

APPENDIX J.

ANNUAL REPORT ON ROADS, MISCELLANEOUS WORKS, BUILDINGS, AND DEFENCE WORKS, BY THE ENGINEER-IN-CHIEF.

The ENGINEER-IN-CHIEF to the Hon. the MINISTER for PUBLIC WORKS.

SIR,—

Public Works Office, 31st March, 1887.

I have the honour to submit the following report on roads and bridges, miscellaneous works, buildings, and defence works for the year ending the 31st March, 1887:—

ROADS AND BRIDGES.

AUCKLAND DISTRICT.

Cox Creek Road.—A contract for the bridge-approaches was entered into on the 1st June, 1886, and the works were finished in December.

Drury-Mauku Road.—Some necessary repairs to the Mauku Bridge have been carried out.

Tuakau Ferry, Waikato River.—The punt has been put in good working order, and an approach-road made for about a quarter of a mile up the incline.

Katikati-Te Aroha Track.—Small repairs have been executed on this track during the year. Reconnaissance surveys have been made of Thompson's Track and the one now in use to determine their relative merits as a route for a dray-road. Further surveys with the same object have been undertaken by the county.

Whatawhata and Te Rore Bridges.—A contract was entered into on the 29th April, 1886, for painting and screwing up these bridges. The work was finished in September.

Waipa-Raglan Road.—The maintenance of this road has been upheld during the year. Metal-ling has been done at bad places, and necessary repairs made to bridges.

Cambridge-Taupo Road.—This road has been maintained in its usual state of repair.

Oxford-Rotorua Road.—This road has been maintained during the past year in the usual manner. The traffic cuts up the surface badly in winter, and, as metal or gravel is not procurable, the worst places are being covered with trachyte sand from the cuttings. Although not a first-class covering, this will probably keep the road passable till the railway is made.

BAY OF PLENTY AND NAPIER.

Tauranga-East Cape.—This road is open as a dray-road from Tauranga to a little beyond Opotiki, after which there is only a horse-track. It is maintained by the Public Works Department from Te Puke to Cape Runaway. Like all the roads in the volcanic district, it suffered considerably by the Tarawera eruptions.

Three cart-bridges, 80ft. in total length, have been erected on the Te Puke-Matata section during the year. The maintenance was done by a Maori contractor, who did not, however, give unqualified satisfaction.

On the Matata-Te Teko section half a mile of new siding-cutting and a quarter of a mile of fascine-work have been done, and a small bridge built during the year. A survey has also been made for 4 miles of deviations to improve the gradients. At present the section is only passable for horse-traffic.

The Te Teko-Whakatane section has been greatly improved by raising, fascining, and draining. It is now in fair order for light wheeled traffic.

Five small bridges and thirty box-culverts have been built between Whakatane and Opotiki during the year, also $5\frac{1}{2}$ miles of side-cutting and 5,000 cubic yards of embankment. The road is now open for vehicles 3 miles beyond Opotiki.

The main horse-track from Opotiki to Whangaparawa, near Cape Runaway, and the branch track from Whakatane to Ohope, have been maintained in fair order during the year. There is still $1\frac{1}{2}$ miles unfinished on the new track between Hawaii and Maraenui, and $2\frac{1}{2}$ miles between Raukore and Whangaparawa.

Opotiki-Ormond Track.—The section from Opotiki to Motu (44 miles), under charge of this department, has been maintained during the year, and is now in fair order for horse-traffic.

Te Teko-Galatea Road (length, 33 miles).—This road was maintained up till September last. Since then it has not been considered necessary to continue the work. The road is very heavy for wheeled traffic where the volcanic deposit is thick, but otherwise it is in good order.

Tauranga-Napier Road.—This road is maintained by the Government all the way from Oropi, 12 miles from Tauranga, to Kaiwaka, 16 miles from Napier. There is also an alternative road from Tauranga to Rotorua, *via* Te Puke, and a branch road from Rotorua to Tarawera.

The main road has been maintained in fair order during the year. Bridges and culverts have been repaired, swampy places fascined, and minor improvements effected. The section through the bush between Oropi and Rotorua was very much cut up in August by exceptionally heavy traffic during very wet weather; but extra men were put on, and substantial repairs effected without delay. There