## APPENDIX C.

# ANNUAL REPORT ON ROADS IN THE NORTH ISLAND, BY THE ENGINEER IN CHARGE.

The Engineer in Charge, North Island, to the Hon. the Minister for Public Works. Public Works Office, Wellington, 30th June, 1878. SIR,—

I have the honor to forward annual report on roadwork executed during last year under "The Public Works Act, 1876," up to the 31st May.

The report this year will necessarily be very brief, as most of the roads have been handed over to the several counties in which they are located, and the new works executed by the Government are of limited extent.

### ROADS NORTH OF AUCKLAND.

The District Engineer reports that no work has been executed by him in this district during the year. The expenditure voted by Parliament has been mainly under the control of the counties interested.

#### WORKS SOUTH OF AUCKLAND.

Great South Road.—Within the last three months this road has been maintained. The bridge's were found to be more or less out of repair, and in many places the surface of the road badly worn.

The bridges have all been repaired, excepting that at Drury, the wings of which need attending This work will, however, soon be completed. The Maungatawhiri Bridge was much decayed, and has been repaired at a cost of £33.

All the bluestone road-metal used has been procured from Mount Eden Gaol, and is of good quality. Portions of the road, on which bluestone road-metal had never been used, have been repaired

with scoria gravel. Approximate expenditure to end of May, about £302.

Mangere Bridge. - Previous reports as to the destruction of some of the piles of this bridge by the teredo have been confirmed, and there is no doubt that provision should be made to renew the piles of the piers.

Experiments have shown that heart-of-totara piles in the same waters are not affected by the worm, and may be used with safety. The cost of renewing the piles, tarring all the woodwork, and

painting the ironwork, will be about £1,800.

Tamaki Bridge.—A report was made on the state of this structure in February, 1877, and certain repairs to the flooring were made at a cost of £25. The lessee has again drawn attention to the state of the floor, which it is evident must be renewed, and also other necessary repairs executed, the cost of which will probably amount to £1,500.

Cambridge-Taupo Road.—This line of road lies between Cambridge and the main line of road between Tauranga and Taupo, which it joins about four miles north of Atiamuri Bridge. The work on it has been executed by a party of the Armed Constabulary Force, working since June last under the supervision of the Public Works Department. The working party has been reduced in number, but there are still about thirty-five at work.

When the Public Works Department took charge, the Pairere Bridge, 30 feet long, was halfbuilt, the timber used being rimu. The bridge is now finished. Large box-culverts on piles are placed where necessary, and the soft sandstone of the district is being used for dry stone culverts. All other bridges and culverts now being built are of kauri or totara.

The length of road formed, 15 feet wide, fit for the haulage of timber, is 12 miles, but no part has been metailed. Originally the formation was only 10 feet wide, but about 7 miles have been

widened as above after being very much destroyed by floods.

About one-half of the timber for the Waipa Bridge, situated about eighteen miles from Cambridge, has been delivered. The rest is being hauled, and the piling-engine is on the ground.

Endeavours have been made to procure timber from the Natives there, and also to employ them in hauling kauri timber from Cambridge, but without success, as intertribal quarrels interfere and prevent the execution of any agreements.

#### BAY OF PLENTY.

Tauranga-Taupo Road.—The portion of this road lying between Tauranga and Oropi, 12 miles, after having been put in good order, was handed over to the county. The remainder of the road has been maintained under an efficient overseer: it is generally in good or fair order throughout, but demands constant attention and re-forming, as it is not a metalled road.

The overseer calculates that the ordinary traffic on this road of heavy waggons and drays has increased, since May, 1877, five times, and that of coaches, buggies, and saddle-horses nearly ten

times The bridges in the Mangarewa Forest were built of rimu, and are decaying. Two of them at least will require to be renewed shortly, when this is done more durable wood will be used.

6—E. 1.