Surveys.-Working-surveys have now been made of the whole of the Thames Valley-Rotorua Railway. They show that the portion not yet undertaken is of much the same character as the Ngatira section, heavy earthworks and steep gradients being unavoidable.

MAIN TRUNK RAILWAY, NORTH ISLAND.

General.	The	following	; state	ement shows	general	ly the state	of t	he wo	orks a	nd sur	veys:—
Lin	e comp			, Puniu sect , Porewa se		•••	••••	Miles 15 12	$\overset{\mathrm{ch.}}{2}54$	Miles	ch. 56
Sections nearly finished, north end, Te Kuiti section """ south end, Hunterville section							 	$10 \\ 5$	59 57	⊿1 16	36
Wo	Works in progress, north end, Waiteti section " " Poro-o-tarao tunnel						 	8 1	53 34	10	07
		Total fir	ished	and in prog	ress	•••	•••			$\overline{54}$	19
$\operatorname{Line}$	e set ou ″	it for con	tract,	north end south end	••••	•••	 		••• •••	15 20	29 51
		Total	•••			•••				36	00

Service-roads and tracks made by Government and contractors, exclusive of pack-tracks, about ...

... 140 miles

Puniu Section .-- The contract for this section included the formation and permanent-way on 15 miles 2 chains southward from Te Awamutu. Another contract included the buildings at four The works were finished in February, and the line opened to Otorohanga- $14\frac{1}{4}$  milesstations. on the 8th instant.

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The formation on 5 miles of the Puniu section was done by Maori piecework in a very satisfactory manner, and at a reasonable cost. About 125,000 cubic yards of earthwork-mostly very long leads-were executed by the Natives at an average of 1s. 3d. per yard-labour only).

Te Kuiti Section.—This is a continuation of the line southwards from the Puniu section for a distance of 10 miles 59 chains. A contract for the formation, bridges, and platelaying was entered into on the 19th August, 1886, and the works are progressing favourably. The formation is nearly finished, the bridges are well advanced, and the platelaying has been commenced. It is expected that all the works will be completed in August.

As in the case of the Puniu section, the formation on five miles of the Te Kuiti section has been carried out by Maori piecework. In addition to other works, 71,000 cubic yards of earthwork have been done in this way, at an average cost of 1s. for labour : 120 Natives have been employed on the works.

The completion of the Te Kuiti section will bring the railway 25 miles into the King-country, and right up to the Native village of Te Kuiti.

Waiter Section.—After the Te Kuiti comes the Waiter section, 8 miles 53 chains, which brings the railway into the Mokau watershed. A contract was entered into on the 9th instant for formation. bridges, and permanent-way. The works on this section are rather expensive. They comprise heavy earthworks, and a viaduct over the Waiteti Gully 468ft. long and 119ft. high in the middle, there being 4 spans of 106ft. The piers and girders are to be of malleable iron, the same design as the Wingatui Viaduct on the Otago Central Railway.

Poro-o-tarao Tunnel.—The length of the tunnel is 53 chains, and of the approaches included in the present contract 61 chains: total, 1 mile 34 chains. The contract was entered into on the 11th August, 1885, two years being given for completing the works. The tunnel is 46 miles south of Te Awamutu, and pierces the dividing-ridge between the Mokau and Wanganui watersheds. In consequence of the remoteness of the situation and the difficulty of access, more than the ordinary obstacles had to be surmounted in carrying out the work. Still, making every allowance for these drawbacks, the progress made has been anything but satisfactory. Instead of being nearly finished, the actual driving of the tunnel is only beginning. The delay is mainly attributable to want of energy on the part of the contractor, and steps would have been taken by this time to terminate the contract were it not that arrangements are in progress by which a better result is anticipated.

The approaches at both ends of the tunnel are nearly complete. Several slips have occurred in the cuttings, but they are not of a serious nature. The tunnel is expected to be all through papa

or soft sandstone rock, easily excavated, but requiring lining. Porewa Section.—This is the first section at the south end of the main trunk line. It is 12 miles 54 chains long. The first contract, including formation, bridges, and platelaying, was completed on the 12th instant. The junction station near Marton is also finished; but the buildings at the other stations have not yet been put in hand.

Hunterville Section (5 miles 57 chains).—This is the continuation of the line beyond Porewa section: it brings the line to Hunterville, a new township, well situated in a good district. A contract was entered into for formation, bridges, and permanent-way on the 19th August, 1886. The works are progressing favourably.

Service-roads.—The country traversed by the main trunk line is altogether unsettled and difficult of access. It was therefore necessary to open up roads and tracks in various directions to facilitate the survey and construction of the railway. The following is a general statement of the work done to date :--