 ch.).*—Work has been in progress on this section since April, 1912, and is making satisfactory progress.

##### *Gisborne-Motu.*

*Otoko Section (23 m. 50 ch. to 31 m. 45 ch.—7 miles 75 chains in length).*—A good deal of work has been necessary in the removal of slips. The Otoko Viaduct is completed. Immediately on completion of the viaduct the ballasting of the remainder of the section, including the Otoko Station yard, was finished, and the section was handed over to the Working Railways Department on the 8th April, 1912.

*Rakauoa Section (31 m. 45 ch. to 38 m. 25 ch.—6 miles 60 chains in length).*—The formation on this section is well advanced, although a great deal of trouble has been experienced with heavy slips. On this section the most notable works are a 10-ft.-diameter water-tunnel, 350 ft. long, at 33 m. 61 ch. (the filling over this gully is 250 ft. long by 81 ft. high); three bridges ranging up to 80 ft. in height, with two spans of 66 ft., two of 44 ft., eight of 33 ft., and four of 22 ft. The bridge-piers at the Waikohu River Bridge at 37 m. 52 ch. are ready for the girders. The rails are laid to 37 m. 50 ch. Owing to the exhaustion of the ballast-pit at Te Karaka, ballast for only a light lift could be put on the worst places. A new pit at Te Puha is now being opened up. Four cottages have been erected at Rakauoa Station. The fencing is complete.

*Matawai Section (38 m. 25 ch. to 44 m. 10 ch.—5 miles 65 chains in length).*—The formation on this section is almost complete in the ordinary way, but owing to the unstable nature of the country many of the cuttings are still slipping and bulging, so that it is difficult to say when finality will be reached. The large cutting at 39 m. 55 ch. is making good progress, but is being pushed on and will soon be cut through. The tunnel at  $42\frac{1}{2}$  m. is all excavated, and the lining is in hand. The piers of the bridge at 38 m. 32 ch. are well advanced, and the superstructure is nearly ready. The Matawai Station yard, with approach-road formation, is completed, and four cottages are in course of erection. The fencing is complete, with exception of some gates.

*Motu Section (44 m. 10 ch. to 50 m.).*—Works on this section have just been commenced. The almost impassable state of the roads has prevented a vigorous prosecution of the works on this section during the recent wet weather.

##### *Gisborne-Napier, Gisborne End.*

*Ngatapa Section (0 m. to 11 m. 41 ch.).*—Formation-work on this section has been in hand about three months. The earthworks are manned up to about 9 m. One mile of fencing has been erected, and some culvert-sites excavated. The survey is completed to 11 m., and is in hand beyond.

##### *Gisborne-Napier, Napier End.*

*Eskdale Section (about 10 miles in length).*—The works on the first portion of this section are light, and  $4\frac{3}{4}$  miles have already been formed. The survey is complete for 9 miles. Borings are in progress to test the nature of the bottom of the inner harbour, across which the line runs for nearly 2 miles, and over which one or two bridges will be required.