

length of box drains (102 in number) is 1,848 feet, and of culverts varying from 2 feet to 4 feet, 382 feet, all of heart of matai, squared and sawn.

Mohaka to Tarawera.—Sixteen miles, ending at Waipunga Bridge. The work on this section is of the same character as the last, with the addition of embankments in places, and at the Turangamuku of cutting in slate rock. The road is open from Napier to a point three miles north of Tarawera, to which place a coach runs twice a week.

In the Te Haroto bush, and at Ohaue, near Tarawera, about a mile and a half of metalling will be required, and may be easily obtained; the rest of the road, it is hoped, will maintain a good surface for light traffic without metal, the ground being dry and porous, consolidating with rain. Bridges have been built as follows, namely:—One of 62 feet, near Haroto; one of 32 feet, near Mohaka—both over deep ravines, and resting on frames bedded on rock; five plain bridges, respectively 25, 24, 22, 27, and 23 feet; and one large bridge over the Waipunga, 87 feet long, consisting of a centre span of 45 feet, and side spans of 20 feet each; the roadway is 25 feet above water-level, to allow for passage of drift timber. Of box drains, fifty-seven have been constructed, of a total length of 1,320 feet, and of culverts, eighteen, varying from 2 feet to 4 feet, of a total length of 544 feet. Four miles of this section lie through bush which has been cleared 1 chain wide. Several slips have occurred on the deeper cuttings, and have been cleared as they occurred.

Tarawera to Runanga.—Nine miles, five of which are open for cart traffic, two in course of construction; and for the two not yet under contract, it is hoped that arrangements will shortly be made for their execution. Of this section, five miles are in bush, felled 1 chain wide; the cuttings are through pumice drift and slate rock, and at Runanga through points of basalt, the material from which has been used in culverts and retaining walls. The culverts, stone and wood, will be of an aggregate length of 247 feet, ranging from 1 to 3 feet in width; about 20,000 feet of timber is cut for culverts, outlet drains, and small bridges. A bridge has been built over the Waipunga upper crossing, 70 feet long, with one centre span, 33 feet trussed, and two side spans each 18 feet.

Runanga to Taupo.—Or, from the upper Waipunga bridge to Tapuacharuru, thirty-five miles; first opened by Native labour, and afterwards improved by the Constabulary. The improved parts extend over twelve miles, and consist of earthworks and formation, and the erection of one large and three small culverts; the deep cuttings and embankments forming the approaches to the proposed bridge across the Waikato have also been made; the cuttings are through pumice cement, difficult to work. The whole length of the road above described has been well laid off, with easy gradients; the timber for bridges and culverts has been well selected,—heart of totara and matai wherever obtainable; in very few cases has rimu been used, and then only where easily renewable.

The direct benefits accruing from the construction of this road, even in its incomplete state, are becoming very apparent in the reduction of the cost of transport to the Taupo district, which is now only one-third of what it was two years ago; and judging from the number of buildings being erected, and in contemplation, it would appear that the posts at Tarawera and Taupo will become permanent settlements.

Section 2.—Taupo northwards to Niho-o-te-Kiore.—Twenty-two miles, being part of Tauranga and Taupo Road, and extending between the two crossings of the Waikato River, was reported last year as having been formed 16 feet wide, as a dray road, mostly by Native labour. This work included 100 feet of culverts, and 24 feet of bridging. Since then, contracts for the supply of the timber for the proposed bridges over the Waikato are all but completed; the timber for the bridge at Aoteamuri, the northern extremity of the road, has been hauled to within a mile of the site, but no actual contract has yet been concluded for its erection. The design includes one trussed span of 50 feet, and one land span of 20 feet in clear; total length 74 feet, width $13\frac{1}{2}$ feet. A serious bush fire in December last destroyed the first supply of timber cut for this bridge, and it has been necessary to replace it. For the erection of the bridge at Tapuacharuru the contract has been let. This will be 84 feet long in one span, trussed. Both will be built of heart of totara.

For culverts and box drains about 10,000 feet of timber have been cut, to be used in improving the drainage of the road, which has as yet been subjected only to light traffic, and retains a very good surface, but about a mile of it will require metalling near Tuahu Hill. Material for this, volcanic rock (trachyte), is close at hand all along the line.

A portion of the road, twelve miles, has been maintained under contract by Natives.

POVERTY BAY TO HICKS' BAY.

The distance between these places is about 112 miles, and the tracks between them lie for almost the whole way very close to the coast, the beaches being used wherever practicable. It is proposed to improve the line of communication, by cutting a horse track about 7 feet wide, and clearing the bush, where it occurs, about half a chain wide, also erecting culverts, small bridges, &c., the estimated cost of the necessary work being a little over £4,000. A certain amount of Native labour has already been expended on the line, a proportion of which may be utilized as part of the future road; other portions must however, it is feared, be rejected, not being in the right place or properly laid out.

The Natives living along the line will be employed by contract, at rates to be fixed by the Surveyor in charge, who has had instructions to lay the road line off carefully, so that when completed it may be really a useful work.

WAIROA AND POVERTY BAY.

1. *Wairoa to Opoiti.*—Thirteen miles. The construction of this road will establish dray communication between the military settlements on the Upper Wairoa and the township of Clyde. Of the whole distance, it is only necessary to execute work over about seven miles, the rest of the road passing over flat land, where, at present, work is not necessary.

About four miles of the above, namely, from Clyde to Scamperdown Creek, were formed during 1870 and 1871; the work consisting of 342 chains of formation 30 feet wide, 640 chains of side