

1899.  
NEW ZEALAND.

PUBLIC WORKS STATEMENT

BY THE HON. W. HALL-JONES, MINISTER FOR PUBLIC WORKS,  
12TH SEPTEMBER, 1899.

MR. SPEAKER,—

In laying before honourable members the Public Works Statement for the year it is my pleasing duty to again report that satisfactory progress has been made with the various works in hand. The Thames-Paeroa, Seaward Bush, and Forest Hill Railways have been opened for traffic, and should materially increase the earning-power of the lines with which they are connected. The progress of settlement and the profitable utilization of valuable timber that have followed the construction of our present railways have manifested the necessity for making further extensions of certain lines. Some of the proposed lines that are urgently required in the interests of settlement also give promise of earning the interest upon the cost of construction from the moment of opening. A large borrowing policy for the completion of our railway system, irrespective of the results likely to be derived therefrom, is to be deprecated. At the same time it should not be forgotten that as a question of colonial policy the completion of the main trunk lines from Auckland to the Bluff, within a reasonable time, is much to be desired. In regard to other lines it will also be necessary, in order to meet the requirements of our industries, and to develop the resources of the colony, to keep pace with settlement and so assist our settlers in getting their products expeditiously and cheaply to markets and ports of shipment.

In my Statement of December, 1897, I included a table showing the mileages of the different sections of railway completed and opened for traffic since the 24th January, 1891—the total length opened within the period referred to being no less than 224 miles 51 chains. Since that Statement was delivered the following additional lines have been opened :—

Railway.	Section.	Length.	
		Miles.	Chains.
Whangarei-Kamo Extension	Whakapara-Waiotu	3	29
Waikato-Thames	Paeroa-Thames	19	20
Midland	Belgrove-Motupiko	9	23
Otago Central	Kokonga-Ranfurly	11	25
Seaward Bush	Gorge Road-Waimahaka	6	52
Forest Hill	Winton-Hedgehope	12	40
Total		62	29
Add mileage reported in Statement of 1897		224	51
Total mileage opened since 24th January, 1891		287	00

There is also at the present time a length of 93 miles in progress. The expenditure on railway-construction works during the same period has amounted to £1,431,140.

Notwithstanding the somewhat increased funds available, I regret that I have still been unable to make provision this year for all the projected new railways and extensions of existing lines that have been petitioned for from time to time. I have only been able to provide for about one-fourth of these works, being those that are most urgently required, or which will be immediately reproductive. While admitting that there is every probability of some of the lines unprovided for ultimately earning interest on their cost, it would nevertheless not be prudent to commence their construction until some of those now in hand have been completed. Reference is made later on to the more important of these proposals.

#### AVAILABLE WAYS AND MEANS FOR PUBLIC-WORKS PURPOSES.

On 31st March, 1898, the available balance of ways and means for public-works purposes was £326,492. Further funds were provided last session as follows:—

Under the Aid to Public Works and Land Settlement Acts Amend-	£
ment Act ... ..	500,000
Transferred from the Consolidated Fund ... ..	425,000
Sinking funds released ... ..	43,360
Miscellaneous receipts ... ..	2,330

Thus making a gross total of available ways and means of £1,297,182. The expenditure amounted to £916,327, which left a balance of £380,855 at the end of the year. Against this there were liabilities amounting to £446,283. It is now proposed to raise additional funds as under:—

	£
For railway construction ... ..	300,000
" additions to open railways ... ..	225,000
" roads to Crown and Native lands and main roads ... ..	150,000
" roads to back-block settlements ... ..	150,000
" permanent works on goldfields ... ..	50,000
" public and technical school buildings ... ..	50,000
" purchase of Native lands ... ..	50,000
" contingent harbour defence ... ..	25,000
Total ... ..	<u>£1,000,000</u>

It is also proposed to transfer from the Consolidated Fund a further sum of £450,000, making altogether a gross total of available ways and means of £1,830,855.

The estimates of expenditure for the current year total to £1,355,098, of which £1,308,025 will be a charge against the Public Works Fund, and the balance against the Government Loans to Local Bodies Account, leaving an unallocated balance of ways and means for public-works purposes of £522,830.

It must, however, be borne in mind that the date of the appropriations will probably limit the actual expenditure to about the same amount as last year, and the balance available for next year will therefore be greater than the £522,830 unallocated. It is also hoped that there will be a surplus on the Consolidated Fund this year, out of which another grant can be made to the Public Works Fund, which, together with the unexpended balance available under the latter fund, will be sufficient to meet the actual expenditure under that fund to 31st March, 1901. What steps should then be taken to obtain further ways and means for public works purposes must be left for the next parliament to consider.

#### TOTAL PUBLIC WORKS EXPENDITURE.

The following table shows, in parallel columns, the total expenditure on all works and services throughout the colony out of the Public Works Fund up to 31st December, 1890, and also up to 31st March last:—

Class of Works.	Expenditure.		
	Total to 31st December, 1890.	1st January, 1891, to 31st March, 1899.	Total to 31st March, 1899.
	£	£	£
Railways (including A.O.L.) ... ..	14,067,100	1,965,266	16,032,366
Roads ... ..	3,575,804	1,387,311	4,963,115
Public buildings ... ..	1,776,003	496,856	2,272,859
Immigration ... ..	2,144,386	2,734	2,147,120
Purchase of Native lands ... ..	1,191,137	713,120	1,904,257
Lighthouses, harbour-works, and harbour-defences	880,095	69,976	950,071
Telegraph extension ... ..	600,849	228,437	829,286
Development of goldfields ... ..	561,101	87,530	648,631
Defence-works (general) ... ..	429,720	39,780	469,500
Departmental ... ..	349,789	84,023	433,812
Minor works and services ... ..	300,689	6,055	306,744
Cost and discount, raising loans, &c. ... ..	1,021,472	6,518	1,027,990
Totals ... ..	<u>£26,898,145</u>	<u>£5,087,606</u>	<u>£31,985,751</u>

## DEPARTMENTAL.

Honourable members are perhaps not aware of the large amount of work performed by the Public Works Department on behalf of other departments of the public service. As the strength of the Public Works staff requires to be appreciably greater by reason of this, I mention the following as some of the works that have been designed, supervised, or reported on for other departments or local bodies during the late financial year:—

Inch Valley Lime-quarry Railway; rifle-ranges, Shoal Bay and Mount Eden; repairs, Mangere, Panmure, and Orakei Bridges; suspension-bridge over Mangawhero River, Wanganui; steel cantilever road-bridge over Rangitikei River at Mangaweka; restoration, Vinegar Hill Bridge over same river; bridge over Taueru River; Karamea Bridge; road, Whangaparapara to Blind Bay; road, Waimangaroa to Denniston; road, Westport to Waimangaroa; deviation, Great South Road round Mount Hercules and other works.

In addition to the above a number of works, too numerous to mention in detail, which have been carried out by local bodies under grants from the Government, have been inspected, and certificates given as to the manner in which the work has been done.

## RAILWAYS UNDER CONSTRUCTION.

The extent of railway-construction work in hand during last year was much the same as during the previous year. It will be convenient if I follow the usual course of briefly describing what has been done on each line, and also at the same time give an outline of the proposals for the current year.

## KAWAKAWA—GRAHAMSTOWN.

The amount of work in hand on this railway last year was not as great as anticipated when the estimates were prepared. The estimates of last year provided for the extension of the line from Waiotu to Hukerenui, but, as the Railways Authorisation Bill, which was to have authorised the work, did not pass, it was impossible to go on with it. It was not foreseen when this line was first started that Hukerenui would be the most suitable position for the principal station for that district. As, however, a large area of kauri forest can be conveniently tapped from this point, it is very desirable that the line should be extended there as soon as possible. The line was opened for traffic to Waiotu on 21st December, 1898. The expenditure during the year amounted to £23,932. It is now proposed to continue the line from Kawakawa southwards, a distance of about six miles. This extension will open up a large area of marketable timber, and when the timber has been cleared, the land, which is of good quality, will be available for settlement. It is also proposed to again make provision for the extension from Waiotu to Hukerenui, and to put the work in hand directly the necessary authorisation Bill has been passed.

Owing to the shallowness of the water at the present terminus at the Whangarei end of this railway, only vessels of small tonnage can gain access to the line at present. An extension to Grahamstown, a distance of two miles and a half, would enable large vessels to enter and leave at any time of the tide. The construction of this extension will insure the carriage over the line of a large quantity of timber, the freight upon which might otherwise be lost, and would also enable the local coal to be exported. It is therefore proposed to include this extension also in the Railways Authorisation Bill.

The survey of the line from Hukerenui to a junction with the Kawakawa Railway is now in hand, but will not be finished for some months. The vote proposed for the current year is £10,000.

#### HELENSVILLE NORTHWARDS.

The formation of the Tahekeroa Section of this railway is proceeding as vigorously as the appropriation for the service will admit of. Indeed, the vote obtained last session was exceeded on the 31st March last by £1,092. The work is still proceeding and making satisfactory progress, two miles of the line being almost ready for platelaying. It is proposed to lay the rails on this length shortly, to facilitate the transport of material for the operations beyond. It is desirable to do this, as the only other access to the works is by a rough bush-road. I propose to ask the House in the Railways Authorisation Bill to sanction the construction of the line to the Kaipara Flats. The vote for last year was £9,000, while the expenditure amounted to £10,092. This year a vote of £12,000 is proposed, which will admit of construction operations being proceeded with expeditiously.

#### THAMES-TE AROHA.

The last section of this railway, from Paeroa to the Thames, was opened for traffic shortly before Christmas, as promised in last year's Statement. The line was not complete at the date of opening, however, and a great deal of work has been done on it since, the construction-men having only recently been withdrawn. The vote for this railway last year was £25,000, and the expenditure amounted to £24,391. A vote of £7,000 is now proposed to clear off all liabilities on Construction Account.

#### PAEROA-WAIHI.

I mentioned in my Statement last year that a detailed survey had been made for a branch railway between Paeroa and Waihi. The great development of mining in this district, and the large increase of population resulting therefrom, have induced private persons to offer to undertake this work. As there is every indication of a further development of the district, and that the mining-works will be of a permanent character, or will, at any rate, last for many years to come, the Government considers it would be inadvisable to allow a private company to make this railway, especially as it promises to give a handsome return upon the cost of construction. In view of this the House will be asked to make provision for a commencement being made with the work. A vote of £6,000 has accordingly been placed on the estimates, and the line will be included in the schedule of the Railways Authorisation Bill.

#### GISBORNE-KARAKA.

The isolated position of Gisborne, and the difficulties the settlers in this part of the colony have had to contend with, owing to want of proper communication with the Port and the outer world, make it a matter of simple justice to establish railway communication between Gisborne, Ormond, and Karaka. The meat and dairy industries have assumed large proportions, and close settlement is going on apace. The roads in winter-time are unable to bear the traffic, and the construction of a line of railway, first to Ormond and thence to Karaka, would provide a long-felt want. With the increase of settlement and the remarkable development of the almost unlimited resources of the district which is taking place, there is little doubt that the earnings of the line would be more than sufficient to meet the interest on the cost of construction. A vote of £6,000 has been placed on the estimates to make a commencement, and Parliament will be asked to authorise the construction of the line.

## NORTH ISLAND MAIN TRUNK.

The construction of the Ohinemoa Section at the north end of this line has proceeded throughout the year, but some of the cuttings where the ground was of a treacherous nature had to be allowed to rest during the worst of the winter weather. The work on the other portions of this section that have been in hand during the year has progressed satisfactorily, and about four miles of the line will be ready for platelaying as soon as the cuttings above referred to are completed. Additional formation has also been taken in hand on the lower part of the section, so that construction-works now extend as far as the Ongarue Valley, a distance of 54 miles from Te Awamutu and 154 from Auckland, and the line to the junction with the East Road at Kawakawa should be completed within two years.

At the southern end of the line the grading now extends to Taihape, a distance of twenty-two miles from the terminus of the open line at Mangaonoho, and forty-four miles from the junction with the main West Coast line at Marton, and the felling and clearing is in hand for a further distance of five miles. The formation on this length is of a particularly heavy character, but good progress has been made with it. Simultaneously with the construction of the Makohine Viaduct, platelaying will be proceeded with to Mangaweka, thus enabling the line, on the completion of the viaduct, to be opened to that township.

The preparation of the ironwork for the Makohine Viaduct has been proceeded with as vigorously as possible throughout the year. During the long days of last summer the machinery was kept going for sixteen hours a day, and when the days commenced to shorten the electric light was installed in the workshop, since which time three shifts have been employed, and the drilling and other operations kept going continuously. The preparation of the ironwork for the structure is now well advanced, and a start will shortly be made with the erection.

Last year a vote of £50,000 was granted for this railway: this year we propose a vote of £70,000.

## RIMUTAKA DEVIATION.

The trial surveys to avoid the Rimutaka Incline and the steep grades and sharp curves between the Upper Hutt and the Summit, which were made by Mr. J. H. Dobson, and were in progress when my last Statement was delivered, have since been completed. The results of these surveys, and of subsequent personal examinations of the ground by the Superintending Engineer (Mr. P. S. Hay, M.A., M.Inst.C.E.), are embodied in the report by that gentleman, which will be found attached to this Statement. A report is also appended on a further examination of the Wainui-o-mata route, by Mr. R. W. Holmes, M.Inst.C.E. The Government now proposes to have accurate detailed surveys undertaken in order to determine with certainty which route offers the greatest advantages, and the work will be started as early as possible. A vote of £6,000 has been placed on the estimates to cover the expenditure this year. Appended to the Statement will also be found several illustrations of the Incline as it exists at present.

## BLENHEIM-AWATERE.

Construction-work on this railway was resumed in September last, and has proceeded satisfactorily since. The formation has already been put in repair and the rails laid on a part of the line, and a further length will be ready for rail-laying shortly, and the balance of the grading as far as the Awatere bridge-site is in hand. In April last a contract was let to Messrs. Scott Brothers, of Christchurch, for the construction of a combined road-and railway-bridge over the Awatere River. The contractors have already commenced the manufacture of the ironwork in Christchurch, and expect to begin operations at the site shortly. The vote taken for this railway last year was £8,000. This year a larger vote is necessary, as construction-works will extend over the whole year instead of only over half the year, and progress-payments are also expected to fall due on the bridge-contract: we therefore ask for an appropriation of £15,000.

## WAIPARA—CHEVIOT.

The large increase of settlement that has taken place in the Cheviot district justifies me in saying that an extension of the railway from Waipara through Cheviot is very desirable. It will some day form an important part of the main trunk line between Picton and the Bluff, and will in all probability be interest-earning when completed. In accordance with my promise last session, Mr. A. Jack started the survey of this railway in May last, and has completed a trial line to a junction with a previously made survey through the Cheviot Estate. As a good line has been secured instructions have been given for a full detailed survey to be made, so that construction-works can be started as soon as this survey is finished and Parliament has authorised the line. A vote of £6,000 is asked for to begin with.

## OTAGO CENTRAL.

The section of this railway between Kokonga and Ranfurly, a distance of 11 miles 25 chains, was opened for public traffic on 14th December last. This makes a length of over seventy-seven miles of the line now complete and open for traffic, of which sixty miles have been opened since the present Government assumed office. When I delivered my Statement last year, the construction of the further section between Ranfurly and Wedderburn had been put in hand. The formation of this length is now rapidly approaching completion, and the laying of the permanent-way will be started in the spring, and the line is expected to be ready for traffic before next winter. Some delay took place before the formation of the further section from Wedderburn to Ida Valley was commenced, as it was thought desirable that the works on the Ranfurly-Wedderburn Section should be in a forward state before any other section was started. The work is now well in hand, however, and is proceeding expeditiously. In respect to the section beyond, complications arose, inasmuch as the line was surveyed through what appeared to be a natural site for a reservoir, so much needed in Central Otago for mining and agricultural purposes. This necessitated enquiries being made, but, upon the latest information to hand, it has now been decided to proceed with the line as originally surveyed. The vote taken last year was £40,000, and the expenditure and liabilities at the end of the year amounted to £30,342. This year the vote proposed is £60,000, and it is intended to make up for the unavoidable delay of last year, and to proceed vigorously with the sections already in hand, and we also intend shortly to make a commencement with the heavy work in the Poolburn Gorge.

## HERIOT EXTENSION.

In my last Statement I mentioned that, subject to a suitable area of land in the district being obtained for settlement, the Government proposed to make a start with the section of this railway extending as far as Edie's, six miles and a quarter from Heriot, and a vote of £2,000 was placed on the estimates to commence the work with. Owing, however, to the land referred to not having been secured, and to the Railways Authorisation Bill, which was to have authorised the construction of the line, not having been passed, no steps could be taken in the matter. The line will again be placed in the Schedule to the Bill this year, and last year's vote is repeated on the estimates.

## CATLIN'S RIVER—SEAWARD BUSH.

Petitions have been presented to Parliament praying for the extension of the Catlin's River line towards Seaward Bush, and of the Seaward Bush line towards Catlin's River. The Government considers that it would be desirable to connect these railways, and will accordingly ask authority in the Railways Authorisation Bill to establish the connection. A survey has already been made of the proposed extension from Owaka to Catlin's Bridge (Ratanui), a distance of three miles and a half, and it is proposed to put the construction of this length in hand as soon as the necessary authority has been obtained.

The Seaward Bush Railway was opened for public traffic to the terminal station at Waimahaka on the 9th June last. Some finishing works still

remained to be done, and a small amount of the work is not yet complete, but will be out of hand shortly. The amount of the vote last year was £10,000, but, owing to the line not being completed quite so soon as expected, only £7,216 was actually expended within the financial year.

The extension to Tokonui, at the Seaward Bush end, a distance of about seven miles, would open up some valuable bush country and a considerable area of land well suited for settlement. No permanent survey of this section has yet been made, but inquiries will be instituted to ascertain its probable cost and the amount of traffic that would be carried over it if constructed. This year we ask for a vote of £12,000 to clear off all liabilities on construction account, and to make a start with the extensions referred to.

#### FOREST HILL.

The work of reducing the grades on the old tramway and converting it into a substantial railway according to present standards has now been completed, the line having been opened for public traffic on the 17th July last. The vote taken for this work last year was £5,000, but only £3,110 was actually expended within the year. A heavy expenditure has since been incurred, however, and a vote of £7,000 is included in the estimates to cover this and all liabilities on construction account.

An extension of the railway for a distance of five miles in the direction of Gore has recently been asked for. The line would traverse easy country, and would probably not cost more than £20,000. No survey of the proposed extension has yet been made, however, but during the recess further inquiries will be made with regard to it.

#### OREPUKI-WAIAU.

Petitions have been received for the construction of a railway from Orepuki to Waiau, and for an alternative line between Waicola and Orawia. I took the opportunity when in Southland recently to pass through this district, and made full inquiries concerning it, and came to the conclusion that the construction of the line from Orepuki would greatly assist in developing the mining, timber, agricultural, and pastoral resources of that important part of the colony. As there is also every reason to believe that there will be a considerable traffic on this extension if constructed, provision will be made for it in the Railways Authorisation Bill, and a vote of £6,000 appears on the estimates to admit of a commencement being made with the work.

#### MIDLAND.

A large amount of work was done on this railway during the year. The construction of the Belgrove section has been completed, the line having been opened for public traffic between Belgrove and Motupiko on 1st March last.

I am sorry to say that the traffic-results on this extension have so far been disappointing; but the receipts would doubtless be largely increased if a further section were constructed up to and for some distance along the Tadmor Valley. A careful trial-survey to determine the respective merits of the Tadmor and Hope Saddle routes for the further extension of this line towards the Buller Valley has been made, but the surveyor's report and plans are not yet in the possession of the Government.

Works at the Greymouth end, between Jackson's and Otira, are rapidly approaching completion. The rails have already been laid over about three-fourths of this length, and will probably be laid to the end of it early in October. Every effort is being made to have the section sufficiently complete to be opened for public traffic by Christmas next.

Considerable work has also been done at the Springfield end of the line. In addition to a large extent of new formation-work, the rails have been laid on about a mile of formation executed by the company. This has been done to facilitate the transport of supplies to the works now in hand. Plans of an iron viaduct over Paterson's Creek, and another over Staircase Gully, are in course of preparation.

The vote passed for the Midland Railway last session was £50,000, but the expenditure on the work amounted to £54,494. A vote of £60,000 is asked for this year.

Honourable members are no doubt aware that certain of the debenture-holders applied to the Supreme Court in the colony for the appointment of a Receiver in July, 1898, and a conditional appointment was in due course made by the Judge, without the consent of the Crown. In pursuance of the conditions attached to the appointment, an application was subsequently made to the Court by the Receiver for permission to sell the railway. This application was opposed by the Government, who further asked that the powers of the Receiver should be restricted to dealings with property of the company other than the railway. Both motions came before the late Chief Justice and Mr. Justice Edwards, sitting together, in December last. After an exhaustive argument judgment was delivered in favour of the Crown. The Receiver appealed against this judgment, the appeal being heard by Judges Williams, Conolly, and Denniston, in May last, the result being that the decision of the Court below was strongly upheld. Copies of both these judgments have been presented to Parliament. The debenture-holders have now appealed to the Privy Council, and the case is expected to come on for hearing in London early in December next. The delays that have taken place have stopped settlement within the area of land reserved for selection by the company; but should the decision of the Privy Council be in favour of the colony, every expedition will be exercised in throwing this land open for settlement.

#### SURVEYS.

In addition to the surveys already referred to—namely, Hukerenui-Kawakawa, Motupiko-Hope Valley, the Rimutaka deviation, and the Waipara-Cheviot Railway—field-work has been in progress throughout the year on the projected line between Napier and Gisborne. Between Napier and Wairoa three lines have been explored, and aneroid heights of the principal points determined, and between Wairoa and Gisborne two routes were examined. The route finally selected between Napier and Wairoa, and of which the trial survey is now being made, is that by the Esk Valley. Over forty miles of trial line have now been run, the country being of a very rough character. The ruling gradient obtained is 1 in 40, with six-chain curves. The survey is still in hand, and will take several months to complete. A reconnaissance survey was also made by Mr. James Stewart, M.Inst.C.E., of Auckland, a former district engineer of the Department, for lines of railway between Gisborne and Rotorua, and Gisborne and Opotiki. Mr. Stewart's report on these surveys is printed as an Appendix to this Statement.

The survey of the unlocated portion of the North Island Main Trunk Railway has also been in progress during the greater part of the year, and the location of the line may now be regarded as practically completed. The small amount of work still remaining to be done in the field can be easily and expeditiously accomplished as soon as spring weather sets in. The survey, and preparation of plans, are now so far advanced that the cost of the line may be estimated within narrow limits of error. As promised during last session, a further examination of the country along the Ngairi, Waitara, and Awakino routes has been made, and a very carefully prepared and interesting report on these routes, and a comparison of them with the Central route, has been made by Mr. R. W. Holmes, M.Inst.C.E. Mr. Holmes was assisted in this task by Mr. A. C. Koch, an Assistant Engineer, who has been many years in the service of the department, and has had experience in exploration surveys. Mr. Holmes's report, to which Mr. Koch's report is attached, will be found as an appendix to this Statement, and will well repay perusal. Reports on the character of the land along the Ngairi and Central routes have been obtained from experienced officers of the Lands and Survey Department, and will also be found attached to this Statement.

The trial survey of an extension of the Blenheim-Awatere Railway southwards to a junction with the North Canterbury railways has also been in

progress and is now well in hand. Mr. J. H. Dobson started the work in December, 1898, and has made considerable progress with it. A vote of £4,000 is proposed for the survey of new lines during the year.

#### TOTAL APPROPRIATIONS FOR RAILWAYS.

In addition to the appropriations already mentioned, a vote of £1,500 is proposed to meet old land-claims and other liabilities on railways in respect of which no specific votes are taken; also a vote of £46,000 for permanent-way and other materials, thus making the total appropriations proposed for railway-construction purposes £336,500.

#### WELLINGTON-MANAWATU RAILWAY.

Honourable members are aware of the conditions under which this line can be compulsorily taken. As there are diverse opinions as to the Government taking it over, a complete investigation should be made by experts as to the position, valuation, and outlook; and also as to the effect the acquisition of the line would have upon the working of the railway system of the North Island. Parliament would then be able to decide what should be done in the matter.

#### ROADS, ETC.

##### ROADS AND OTHER WORKS UNDER THE CONTROL OF THE MINISTER OF LANDS.

The report of the Department of Lands and Survey gives in detail the nature and extent of the road and other works done by that department mainly in the interests of advancing settlement. It shows that during the past year 312 miles of dray-roads and 399 miles of bridle-roads have been constructed, 350 miles of roads have been widened from bridle- to dray-roads, 139 miles of bridle-roads have been improved, 96 bridges over 30 ft. span were built, and 575 miles of new road were surveyed for construction. These works, together with the maintenance of 2,879 miles of roads already constructed, have cost for the year £282,352.

Settlement on the back-lying Crown lands has now reached the stage at which settlers require roads passable by vehicles. The 6 ft. tracks were eagerly applied for at first to get into the farms. Now, when the bush is felled and the land in grass, they require roads to enable them to remove their produce, and also for the other purposes of life.

The back lands are difficult to provide with such roads, and the construction is expensive, but, having settled these Crown lands, the Government is bound to forward to the utmost of the country's ability their future development.

For the current year the House is asked to authorise works to the extent of £455,280, and to vote for their payment during the year a sum of £330,000, also £47,073 under the Government Loans to Local Bodies Account.

The number of separate roads or items in the estimates is this year greater than in those of last year, and the amounts are, many of them, small. These small amounts are probably as valuable to the districts affected as are the larger sums for the opening of new lands, or for the maintenance of existing means of communication, and they are, therefore, not to be despised on that account. As far as practicable the machinery of the local bodies will be taken advantage of in the expenditure of the smaller votes.

#### ROADS ON GOLDFIELDS.—MINES DEPARTMENT.

The vote last year for these purposes amounted to £62,625, the expenditure being £46,549, with liabilities at the end of the financial year amounting to £45,740.

The sum proposed to be authorised for the current year is £101,228, on account of which a vote of £70,000 is asked for.

## DEVELOPMENT OF GOLDFIELDS.

As anticipated in the statement of last year, the yield of gold is steadily increasing, and it is believed that this increase will continue as fresh mines are opened up and developed.

The quantity of gold and silver entered at the Customs for export during the year ended the 31st December, 1898, was 280,175 oz. of gold, valued at £1,080,691, and of silver 293,851 oz., valued at £33,107, as compared with 251,645 oz. of gold, valued at £980,204, and of silver 183,892 oz., valued at £20,872, being an increase of 28,530 oz. of gold, valued at £100,487, and of silver 109,959 oz., valued at £12,235, while the increase for the seven months ending the 31st July last was 65,047 oz. of gold, valued at £252,507, and of silver 43,133 oz., valued at £5,487, over the corresponding seven months of the year 1898. These results fully bear out the anticipations in the Statement of last year.

Dredging operations still continue to yield satisfactory returns, and claims have been taken up on most of the available rivers and streams within the goldfields of the Middle Island, while the improvements in the dredges and machinery which are constantly being made will, there is little doubt, largely increase the returns of gold from this description of mining.

The pumping-plant at the Thames referred to in my previous Statement has been completed, but until the shaft, which is now down to a depth exceeding 600 ft., has been continued to a greater depth, the benefit to quartz-mining at deep levels in that part of the goldfields cannot be determined.

There is also a proposal to work the alluvial drifts at Ross Flat, on the West Coast of the Middle Island, to a depth of 400 ft. below the adit, and it is intended to grant a subsidy not exceeding £15,000 on a total estimated cost of £50,000 to provide pumping-machinery to be worked by electrical power to drain the flat.

The question of water-conservation still continues to engage attention, and information is being obtained from time to time as to the best sites for reservoirs and dams to conserve water. The dam at West Eweburn, in the Maniototo County, referred to in the statement of last year, is still under construction. This dam, when completed to a height of 70 ft. at the crest, is estimated to hold 500,000,000 gallons of water.

The amount expended last financial year on works for the development of the goldfields was £17,354, while the liabilities amounted to £6,626, and it is proposed to take a vote of £40,000 for the current year.

## NATIVE LAND PURCHASES.

In pursuance of the tapering-off policy initiated by the Government as regards purchase of Native lands, efforts are being made to close up all incomplete purchases, and to get the land already acquired partitioned by having the interests of the Crown defined and separated from those of non-sellers. When this is done the land will be divided into suitable blocks for settlement, and roaded. There are seven survey parties already at this work, and about a hundred men are also employed on road-construction. It is anticipated that before the end of the financial year from 150,000 to 200,000 acres of land purchased from the Natives will be thrown open for settlement. The vote proposed for the current year is £50,000. Next year a much smaller sum will probably suffice.

## TELEGRAPH EXTENSION.

The expenditure under this class during the past year was £28,551.

The following are the most important of the lines constructed: Auckland to New Plymouth, Wanganui to New Plymouth, Toko to Strathmore, Dannevirke to Weber, Ormond to Te Karaka, Te Karaka to Whatatutu, Collingwood to Bainham, Belgrove to Tophouse, Renwicktown to Kaituna, Ashburton to Mayfield, Waikari to Hawarden, Kaikoura to Waitaki, Wairio to Wrey's Bush, Balclutha to Warepa, and Merrivale to Clifden. A new multiple switchboard has also been fitted up in the Auckland Telephone Exchange.

The vote asked for this year is £33,000, to provide for additions to existing exchanges, the completion of works now in hand, and also for sundry new works.

## PUBLIC BUILDINGS.

There was an increased expenditure upon public buildings during the late financial year, due principally to the completion of the new Parliament Buildings, and also to a large number of smaller buildings erected many years ago requiring renewal, or considerable additions.

The appropriations proposed for the current year amount to £197,745—namely, £155,170 under the Public Works Fund, and £42,575 under the Consolidated Fund. The principal works carried out last year or provided for this year are as follow :—

## GENERAL.

First in order of magnitude under this head is the new wing at the Parliament Buildings, comprising a new Assembly Library, and new vestibule, offices, and Committee-rooms. The exterior walls of the addition were fairly complete before the session of 1898, and as soon as possible after the termination of that session tenders were invited for the completion of the building. The tender of Messrs. J. and A. Wilson was accepted, and the contractors have carried out their work very satisfactorily, the building being ready for occupation by the commencement of the present session. It was not considered advisable to move the library into the new wing before the sitting of Parliament, but its transfer will be arranged for during the recess; and I have no doubt that honourable members will appreciate the increased comfort which the new accommodation will afford them, and will be still more gratified to know that at last our valuable library is housed in what is practically a fire-proof building. The vote taken for the erection of this building last year was £25,000, and £20,564 was expended, with liabilities existing at the close of the year to the amount of £7,564. This year we ask for a vote of £8,500 to cover these liabilities, and to provide for other charges on construction account. We also ask for a vote of £3,000 for furniture and fittings, including shelving for books in new library. The other buildings included in this class are the Government Houses at Auckland and Wellington, and the general departmental offices throughout the colony. The total vote last year for all buildings under this class (including the Parliament Buildings) was £30,150, and £29,400 was expended. This year we ask for a vote of £17,480.

## JUDICIAL.

A large number of buildings under this head have been dealt with during the year. The principal expenditure has taken place on the following :—

*Courthouses.*—The new Courthouse at Palmerston North has been finished and occupied; new buildings have also been erected at Leeston and Macrae's; strongrooms have been added at Coromandel, Naseby, and Cromwell, and important additions made at Paeroa and Clyde. The works provided for this year are: New law-courts, Dunedin; new Magistrate's Court, Wellington; new Courthouses at Waihi, Te Awamutu, Mangaweka, Eketahuna, Temuka, Hampden, and Bluff; also additions and alterations at Auckland, Thames, and Christchurch, extensive repairs at Wanganui and Greymouth, and some other minor works.

*Gaols.*—The expenditure under this head last year was unusually small, the principal item being the Gaoler's house at Clyde. For the current year a vote is proposed to proceed with the building of the Mount Eden Gaol, Auckland; sundry works at the Terrace Gaol, Wellington; and minor works at Gisborne and elsewhere.

*Police-stations.*—A contract was let last year for the erection of a new police-station at Auckland, and the work is now well in hand. Smaller stations have also been erected at Coromandel, Karangahake, Te Kuiti, Moawhango, Opunake, and Manaia. Properties have been purchased at Bingsland (Christchurch) and Denniston, and additions and alterations made at Te Aroha, Hastings, Wellington, Nelson (Port), Greymouth, Temuka, and Waimate, and extensive repairs have been done at Mercer, Ross, and Okarito, besides less expensive

work at other stations. The appropriation proposed for the current year will provide for the completion of the new station at Auckland, and the additions at Wellington; also new quarters at the Thames, New Plymouth, Nelson, Westport, Christchurch and Queenstown; and new stations at Hamilton West, Cambridge, Gisborne, Mokau, Waverley, Feilding, Kaikoura, Arrowtown, and Invercargill; also additions at Pukekohe, Ngaruawahia, Tokaanu, Dannevirke, Normanby, Hawera, Blenheim, Greymouth, Rangiora, Kaiapoi, Fairlie, Roxburgh and Lawrence; and for extensive repairs at Newton (Auckland), Marton, Lyttelton, Southbridge, and Timaru, and the purchase of a property at Kimbolton.

#### POST AND TELEGRAPH.

The principal expenditure under this head last year was as follows: New post-offices at Otahuhu, Waitekauri, Mosgiel, and Miller's Flat; the purchase of a site at Petone; additions to offices at Mangonui, Waitara, Wellington, Ashburton, and Owaka; also extensive repairs at Auckland, Palmerston North, Picton, Christchurch, and Timaru.

The appropriation proposed for the current year will provide for new post-offices at Parnell, Ponsonby, Inglewood, Mangaweka, Feilding, Levin, Wereroa, Eketahuna, Masterton, Petone, Newtown (Wellington), Renwicktown, Wakapuaka, Takaka, Temuka, Naseby, and Bluff; also extensive alterations at Auckland, and important additions or renovations at Te Aroha, Hamilton, Wanganui, Wellington, Hokitika, Christchurch, Dunedin, Alexandra, Roxburgh, and Maitāhara.

#### LUNATIC ASYLUMS.

The expenditure on new works at our asylum buildings last year totalled to £17,667, over £11,000 of which was at Porirua, and nearly £2,500 at Nelson. The building at Porirua is now approaching completion. The new auxiliary asylum at Nelson has been finished and occupied, but additions are now proposed to the portion of the old building occupied by female patients. A modern laundry is also urgently needed, and is now in course of construction. The other works for which provision is made are a block of single rooms now in course of construction at Auckland, also additions to the male side of the same asylum; a new boiler-house and boilers, also improved fire-service at Wellington; and installing the electric light, providing a Nurses' Home, and augmenting the water-supply at Seacliff.

#### SCHOOLS.

The amount voted for school buildings last year was £75,400—namely, £25,000 under the Consolidated Fund and £50,400 under the Public Works Fund. The expenditure amounted to £68,403—namely, £25,000 under the Consolidated Fund and £43,403 under the Public Works Fund. This year we ask for a total vote of £77,500—namely, £25,000 under the Consolidated Fund and £52,500 under the Public Works Fund. The votes, so far as they apply to the erection of schools under the control of the several Education Boards, are distributed to these Boards for expenditure. The only portion of the vote expended under the direct control of the Government is that for Native and industrial schools. Native schools were erected last year, or are now in course of construction, at Whirinaki, Utakura, Waimana, Rakaumanga, Waiotapu, Nuhaka, and Manaia, while the school at Maungatapu was moved.

The work of rebuilding the Caversham Industrial School has proceeded fairly satisfactorily. This year provision is made for additional buildings at Burnham, and for further rebuilding at Caversham.

#### LIGHTHOUSES, HARBOUR-WORKS, AND HARBOUR-DEFENCES.

The expenditure on new lighthouses last year amounted to £3,727, almost the whole of which was on the building now in course of erection at the East Cape. The vote for the current year is £4,270, of which £4,000 is on account of East Cape. This amount will nearly complete the works at this lighthouse.

The expenditure on harbour-works amounted to £1,777. The amount asked for this year is £1,975, which provides for continuing the reclamation-works at Sticking Point, Lyttelton; completion of work at Hokitika; and new wharves at Mokau, Karamea, Little Wanganui, and Bruce Bay.

The appropriation for harbour-defences last year was £10,000, and £10,158 was expended, the amounts at the several ports being as follows: Auckland, £6,165; Wellington, £2,447; Lyttelton, £461; Dunedin, £1,085. The liabilities at the end of the year were £3,514, and we ask for a vote of £10,000 to cover these, and also to provide for important works now in hand or contemplated. The principal of these are the new battery at Mount Victoria, Auckland, and electric-light emplacements at Auckland and Wellington, and other minor works.

Last year's vote for contingent defence was £35,000, but, owing to English orders not being executed as rapidly as expected, only £13,867 was actually expended within the year; but liabilities existed at the close of the year to the additional sum of £18,450. We ask for a vote of £40,000 to cover these liabilities and further purchases of warlike stores, full details of which appear in the estimates. The vote also provides for the purchase of additional land at the rifle-ranges at Polhill Gully (Wellington) and Pelichet Bay (Dunedin), also for rifle-ranges in the Auckland District.

#### SUMMARY AND CONCLUSION.

The gross total votes now submitted to the House for public-works purposes amount to £1,355,098, as compared with £1,237,536 last year. The actual expenditure last year amounted to £933,298—viz., £916,327 under the Public Works Fund, and £16,971 out of the Loans to Local Bodies Account.

In conclusion I may remind honourable members of the words used by the late Hon. John Ballance in 1892 when he said,—“If my interpretation of colonial patriotism and aspirations is correct, we must continue to open up land for settlement by means of money spent on roads and bridges; we must still continue, slowly it may be, to take our railways forward to those points where they will serve the purpose of tapping districts of high producing capacity.” The Government believe this, with slight modification, to be the mind of the country at the present time.

The altered condition of the colony has, we believe, demanded more expedition in providing means of communication, and, while the amount expended last year and the amount proposed for expenditure this year, compared with the expenditure of a few years ago may seem large, yet the spread of settlement causing the large increase in the productive power of the colony demands a commensurate increase in the expenditure upon reproductive public works, and the allocation of the funds has been carefully considered with the view of meeting the urgent needs of the colony.



## PUBLIC WORKS STATEMENT, 1899.

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TABLE No. 1.

SUMMARY showing the TOTAL EXPENDITURE on PUBLIC WORKS and OTHER SERVICES out of PUBLIC WORKS FUND to 31st March, 1899, and the LIABILITIES on that Date.

Number of Table containing Details.	Works.	Total Net Expenditure to 31st March, 1898.	Expenditure during 12 Months ended 31st March, 1899.	Total Expenditure to 31st March, 1899.	Liabilities on Authorities, Con- tracts, &c. 31st March, 1899.	Total Expenditure Liabilities.	Works.
3	Railways ...	£ 15,638,173 18 9	£ 374,191 19 9*	£ 16,032,365 18 6	£ 77,870 15 4	£ 16,110,236 13 10	Railways.
4†	Roads ...	4,667,996 7 4†	295,483 7 2	4,963,479 14 6	310,764 9 3	5,274,244 3 9	Roads.
5 and 54	Development of goldfields ...	581,276 0 9	17,354 10 2	598,630 10 11	6,625 15 8	605,256 6 7	Development of goldfields.
6	Telegraphs ...	800,735 4 9	28,550 14 0	829,285 18 9	...	829,285 18 9	Telegraphs.
7	Public buildings ...	2,165,592 11 9	107,266 14 5	2,272,859 6 2	28,939 0 0	2,300,889 6 2	Public buildings.
8	Lighthouses, harbour works, and harbour defences	934,408 2 11	15,662 10 1	950,070 13 0	3,826 0 0	953,896 13 0	Lighthouses, harbour works, and harbour defences.
...	Departmental ...	433,722 1 2	10,090 1 3	433,812 2 5	...	433,812 2 5	Departmental.
18 of 1878	Coal-exploration and mine-development	10,835 8 0	...	10,835 8 0	...	10,835 8 0	Coal-exploration and mine-development.
11 of 1877	Aiding works on Thames goldfields	50,000 0 0	...	50,000 0 0	...	50,000 0 0	Aiding works on Thames goldfields.
...	Immigration ...	2,147,015 4 0	104 16 10	2,147,120 0 10	...	2,147,120 0 10	Immigration.
...	Purchase of Native lands	1,851,299 14 7§	53,182 16 10	1,904,482 11 5	...	1,904,482 11 5	Purchase of Native lands.
...	Defence ...	455,633 3 7	13,866 12 11	469,499 16 6	18,450 0 0	487,949 16 6	Defence.
...	Charges and expenses of raising loans	1,027,764 13 0	225 1 0	1,027,989 14 0	...	1,027,989 14 0	Charges and expenses of raising loans.
...	Interest and sinking fund	218,500 0 0	...	218,500 0 0	...	218,500 0 0	Interest and sinking fund.
...	Rates on Native lands	62,461 19 0	347 11 10	62,809 10 10	715 18 11	63,525 9 9	Rates on Native lands.
...	Thermal springs ...	14,599 13 2	...	14,599 13 2	...	14,599 13 2	Thermal springs.
...	Totals	31,070,014 2 9½	916,326 16 3	31,986,340 19 0	446,282 19 2	32,432,623 18 2	Totals.
...	Less recoveries on account of services of previous years— Roads ...	...	...	...	...	...	Less recoveries on account of services of previous years— Roads ...
...	Purchase of Native lands	...	...	590 8 6	...	590 8 6	Purchase of Native lands
...	GRAND TOTALS	31,070,014 2 9	916,326 16 3	31,985,750 10 6	446,282 19 2	32,432,033 9 8	GRAND TOTALS.

\* Includes £50 17s. 6d. charged to "Unauthorised."  
 † Includes expenditure under Lands Improvement Account, £300,929 12s. 5d., and £30,000 transferred from Consolidated Fund, previously applied in reduction of "Roads" Expenditure.  
 § Includes expenditure under Native Lands Purchase Account, £291,980 1s. 1d.

Table 2.

## GENERAL SUMMARY.

Showing NET YEARLY EXPENDITURE out of PUBLIC WORKS FUND, 1880-81 to 1898-99.

Class.	Description of Services.	Total Net Expenditure to 31st March, 1880.	Expenditure.																		Total Net Expenditure to 31st March, 1899.	
			1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.		1898-99.
I.	Immigration .. .. .	£ 1,891,719	£ 31,134 <i>Cr. 1,433</i>	£ 6,797 <i>Cr. 2,462</i>	£ 3,999	£ 107,041	£ 57,148	£ 11,675	£ 12,454	£ 15,598	£ 8,791	£ 867	£ 1,823	£ 817	£ 242	£ 343	£ 101	£ Cr. 10	£ 301	£ 70	£ 105	£ 2,147,120
II.	Public Works Departmental .. .. .	144,623	13,773 <i>Cr. 525</i>	13,321 <i>Cr. 89</i>	12,871	13,465	30,157	29,632	25,835	25,090	21,458	12,294	10,264	7,796	7,790	8,406	8,680	14,300	14,892	9,689	10,090	433,812
III.	Railways .. .. .	8,553,944	985,259 <i>Cr. 34,864</i>	454,333 <i>Cr. 21,809</i>	354,781	662,046	663,063	725,496	616,447	403,727	272,077	289,601 <i>Cr. 29</i>	180,021	154,417 <i>Cr. 681</i>	220,894	176,304	247,545	197,105	207,231 <i>Cr. 334</i>	351,600	*374,192	16,032,366
IV.	Roads:—																					
	Roads North of Auckland .. .. .	41,241	43,773	17,022	7,929	17,566	34,574	33,163	30,738	3,138	264	267	9,905	11,739	12,588	22,235	22,731	27,959	4,289	241,209	248,933	
	Main Roads .. .. .	718,401	83,675	92,520	111,603	31,809	30,380	26,833	22,294	13,756	10,968	12,799	12,489	6,843	10,443	22,235	22,731	27,959	4,289	241,209	248,933	
	Miscellaneous Roads and Bridges .. .. .	44,255	52,152	35,936	81,634	61,635	37,165	37,615	39,748	25,989	26,748	19,998	12,489	6,843	10,443	58,042	9,972	17,075	11,195	241,209	248,933	
	Roads to open up Lands .. .. .	225,000	52,152	35,936	81,634	84,631	49,314	61,794	57,157	21,954	28,160	24,285	24,285	27,993	21,989	58,042	9,972	17,075	11,195	241,209	248,933	
	Grants-in-Aid .. .. .	..	..	..	..	106,399	149,982	138,045	81,264	57,632	26,913	2,172	1,586	10,757	7,144	8,951	..	..	..	..	..	
	Village Settlements .. .. .	..	..	..	..	..	..	..	1,891	12,053	10,770	7,345	4,884	3,829	4,412	2,898	..	..	..	..	..	
	Local Bodies .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Roads on Goldfields .. .. .	..	..	..	9,439	26,602	15,631	31,622	32,625	25,053	7,015	13,290	12,687	9,795	19,490	20,387	17,577	21,513	32,578	49,569	46,550	
	Miscellaneous .. .. .	267,702	52,987 <i>Cr. 2,043</i>	237 <i>Cr. 109</i>	471	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Development of Thermal Springs and Natural Scenery .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Roads to give access to North Island Trunk Railway .. .. .	..	..	..	..	..	..	6,832	12,900	20,410	1,898	248	5,532	30,289	29,440	34,765	17,841	..	16,023	..	..	
	Lands Improvement Account .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	89,207	108,168	103,555	..	..	
	Total, Roads .. .. .	1,296,599	230,544	145,606	211,076	328,642	317,043	335,904	278,617	219,519	106,439	83,009	45,164	36,761	103,893	146,638	150,278	174,369	167,482	290,413	295,118	4,963,114
V.	Development of Goldfields .. .. .	480,930	16,597 <i>Cr. 20</i>	13,272	6,824	16,596	8,029	9,032	7,665	1,016	55	284	821	2,257	3,811	5,272	5,865	9,345	10,508	33,117	17,354	648,630
VI.	Purchase of Native Lands .. .. .	772,570	57,836 <i>Cr. 950</i>	40,573 <i>Cr. 2,661</i>	29,844	24,480	70,572	34,545	88,836	25,643	9,072	28,194	17,925	52,397	57,187 <i>Cr. 10,438</i>	4,320 <i>Cr. 2,428</i>	349 <i>Cr. 12</i>	..	Cr. 37	61,503	53,182 <i>Cr. 225</i>	..
	Native Lands Purchase Account .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	19,575	78,985	101,009	163,411	129,000	..	..	
	Total, Land Purchases .. .. .	772,570	56,886	37,912	29,844	24,480	70,572	34,545	88,836	25,643	9,072	28,194	17,925	52,397	66,324	80,877	101,346	163,411	128,963	61,503	52,957	1,904,257
VII.	Telegraph Extension .. .. .	368,764	45,281 <i>Cr. 1,498</i>	7,517 <i>Cr. 32</i>	18,654	19,532	25,799	36,010	18,952	22,984	12,047	16,346	16,292	27,773	29,245	16,127	19,229	35,538	36,791	29,384	28,551	829,286
VIII.	Public Buildings:—																					
	General (including Miscellaneous) .. .. .	154,733	..	..	..	34	..	..	947	12,742	14,588	7,256	2,880	454	1,588	621	2,523	3,724	8,178	14,797	8,764	
	Parliamentary .. .. .	..	..	..	5,331	8,416	183	..	8	24	..	..	..	..	..	209	6,822	..	9	466	20,636	
	Judicial .. .. .	78,499	55,402	16,259	16,743	22,652	12,227	11,106	15,875	8,273	8,228	11,246	9,892	8,901	2,779	5,262	11,487	27,341	14,806	12,727	11,109	
	Post and Telegraph .. .. .	78,944	9,336	1,752	9,939	22,616	8,955	4,880	2,772	2,227	82	1,376	709	1,009	6,843	3,154	3,542	6,194	7,504	5,888	5,168	
	Customs .. .. .	1,969	..	..	193	1,659	830	99	..	..	..	..	18	409	5	666	12	647	16	385	..	
	Survey .. .. .	..	..	..	20	34	..	461	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Quarantine Stations .. .. .	..	..	..	971	996	848	313	274	..	..	..	..	..	..	..	..	..	..	..	..	
	Lunatic Asylums .. .. .	45,052	39,604	26,699	31,652	58,047	24,992	4,007	13,694	23,107	10,242	15,717	8,930	16,914	11,887	18,957	13,633	10,935	16,404	14,130	17,667	
	Hospitals and Charitable Institutions .. .. .	14,304	2,219	140	64	256	3,792	3,299	4,421	4,156	673	Cr. 140	..	..	7,999	..	..	6,561	700	..	..	
	School-buildings .. .. .	278,519	99,173	82,535	88,134	49,814	66,069	62,884	51,607	40,000	779	..	..	7,500	..	15,000	15,000	20,000	22,143	23,864	43,403	
	Agricultural .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160	837	1,127	819	1,328	520	
	Total, Public Buildings .. .. .	652,020	205,734	128,352	153,072	164,376	117,361	86,859	89,598	90,529	34,592	35,473	22,820	34,791	31,101	44,032	54,190	76,529	70,579	73,585	107,267	2,272,860
IX.	Lighthouses, Harbour Works, and Harbour Defences:—																					
	Lighthouses .. .. .	85,203	2,636	2,397	4,724	6,730	7,383	300	3,272	2,866	2,504	1,551	..	..	6,642	2,612	..	234	6,067	2,180	3,727	
	Harbour Works .. .. .	113,314	21,876	18,812 <i>Cr. 2</i>	100,676	29,591	17,050	6,508	6,004	500	Cr. 5,000	589	189	..	..	..	650	3,861	866	568	1,777	
	Harbour Defences .. .. .	34,514	904	..	..	7,213	9,601	127,167	139,429	73,459	50,089	7,293	2,477	7,347	4,563	3,976	2,495	3,314	4,667	2,547	10,158	
	Total, Lighthouses, &c. .. .. .	233,031	25,416	21,207	105,400	43,534	34,034	133,975	148,705	76												

N.B.—The figures in italics, prefixed by “Cr.,” are either recoveries on account of services of previous years or receipts-in-aid applied in reduction of expenditure.

The totals from 1892-93 to 1896-97, inclusive, include expenditure under Native Lands Purchase Account, and from 1894-95 to 1896-97, inclusive, expenditure under Lands Improvement Account.

\* Includes “Unauthorised,” £51.

**TABLE No. 3.**  
**EXPENDITURE on RAILWAYS to 31st March, 1899, and LIABILITIES on that Date.**

LINES OF RAILWAY.	Total Expenditure by General Government to 31st March, 1898.	Total Expenditure by General Government, 31st March, 1898, after Distribution of certain Survey Expenditure to Individual Lines.	EXPENDITURE DURING YEAR 1898-99 (INCLUDING £18,012 10s. 8d. DISTRIBUTED FROM STOCK OF PERMANENT-WAY).								Total Expenditure by General Government, 31st March, 1899.	Liabilities.	Total Expenditure by General Government, and Liabilities, 31st March, 1899.	Valuation of Works constructed by Provinces.	Total Expenditure and Liabilities, 31st March, 1899.	LINES OF RAILWAY.
			New Works.			Works on Open Lines.	Land-claims and other Old Liabilities.	Surveys.	Rolling-stock.							
			Construction.	Permanent- way.	Total New Works.											
Kaihu Valley .. .. .	£ s. d. 54,758 12 4	£ s. d. 54,758 12 4	£ s. d. .. .. .	£ s. d. .. .. .	£ s. d. .. .. .	£ s. d. 100 6 10	£ s. d. .. .. .	£ s. d. .. .. .	£ s. d. 54,858 19 2	£ s. d. 66 0 0	£ s. d. 54,924 19 2	£ s. d. .. .. .	£ s. d. 54,924 19 2	Kaihu Valley.		
Kawakawa .. .. .	79,361 2 1	79,361 2 1	.. .. .	.. .. .	.. .. .	6 15 6	.. .. .	.. .. .	79,367 17 7	.. .. .	79,367 17 7	.. .. .	79,367 17 7	Kawakawa.		
Whangarei to Kamo Extension .. .. .	127,056 9 8	127,056 9 8	3,961 13 9	3,795 17 11	7,727 11 8	1,186 6 10	.. .. .	.. .. .	135,970 8 2	458 0 0	136,428 8 2	.. .. .	136,428 8 2	Whangarei to Kamo Extension.		
Helensville Northwards .. .. .	73,671 6 11	73,671 6 11	10,091 19 1	.. .. .	10,091 19 1	.. .. .	.. .. .	.. .. .	83,763 6 0	799 0 0	84,562 6 0	.. .. .	84,562 6 0	Helensville Northwards.		
Kaipara to Waikato .. .. .	1,164,589 7 4	1,164,589 7 4	.. .. .	.. .. .	.. .. .	3,838 9 9	.. .. .	.. .. .	1,168,427 17 1	.. .. .	1,168,427 17 1	.. .. .	1,168,427 17 1	Kaipara to Waikato.		
Cambridge Branch .. .. .	51,065 9 9	51,065 9 9	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	51,065 9 9	.. .. .	51,065 9 9	.. .. .	51,065 9 9	Cambridge Branch.		
Waikato to Thames— Hamilton to Te Aroha .. .. .	139,016 4 3	139,016 4 3	.. .. .	.. .. .	.. .. .	85 3 3	.. .. .	.. .. .	139,101 7 6	.. .. .	139,101 7 6	.. .. .	139,101 7 6	Waikato to Thames— Hamilton to Te Aroha.		
Te Aroha to Thames .. .. .	135,432 0 8	135,432 0 8	24,390 16 3	16,630 12 1	41,021 8 4	.. .. .	.. .. .	.. .. .	176,453 9 0	3,941 0 0	180,394 9 0	.. .. .	180,394 9 0	Te Aroha to Thames.		
Thames Valley to Rotorua— Morrinsville to Lichfield .. .. .	161,507 7 0	161,507 7 0	.. .. .	.. .. .	.. .. .	.. .. .	Cr. 52 0 0	.. .. .	161,455 7 0	.. .. .	161,455 7 0	.. .. .	161,455 7 0	Thames Valley to Rotorua— Morrinsville to Lichfield.		
Putaruru to Rotorua .. .. .	191,667 14 6	191,667 14 6	.. .. .	.. .. .	.. .. .	19 18 2	178 18 11	.. .. .	191,866 11 7	113 0 0	191,979 11 7	.. .. .	191,979 11 7	Putaruru to Rotorua.		
Marton to Te Awamutu— North End .. .. .	309,294 17 7	311,043 17 2	11,834 19 5	.. .. .	11,834 19 5	.. .. .	59 8 11	.. .. .	322,938 5 6	728 0 0	323,666 5 6	.. .. .	323,666 5 6	Marton to Te Awamutu— North End.		
South End .. .. .	283,678 5 9	292,153 16 11	31,030 14 9	.. .. .	31,030 14 9	.. .. .	.. .. .	.. .. .	323,184 11 8	5,967 0 0	329,151 11 8	.. .. .	329,151 11 8	South End.		
Gisborne to Ormond Tramway .. .. .	4,975 1 7	4,975 1 7	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	4,975 1 7	.. .. .	4,975 1 7	.. .. .	4,975 1 7	Gisborne to Ormond Tramway.		
Wellington to Napier— Napier to Woodville and Palmerston North .. .. .	781,164 1 2	781,164 1 2	.. .. .	.. .. .	.. .. .	6,503 3 1	.. .. .	.. .. .	787,667 4 3	.. .. .	787,667 4 3	.. .. .	787,667 4 3	Wellington to Napier— Napier to Woodville and Palmerston North.		
Wellington to Woodville, including Te Aro Extension .. .. .	1,129,054 5 9	1,129,054 5 9	Cr. 194 2 11	.. .. .	Cr. 194 2 11	10,071 4 7	271 11 1	.. .. .	1,139,202 18 6	137 0 0	1,139,339 18 6	.. .. .	1,139,339 18 6	Wellington to Woodville, including Te Aro Extension.		
Wellington to Foxton .. .. .	42,116 3 4	42,116 3 4	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	42,116 3 4	.. .. .	42,116 3 4	.. .. .	42,116 3 4	Wellington to Foxton.		
Foxton to Waitara .. .. .	1,286,624 9 7	1,286,624 9 7	.. .. .	.. .. .	.. .. .	11,658 4 1	20 0 0	.. .. .	1,298,302 13 8	.. .. .	1,298,302 13 8	.. .. .	1,298,302 13 8	Foxton to Waitara.		
Nelson to Roundell .. .. .	162,508 17 9	162,508 17 9	.. .. .	.. .. .	.. .. .	35 4 5	Cr. 2 10 0	.. .. .	162,541 12 2	.. .. .	162,541 12 2	.. .. .	162,541 12 2	Nelson to Roundell.		
Midland Railway— Belgrove Section .. .. .	7,823 4 6	7,823 4 6	6,373 1 6	191 12 0	6,564 13 6	.. .. .	.. .. .	.. .. .	14,387 18 0	378 0 0	14,765 18 0	.. .. .	14,765 18 0	Midland Railway— Belgrove Section.		
Otira Section .. .. .	17,142 0 7	17,142 0 7	31,892 7 7	2,358 0 5	34,250 8 0	.. .. .	.. .. .	.. .. .	51,392 8 7	16,868 0 0	68,260 8 7	.. .. .	68,260 8 7	Otira Section.		
Springfield Section .. .. .	41 3 4	41 3 4	16,228 15 7	.. .. .	16,228 15 7	.. .. .	.. .. .	.. .. .	16,269 18 11	3,369 0 0	19,638 18 11	.. .. .	19,638 18 11	Springfield Section.		
Greymouth to Nelson Creek .. .. .	166,471 11 11	166,471 11 11	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	166,471 11 11	.. .. .	166,471 11 11	.. .. .	166,471 11 11	Greymouth to Nelson Creek.		
Greymouth to Hokitika .. .. .	187,126 16 7	187,126 16 7	.. .. .	.. .. .	.. .. .	415 3 8	.. .. .	.. .. .	187,542 0 3	.. .. .	187,542 0 3	.. .. .	187,542 0 3	Greymouth to Hokitika.		
Westport to Ngakawau .. .. .	187,512 15 7	187,512 15 7	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	187,512 15 7	.. .. .	187,512 15 7	.. .. .	187,512 15 7	Westport to Ngakawau.		
Picton to Hurunui— Picton to Awatere .. .. .	249,456 6 4	249,456 6 4	4,741 13 7	115 7 9	4,857 1 4	.. .. .	Cr. 5 0 0	.. .. .	254,308 7 8	800 0 0	255,108 7 8	.. .. .	255,108 7 8	Picton to Hurunui— Picton to Awatere.		
Hurunui to Red Post .. .. .	39,093 6 1	39,093 6 1	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	39,093 6 1	.. .. .	39,093 6 1	.. .. .	39,093 6 1	Hurunui to Red Post.		
Hurunui to Waitaki— Main Line .. .. .	1,416,874 14 1	1,416,887 5 7	.. .. .	.. .. .	.. .. .	15,297 2 4	.. .. .	.. .. .	1,432,184 7 11	56 0 0	1,432,240 7 11	316,135 0 0	1,748,375 7 11	Hurunui to Waitaki— Main Line.		
Oxford Branch .. .. .	51,467 7 11	51,467 7 11	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	51,467 7 11	.. .. .	51,467 7 11	.. .. .	51,467 7 11	Oxford Branch.		
Eyreton Branch .. .. .	44,276 12 10	44,276 12 10	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	44,276 12 10	.. .. .	44,276 12 10	.. .. .	44,276 12 10	Eyreton Branch.		
Lyttelton Branch .. .. .	71,027 19 6	71,027 19 6	.. .. .	.. .. .	.. .. .	257 13 9	.. .. .	.. .. .	71,285 13 3	.. .. .	71,285 13 3	340,500 0 0	411,785 13 3	Lyttelton Branch.		
Southbridge Branch .. .. .	85,652 13 0	85,652 13 0	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .	85,652 13 0	.. .. .	85,652 13 0	.. .. .	85,652 13 0	Southbridge Branch.		
Springfield and Whitecliffs Branches .. .. .	93,415 19 1	93,415 19 1	.. .. .	.. .. .	.. .. .	100 10 11	.. .. .	.. .. .	93,516 10 0	.. .. .	93,516 10 0	.. .. .	93,516 10 0	Springfield and Whitecliffs Branches.		
Fairlie Creek Branch .. .. .	66,471 18 8	66,471 18 8	.. .. .	.. .. .	.. .. .	55 15 2	.. .. .	.. .. .	66,527 13 10	.. .. .	66,527 13 10	75,124 0 0	141,651 13 10	Fairlie Creek Branch.		
Waimate Branch .. .. .	47,682 16 6	47,682 16 6	.. .. .	.. .. .	.. .. .	37 12 8	.. .. .	.. .. .	47,720 9 2	.. .. .	47,720 9 2	.. .. .	47,720 9 2	Waimate Branch.		
Ashburton Forks Branch .. .. .	*73,492 19 5	*73,492 19 5	.. .. .	.. .. .	.. .. .	90 13 11	.. .. .	.. .. .	73,583 13 4	.. .. .	73,583 13 4	.. .. .	73,583 13 4	Ashburton Forks Branch.		
Upper Ashburton Branch .. .. .	61,308 13 3	61,308 13 3	.. .. .	.. .. .	.. .. .	48 19 4	.. .. .	.. .. .	61,357 12 7	.. .. .	61,357 12 7	.. .. .	61,357 12 7	Upper Ashburton Branch.		
Little River Branch .. .. .	107,266 18 1	107,266 18 1	.. .. .	.. .. .	.. .. .	206 15 7	.. .. .	.. .. .	107,473 13 8	.. .. .	107,473 13 8	.. .. .	107,473 13 8	Little River Branch.		
Canterbury Interior Main Line— Oxford to Malvern .. .. .	53,649 0 4	53,649 0 4	.. .. .	.. .. .	.. .. .	.. .. .										

TABLE NO. 4.

STATEMENT showing the NET EXPENDITURE on ROADS, BRIDGES, &c., out of the Public Works Funds, and Government Loans to Local Bodies, Lands Improvement, and Native Land Purchase Accounts to 31st March, 1899, and the LIABILITIES on that date.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
AUCKLAND LAND DISTRICT—							
ROADS, BRIDGES, ETC.							
Bridge over Kaitia (Smith's gate)	Mongonui	Bay of Islands	20 0 0	..	20 0 0	..	20 0 0
Homestead Blocks, Mongonui	"	"	454 15 6	..	454 15 6	..	454 15 6
North Shore-Awanui	"	"	832 12 0	411 1 3	1,243 13 3	388 18 9	1,632 12 0
Mongonui Parish-Awanui (Main Road)	"	"	482 0 2	504 2 0	986 2 2	295 18 0	1,282 0 2
Victoria Valley to Main Road	"	"	150 0 0	..	150 0 0	..	150 0 0
Houhora-Awanui	"	"	2,442 0 6	150 6 8	2,592 7 2	49 13 4	2,642 0 6
Ahipara to Herekino	"	"	37 10 0	..	37 10 0	..	37 10 0
Liabilities of Victoria Valley Road Board	"	"	358 5 9	245 1 0	603 6 9	154 19 0	758 5 9
Maungataniwha	"	"	125 0 0	..	125 0 0	..	125 0 0
Oruru-Mangamuka	"	"	4 5 6	..	4 5 6	90 14 6	95 0 0
Oruru-Hikurangi	"	"	68 10 0	..	68 10 0	..	68 10 0
Bridge over Puihi River, Mongonui	"	"	390 8 0	95 15 0	486 3 0	304 5 0	790 8 0
Takahue-Herekino	"	"	100 0 0	..	100 0 0	..	100 0 0
Larmer's-Takahue	"	"	40 0 0	125 0 0	165 0 0	75 0 0	240 0 0
Kaitia-Ahipara	"	"	900 0 0	200 0 0	1,100 0 0	..	1,100 0 0
Mangonui County Roads	"	"	..	..	..	200 0 0	200 0 0
Kohumaru Block	"	"	..	..	..	200 0 0	200 0 0
Maungataniwha (II., III.) Block	"	"	..	..	..	200 0 0	200 0 0
Onukai Block	"	"	..	..	..	200 0 0	200 0 0
Rangauun (XII., XIII.)-Takahue (III., IV.) Block	"	"	..	..	..	200 0 0	200 0 0
Takahue (IX., X., XIV.) Block	"	"	..	..	..	200 0 0	200 0 0
Maungataniwha (VI.) Block	"	"	..	..	..	500 0 0	500 0 0
Maungataniwha Block	"	"	..	..	..	120 0 0	120 0 0
Takahue Block	"	"	404 4 0	..	404 4 0	16 0 0	420 4 0
Takahue-Whangape Block	"	"	15 10 0	24 3 6	39 13 6	160 6 6	200 0 0
Warkworth-Awanui	"	"	663 16 6	224 18 10	888 15 4	69 13 6	958 8 10
Awanui-West Coast	"	"	841 11 2	..	841 11 2	..	841 11 2
Kaeo-Whangaroa	"	"	..	75 0 0	75 0 0	25 0 0	100 0 0
Mangatoetoe	"	"	..	175 10 0	175 10 0	24 10 0	200 0 0
Mongonui-Taipa-Awanui	"	"	..	50 0 0	50 0 0	..	50 0 0
Takahue Village-Victoria Valley	"	"	..	..	..	250 0 0	250 0 0
Victoria Valley-Kaitia	"	"	..	150 0 0	150 0 0	150 0 0	150 0 0
Warkworth-Awanui (see also under North Shore, Awanui, in separate counties)	"	"	15,620 10 9	..	15,620 10 9	100 0 0	250 0 0
Okaihau to Victoria Valley	"	"	8,158 7 6	71 16 9	8,230 4 3	228 3 3	8,458 7 6
Totara-Whangaroa to Kaeo	"	"	550 0 0	..	550 0 0	..	550 0 0
North Shore-Awanui	"	"	296 0 0	299 19 6	595 19 6	100 0 6	696 0 0
Kaeo Parish-Mangonui Parish (Main Road)	"	"	..	..	..	..	..
Carried forward	..	..	32,955 7 4	2,802 14 6	35,758 1 10	3,903 2 4	39,661 4 2

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities to Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	32,955 7 4	2,802 14 6	35,758 1 10	3,903 2 4	39,661 4 2
ROADS, BRIDGES, ETC.—continued.							
AUCKLAND DISTRICT—continued.							
Whangaroa County Roads .. .. .	Whangaroa	..	800 0 0	100 0 0	900 0 0	100 0 0	1,000 0 0
Iwitaia to Kaeo .. .. .	"	Bay of Islands	300 0 0	..	300 0 0	..	300 0 0
Kaeo-Waimate .. .. .	"	"	732 16 3	100 0 0	832 16 3	17 3 9	850 0 0
Totara Foreshore Bridge (renewing) .. .. .	"	"	..	..	..	100 0 0	100 0 0
Waikoura Bridge (repairs) .. .. .	"	"	..	100 0 0	100 0 0	100 0 0	200 0 0
Mangonui boundary to Iwataua .. .. .	"	"	200 0 0	..	200 0 0	..	200 0 0
Whangaroa Coast Road .. .. .	"	"	..	..	..	100 0 0	100 0 0
Whangaroa-Kaeo (widening bridging, &c.) .. .. .	"	"	..	..	..	300 0 0	300 0 0
Bay of Islands District .. .. .	Bay of Islands	..	34,903 16 5	..	34,903 16 5	..	34,903 16 5
Main Road, Lot 2, Block XIV, Hukerenui S.D. .. .. .	"	"	98 11 8	21 3 1	119 14 9	0 5 3	120 0 0
Opua-Waimate .. .. .	"	"	1,357 11 5	75 16 6	1,433 7 11	164 3 6	1,597 11 5
Hukerenui South-Waiotu Valley .. .. .	"	"	90 6 0	109 14 0	200 0 0	90 6 0	290 6 0
Kawakawa Roads .. .. .	"	"	150 0 0	..	150 0 0	..	150 0 0
North Shore-Awanui .. .. .	"	"	..	..	..	..	..
Hukerenui-Kaeo Parish (Main Road) .. .. .	"	"	336 0 2	588 13 6	924 13 8	411 6 6	1,336 0 2
Utakura Bridge .. .. .	"	"	350 0 0	..	350 0 0	..	350 0 0
Waitangi-Kaikohu .. .. .	"	"	200 0 0	..	200 0 0	100 0 0	300 0 0
Hayter's-Morrow's .. .. .	"	"	..	..	..	50 0 0	50 0 0
Ngapipito Road .. .. .	"	"	587 14 10	..	587 14 10	300 0 0	887 14 10
Motatau .. .. .	"	"	..	..	..	50 0 0	50 0 0
Ohacawai Kaikohe .. .. .	"	"	..	..	..	150 0 0	150 0 0
Ohacawai-Okaihau .. .. .	"	"	..	..	..	100 0 0	100 0 0
Pungaere Settlement-Kerikeri .. .. .	"	"	..	..	..	150 0 0	150 0 0
Ruapekapeka-Waiotu Bridge .. .. .	"	"	..	..	..	300 0 0	300 0 0
Hukerenui (I., II.)-Kawakawa (XIII.) Block .. .. .	"	"	..	..	..	200 0 0	200 0 0
Utakura Road deviation .. .. .	"	"	24 18 3	27 0 0	51 18 3	473 0 0	524 18 3
Kamarara Valley .. .. .	"	"	1,275 11 8	3 0 0	1,278 11 8	197 0 0	1,475 11 8
Towai to Ruapekapeka .. .. .	"	"	348 6 0	51 14 0	400 0 0	..	400 0 0
Tikiponga Hill-Paranui Bridge .. .. .	"	"	100 0 0	..	100 0 0	186 7 0	286 7 0
Waitangi Bridge .. .. .	"	"	74 12 0	13 13 0	87 25 0	..	87 25 0
Main North Road-Waiotu Block .. .. .	"	"	..	225 8 0	225 8 0	..	225 8 0
Road through Native land near Waihou .. .. .	"	"	..	40 0 0	40 0 0	..	40 0 0
Paeroa Stream Bridge .. .. .	"	"	..	..	..	100 0 0	100 0 0
Ruapekapeka Block .. .. .	"	"	431 19 10	42 13 6	474 13 4	25 6 8	500 0 0
Tirohanga-Pakaru .. .. .	"	"	100 0 0	..	100 0 0	..	100 0 0
Okaihau-Kerikeri .. .. .	"	"	..	100 0 0	100 0 0	..	100 0 0
Waikerikeri Bridge .. .. .	"	"	..	..	..	160 0 0	160 0 0
Carried forward .. .. .	..	..	75,417 11 10	4,401 10 1	79,819 1 11	7,828 1 0	87,647 2 11

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	75,417 11 10	4,401 10 1	79,819 1 11	7,828 1 0	87,647 2 11
AUCKLAND LAND DISTRICT—continued.							
Herekino ..	..	..	7,568 6 7	91 9 0	91 9 0	108 11 0	200 0 0
Herd's Point, Takahue ..	..	..	..	295 17 2	7,864 3 9	154 2 10	8,018 6 7
Hokianga Bridge ..	..	..	..	40 0 0	40 0 0	..	40 0 0
Monganui Bluff Road ..	..	..	..	..	96 9 0	..	96 9 0
Okaihau-Horeke ..	..	..	..	45 0 0	250 0 0	..	250 0 0
Kaikū-Kaikōhe ..	..	..	..	..	385 1 0	..	385 1 0
Awatuna Improved farm Settlement ..	..	..	..	94 14 1	1,804 17 2	416 18 7	2,221 15 9
Monganui Bluff to Kaihu ..	..	..	..	..	4,018 15 0	..	4,018 15 0
Rangitira Improved farm Settlement ..	..	..	..	168 14 11	2,171 11 7	811 14 0	2,983 5 7
Takahue to Mangonuiwae ..	..	..	..	..	2,931 7 7	..	2,931 7 7
Katui Improved farm Settlement ..	..	..	..	439 17 5	520 18 3	168 2 7	689 0 10
Kohukohu to Rakatapu ..	..	..	..	..	724 12 9	400 0 0	1,124 12 9
Manganui Improved farm Settlement ..	..	..	..	281 1 3	2,527 8 8	18 18 9	2,546 7 5
Waimamaku Bridge ..	..	..	..	..	606 8 9	..	606 8 9
Auckland Special Settlement, Mangakahia ..	..	..	..	238 10 11	238 10 11	61 9 1	300 0 0
Lower Waiohou Road ..	..	..	..	..	284 11 0	..	284 11 0
Section 55, Block VII., Whangape ..	..	..	..	..	..	200 0 0	200 0 0
Waimamaku to Pakanae ..	..	..	..	245 7 7	2,132 16 10	195 1 0	2,327 17 10
Tabeke-Otau ..	..	..	..	93 16 6	93 16 6	6 3 6	100 0 0
Opanaki-Hokianga ..	..	..	..	..	10,472 11 7	..	10,472 11 7
Kohukohu-Takahue-Herd's Point ..	..	..	..	..	..	200 0 0	200 0 0
Waimamaku District ..	..	..	..	..	605 19 3	..	605 19 3
Manganuiwae-Whangape ..	..	..	..	33 9 7	197 0 1	266 10 5	463 10 6
Hokianga County Roads ..	..	..	..	200 0 0	592 10 0	..	592 10 0
Waimamaku ..	..	..	..	191 2 10	191 2 10	115 17 2	307 0 0
Waimamaku-Punakitere ..	..	..	..	364 10 3	1,248 17 0	0 14 6	1,249 11 6
Herekino-Whangape ..	..	..	..	..	..	300 0 0	300 0 0
Manganui-Mangakahia ..	..	..	..	..	..	300 0 0	300 0 0
Onamaia-Hokianga Heads ..	..	..	..	..	..	300 0 0	300 0 0
Onamaia-Hawene ..	..	..	..	..	..	100 0 0	100 0 0
Te Awaroa North ..	..	..	..	..	..	200 0 0	200 0 0
Waimamaku Settlement ..	..	..	..	..	..	400 0 0	400 0 0
Tutanoe (V.) Block ..	..	..	..	..	..	200 0 0	200 0 0
Waipoua (VII.) Block ..	..	..	..	..	..	200 0 0	200 0 0
Taheke Bridge ..	..	..	..	..	..	100 0 0	100 0 0
Punakitere Settlement Roads ..	..	..	..	246 14 10	246 14 10	153 5 2	400 0 0
Hokianga Heads-Ohawai, <i>via</i> Rawene ..	..	..	..	..	1,547 14 0	..	1,547 14 0
Part Block VII., Waipoua S.D. ..	..	..	..	264 7 11	264 7 11	85 12 1	300 0 0
Manganuiwae ..	..	..	..	74 13 8	269 13 2	125 6 4	394 19 6
Carried forward ..	..	..	114,427 12 4	7,810 18 0	122,238 10 4	13,266 8 0	135,504 18 4

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward ..	..	..	114,427 12 4	7,810 18 0	122,238 10 4	13,266 8 0	135,504 18 4
ROADS, BRIDGES, ETC.—continued.							
AUCKLAND LAND DISTRICT—continued.							
Mangonuiwae Block ..	Hokianga	..	330 0 0	103 1 0	433 1 0	896 19 0	1,000 0 0
Punakitere (XIV., XV.) Tutamoe (I., II.) Block, Waimatanui Block ..	"	..	..	..	..	..	..
Waipoua Block...	"	..	4,125 0 11	4 1 0	4,129 1 11	0 14 7	4,129 16 6
Marlborough Association ..	"	..	964 4 4	227 14 5	1,191 18 9	72 5 7	1,264 4 4
Kohukohu-Motukaraka ..	"	..	400 0 0	125 17 3	525 17 3	74 2 9	600 0 0
Kaikohu-Taheke ..	"	..	397 17 8	102 2 4	500 0 0	97 17 8	597 17 8
Hukerenui Block II.—Whakapara Railway-station ..	Hokianga and Bay of Isl'nds	..	..	..	..	200 0 0	200 0 0
Motatau Block ..	Whangarei and Bay of Isl'ds	..	276 1 7	2 9 0	278 10 7	1 9 5	280 0 0
Mangakahia Bridge (to account) ..	Whangarei	..	..	..	..	415 6 6	800 0 0
Mangapai ..	"	..	300 0 0	200 0 0	500 0 0	..	500 0 0
Whanaki Wharf ..	"	..	2 12 0	129 10 0	132 2 0	7 18 0	140 0 0
Mahurangi-Whangarei ..	"	..	129 15 3	..	129 15 3	..	129 15 3
Bridge over Wairua River ..	"	..	463 8 0	75 19 0	539 7 0	0 13 0	540 0 0
Waipu to Mangawhai ..	"	..	120 0 0	..	120 0 0	..	120 0 0
Jordan ..	"	..	..	200 0 0	200 0 0	..	200 0 0
Puhipuhi ..	"	..	385 5 2	..	385 5 2	..	385 5 2
Opuahanga ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Bridge over Mongonui River ..	"	..	155 5 6	..	155 5 6	..	155 5 6
Maungakamea-Ruarangi ..	"	..	45 9 0	50 15 6	96 4 6	3 15 6	100 0 0
Puatangata to Railway station, Puatangata ..	"	..	400 0 0	..	400 0 0	..	400 0 0
Mangakahia Block IV. ..	"	..	..	200 0 0	200 0 0	..	200 0 0
Whangarei Heads ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Wairua to Sandy Bay ..	"	..	1,540 3 6	..	1,540 3 6	..	1,540 3 6
Wairua-Helena Bay ..	"	..	1,888 13 10	..	1,888 13 10	..	1,888 13 10
Purua Bridge ..	"	..	200 0 0	..	200 0 0	..	200 0 0
Whangarei through Taheke ..	"	..	1,262 19 7	..	1,262 19 7	..	1,262 19 7
Old North Road ..	"	..	160 15 8	40 15 0	201 10 8	201 10 8	201 10 8
Purua, Ruatangata, and Mangakahia ..	"	..	3,004 7 7	200 9 8	3,204 17 3	99 10 4	3,304 7 7
Hikurangi-Otonga ..	"	..	..	250 0 0	250 0 0	..	250 0 0
Waipu and Wharf ..	"	..	50 0 0	200 0 0	250 0 0	50 0 0	300 0 0
Block II., Tangihua ..	"	..	635 6 0	..	635 6 0	..	635 6 0
Kaimamakai ..	"	..	225 4 3	200 0 0	200 0 0	..	200 0 0
Otonga Bridge ..	"	..	502 0 6	..	502 0 6	..	502 0 6
Mangapai to Mareritu ..	"	..	..	133 4 0	133 4 0	..	300 0 0
Blocks XIII. and XIV., Opuahanga, and Blocks III. and IV., Whangarei ..	"	..	139 16 9	..	139 16 9	160 0 0	299 16 9
Hukerenui Blocks X., XI. ..	"	..	..	..	..	100 0 0	100 0 0
Caves-McLaughlin's ..	"	..	..	..	..	..	..
Carried forward ..	..	..	132,731 19 5	10,641 9 8	143,373 9 1	15,613 16 4	158,987 5 5

TABLE NO. 4.—*continued.*  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—*continued.*

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward .. ..	..	..	132,731 19 5	10,641 9 8	143,373 9 1	15,613 16 4	158,987 5 5
AUCKLAND LAND DISTRICT— <i>continued.</i>							
Roads, Bridges, Etc.— <i>continued.</i>							
Giles's Corner—Great North Road ..	Whangarei	Marsden	..	..	..	70 0 0	70 0 0
Grahamstown—Parua Bay ..	"	"	..	..	..	200 0 0	200 0 0
Hikurangi—Jordan ..	"	"	..	..	..	200 0 0	200 0 0
Jordan—Hukerenui Station (bridge-road) ..	"	"	..	..	..	150 0 0	150 0 0
Maunu—Maungatapere—Mangakahia ..	"	"	..	..	..	300 0 0	300 0 0
Marsden Point to Waipu ..	"	"	..	..	..	100 0 0	100 0 0
Marsden—Finlayson's—Waipu ..	"	"	..	..	..	200 0 0	200 0 0
Opunahanga—Otonga East ..	"	"	..	..	..	100 0 0	100 0 0
Three-mile Bush (repairing) ..	"	"	..	..	..	150 0 0	150 0 0
Tangihua No. 2—Tangiteroria ..	"	"	..	..	..	200 0 0	200 0 0
Tangiteroria—Mangakahia ..	"	"	..	..	..	100 0 0	100 0 0
Tokatoka—Mangapai ..	"	"	902 1 6	..	902 1 6	200 0 0	1,102 1 6
Waipu ..	"	"	..	..	..	200 0 0	200 0 0
Wharf extension, Waipu ..	"	"	..	..	..	50 0 0	50 0 0
Waioitu Bridge (Hutchinson's) ..	"	"	..	100 0 0	100 0 0	100 0 0	100 0 0
Waipu Bridge (damage by floods) ..	"	"	..	..	..	200 0 0	200 0 0
Kauaeranga Block ..	"	"	..	..	..	300 0 0	300 0 0
Mangaru (IV., VIII.) Block ..	"	"	..	..	..	200 0 0	200 0 0
Opunahanga (XIII., XIV.) Block ..	"	"	..	..	..	200 0 0	200 0 0
Waipu (VI., X.) Block ..	"	"	..	..	..	200 0 0	200 0 0
Opunahanga to Whangarei ..	"	"	300 0 0	..	300 0 0	..	300 0 0
Opunahanga No. 1 Block ..	"	"	..	..	..	235 0 0	235 0 0
Wairua Bridge and Road ..	"	"	608 10 0	..	608 10 0	..	608 10 0
Ruatangata ..	"	"	550 15 5	52 16 7	603 12 0	154 11 6	758 3 6
Opunahanga—Whananaki ..	"	"	397 3 2	..	397 3 2	100 0 0	100 0 0
Waipu River, £1 for £1 (deepening) ..	"	"	..	..	..	400 0 0	397 3 2
Maungatapere Road ..	"	"	475 0 0	..	475 0 0	..	475 0 0
Wairoa Bridge, Tangiteroria (to account) ..	"	"	..	..	..	150 0 0	150 0 0
Maungakamea ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Maungakamea—Tangihua ..	"	"	150 0 0	..	150 0 0	..	150 0 0
North River, Waipu ..	"	"	300 0 0	..	300 0 0	..	300 0 0
Drevers—Otonga East ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Grahamstown, Whangarei ..	"	"	..	..	..	..	..
Otonga East—Whananaki ..	"	"	..	..	..	..	..
Whareora—Grahamstown ..	"	"	..	..	..	..	..
North Shore—Awanui ..	"	"	391 5 0	293 16 11	675 1 11	116 3 1	791 5 0
Waikiekie Parish—Hukerenui (main road) ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Ngunguru—Main Road ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Waipu to Marsden Point ..	"	"	..	..	..	..	..
Carried forward .. ..	..	..	137,706 14 6	11,178 3 2	148,884 17 8	19,989 10 11	168,874 8 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	137,706 14 6	11,178 3 2	148,884 17 8	19,989 10 11	168,874 8 7
AUCKLAND LAND DISTRICT—continued.							
Waipū (Blocks VI. and VII.) ..	Whangarei	Marsden	500 0 0	..	500 0 0	790 0 0	790 0 0
Waipū to Māreketū ..	"	"	150 0 0	..	150 0 0	150 0 0	650 0 0
Whareora-Taheke-Pātana ..	"	"	200 0 0	..	200 0 0	..	150 0 0
Opua-whanga to main road ..	"	"	300 0 0	..	300 0 0	..	200 0 0
Waipū Central ..	"	"	..	300 0 0	300 0 0	..	300 0 0
Ruakaka-North River ..	"	"	400 0 0	..	400 0 0	..	300 0 0
Whānauaki-Ngunguru ..	"	"	360 0 0	100 0 0	460 0 0	..	400 0 0
Parua to Taheke ..	"	"	150 0 0	..	150 0 0	..	460 0 0
Parua Bay ..	"	"	100 0 0	..	100 0 0	..	150 0 0
Hikurangi-Jordan Flat ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Kaitara ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Waipū Cove ..	"	"	..	100 0 0	100 0 0	..	100 0 0
Whangarei Bridge ..	"	"	250 0 0	..	250 0 0	..	100 0 0
Whangarei Bridge (£1 for £1) ..	"	"	100 0 0	..	100 0 0	..	250 0 0
Whangarei Footbridge ..	"	"	499 9 3	..	499 9 3	..	100 0 0
Hikurangi ..	"	"	696 7 5	199 10 11	895 18 4	..	100 0 0
Mānu-Otūhe ..	"	"	200 0 0	752 5 6	200 0 0	1,247 14 6	895 18 4
Ōhāhe Forest ..	"	"	100 0 0	..	100 0 0	..	200 0 0
Māngakahia (Blocks XI., XII., XV., and XVI.) ..	"	"	300 0 0	..	300 0 0	..	2,000 0 0
Marsden Point Wharf ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Marsden Point Kaimanuka, and Finlayson's Road ..	"	"	100 0 0	150 11 6	150 11 6	49 8 6	300 0 0
Waipū North ..	"	"	..	..	..	..	100 0 0
Hukerenui-Waiotu ..	"	"	..	..	..	..	200 0 0
Grahamstown ..	"	"	476 5 6	..	476 5 6	..	100 0 0
Opua-whanga Whangarei No. 1 Block ..	"	"	661 9 9	89 0 0	661 9 9	23 14 6	500 0 0
Ngunguru Ferry ..	"	"	450 0 0	..	450 0 0	11 0 0	100 0 0
Ngunguru Block ..	"	"	100 0 0	..	100 0 0	110 10 3	772 0 0
Māngapāi-Waikiekie ..	"	"	..	..	..	300 0 0	750 0 0
Kauri Mountain Road ..	"	"	..	..	..	..	100 0 0
Kaari Mountain-Pātana ..	"	"	398 8 8	100 0 0	524 8 8	..	100 0 0
Kaueranga ..	"	"	350 0 0	126 0 0	524 8 8	..	524 8 8
Dargaville to Aratapu ..	"	"	..	111 4 8	111 4 8	50 0 0	450 0 0
Māungaru Block ..	"	"	1,200 0 0	200 0 0	1,400 0 0	348 15 4	460 0 0
Dargaville-Tangiteroria ..	"	"	200 0 0	..	200 0 0	100 0 0	1,500 0 0
Maropū (Block III., Kaihu) ..	"	"	..	92 2 11	92 2 11	335 0 0	535 0 0
Opanake Block ..	"	"	458 0 0	1,022 2 11	458 0 0	7 17 1	100 0 0
Avoca Block ..	"	"	1,220 6 6	..	1,220 6 6	..	458 0 0
Opanake-Hokianga ..	"	"	50 0 0	..	50 0 0	477 17 1	2,720 6 6
Opanake-Mongonui Bluff ..	"	"	..	..	..	100 0 0	150 0 0
Carried forward ..	..	..	147,977 1 7	14,571 1 7	162,548 3 2	24,091 8 2	186,639 11 4

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1888. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1889. £ s. d.	Total Net Expenditure to 31st March, 1889. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1889. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	147,977 1 7	14,571 1 7	162,548 3 2	24,091 8 2	186,639 11 4
AUCKLAND LAND DISTRICT.—continued.							
Mangakaha (XIII.) Mangaru (I.) Block ..	Hobson	..	..	..	..	200 0 0	200 0 0
Maungaru (VII., VIII.) Block ..	"	..	..	..	..	100 0 0	100 0 0
Tutanoe (XIII., XIV.) Kaitiri (III., VII.) Block ..	"	..	629 14 1	268 6 0	898 0 1	200 0 0	200 0 0
Auckland Special Settlement Block ..	"	..	..	..	..	0 19 11	899 0 0
Avoca Special Settlement ..	"	..	..	..	..	300 0 0	300 0 0
Dargaville-Kaikohu ..	"	..	..	..	..	500 0 0	500 0 0
Mangawhare-Opanaki ..	"	..	..	..	..	250 0 0	250 0 0
Mangatu Special Settlement (via Mongonui Bluff)—West Coast ..	"	..	..	..	..	300 0 0	300 0 0
Maungaru Special Settlement ..	"	..	..	..	..	100 0 0	100 0 0
Opanaki-Mongonui Bluff—West Coast ..	"	..	..	..	..	50 0 0	50 0 0
Omu Wharf, Avoca ..	"	..	..	..	..	75 0 0	75 0 0
Draining Tatarariki ..	"	..	350 0 0	..	350 0 0	..	350 0 0
Okahu ..	"	..	..	..	..	300 0 0	300 0 0
Waioa Ferry, Dargaville ..	"	..	299 18 11	..	299 18 11	..	299 18 11
Maropu to Kai-iwi ..	"	..	250 0 0	..	250 0 0	..	250 0 0
Tangowahine Bridge ..	"	..	400 0 0	..	400 0 0	..	400 0 0
Tekopuru Wharf, £1 for £1 ..	"	..	..	100 0 0	100 0 0	..	100 0 0
Main Road to Opanaki Railway-station ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Tangihua ..	"	..	1,238 19 1	..	1,238 19 1	49 15 1	1,288 14 2
Tangihua No. 2 ..	"	..	50 0 0	..	50 0 0	..	50 0 0
Bridge over Opanake River ..	"	..	350 0 0	..	350 0 0	..	350 0 0
Arasapa to Tatarariki ..	"	..	150 0 0	..	150 0 0	..	150 0 0
Arasapohue ..	"	..	250 0 0	50 0 0	300 0 0	100 0 0	400 0 0
Te Kopuru-Tikinui ..	"	..	152 18 0	197 2 0	350 0 0	2 18 0	352 18 0
Minitai to Tokatoka ..	"	..	200 0 0	..	200 0 0	..	200 0 0
Te Kopuru-Kaipara Heads ..	"	..	..	..	..	100 0 0	100 0 0
Tikinui Roads-Kopuru ..	"	..	..	..	..	100 0 0	100 0 0
Mareikura (I.) Block ..	"	..	..	..	..	120 0 0	120 0 0
Mareikura (II.) Block ..	"	..	..	..	..	70 0 0	70 0 0
Waioa (Dargaville) ..	"	..	230 6 6	..	230 6 6	300 0 0	530 6 6
Maungaturoto to Tokatoka ..	"	..	..	7 8 6	7 8 6	42 11 6	50 0 0
Topini-Maungaturoto ..	"	..	2,843 10 4	87 17 4	2,930 7 8	61 11 2	2,992 18 10
Pahi-Waikiekie ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Braigh's ..	"	..	1,004 13 0	95 0 2	1,099 13 2	100 3 6	1,199 16 8
Marerehu ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Jordan's ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Otamatea County Roads ..	"	..	3 18 0	..	3 18 0	..	3 18 0
Hukitere ..	"	..	..	..	..	300 0 0	300 0 0
Carried forward ..	..	..	156,675 19 6	15,876 15 7	172,552 15 1	28,014 7 4	200,567 2 5

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.			Net Expenditure during 12 Months ended 31st March, 1899.			Total Net Expenditure to 31st March, 1899.			Liabilities on Authorities, Contracts, &c. 31st March, 1899.			Total Net Expenditure and Liabilities.		
			£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward ..	..	..	156,675	19	6	15,376	15	7	172,052	15	1	28,014	7	4	200,067	2	5
AUCKLAND LAND DISTRICT.—continued.																	
ROADS, BRIDGES, ETC.—continued.																	
Tokatoka Post-office ..	..	..	220	0	0	..	..	..	230	0	0	100	0	0	330	0	0
Matakohe ..	..	..	100	0	0	..	..	..	100	0	0	100	0	0	200	0	0
Matakohe-Tokatoka ..	..	..	818	12	6	..	..	..	818	12	6	200	0	0	1,018	12	6
Matakohe-Mongonui ..	..	..	194	7	0	..	..	..	194	7	0	300	0	0	494	7	0
Pahi Wharf ..	..	..	314	0	0	..	..	..	314	0	0	..	..	..	314	0	0
Pahi Wharf and Road ..	..	..	90	0	0	..	..	..	90	0	0	..	..	..	90	0	0
Kaiwaka-Mangawai ..	..	..	..	..	..	150	0	0	150	0	0	50	0	0	200	0	0
Valley Road, Paparoa ..	..	..	192	4	11	7	5	0	199	9	11	92	15	0	292	4	11
Paparoa ..	..	..	150	0	0	..	..	..	150	0	0	..	..	..	150	0	0
Block XII., Paparoa ..	..	..	124	0	0	..	..	..	124	0	0	..	..	..	124	0	0
Paparoa-Maungaturoto ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raupo Wharf ..	..	..	..	..	..	12	0	0	12	0	0	..	..	..	200	0	0
Hardie's Bridge (repairs) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	238	0	0
Tokatoka Swamp Block ..	..	..	2,887	3	7	..	..	..	2,887	3	7	..	..	..	250	0	0
Tokatoka Swamp (No. 2) Block ..	..	..	5,927	5	4	2,668	3	5	8,595	8	9	2	16	5	2,890	0	0
Tokatoka Swamp (drainage, road, and tramway) ..	..	..	746	9	10	88	16	0	835	5	10	173	4	2	1,000	0	0
Pahi-Maungaturoto Road ..	..	..	240	17	1	397	1	11	637	19	0	29	4	0	8,768	12	11
North Shore, Awanui ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	864	9	10
Hakura-Waikiekie Parish (main road) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,040	17	1
Mangawai Bridge (to account) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	300	0	0
Hoteo Valley-Mangawai ..	..	..	499	12	9	..	..	..	..	..	..	..	..	..	100	0	0
West Coast Road, Hoteo ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	499	12	9
North Shore-Awanui ..	..	..	454	2	10	369	8	5	823	11	3	430	11	7	1,254	2	10
Waivera-Hakuru (main road) ..	..	..	80	0	0	..	..	..	80	0	0	..	..	..	80	0	0
Road to Omaha Wharf ..	..	..	..	..	..	125	0	0	125	0	0	..	..	..	125	0	0
Matakana Bridge ..	..	..	392	7	6	..	..	..	392	7	6	..	..	..	392	7	6
Pakiri ..	..	..	187	13	4	98	2	5	285	15	9	201	17	7	487	13	4
Pakiri-Omahua (Warkworth-Pakiri) ..	..	..	845	12	0	..	..	..	845	12	0	..	..	..	845	12	0
Puhoi-Makaran ..	..	..	..	..	..	Cr. 156	1	4	Cr. 156	1	4	336	1	4	180	0	0
Makara River Bridge ..	..	..	272	16	6	..	..	..	272	16	6	..	..	..	272	16	6
Omaha ..	..	..	83	10	0	..	..	..	83	10	0	..	..	..	11	17	0
Hoteo-Waiwhiu ..	..	..	200	0	0	..	..	..	200	0	0	100	0	0	300	0	0
Hoteo Valley Road ..	..	..	..	..	..	156	5	9	156	5	9	243	14	3	400	0	0
Blocks X. and XI., Tauhoa ..	..	..	472	17	9	..	..	..	472	17	9	..	..	..	472	17	9
Kourawera District ..	..	..	..	..	..	4	7	1	4	7	1	145	12	11	150	0	0
Warkworth-Main Road ..	..	..	150	0	0	..	..	..	150	0	0	..	..	..	150	0	0
Warkworth ..	..	..	413	19	8	129	10	4	543	10	0	170	9	8	713	19	8
Warkworth-Kaipara Flats and Tauhoa ..	..	..	150	0	0	..	..	..	150	0	0	..	..	..	150	0	0
Kaipara Flats Settlement ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carried forward ..	..	..	172,893	12	1	19,431	7	7	192,324	19	8	83,093	9	4	225,418	9	0

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward .. .. .	..	..	172,893 12 1	19,431 7 7	192,324 19 8	33,093 9 4	225,418 9 0
ROADS, BRIDGES, ETC.—continued.							
AUCKLAND LAND DISTRICT—continued.							
Matakana Ranges .. .. .	Rodney	Waitemata	294 16 10	55 3 2	350 0 0	144 16 10	494 16 10
Ahuroa Road .. .. .	"	"	100 0 0	..	100 0 0	..	100 0 0
Matakana Wharf (Mahurangi Heads)	"	"	300 0 0	..	300 0 0	100 0 0	100 0 0
Warkworth (southward) .. .. .	"	"	..	..	..	..	300 0 0
Tauhoa .. .. .	"	"	..	..	..	..	100 0 0
Mahurangi Wharf .. .. .	"	"	..	93 0 0	93 0 0	7 0 0	100 0 0
Makarau Bridge—West Coast .. .. .	"	"	..	..	..	260 0 0	260 0 0
Matakana—Omaha .. .. .	"	"	..	..	..	200 0 0	200 0 0
Matakana Ranges—Te Arai .. .. .	"	"	..	..	..	100 0 0	100 0 0
Te Arai—Mangawhai .. .. .	"	"	..	..	..	150 0 0	150 0 0
Warkworth—Matakana .. .. .	"	"	..	..	..	100 0 0	100 0 0
Hoteo Bridge .. .. .	"	"	..	..	..	100 0 0	100 0 0
Mahurangi Bridge (Warkworth) .. .. .	"	"	..	..	..	160 0 0	160 0 0
Upper Makarau Bridge .. .. .	"	"	..	..	..	400 0 0	400 0 0
Tauhoa Block .. .. .	Rodney	"	380 0 0	..	380 0 0	200 0 0	200 0 0
Warkworth Wharf—Courthouse .. .. .	"	"	..	..	..	69 0 0	449 0 0
Tauhoa and Komokoriki Block .. .. .	"	"	325 0 0	..	325 0 0	100 0 0	100 0 0
Makarau—Railway Station .. .. .	"	"	..	119 15 10	119 15 10	30 4 2	325 0 0
Ahuroa Block .. .. .	"	"	432 0 5	65 2 0	497 2 5	2 17 7	150 0 0
Ahuroa—Komokoriki .. .. .	"	"	..	..	..	100 0 0	500 0 0
Pakiri Block .. .. .	"	"	369 0 0	..	369 0 0	..	100 0 0
Warkworth Bridge .. .. .	"	"	..	..	..	..	369 0 0
Kaipara Flat—Tauhoa .. .. .	"	"	6 6 0	..	6 6 0	..	.. 6 0
Puhoi Bridge .. .. .	"	"	100 0 0	109 10 8	109 10 8	90 9 4	200 0 0
Wade to Wainui .. .. .	"	"	..	..	100 0 0	..	100 0 0
Hoteo Valley—Te Arai .. .. .	"	"	..	..	..	100 0 0	100 0 0
Helensville to Kaupakapapa .. .. .	"	"	658 19 1	..	658 19 1	..	658 19 1
Puhoi—Warkworth .. .. .	"	"	..	3 12 6	3 12 6	46 7 6	50 0 0
North Shore—Awanui .. .. .	"	"	330 10 5	560 15 3	891 5 8	289 4 9	1,130 10 5
North Shore—Waiwera (Main Road)	"	"	..	..	..	..	..
Warkworth—Welsford .. .. .	"	"	..	22 0 3	22 0 3	27 19 9	50 0 0
Warkworth—Kaipara Flats .. .. .	"	"	..	8 0 4	8 0 4	41 19 8	50 0 0
Kaupakapapa—Port Albert .. .. .	"	"	500 0 0	100 0 0	600 0 0	150 0 0	750 0 0
Port Albert—Welsford Junction .. .. .	"	"	..	49 15 5	49 15 5	50 4 7	100 0 0
Puhoi—Makarau Bridge (repairs—two bridges)	Rodney and Waitemata	"	..	..	..	150 0 0	150 0 0
Helensville—Port Albert .. .. .	"	"	..	..	..	150 0 0	150 0 0
Kaupakapapa—Port Albert .. .. .	"	"	..	..	..	150 0 0	150 0 0
Waikomiti West .. .. .	Waitemata	"	1,100 0 0	..	1,100 0 0	150 0 0	1,100 0 0
Upper Waiwera—Wade—Wainui .. .. .	"	"	..	..	..	..	100 0 0
Carried forward .. .. .	..	..	177,790 4 10	20,618 3 0	198,408 7 10	36,613 13 6	235,022 1 4

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure, and Liabilities. £ s. d.
Brought forward .. .. .	..	..	177,790 4 10	20,618 3 0	198,408 7 10	36,613 13 6	235,022 1 4
AUCKLAND LAND DISTRICT—continued.							
Road to Kaukapakapa Railway Station .. .. .	Waitemata	..	400 0 0	..	400 0 0	..	400 0 0
Helensville to Kaipatiki .. .. .	"	..	2,236 5 7	..	2,236 5 7	..	2,236 5 7
Huia, West Coast .. .. .	"	..	..	250 0 0	250 0 0	..	250 0 0
Woodhill Bridge .. .. .	"	..	264 14 3	..	264 14 3	..	264 14 3
Henderson-Swanston (metalling) .. .. .	"	..	..	150 0 0	150 0 0	..	150 0 0
Kumeu Main Road-Rewiti .. .. .	"	..	..	150 0 0	150 0 0	..	150 0 0
Upper Waiwera Road Extension .. .. .	"	..	..	..	..	100 0 0	100 0 0
West Coast Road-Waitangi .. .. .	"	..	..	..	..	100 0 0	100 0 0
Woodhill-Parkhurst .. .. .	"	..	..	..	..	100 0 0	100 0 0
Wade Village-Orewa .. .. .	"	..	..	..	..	50 0 0	50 0 0
Wade-Lucas Creek .. .. .	"	..	200 0 0	..	200 0 0	100 0 0	300 0 0
Great Barrier Island Roads .. .. .	"	..	..	150 0 0	150 0 0	100 0 0	250 0 0
Rewiti-Parkhurst .. .. .	"	..	..	..	..	..	..
Waikomiti to Swanston .. .. .	"	..	500 0 0	..	500 0 0	..	500 0 0
Dairy Flat-Lucas Creek .. .. .	"	..	..	150 0 0	150 0 0	200 0 0	350 0 0
Wainui-Kaukapakapa .. .. .	"	..	..	..	..	..	..
Inland Road-Kaukapakapa .. .. .	"	..	366 1 3	101 10 1	467 11 4	100 0 0	567 11 4
Waiwera Springs .. .. .	"	..	..	400 0 0	400 0 0	32 8 8	432 8 8
Track to Kauri Forest, Waitakeri .. .. .	"	..	..	..	..	..	..
Whau to Henderson Creek .. .. .	Eden	..	400 0 0	..	400 0 0	..	400 0 0
Henderson .. .. .	"	..	200 0 0	100 0 0	300 0 0	50 0 0	350 0 0
Stoke's Point to Lucas Creek .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Swanston-West Coast .. .. .	"	..	100 0 0	200 0 0	300 0 0	100 0 0	400 0 0
Stoke's Point to Lake District .. .. .	"	..	200 0 0	..	200 0 0	..	200 0 0
Birkenhead Slip, £1 for £1 .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Great North Road (cut hill) .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Henderson-West Coast .. .. .	Eden and Waitemata	..	..	..	..	250 0 0	250 0 0
Lucas Creek Road .. .. .	Eden	..	..	..	..	100 0 0	100 0 0
Wainui-Kaukapakapa Railway-station .. .. .	"	..	..	..	..	200 0 0	200 0 0
Waikomiti West .. .. .	"	..	..	..	..	200 0 0	200 0 0
Great North Road, from Whau Bridge-Waikomiti Cemetery .. .. .	"	..	..	..	..	150 0 0	150 0 0
Waikomiti-Huia .. .. .	"	..	450 0 0	110 0 0	560 0 0	300 0 0	860 0 0
Birkenhead-Warkworth .. .. .	Waitemata	..	200 0 0	..	200 0 0	..	200 0 0
Rangitoto Mountain, £1 for £1 .. .. .	Manukau	..	105 0 0	20 0 0	125 0 0	..	125 0 0
Oakley Creek Bridge (£1 for £1) .. .. .	Eden	..	..	..	..	400 0 0	400 0 0
Orakei Bridge (repairs) .. .. .	Manukau	..	..	472 10 1	472 10 1	27 9 11	499 9 12
Mangere Bridge .. .. .	Eden	..	17,820 5 3	106 5 6	17,926 10 9	..	17,926 10 9
Tamaki Bridge (Panmure) .. .. .	Manukau	..	399 0 10	269 3 1	668 3 11	700 16 11	1,369 0 10
Carried forward .. .. .	..	..	201,831 12 0	28,247 11 9	225,079 3 9	89,974 9 0	265,053 12 9

TABLE NO. 4.—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1896. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. ..	..	..	201,881 12 0	23,247 11 9	225,079 3 9	89,974 9 0	265,053 12 9
AUCKLAND LAND DISTRICT.—continued.							
Panmure Wharf (repairs) ..	Manukau	Manukau	..	..	..	100 0 0	100 0 0
Otahuhu Wharf ..	"	"	..	50 0 0	50 0 0	100 0 0	100 0 0
Outau Swamp (drainage and road) ..	"	"	186 19 7	34 16 0	221 15 7	385 4 0	586 19 7
Hunua to Railway-station ..	"	"	160 2 6	180 11 11	340 14 5	114 5 7	455 0 0
Awhitu Road and Wharf ..	"	"	50 0 0	..	50 0 0	..	50 0 0
Putamahoe to Stenson's Corner ..	"	"	50 0 0	..	50 0 0	..	50 0 0
Maoro to Port Waikato ..	"	"	50 0 0	..	50 0 0	..	50 0 0
Awaroa Swamp, £1 for £1 ..	"	"	7 10 0	..	7 10 0	..	7 10 0
Payment to Ferryman, Port Waikato ..	"	"	5 554 2 1	80 0 0	5,634 2 1	270 0 0	5,904 2 1
Pukekohe-Waikau ..	"	"	250 0 0	..	250 0 0	..	250 0 0
Pukekohe ..	"	"	520 9 6	..	520 9 6	..	520 9 6
Punt at Tuakau ..	"	"	15 2 2	..	15 2 2	..	15 2 2
Pukekohe Railway-station through East Pukekohe and Bombay ..	"	"	300 0 0	..	300 0 0	..	300 0 0
Buckland Station ..	"	"	102 0 0	..	102 0 0	..	102 0 0
Maungatawhiri Valley ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Maketu to Ararimu ..	"	"	50 0 0	..	50 0 0	..	50 0 0
Tuakau-Waikato ..	"	"	610 2 6	50 0 0	660 2 6	100 0 0	760 2 6
Awaroa Swamp Drain and roads ..	"	"	1,896 10 9	..	1,896 10 9	..	1,896 10 9
Akaaka Swamp ..	"	"	375 0 0	..	375 0 0	..	375 0 0
Otaua to Deed's ..	"	"	41 0 0	..	41 0 0	..	41 0 0
Mauku Bridge (subsidy) ..	"	"	167 11 7	..	167 11 7	3 19 10	171 11 5
Mauku Bridge (Drury-Waikau) ..	"	"	660 13 10	28 2 0	688 15 10	..	688 15 10
Maoro Swamp (drainage and road) ..	"	"	149 2 8	..	149 2 8	..	149 2 8
Whisky Creek Road ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Mauku District ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Putamahoe ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Abraham's Gully ..	"	"	1,104 16 2	389 5 7	1,494 1 9	110 14 5	1,604 16 2
Otaua ..	"	"	331 8 4	..	331 8 4	..	331 8 4
Akaaka Swamp Block ..	"	"	2,350 0 0	..	2,350 0 0	..	2,350 0 0
Otaua Block ..	"	"	253 10 0	297 3 10	550 13 10	18 6 2	569 0 0
Wairoa River-Otaua ..	"	"	100 13 6	..	100 13 6	..	100 13 6
Tauranga Creek Wharf ..	"	"	..	..	..	100 0 0	100 0 0
Aka-Aka-Otaua ..	"	"	..	..	..	300 0 0	300 0 0
Hunua Road ..	"	"	..	..	..	200 0 0	200 0 0
Hunua-Main Road ..	"	"	..	..	..	100 0 0	100 0 0
Mataitai-Cleveland ..	"	"	..	..	..	100 0 0	100 0 0
Otaua Block-Ness Valley ..	"	"	..	6 10 0	6 10 0	183 10 0	189 10 0
Putamahoe-West Mauku (metalling) ..	"	"	..	50 0 0	50 0 0	50 0 0	100 0 0
Carried forward ..	..	..	217,768 7 2	24,409 1 1	242,177 8 3	42,150 9 0	284,327 17 3



TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	271,073 11 9	25,250 19 4	296,324 11 1	42,866 6 3	339,190 17 4
AUCKLAND LAND DISTRICT—continued.							
Roads, Bridges, ETC.—continued.							
Homokorau Bridge .. .. .	Waikato	..	250 0 0	..	250 0 0	..	250 0 0
Removal of punt, Te Rore to Churchhill .. .. .	"	..	40 14 9	..	40 14 9	..	40 14 9
Removal of Churchhill Punt .. .. .	"	..	42 2 0	..	42 2 0	..	42 2 0
Blocks X. and XI., Rangiri Survey District .. .. .	"	..	189 18 7	37 7 0	227 5 7	22 14 5	250 0 0
Puriri Block .. .. .	"	..	..	..	..	186 0 0	186 0 0
Road to Section 485, Whangamarino .. .. .	"	..	..	..	..	100 0 0	100 0 0
University Endowment, Kimihia .. .. .	"	..	..	..	..	100 0 0	100 0 0
Waerenga Station, Waerenga Settlement .. .. .	"	..	..	..	..	100 0 0	100 0 0
Waipuna Valley Road and Whangamarino Parish .. .. .	"	..	..	..	..	100 0 0	100 0 0
Rangiri-Cambridge (Main Road) .. .. .	"	..	..	..	..	350 0 0	350 0 0
Whangamarino District .. .. .	"	..	1,102 2 9	..	1,102 2 9	..	1,102 2 9
Education endowment, Kimihia-Huntly .. .. .	"	..	..	75 0 0	75 0 0	25 0 0	100 0 0
Churchill Punt .. .. .	"	..	150 5 2	..	150 5 2	..	150 5 2
Gibbons Creek Bridge (Hamilton) .. .. .	"	..	250 0 0	..	250 0 0	..	250 0 0
Matahura .. .. .	"	..	200 0 0	..	200 0 0	..	200 0 0
Rangiri Lake, Matahura Road .. .. .	"	..	200 0 0	..	200 0 0	..	200 0 0
Rangiri Lake to Railway-station .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Wairangi Railway-station .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Wairangi Railway-station and Matahura .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Waikare Lake to Onewhero .. .. .	"	..	200 0 0	100 0 0	200 0 0	..	200 0 0
Churchhill Punt, on Waikato .. .. .	"	..	50 0 0	..	50 0 0	100 0 0	100 0 0
Whangamarino Parish .. .. .	"	..	100 0 0	..	100 0 0	..	100 0 0
Wairangi-Matahura .. .. .	"	..	176 5 9	330 0 0	506 5 9	..	596 5 9
Taupiri Block .. .. .	"	..	..	..	..	200 0 0	200 0 0
Bombay-Rangiri (Main Road) .. .. .	Waikato and Manukau	..	242 0 0	..	242 0 0	200 0 0	242 0 0
Raglan Wharf, £1 for £1 .. .. .	Raglan	..	..	100 0 0	100 0 0	..	100 0 0
Matakataka Cutting .. .. .	"	..	1,006 4 8	..	1,006 4 8	..	1,006 4 8
Bridge over Waipa, on Raglan Main Road .. .. .	"	..	45 6 6	50 16 9	96 3 3	3 16 9	100 0 0
Onewhero (Sections 128, 129) .. .. .	"	..	3,806 19 11	..	3,806 19 11	..	3,806 19 11
Waikato-Block XIV., Awaroa .. .. .	"	..	3,035 10 4	..	3,035 10 4	..	3,035 10 4
Lake Whangape-Block VII., Awaroa .. .. .	"	..	2,065 15 0	..	2,065 15 0	..	2,065 15 0
Whangaro-Kahururu .. .. .	"	..	270 16 1	310 12 9	581 8 10	4 12 5	586 1 3
Whangaro-Akatea-Ngaruawahia .. .. .	"	..	5,156 12 6	..	5,156 12 6	..	5,156 12 6
Whangaro-Akatea .. .. .	"	..	..	200 0 0	200 0 0	100 0 0	300 0 0
Whangaro-Te Mata .. .. .	"	..	511 8 0	..	511 8 0	..	511 8 0
Macawhero-Whangape .. .. .	"	..	160 0 0	..	160 0 0	..	160 0 0
Te Rore Bridge .. .. .	"	..	202 17 1	..	202 17 1	..	202 17 1
Mata-Kauroa .. .. .	"	..	100 0 0	50 0 0	150 0 0	..	150 0 0
Mangapiko-Maire .. .. .	"	..	..	..	..	..	..
Carried forward .. .. .	..	..	290,928 10 10	26,504 15 10	317,433 6 8	44,348 9 10	361,781 16 6

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	290,928 10 10	26,504 15 10	317,433 6 8	44,348 9 10	361,781 16 6
AUCKLAND LAND DISTRICT—continued. ROADS, BRIDGES, ETC.—continued.							
Whaingaro to Mangapiko, Mangapiko to Maire	..	..	853 3 1	..	853 3 1	..	853 3 1
Huntly-Kahururu Road	..	..	836 18 1	150 19 0	987 17 1	49 1 0	1,036 18 1
Huntly Punt .. .. .	..	..	200 0 0	..	200 0 0	..	200 0 0
Kahururu Block .. .. .	..	..	..	..	..	300 0 0	300 0 0
Opuatia Bridge and Crossing	..	..	2,027 5 6	1,023 19 8	3,051 5 2	176 0 4	3,227 5 6
Tuakau-Opuatia-Kahururu	..	..	..	..	..	200 0 0	200 0 0
Awaroa No. 2 Block .. .. .	..	..	360 3 10	114 18 3	475 2 1	285 1 9	760 3 10
Awaroa, Block XI. .. .. .	..	..	..	1 3 6	1 3 6	78 16 6	80 0 0
Paekotare Block .. .. .	..	..	3,098 8 2	200 0 0	3,298 8 2	200 0 0	3,498 8 2
Raglan-Waipia .. .. .	..	..	..	50 0 0	50 0 0	150 0 0	200 0 0
Raglan-Ruapuke .. .. .	..	..	..	..	..	100 0 0	100 0 0
Aotea Wharf Road .. .. .	..	..	..	..	..	150 0 0	150 0 0
Bregmen's Landing-Tuakau	..	..	..	..	..	100 0 0	100 0 0
Main Road-Pukekawa .. .. .	..	..	..	..	..	200 0 0	200 0 0
Ngaruawahia-Huntly West	..	..	..	..	..	200 0 0	200 0 0
Otorohanga Trig Road .. .. .	..	..	..	..	..	100 0 0	100 0 0
Rutherford's Hill (Section 90, Block III.), Awaroa.	..	..	..	..	..	500 0 0	500 0 0
Tuakau-Raglan .. .. .	..	..	..	42 19 1	42 19 1	457 0 11	500 0 0
Tuakau Bridge (to account)	..	..	..	..	..	200 0 0	200 0 0
Waitetuna Bridge .. .. .	..	..	..	..	..	300 0 0	300 0 0
Newcastle (IX., X., XI.) Block	..	..	..	66 19 0	66 19 0	233 1 0	300 0 0
Opuatia (No. 1) Block .. .. .	..	..	..	29 3 7	29 3 7	270 16 5	300 0 0
Opuatia (No. 2) Block .. .. .	..	..	..	95 1 5	95 1 5	104 18 7	200 0 0
Opuatia (No. 3) Block .. .. .	..	..	..	..	..	100 0 0	100 0 0
Onewhoro (XII., XVI.)-Maramara (IX., XIII.) Block	..	..	..	..	..	300 0 0	300 0 0
Prongia (III., IV., VI., VII., VIII.) Block, Kawhia	..	..	..	..	..	180 0 0	180 0 0
Rangiriri (IX., X.) Block .. .. .	..	..	..	..	..	200 0 0	200 0 0
Te Puroa Block .. .. .	..	..	..	100 0 0	100 0 0	100 0 0	100 0 0
Waipa (Sections 33 to 122) Block	..	..	..	146 11 2	146 11 2	253 8 10	400 0 0
Main Road to Blocks VII. and IX., Karioi	..	..	232 12 7	..	232 12 7	..	232 12 7
From Main Road to West Coast ..	..	..	1,661 14 6	..	1,661 14 6	..	1,661 14 6
Road through Block VI., Awaroa	..	..	..	55 0 0	55 0 0	..	55 0 0
Mangaokahu Block .. .. .	..	..	213 4 6	169 0 8	382 5 2	80 19 4	463 4 6
Karioi-Alexandra Block .. .. .	..	..	50 0 0	..	50 0 0	..	50 0 0
Karioi Parish Block .. .. .	..	..	1,863 18 9	..	1,863 18 9	..	1,863 18 9
Lawson's Hill .. .. .	..	..	2 5 10	1 1 9	3 7 7	98 18 3	102 5 10
Tuakau Punt .. .. .	..	..	..	..	..	..	..
Tuakau-Opuatia Kahururu	..	..	..	..	..	..	..
Bregmen's Landing and Mercer ..	..	..	..	..	..	..	..
Carried forward .. .. .	..	..	302,328 5 8	28,751 12 11	331,079 18 7	50,016 12 9	381,096 11 4



TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	..	321,812 6 7	31,957 14 1	353,770 0 8	55,346 18 5	409,116 19 1
AUCKLAND LAND DISTRICT—continued.							
Pirongia (IV., VIII.) Block	..	..	..	..	..	..	..
Otorohanga—Te Kuiti	..	..	58 12 5	..	58 12 5	..	58 12 5
Te Kuiti—Awakino	..	..	14,027 16 3	5,546 7 1	19,574 3 4	453 12 11	20,027 16 3
North End North Island Main Trunk Railway	..	..	3,886 5 5	..	3,886 5 5	..	3,886 5 5
Tunnel—Karori	..	..	7,780 18 7	..	7,780 18 7	..	7,780 18 7
Mangauka AIA	..	..	119 10 11	254 17 11	374 8 10	25 11 2	400 0 0
Paeamako (Karua-o-te-Whenua) Improved-farm Settlement	..	..	553 11 9	310 1 6	863 13 3	839 9 3	1,703 2 6
Kawhia Aotea	..	..	..	104 19 9	104 19 9	..	110 0 0
Pirongia West	..	..	360 6 9	137 10 0	497 16 9	1,362 10 0	1,860 6 9
Ouruwhero N2, and Puketaraka	..	..	262 5 6	37 14 6	300 0 0	..	300 0 0
Kihikihī—Otorohanga—Te Kuiti	..	..	480 12 11	47 12 9	528 5 8	252 7 3	780 12 11
Whatiwhaitheoe Bridge	..	..	..	13 14 11	13 14 11	86 5 1	100 0 0
Paeamako—Ohura	..	..	..	92 1 11	92 1 11	807 18 1	400 0 0
Katikati—Te Aroha (Thompson's track)	..	..	2,139 16 11	..	2,139 16 11	..	2,139 16 11
Aroha Township—Gold-mines	..	..	500 0 0	..	500 0 0	..	500 0 0
Te Aroha—Katikati Road	..	..	50 0 0	..	50 0 0	..	50 0 0
Te Aroha Block	..	..	5,300 2 6	..	5,300 2 6	..	5,300 2 6
Huihuitaha to Paetere	..	..	705 8 2	..	705 8 2	..	705 8 2
Katikati—Te Aroha	..	..	785 11 1	..	785 11 1	..	785 11 1
Te Aroha Drains	..	..	776 19 3	..	776 19 3	..	776 19 3
Te Aroha Sanatorium, Hot Springs, and Domain	..	..	375 17 5	1,372 17 2	1,748 14 7	227 16 7	1,976 11 2
Te Aroha Domain	..	..	2,733 3 6	..	2,733 3 6	..	2,733 3 6
Te Aroha and Waitoa Drains	..	..	375 16 11	..	375 16 11	..	619 1 5
Te Aroha—Rotorua Road through Okauia Block	..	..	..	..	..	300 0 0	300 0 0
Cambridge—Taupo	..	..	1,341 10 7	..	1,341 10 7	..	1,341 10 7
Works at Te Aroha Springs	..	..	57 18 0	..	57 18 0	..	57 18 0
Cambridge—Tauranga	..	..	4,100 0 0	..	4,100 0 0	100 0 0	4,200 0 0
Katikati to Te Aroha (horse-track)	..	..	359 9 5	..	359 9 5	..	359 9 5
Paraiti Bridge	..	..	..	..	..	..	..
Bay of Plenty	..	..	91,220 6 4	..	91,220 6 4	..	91,220 6 4
Tauranga County flood-damages	..	..	192 11 4	..	192 11 4	10 0 0	202 11 4
Waimapu Bridge	..	..	5,655 3 0	..	5,655 3 0	..	5,655 3 0
Paengaroa	..	..	25 0 0	..	25 0 0	..	25 0 0
Tauranga to Opotiki	..	..	100 0 0	..	100 0 0	..	100 0 0
Tauranga to Te Puke and Matata	..	..	12,962 1 2	..	12,962 1 2	..	12,962 1 2
Oamaruakau Bridge	..	..	378 19 0	..	378 19 0	..	378 19 0
Otawa Nos. 1A and 1B	..	..	447 7 10	..	447 7 10	200 0 0	647 7 10
Pukeatataru Road	..	..	80 0 0	..	80 0 0	..	80 0 0
Carried forward	..	..	480,005 9 6	39,875 11 7	519,881 1 1	59,760 13 6	579,641 14 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	480,005 9 6	39,875 11 7	519,881 1 1	59,760 13 6	579,641 14 7
AUCKLAND LAND DISTRICT—continued.							
Pye's Pa	..	Bay of Plenty	200 0 0	100 0 0	300 0 0	..	300 0 0
Ake Ake	..	"	..	..	..	75 0 0	75 0 0
Maketu Wharf	..	"	..	..	..	200 0 0	200 0 0
Kaiti Bridge	..	"	..	..	..	200 0 0	200 0 0
Ruahiti Bridge (Tauranga-Cambridge)	..	"	..	..	..	150 0 0	150 0 0
Kaituna Stream Bridge	..	"	212 5 6	175 4 6	387 10 0	224 15 6	612 5 6
Papamoa Special Settlement	..	"	526 8 10	..	526 8 10	200 0 0	726 8 10
Papamoa No. 1	..	"	2,191 14 11	411 2 8	2,602 17 7	200 0 0	2,802 17 7
Papamoa Nos. 1 and 2 (additional)	..	"	1,982 4 1	1,821 4 4	3,803 8 5	178 15 8	3,982 4 1
Maketu-Rotorua	..	Bay of Plenty and Hawke's Bay	40,541 3 0	..	40,541 3 0	..	40,541 3 0
Tauranga-Runanga	..	Ditto	..	..	..	..	..
Tauranga-Napier, via Taupo	..	..	..	..	..	..	..
Opotiki-Whakatane	..	Bay of Plenty	1,099 15 8	100 0 0	1,099 15 8	..	1,099 15 8
Matata-Te Teko	..	"	150 0 0	..	150 0 0	100 0 0	250 0 0
Whakatane to Ohape	..	"	250 0 0	..	250 0 0	..	250 0 0
Waioeka, Blocks II., III., IV.	..	"	150 0 0	50 0 0	200 0 0	700 0 0	900 0 0
Orini Bridge, Whakatane	..	"	299 5 0	..	299 5 0	..	299 5 0
Rebuilding, repairing, and constructing county bridges	..	"	..	500 0 0	500 0 0	..	500 0 0
Opotiki-Waiotahi	..	"	562 10 0	..	562 10 0	..	562 10 0
Nukuhou-Maratotara	..	"	..	..	..	500 0 0	500 0 0
Galatea-Te Kapu, via Waikaremoana	..	"	1,848 3 9	..	1,848 3 9	..	1,848 3 9
Papamoa-Omarumutu	..	"	300 0 0	150 0 0	450 0 0	..	450 0 0
Whakatane roads and bridges, £1 for £1	..	"	200 0 0	150 0 0	350 0 0	200 0 0	550 0 0
Waiotahi	..	"	500 0 0	..	500 0 0	..	500 0 0
Waiotahi Bridge	..	"	750 13 9	..	750 13 9	200 0 0	950 13 9
Opotiki-Otamamaku	..	"	200 0 0	..	200 0 0	..	200 0 0
Waiotahi Block	..	"	2,000 0 0	..	2,000 0 0	500 0 0	2,500 0 0
Waiawa Block	..	"	1,063 13 0	14 7 0	1,078 0 0	485 13 0	1,563 13 0
Waimana	..	"	825 0 0	..	825 0 0	700 0 0	1,525 0 0
Te Teko-Opotiki	..	"	6,111 12 0	308 19 4	6,420 11 4	119 6 1	6,539 17 5
Rangataiki-Ruatoki-Waiotahi	..	"	..	159 9 7	159 9 7	0 10 5	160 0 0
Galatea-Te Teko	..	"	..	..	..	300 0 0	300 0 0
Otara River-Papamoa	..	"	..	..	..	100 0 0	100 0 0
Omarumutu-Te Whaiti	..	"	..	..	..	..	..
Carried forward	..	..	541,969 19 0	43,815 19 0	585,785 18 0	65,733 11 6	651,519 9 6



TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	637,418 11 6	63,792 11 5	701,211 2 11	77,665 4 5	778,876 7 4
ROADS, BRIDGES, ETC.—continued.							
AUCKLAND LAND DISTRICT—continued.							
Wharepunga No. 1	Taupo West	Bay of Plenty	254 11 10	49 19 6	254 11 10	745 8 2	1,000 0 0
Kihikihi-Waotu	"	"	714 13 6	..	49 19 6	150 0 6	200 0 0
Tools, &c.	"	"	..	..	714 13 6	..	714 13 6
Baths and water supply, Tokaanu	"	"	2 7 0	..	..	500 0 0	500 0 0
Wharf, Tokaanu	"	"	4,300 19 10	..	2 7 0	300 0 0	302 7 0
Waioatapu-Galatea	"	"	1,800 1 5	..	4,300 19 10	..	4,300 19 10
Huka Falls to Pukatarata	"	"	..	243 14 0	1,800 1 5	..	1,800 1 5
Ateamuri-Orakei-Korako	"	"	..	..	243 14 0	6 6 0	250 0 0
Otarewa-Waipapa Stream (Robinson's Road)	"	"	..	172 0 10	..	200 0 0	200 0 0
Waiki-Tokaanu	"	"	..	..	172 0 10	27 19 2	200 0 0
Whakatane Wharf (repairs)	"	"	..	817 0 10	..	200 0 0	200 0 0
Waikato Bridge (Waioatapu) (to account)	"	"	229 3 1	233 3 10	817 0 10	1,181 12 7	1,948 13 5
Track to Orakei-Korako	"	"	5 10 0	..	462 6 11	66 16 2	529 3 1
Waitepa to Taupo	"	"	..	..	5 10 0	..	5 10 0
Tauhara Mountain	"	"	50 0 0	100 0 0	..	100 0 0	100 0 0
Taupo Domain	"	"	1,643 3 2	395 16 7	..	300 0 0	450 0 0
Tokaanu to Taupo	"	"	12,601 17 9	..	2,038 19 9	304 3 5	2,343 3 2
Taupo, via Rotomira and Murimotu to West Coast	"	"	926 5 8	..	12,601 17 9	..	12,601 17 9
Roads and bridges in Native district	"	"	10,824 6 7	..	926 5 8	..	10,824 6 7
Sundry roads and bridges, Auckland	"	"	..	..	10,824 6 7	..	10,824 6 7
Purchase of roads	"	"	20 0 0	..	..	..	..
Purchase of roads to Crown lands	"	"	11,486 8 3	..	20 0 0	..	20 0 0
Native districts	"	"	194 0 6	Cr. 7 9 4	11,486 8 3	..	11,486 8 3
Village settlements (see also "General")	"	"	229,671 15 9	..	186 11 2	375 9 4	562 0 6
Roads, bridges, and wharves, North of Auckland	"	"	14,041 8 7	936 16 8	229,671 15 9	204 4 8	229,671 15 9
Miscellaneous, and engineering	"	"	926,185 4 5	66,733 14 4	14,978 5 3	..	15,182 9 11
Total, Auckland Land District	..	..	926,185 4 5	66,733 14 4	992,918 18 9	82,277 4 5	1,075,196 3 2
HAWKE'S BAY LAND DISTRICT—							
Waipapu County	Waipapu	Waipapu	400 0 0	..	400 0 0	..	400 0 0
Opotiki-East Cape	"	"	500 0 0	200 0 0	700 0 0	300 0 0	1,000 0 0
Awaniui-Hicks Bay	"	"	312 2 9	..	312 2 9	..	312 2 9
Awaniui-Tikiteke	"	"	..	300 0 0	300 0 0	..	300 0 0
Mata Valley	"	"	313 0 9	..	..	200 0 0	200 0 0
Waionatani to Hicks Bay	"	"	..	..	313 0 9	..	313 0 9
Kawakawa-Hick's Bay	"	"	..	..	..	150 0 0	150 0 0
Waipiro Hot Springs-Tolaga Bay	"	"	..	..	..	500 0 0	500 0 0
Waipiro Hot Springs-Tokomaru	"	"	..	..	..	200 0 0	200 0 0
Waipiro-Mata	"	"	..	..	..	300 0 0	300 0 0
Carried forward	..	..	1,525 3 6	500 0 0	2,025 3 6	1,650 0 0	3,675 3 6

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	1,525 3 6	500 0 0	2,025 3 6	1,650 0 0	3,675 3 6
ROADS, BRIDGES, ETC.—continued.							
HAWKE'S BAY LAND DISTRICT—continued.							
Tokomaru-Huiarau	Waipuu	Waipuu	200 0 0	..	200 0 0	..	200 0 0
Tauwhareparae-Tokomaru	"	"	..	..	..	150 0 0	150 0 0
Tauwhareparae-Crown lands	"	"	..	..	..	200 0 0	200 0 0
Wharepunga-Repunga	"	"	..	300 0 0	300 0 0	..	300 0 0
Pukeamaru	"	"	..	..	..	250 0 0	250 0 0
Waipiro-Te Puia-Hikiwai	"	"	..	..	..	500 0 0	500 0 0
Whakaangi	"	"	..	..	..	250 0 0	250 0 0
Waihuka	"	"	7 4 3	..	7 4 3	243 0 0	250 4 3
Ahomatariki	"	"	..	..	..	250 0 0	250 0 0
Hikurangi Block	"	"	495 19 5	0 5 0	496 4 5	23 15 7	520 0 0
Waipuu Inland Road	"	"	100 0 0	..	100 0 0	300 0 0	400 0 0
Ormond-Waipuu	"	"	12,476 0 1	..	12,476 0 1	..	12,476 0 1
Ormond-Waipuu	"	"	802 13 0	..	802 13 0	..	802 13 0
Waimata-Waipuu	"	"	600 0 0	..	600 0 0	..	600 0 0
Gisborne via Tolaga Bay Awanui	"	"	999 11 9	200 0 0	1,199 11 9	600 0 0	1,799 11 9
Gisborne via Tolaga-Hicks Bay	"	"	..	..	..	..	..
Gisborne-Tolaga-Tauwhareparae	Cook	"	300 0 0	..	300 0 0	..	300 0 0
Tolaga-Marunga-Tauwhareparae	"	"	756 10 1	..	756 10 1	..	756 10 1
Waimata-Tauwhareparae	"	"	500 0 0	..	500 0 0	300 0 0	800 0 0
Waikohu-Matawai and Motu Block	"	"	500 0 0	..	500 0 0	2,000 0 0	2,000 0 0
Tauwhareparae-Arikihi	"	"	..	..	..	300 0 0	300 0 0
Huirarau Block	"	"	..	..	..	500 0 0	500 0 0
Porety Bay	"	"	21,499 5 4	..	21,499 5 4	..	21,499 5 4
Tolaga-Mangatekorau	"	"	358 19 6	..	358 19 6	..	358 19 6
Punakitere Block	"	"	2,149 14 4	..	2,149 14 4	..	2,149 14 4
Tolaga-Arikihi	"	"	3,016 6 11	..	3,016 6 11	231 0 0	3,247 6 11
Waipoa Road to Oil Springs	"	"	650 0 0	..	650 0 0	..	650 0 0
Tauwharetoi Block	"	"	1,169 7 2	..	1,169 7 2	..	1,169 7 2
Waikohu	"	"	1,303 10 9	1,192 19 1	2,496 9 10	557 0 11	3,053 10 9
Waikohu-Motu	"	"	733 16 6	..	733 16 6	..	733 16 6
Motu Bridge and Road	"	"	300 0 0	300 0 0	300 0 0	..	300 0 0
Tatapouri Hill	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Waikohu Bridge (£1 for £2)	"	"	782 9 4	..	782 9 4	40 0 0	822 9 4
Pakarae Road and Punt	"	"	..	..	..	300 0 0	300 0 0
Puatui Hill	"	"	..	..	..	150 0 0	150 0 0
Te Arai	"	"	..	..	..	600 0 0	600 0 0
Nuhaka Bridge (to account), £1 for £1	"	"	..	..	..	200 0 0	200 0 0
Tolaga-Anaura	"	"	..	..	..	250 0 0	250 0 0
Tolaga Hill	"	"	..	..	..	..	..
Carried forward	..	..	51,426 11 11	2,493 4 1	53,919 16 0	9,844 16 6	63,764 12 6

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	51,426 11 11	2,498 4 1	53,919 16 0	9,844 16 6	63,764 12 6
HAWKE'S BAY LAND DISTRICT—continued.							
Wainui	Cook	Waipapu	..	..	..	300 0 0	300 0 0
Waimata Bridge (Ackroyd's)	"	"	..	..	..	100 0 0	100 0 0
Turehau Bridge	"	"	..	..	..	300 0 0	300 0 0
Waimoko Bridge	"	"	..	..	..	500 0 0	500 0 0
Waimata Riding	"	"	880 0 0	..	880 0 0	..	880 0 0
Pouawa Road Board	"	"	130 0 0	..	130 0 0	..	130 0 0
Gisborne-Waimata (metalling)	"	"	425 0 0	275 0 0	700 0 0	..	700 0 0
Gisborne-Waimata	"	"	4,250 9 6	..	4,250 9 6	..	4,250 9 6
Hangaroa-Tiniroro	"	"	..	..	..	500 0 0	500 0 0
Te Ranga Falls Bridge	"	"	120 0 0	..	120 0 0	..	120 0 0
Whataupoko Road Board	"	"	1,690 12 0	..	1,690 12 0	..	1,690 12 0
Cook County (flood-damages)	"	"	..	..	..	300 0 0	300 0 0
Motu	"	"	949 7 11	..	949 7 11	..	949 7 11
Motu Road, widening	"	"	2 7 0	559 19 11	1,509 7 10	300 0 0	1,949 7 11
Gisborne-Rotorua Stock	"	"	18,142 6 3	945 3 2	18,142 6 3	1,052 9 10	19,194 5 3
Opotiki-Ormond	"	"	5,065 12 9	..	5,065 12 9	..	5,065 12 9
Gisborne-Opotiki	"	"	578 4 8	..	578 4 8	..	578 4 8
Ormond-Opotiki, and branch roads	"	"	11,963 7 8	..	11,963 7 8	..	11,963 7 8
Gisborne-Opotiki	"	"	1,000 0 0	309 15 0	1,309 15 0	190 5 0	1,499 5 0
Wairoa-Gisborne	"	"	1,990 5 0	1,263 9 3	3,253 4 3	786 10 9	4,039 4 3
Nuhaka-Gisborne	"	"	..	95 6 6	95 6 6	304 13 6	400 0 0
Nuhaka No. 1	"	"	374 15 0	125 5 0	500 0 0	299 15 0	799 15 0
Muriwai-Mahia	"	"	1,628 3 1	5,959 11 0	7,587 4 1	86 17 0	7,673 11 1
Gisborne-Waikaremoana	"	"	853 15 2	..	853 15 2	10 4 10	864 5 12
Ruakituri Block	"	"	500 0 0	1,500 0 0	2,000 0 0	..	2,000 0 0
Opotiki Bridge (to account)	"	"	100 0 0	..	100 0 0	..	100 0 0
Opotiki Bridge	"	"	1,450 0 0	..	1,450 0 0	500 0 0	1,950 0 0
Ohuka-Waikaremoana	"	"	544 18 6	..	544 18 6	..	544 18 6
Frasertown-Waikaremoana	"	"	743 12 6	..	743 12 6	..	743 12 6
Wairoa and Waikaremoana (bridle-track through the Waiau District to Poverty Bay)	"	"	58 0 0	..	58 0 0	..	58 0 0
Nuhaka	"	"	22 0 0	5 11 10	27 11 10	494 8 2	522 0 0
Nuhaka, Block No. 2	"	"	568 3 0	..	568 3 0	..	568 3 0
Nuhaka Springs	"	"	1,769 7 10	..	1,769 7 10	..	1,769 7 10
Nuhaka Block	"	"	400 0 0	..	400 0 0	300 0 0	700 0 0
Rotokakaranga	"	"	..	..	..	..	..
Waiau Block	"	"	..	..	..	..	..
Carried forward	..	..	106,710 15 4	14,130 15 9	120,841 11 1	16,761 10 8	137,603 1 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Accounts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	..	106,710 15 4	14,190 15 9	120,841 11 1	16,761 10 8	137,603 1 9
HAWKE'S BAY LAND DISTRICT—continued.							
Roads, Bridges, etc.—continued.							
Roads, Wairoa, and Wairoa County roads	Wairoa	Hawke's Bay and Waiapu	1,512 7 8	..	1,512 7 8	..	1,512 7 8
Wairoa County roads (flood-damages)	"	"	300 0 0	..	300 0 0	..	300 0 0
Bridge over Mohaka	"	"	500 0 0	..	500 0 0	..	500 0 0
Napier to Wairoa, £1 to £1	"	Hawke's Bay	725 0 0	..	725 0 0	..	725 0 0
Napier to Wairoa..	"	"	3,874 4 5	5,576 8 11	9,450 13 4	423 11 1	9,874 4 5
Mohaka southwards	"	"	320 19 6	..	320 19 6	..	320 19 6
Mohaka and Waitara	"	"	151 6 4	..	151 6 4	..	151 6 4
Upper and Lower Mohaka	"	"	..	..	..	100 0 0	100 0 0
Makaroro Bridge and approaches	"	"	..	..	..	400 0 0	400 0 0
Waitara Block	"	"	781 0 6	..	781 0 6	..	781 0 6
Runanga-Pohui	"	Waiapu	1,853 1 4	1,631 18 4	3,484 19 8	2,263 15 1	5,748 14 9
Sundry roads and bridges, Hawke's Bay	Wairoa and Hawke's Bay	Hawke's Bay	419 10 5	..	419 10 5	..	419 10 5
Pohui Block	"	"	538 0 0	..	538 0 0	..	538 0 0
Puketitiri Block	"	"	520 0 0	..	520 0 0	..	520 0 0
Puketitiri	"	"	..	..	..	250 0 0	250 0 0
Roads, Napier District	"	"	32,189 19 2	..	32,189 19 2	..	32,189 19 2
Napier-Murimotu Roads	"	"	1,047 6 0	..	1,047 6 0	..	1,047 6 0
Bridge over Ahuriri Harbour	"	"	625 16 1	..	625 16 1	..	625 16 1
Meanee protective works	"	"	500 0 0	..	500 0 0	..	500 0 0
Mohaka Bridge (to account)	"	Hawke's Bay and Waiapu	..	45 10 0	45 10 0	6,444 10 0	6,490 0 0
Kuripapanga-Inland-Patea	"	Hawke's Bay, Patea, and Rangitikei	5,000 0 0	..	5,000 0 0	..	5,000 0 0
Elsthorpe Roads	Patangata	Hawke's Bay	..	..	..	250 0 0	250 0 0
Whakarara Road and Bridge	Waipawa	Waipawa	..	..	..	150 0 0	150 0 0
Whakarara Block	"	"	..	..	..	38 0 0	38 0 0
Ruahine Block (approach)	"	"	..	447 13 2	447 13 2	252 6 10	700 0 0
Ruahine	"	"	324 1 1	..	324 1 1	250 0 0	574 1 1
Ruahine Block	"	"	497 13 10	2 6 10	500 0 8	15 18 3	515 18 11
Makareu	"	"	1,992 15 2	..	1,992 15 2	..	1,992 15 2
Tukituki to Waipawa	"	"	985 1 5	..	985 1 5	..	985 1 5
Norsewood-Apiti-Hawke's Bay	"	"	454 16 1	111 12 10	566 8 11	238 7 2	804 16 1
Takapau-Kopua, £1 for £1	"	"	352 17 6	147 2 6	500 0 0	..	500 0 0
Manawatu and Makotuku Rivers, Ormondville	"	"	450 0 0	..	450 0 0	..	450 0 0
Waikopiro Improved-farm Settlement	"	"	1,622 6 3	441 13 6	2,063 19 9	558 6 6	2,622 6 3
Waikopiro	"	"	4,581 1 10	1,006 4 9	5,587 6 7	493 8 8	6,080 15 3
Ormondville-Waikopiro	"	"	136 13 9	534 3 0	670 16 9	265 17 0	936 13 9
Manawatu Bridge, Waikopiro	"	"	..	610 10 4	610 10 4	889 9 8	1,500 0 0
Manawatu Bridge	"	"	500 0 0	..	500 0 0	..	500 0 0
Te Ohu	"	"	434 8 10	..	434 8 10	..	434 8 10
Carried forward	..	..	169,901 2 6	24,685 19 11	194,587 2 5	30,045 0 11	224,632 3 4

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on Roads, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.		Net Expenditure during 12 Months ended 31st March, 1899.		Total Net Expenditure to 31st March, 1899.		Liabilities on Authorities, Contracts, &c., 31st March, 1899.		Total Net Expenditure and Liabilities.	
			£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Brought forward	..	..	169,901	2 6	24,685	19 11	194,587	2 5	30,045	0 11	224,632	3 4
ROADS, BRIDGES, ETC.—continued.												
HAWKE'S BAY LAND DISTRICT—continued.												
Liberal Block	Waipawa	..	400	0 0	626	10 9	626	10 9	..	..	400	0 0
Dannevirke-Tiratu	"	..	2,088	15 4	..	..	2,088	15 4	..	..	626	10 9
Umutaoroa Block	"	..	28	7 1	..	..	28	7 1	71	12 11	2,088	15 4
Dannevirke-Tamaki	"	..	..	..	..	..	..	..	100	0 0	100	0 0
Holder's	"	..	..	..	..	..	..	..	100	0 0	100	0 0
Ngapaeruru	"	..	..	..	..	..	..	..	..	..	..	..
Anuranga Block	Waipawa and Pahiatua	..	1,883	7 11	..	..	1,883	7 11	..	..	1,883	7 11
Norsewood District, Ngamoko, and Maharahara	"	..	2,709	16 6	..	..	2,709	16 6	..	..	2,709	16 6
Otawai Road, Tahoraite	Pahiatua	..	200	0 0	..	..	200	0 0	..	..	200	0 0
Totaro Road, Tahoraite	"	..	250	0 0	..	..	250	0 0	..	..	250	0 0
Victoria- and Bush-mills Settlement	"	..	900	0 0	..	..	900	0 0	..	..	900	0 0
Dannevirke-Weber-Wimbleton	"	..	274	1 3	125	18 9	400	0 0	174	1 3	574	1 3
Oporae	"	..	81	6 3	613	0 4	644	6 7	85	13 5	730	0 0
Maharahara Block	"	..	1,938	12 8	..	..	1,938	12 8	..	..	1,938	12 8
Woodville Block II.	"	..	37	2 2	..	..	37	2 2	..	..	37	2 2
Holder's Roads	"	..	300	0 0	..	..	300	0 0	..	..	300	0 0
Woodville Block	"	..	26	9 10	..	..	26	9 10	..	..	26	9 10
Tautane and Tahoraite	Waipawa and Pahiatua	..	20,556	7 11	..	..	20,556	7 11	..	..	20,556	7 11
Tautane and Weber Road	"	..	248	15 0	2,901	5 6	2,901	5 6	348	14 6	3,250	0 0
Ngapaeruru Block	Waipawa	..	1,851	11 8	..	..	1,851	11 8	200	0 0	2,481	15 0
Tools, &c.	"	..	..	..	..	..	..	..	..	..	248	15 0
Miscellaneous, and engineering	"	..	..	..	..	..	..	..	..	..	2,051	11 8
Totals, Hawke's Bay Land District	..	..	203,625	16 1	28,952	15 3	232,578	11 4	31,125	3 0	263,703	14 4
TARANAKI LAND DISTRICT—												
Tawai Improved-farm Settlement	Kawhia	..	774	8 1	68	6 7	842	14 8	157	13 5	1,000	8 1
Mokau Punt	Clifton	..	221	16 0	..	..	221	16 0	..	..	221	16 0
Tauranga No. 1 and C	"	..	..	..	..	..	..	..	1,000	0 0	1,000	0 0
Greenlands Improved-farm Settlement	"	..	629	9 11	374	4 2	1,003	14 1	125	15 10	1,129	9 11
Mohakatino Bridge	"	..	1,421	14 5	..	..	1,421	14 5	98	5 7	1,460	0 0
Tongaporutu Improved-farm Settlement	"	..	1,726	11 11	96	0 4	1,822	12 3	408	19 8	2,226	11 11
Tongaporutu Ferry	"	..	2	2 3	..	..	2	2 3	250	0 0	252	2 3
Uruti Improved-farm Settlement	"	..	713	13 10	7	18 4	721	12 2	252	1 8	973	13 10
Pukearuru and Mokau	"	..	..	..	..	..	..	..	..	..	..	..
Pukearuru inland-Mohakatino	"	..	11,556	5 5	2,799	0 0	14,355	5 5	201	0 0	14,556	5 5
Pukearuru inland	"	..	..	..	..	..	..	..	..	..	..	..
Mohakatino-Parinihi No. 1A	"	..	3,864	17 10	..	..	3,864	17 10	..	..	3,864	17 10
Carried forward	..	..	20,910	19 8	3,945	9 5	24,256	9 1	2,428	16 2	26,685	5 3

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on Roads, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	..	20,910 19 8	3,945 9 5	24,256 9 1	2,428 16 2	26,685 5 3
TARANAKI LAND DISTRICT—continued.							
Roads, Bridges, &c.—continued.							
Mimi-Mangaroa (road metalling), £1 for £1	..	Egmont	400 0 0	30 18 0	1,746 19 3	750 0 0	1,150 0 0
Okau Improved-farm Settlement	..	"	1,716 1 3	430 8 7	786 12 0	254 2 0	2,001 1 3
Pukiki..	..	"	306 3 5	237 15 3	1,694 0 0	269 11 5	1,006 3 5
Derwent Improved-farm Settlement	..	"	1,456 4 9	..	500 0 0	161 0 0	1,855 0 0
Ohura South K No. 5 and L	..	"	500 0 0	180 15 4	293 2 4	..	500 0 0
Burfoot Improved-farm Settlement	..	"	112 7 0	67 0 5	966 0 0	180 4 2	473 6 6
Lepperton Block..	..	"	898 19 7	43 16 0	2,381 19 1	134 3 10	2,516 2 11
Ratatomokia Improved-farm Settlement	..	"	2,338 3 1	..	..	..	..
Moanatairi Block	..	"	..	..	..	..	..
Manatapa Improved-farm Settlement	..	"	141 19 1	52 4 7	194 3 8	200 0 0	200 0 0
Moanatairi Special Settlement	..	"	..	..	..	207 15 5	401 19 1
Uretu Township site	..	"	3,416 19 11	..	3,416 19 11	106 11 6	106 11 6
Maraekowhai (Ohura Road)	..	"	..	..	..	250 0 0	250 0 0
Kaipikari deviation	..	"	..	..	..	100 0 0	100 0 0
Mokau River Bridge-track	..	"	..	..	..	100 0 0	100 0 0
Moki Junction—Block II., Upper Waitara	..	"	..	..	..	250 0 0	250 0 0
Ngatoto	..	"	..	..	..	300 0 0	300 0 0
Tongaporutu Bridge (to account)	..	"	..	..	..	90 11 9	900 0 0
Kaipikari Block	..	"	..	..	..	400 0 0	590 6 8
Mokau Road	..	"	190 6 8	809 8 3	809 8 3	..	126 0 0
Upper Waitara Block (Uruti Road)	..	"	126 0 0	..	126 0 0	..	800 0 0
Okoke Road	..	"	500 0 0	9 9 0	1,550 2 0	300 0 0	2,040 13 0
Okoke Block	..	"	1,540 13 0	..	..	490 11 0	150 0 0
Waikiekie Block	..	"	..	..	..	150 0 0	150 0 0
Tikorangi—Te Tarata	..	"	702 3 8	..	702 3 8	671 16 10	702 3 8
Junction Road—Purangi, £1 for £1	..	"	5,308 2 5	..	5,308 2 5	..	5,979 19 3
Junction Road (widening)	..	"	..	800 0 0	800 0 0	..	800 0 0
Upper Waitara—Mangaroa	..	"	1,442 13 6	44 7 0	1,487 5 6	8 13 5	1,495 18 11
Bridge over Purangi (to account)	..	"	10 11 11	555 7 10	565 19 9	1,687 12 2	2,253 11 11
Bridge over Purangi	..	"	4 3 6	..	4 3 6	..	4 3 6
Roads east of Waitara	..	"	6,579 16 8	..	6,579 16 8	..	6,579 16 8
Ngatimaru Block..	..	"	1,830 0 0	..	1,830 0 0	..	1,830 0 0
Milsom	..	"	1,750 0 0	150 0 0	1,750 0 0	..	1,750 0 0
Milsom Block	..	"	..	215 9 7	215 9 7	14 10 5	230 0 0
Milsom and Tanner	..	"	498 5 0	..	498 5 0	..	498 5 0
Aitawa and Pita Roads	..	"	813 3 9	333 6 6	1,146 10 3	53 9 9	1,200 0 0
Oxford Association Block	..	"	..	..	..	500 0 0	500 0 0
Waitara River (to account), £1 for £1	..	Taranaki and Egmont	..	..	..	..	..
Carried forward	..	..	53,494 2 10	7,305 15 9	60,799 18 7	10,159 9 10	70,959 8 5

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	53,494 2 10	7,305 15 9	60,799 18 7	10,159 9 10	70,959 8 5
ROADS, BRIDGES, ETC.—continued.							
TARANAKI—continued.							
Inglewood-White Cliffs	Clifton and Taranaki	Egmont	5,000 0 0	..	5,000 0 0	..	5,000 0 0
Inglewood-Ngamaru	"	"	368 3 1	..	368 3 1	..	368 3 1
Junction Road, from Inglewood eastwards	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Waitara Bridge (Tarata Bridge)	"	"	968 18 2	..	968 18 2	..	968 18 2
Tikurangi Bridge, £1 for £1	"	Taranaki and Egmont	799 5 1	..	799 5 1	..	799 5 1
Tikurangi Bridge	"	"	387 4 9	..	387 4 9	..	387 4 9
Toro (Section 23, Block IV., Huiroa) Block	Taranaki	"	..	..	..	..	..
Inglewood-Waitara	"	"	2,749 1 5	..	2,749 1 5	..	2,749 1 5
New Plymouth inland	"	"	3,760 17 3	..	3,760 17 3	..	3,760 17 3
Henwood and Upland Roads	"	"	993 12 10	..	993 12 10	..	993 12 10
Bridge on Stony River and approaches	"	Taranaki	1,151 6 2	..	1,151 6 2	..	1,151 6 2
Egmont Block	"	"	303 1 7	5 19 4	309 0 11	111 19 1	421 0 0
Egmont (VI.) Block	"	"	185 15 6	..	185 15 6	..	185 15 6
Egmont Road	"	"	356 12 11	..	356 12 11	..	356 12 11
Egmont District	"	"	201 19 10	..	201 19 10	..	201 19 10
Alfred Road	"	"	430 17 4	1,025 7 9	1,456 5 1	43 14 11	1,500 0 0
Patua (Egmont V., VII., XI.) Block	"	"	94 8 8	..	94 8 8	..	94 8 8
Patua (Egmont) Block	"	"	1,149 7 0	..	1,149 7 0	..	1,149 7 0
Carrington Road	"	"	781 1 3	..	781 1 3	..	781 1 3
Tariki Road	"	"	514 0 2	..	514 0 2	..	514 0 2
Huiroa Block Bridge over Manganui River	"	"	2,067 17 10	..	2,067 17 10	..	2,067 17 10
Ironsand Block	"	"	..	..	..	..	..
Huiroa District	"	"	..	..	..	..	..
Kent Road	"	"	..	..	..	150 0 0	150 0 0
Koru-New Plymouth, £1 for £1	"	"	..	..	..	300 0 0	300 0 0
Maude Road	"	"	..	..	..	100 0 0	100 0 0
Newall and Tohu Roads	"	"	..	..	..	150 0 0	150 0 0
Motukawa	"	"	150 0 0	..	150 0 0	..	150 0 0
Newall Road	"	"	100 0 0	..	100 0 0	..	100 0 0
Waiveranui	"	"	192 10 6	..	192 10 6	..	192 10 6
Egmont (metalling), £1 for £1	"	Taranaki and Egmont	..	..	..	150 0 0	150 0 0
Opunake Wharf, £1 for £1	"	Hawera	1,131 14 0	..	1,131 14 0	..	1,131 14 0
Kohurutahi Improved-farm Settlement..	"	"	256 19 10	..	256 19 10	..	256 19 10
Kohurutahi-Tangarakau	Stratford	"	2,074 12 6	523 0 5	2,597 12 11	476 19 7	3,074 12 6
Tangarakau Clearing	"	"	263 7 2	..	263 7 2	..	263 7 2
Tangarakau River (clearing), to account	"	"	233 11 10	75 10 3	309 2 1	124 9 9	433 11 10
Whangamomona Improved-farm Settlement	"	"	8,059 4 7	941 2 4	9,000 6 11	108 17 8	9,109 4 7
Ross Block	"	"	421 0 0	..	421 0 0	57 0 0	478 0 0
Carried forward	..	..	89,640 14 1	9,876 15 10	99,517 9 11	12,332 10 10	111,850 0 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
TARANAKI—continued.							
Brought forward	..	..	89,640 14 1	9,876 15 10	99,517 9 11	12,332 10 10	111,850 0 9
Roads, Bridges, ETC.—continued.							
Huiroa Improved-farm Settlement	Stratford	Egmont	886 6 5	124 15 1	1,011 1 6	75 4 11	1,086 6 5
Huiroa Block	..	..	1,254 6 8	..	1,254 6 8	..	1,254 6 8
Huiroa Roads	..	..	79 12 3	31 16 8	111 8 11	4 1 1	115 10 0
Block X., Huiroa	..	..	745 17 0	..	745 17 0	..	745 17 0
Roads east of Waipuku	..	..	278 13 5	..	278 13 5	..	278 13 5
Roads east of Midhurst	..	..	253 10 3	..	253 10 3	..	253 10 3
Mountain-roads to blocks under survey	..	..	890 14 0	..	890 14 0	..	890 14 0
Roads east of Stratford	..	..	1,865 19 8	..	1,865 19 8	..	1,865 19 8
Denbigh Road subsidy	..	..	150 0 0	..	150 0 0	..	150 0 0
East Road	..	..	1,158 7 6	..	1,158 7 6	..	1,158 7 6
Ohura (contribution)	..	..	4,916 8 2	1,118 16 11	4,916 8 2	2,881 3 1	4,000 0 0
Ohura	..	..	2,992 18 0	..	2,992 18 0	..	4,916 8 2
Taumatamahoe	..	..	49,070 11 5	..	49,070 11 5	..	2,992 18 0
Taumatamahoe No. 2	..	..	11,704 10 10	12,613 15 7	24,318 6 5	385 12 5	49,070 11 5
Stratford-Ongarue-Ohura	..	..	600 0 0	..	600 0 0	..	24,703 18 10
Stratford-Ongarue	..	..	4,144 0 0	1,497 4 0	4,144 0 0	2 16 0	600 0 0
Kahouri Bridge	..	..	..	..	..	..	1,500 0 0
Putikimua	..	..	..	..	..	..	4,144 0 0
Mangaere Block	..	..	..	..	..	200 0 0	200 0 0
Akama	..	..	..	..	..	..	..
Huiroa Township (bushfelling)	..	..	748 13 5	10 8 3	759 1 8	178 11 9	937 13 5
Mangaere Improved-farm Settlement	..	..	894 0 0	..	894 0 0	..	894 0 0
Manganui Block	..	..	800 0 0	..	800 0 0	..	800 0 0
Eltham Block	..	..	..	..	..	300 0 0	300 0 0
Gatton Special Settlement	..	..	..	..	..	100 0 0	100 0 0
Mohakau	..	..	..	..	..	100 0 0	100 0 0
Pembroke	..	..	..	..	..	34 5 1	200 0 0
Punihakan	..	..	..	165 14 11	165 14 11	500 0 0	500 0 0
Taihoire (widening), £1 for £1 (to account)	..	..	..	..	..	50 0 0	50 0 0
Wingrove Road	..	..	..	..	..	..	..
Manganui Bridge	..	..	947 3 6	200 0 0	200 0 0	202 17 0	200 0 0
Autawa Block	..	..	..	2 19 6	950 3 0	65 10 0	1,133 0 0
Hurimoana Block	..	..	..	234 10 0	234 10 0	300 0 0	300 0 0
Kohurutahi Block	..	..	..	..	..	300 0 0	300 0 0
Llewellyn Block	..	..	..	233 14 0	233 14 0	116 6 0	350 0 0
Marco Block	..	..	..	..	..	300 0 0	300 0 0
Rimuputa Block	..	..	950 0 0	..	950 0 0	..	950 0 0
Gatton Block	..	..	122 0 7	946 4 11	1,068 5 6	53 15 1	1,122 0 7
Terrace End	..	..	..	..	..	..	..
Carried forward	..	..	175,094 7 2	27,056 15 8	202,151 2 10	18,382 13 3	220,533 16 1

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward ..	..	..	175,094 7 2	27,056 15 8	202,151 2 10	18,392 13 3	220,533 16 1
ROADS, BRIDGES, ETC.—continued.							
TARANAKI—continued.							
Terrace End Special-settlement Block ..	Stratford	Egmont	2,173 0 0	..	2,173 0 0	..	2,173 0 0
Mangaehu Block ..	"	"	301 0 0	..	301 0 0	..	301 0 0
Puniwhakau Block ..	"	"	930 6 9	995 13 3	1,926 0 0	..	1,926 0 0
Makahu Block ..	"	"	..	153 4 0	153 4 0	346 16 0	500 0 0
Mangaotuku ..	"	"	650 0 0	..	650 0 0	200 0 0	850 0 0
Mangaotuku Block ..	"	"	376 12 7	..	376 12 7	..	376 12 7
Mangaehu and Llewellyn Special-settlement Blocks (above loan) ..	"	"	..	146 5 3	146 5 3	153 14 9	300 0 0
To complete bushfelling, Stratford ..	"	"	34 0 0	..	34 0 0	..	34 0 0
Refund expenses, T. Kelly, Mountain-road Com- mission ..	"	"	19 8 0	..	19 8 0	..	19 8 0
Bridge on Stratford-Opunake Road ..	"	"	376 19 8	..	376 19 8	..	376 19 8
Kaupokonui Block ..	Hawera	Hawera	34 7 6	299 3 4	12,880 1 0	23 12 6	58 0 0
Ngairu (draining swamps) ..	"	"	12,580 17 8	..	12,880 1 0	0 0 10	12,880 1 10
Anderson's roads and bridges (Rawhitiroa Road)	"	"	4,524 8 7	..	4,524 8 7	..	4,524 8 7
Poti Improved-farm Settlement ..	"	"	210 18 2	56 10 6	267 8 8	72 11 4	340 0 0
Native Trust Blocks ..	"	"	1,834 13 9	..	1,834 13 9	..	1,834 13 9
Ngairu Improved-farm Settlement ..	"	"	545 3 9	45 1 0	590 4 9	254 19 0	845 3 9
Eltham and branch roads ..	"	"	7,359 15 6	..	7,359 15 6	..	7,359 15 6
Maata Improved-farm Settlement ..	"	"	57 9 3	20 0 0	77 9 3	123 0 0	200 9 3
Rotokare and other roads ..	"	"	1,182 19 3	..	1,182 19 3	..	1,182 19 3
Ararata Bridge ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Roads through bush, Waimate Plains ..	"	"	1,614 9 8	..	1,614 9 8	..	1,614 9 8
Roads through bush, Waimate Plains ..	"	"	15,714 8 9	..	15,714 8 9	..	15,714 8 9
Continuous reserve to be refunded ..	"	"	5,045 10 4	..	5,045 10 4	..	5,045 10 4
Roads inland, Mokoia ..	"	Patea	663 18 1	..	663 18 1	..	663 18 1
Tangahoe Valley ..	"	"	..	..	..	300 0 0	300 0 0
Punehi Bridge ..	"	"	..	..	..	500 0 0	500 0 0
Mangamingi Township ..	"	Egmont	90 12 7	9 7 5	100 0 0	50 12 7	150 12 7
Through parts of Blocks I., II., V., VII., X., Ngairu District ..	"	Egmont, Patea, and Hawera	2,041 0 10	..	2,041 0 10	..	2,041 0 10
Through parts of Blocks III., V., X., Ngairu District Tracks and huts, Mount Egmont ..	Taranaki, Stratford, and Hawera	Taranaki, Egmont, and Hawera	1,146 3 6	158 3 0	1,146 3 6	..	1,146 3 6
Hawera to Waitara ..	"	"	541 17 0	..	700 0 0	141 17 0	841 17 0
Waiti-Patea ..	"	Egmont and Hawera ..	14,469 19 2	..	14,469 19 2	..	14,469 19 2
South Egmont Forest Reserve ..	"	Egmont, Patea, and Hawera	58,566 6 9	..	58,566 6 9	..	58,566 6 9
Mangamingi ..	"	Hawera	47 8 0	..	47 8 0	..	47 8 0
Carried forward ..	..	..	6,640 4 10	..	6,640 4 10	..	6,640 4 10
			315,018 7 1	28,940 3 5	343,958 10 6	20,549 17 3	364,508 7 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
Brought forward	..	..	£ s. d. 315,018 7 1	£ s. d. 28,940 3 5	£ s. d. 343,958 10 6	£ s. d. 20,549 17 3	£ s. d. 364,508 7 9
TARANAKI LAND DISTRICT—continued.							
Great South Road, between Opunake and Maniaia	Taranaki and Hawera	..	2,946 0 0	..	2,946 0 0	..	2,946 0 0
Rawhitiroa Block	Patea	..	3 11 11	..	3 11 11	800 0 0	803 11 11
Bush lands inland of Patea	"	..	1,926 0 11	..	1,926 0 11	..	1,926 0 11
Rangiwakaoma Block	"	..	..	..	..	300 0 0	300 0 0
Kaimanuka and Rawhitiroa	"	..	3,652 16 0	..	3,652 16 0	500 0 0	4,152 16 0
Waitotara Valley	"	..	1,220 19 0	..	2,941 13 3	379 5 9	3,320 19 0
Waitotara, widening (four miles of this in Wellington District)	"	..	18 5 0	..	18 5 0	..	18 5 0
Waitotara, widening (contribution)	"	..	1,481 15 0	..	1,481 15 0	..	1,481 15 0
Opaku-Kapara Block	"	..	2,594 18 10	130 2 5	2,725 1 3	67 18 9	2,793 0 0
Weraweraonga	"	..	600 0 0	..	600 0 0	..	600 0 0
Whenuakura Valley Bridge and Road	"	..	1,077 12 3	..	1,077 12 3	..	1,077 12 3
Ball Road (Blocks IX, X, XIII, XIV, Carlyle and Opaku S.D.)	"	..	74 1 8	981 5 0	1,055 6 8	3 8 4	1,058 15 0
Okotuku	"	..	..	109 7 8	109 7 8	90 12 4	200 0 0
Central Patea Valley	"	..	221 17 0	..	221 17 0	400 0 0	621 17 0
Mataimoana	"	..	..	..	..	300 0 0	300 0 0
Motoroa	"	..	..	..	..	400 0 0	400 0 0
Nukuhau	"	..	..	..	..	100 0 0	100 0 0
Okahutiria	"	..	386 11 3	15 15 0	402 6 3	17 13 9	420 0 0
Waverley-Patea	"	..	70 0 0	..	70 0 0	..	70 0 0
Taumatatahi Improved-farm Settlement	"	..	355 0 6	43 16 3	398 16 9	106 3 9	505 0 6
Patea River Bridge, Ball Road (to account), £1 for £1	"	..	..	..	..	250 0 0	250 0 0
Moeawatea Block	"	..	..	..	..	300 0 0	300 0 0
Patea River Bridge	"	..	..	..	..	..	..
Patea River Bridge (to account)	Hawera and Patea	..	101 5 4	498 14 8	600 0 0	..	600 0 0
Eltham-Waitotara	"	..	..	1,270 17 1	1,270 17 1	..	1,270 17 1
Eltham-Waitotara, £1 for £1	"	..	..	..	..	400 0 0	400 0 0
Makuri and Akaka, £1 for £1	"	..	..	..	..	200 0 0	200 0 0
Patea River (snagging)	"	..	..	..	..	60 0 0	60 0 0
Roads and bridges, unsettled districts, Patea and Taranaki	Taranaki, Hawera, Patea, and Waitotara	..	48,296 16 3	..	48,296 16 3	..	48,296 16 3
Kaitangiwhenua Block	"	..	1,375 0 0	..	1,375 0 0	..	1,375 0 0
Kaitangiwhenua No. 2 Block (Rawhitiroa Road)	"	..	5,756 0 0	..	5,756 0 0	..	5,756 0 0
Kaitangiwhenua No. 3 Block	"	..	..	..	..	453 0 11	..
Whenuakura Block	"	..	901 14 8	46 19 1	46 19 1	..	500 0 0
Kaitangiwhenua No. 2	"	..	251 11 3	129 2 4	1,030 17 0	..	1,030 17 0
Sundry roads, Taranaki	"	..	..	..	251 11 3	..	251 11 3
Carried forward	..	..	388,830 8 11	33,886 17 2	422,217 1 1	25,678 0 10	447,895 1 11

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1888.	Net Expenditure during 12 Months ended 31st March, 1889.	Total Net Expenditure to 31st March, 1889.	Liabilities on Authorities, Contracts, &c., 31st March, 1889.	Total Net Expenditure and Liabilities.
Brought forward	..	..	£ s. d. 388,330 3 11	£ s. d. 33,886 17 2	£ s. d. 422,217 1 1	£ s. d. 25,678 0 10	£ s. d. 447,895 1 11
ROADS, BRIDGES, ETC.—continued.	..	..					
TARANAKI LAND DISTRICT—continued.	..	..					
Tools, &c.	..	..	254 4 2	..	254 4 2	..	254 4 2
General: Salaries	..	..	402 18 8	..	402 18 8	..	402 18 8
Miscellaneous and engineering	..	..	3,978 12 5	213 11 8	4,192 4 1	75 11 2	4,267 15 3
Total, Taranaki Land District	..	..	392,965 19 2	34,100 8 10	427,066 8 0	25,753 12 0	452,820 0 0
WELLINGTON LAND DISTRICT—	..	Patea					
Motoroa..	..	..	99 8 11	326 5 5	425 14 4	175 0 0	175 0 0
Tongariro National Park	..	..	2,751 9 0	109 16 0	2,861 5 0	34 5 8	460 0 0
Kaitieke Block	..	..	5,376 18 1	..	5,376 18 1	590 4 0	3,451 9 0
Wanganui-Taupo	..	..	..	..	..	..	5,376 18 1
Okahukura	..	..	387 10 10	88 12 6	476 3 4	23 16 8	500 0 0
Okahukura 8m	..	..	..	..	..	300 0 0	300 0 0
Taurewa-Okahukura	..	..	533 17 4	857 17 2	1,391 14 6	8 5 6	1,400 0 0
Gladstone Block	..	..	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Waimarino Block	..	..	2,267 17 0	316 8 8	2,584 5 8	183 11 4	2,767 17 0
Waimarino	..	..	6,813 5 7	..	6,813 5 7	23 4 5	6,841 10 0
Manganui Ruapehu Block	..	..	219 19 11	276 3 7	496 3 6	23 16 5	519 19 11
Moa whango-Karioi	..	..	1,116 6 6	..	1,116 6 6	..	1,116 6 6
Horopito Improvement Farm	..	..	329 14 0	32 16 4	362 10 4	217 3 8	579 14 0
Raetihi-Ohura	..	..	2,178 6 0	149 10 3	2,327 16 3	450 9 9	2,778 6 0
Raetihi Township	..	..	149 12 6	5 5 0	154 17 6	94 15 0	249 12 6
Clifton Block	..	..	1,163 0 0	..	1,163 0 0	..	1,163 0 0
Flood-damages, Makohine Village Settlement, Clifton Block	..	..	..	206 2 11	206 2 11	79 7 1	285 10 0
Hautapu-Main Road	..	..	..	115 10 0	115 10 0	84 10 0	200 0 0
Hunterville I., II., III.	..	..	1,391 6 0	1,257 1 11	2,648 7 11	150 0 0	150 0 0
Otararoho	..	..	..	22 13 0	22 13 0	42 18 1	2,691 6 0
Retaruke Valley	..	..	..	..	..	177 7 0	200 0 0
Turakina Valley	..	..	3,618 16 3	662 13 6	4,281 9 9	200 0 0	200 0 0
Mangawhero Bridge (Aberfeldie)	..	..	..	..	..	137 6 6	4,418 16 3
Upper Mangaeahu Bridge	..	..	..	..	..	1,000 0 0	1,000 0 0
Clifton (No. 2) Block	..	..	..	..	..	250 0 0	250 0 0
Makotuku (No. 3) Block	..	..	..	..	..	186 0 0	186 0 0
Marton (No. 3) Block	..	..	..	..	..	800 0 0	800 0 0
Carried forward	..	..	29,397 7 11	4,426 16 8	33,824 4 2	5,237 1 1	39,061 5 3

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	29,397 7 11	4,426 16 3	33,824 4 2	5,237 1 1	39,061 5 3
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Wanganui	Wanganui	Patea	1,388 9 2	400 0 0	1,556 0 0	..	400 0 0
Wanganui Block ..	..	..	27 12 0	167 10 10	1,556 0 0	..	1,556 0 0
Hukumu Road ..	..	..	..	220 11 7	248 3 7	29 16 5	278 0 0
Wanganui River Trust ..	..	..	4,850 0 0	1,000 0 0	5,850 0 0	..	5,850 0 0
Raetihi-Parapara ..	..	..	2,845 0 8	38 13 5	2,683 14 1	561 6 7	3,245 0 8
Pipiriki-Waiouru ..	..	..	3,683 14 10	2,183 2 8	5,866 17 6	816 17 4	6,683 14 10
Including (Pipiriki-Karioi Pipiriki-Ohakune	..	..	24,571 18 10	..	24,571 18 10	..	24,571 18 10
Mangawhero-Murimotu (same as Wanganui-Murimotu)	..	..	5,875 18 11	151 17 8	6,027 16 7	198 2 4	6,225 18 11
Paratieke ..	..	..	588 2 7	..	588 2 7	..	588 2 7
Rangiwaea ..	..	..	..	..	..	500 0 0	500 0 0
Maungakarehu ..	..	..	1,730 7 0	..	1,730 7 0	..	1,730 7 0
Ruanui 2A and 3A ..	..	..	..	..	..	200 0 0	200 0 0
Wanganui River (steamer subsidy)	Wanganui and Waitotara	..	2,280 7 7	Cr. 87 10 0	2,192 17 7	..	2,192 17 7
Rotoaira-Tokaanu ..	East Taupo ..	Bay of Plenty, Patea, and Rangitikei	20,968 15 5	2,225 12 2	23,194 7 7	100 0 0	23,417 14 3
Ohingaiti-Tokaanu ..	Taupo East, Wanganui, and Rangitikei	..	..	..	..	223 6 8	..
Hunterville-Turangarehe	Ditto ..	..	24,867 1 8	..	24,867 1 8	..	24,867 1 8
Tuamaranui-Ohakune ..	Taupo West and Wanganui	Bay of Plenty and Patea..	4,764 6 3	811 12 6	5,575 18 9	23 0 5	5,604 19 2
Rotoaira-Waimarino ..	..	..	1,418 5 9	..	1,418 5 9	100 0 0	1,518 5 9
Waimarino-Tokaanu ..	..	..	43 6 6	..	43 6 6	..	43 6 6
Kuripapanga-Karioi ..	Wanganui, Rangitikei, and Hawke's Bay	Patea, Rangitikei, and Hawke's Bay	2,443 11 7	..	2,443 11 7	..	2,443 11 7
Moawhango-Te Horo ..	Wanganui and Hawke's Bay	Patea and Rangitikei	504 3 7	47 19 3	552 2 10	202 0 9	754 3 7
Taihape Township ..	Rangitikei ..	Rangitikei	216 1 2	1 6 0	217 7 2	198 14 0	416 1 2
Rongoti Improved Farm ..	..	..	385 5 5	380 1 9	765 7 2	54 12 10	820 0 0
Hautapu ..	..	..	1,922 2 7	307 15 10	2,229 18 5	61 8 0	2,291 6 5
Taihape ..	..	..	3,556 0 10	891 3 6	4,447 4 4	230 10 9	4,677 15 1
Ohutu ..	..	..	2,819 0 0	972 0 9	3,791 0 9	198 6 6	3,989 7 3
Otuarei Improved Farm ..	..	..	171 18 3	213 2 6	385 0 9	314 16 3	699 17 0
Ohinewairua Block ..	..	..	211 7 9	1,012 0 3	1,223 8 0	476 19 9	1,700 7 9
Pukeokahu (IX.) Block ..	..	..	..	..	..	..	..
Hautapu (VIII.), Ruahine (V., IX., X.) Blocks, Hautapu-Ruahine No. 2	..	..	..	81 3 3	81 3 3	218 16 9	300 0 0
Pukeokahu (X., XII.), Ohinewairua (XVI.), Hautapu (IV.), Ruahine (I.) Block, Pukeokahu	..	..	..	300 0 0	300 0 0	..	300 0 0
Masterton-Tenui Improved Farm ..	..	..	801 4 10	154 16 4	956 1 2	145 3 8	1,101 4 10
Carried forward	..	..	142,131 11 1	15,899 16 6	158,031 7 7	10,097 0 1	168,128 7 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward ..	..	..	142,131 11 1	15,899 16 6	158,031 7 7	10,097 0 1	168,128 7 8
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Mangaweka Improved farm Settlement..	..	..	..	..	..	..	..
Mangaweka Township ..	..	..	..	..	..	..	..
Mangaweka Township (drainage) ..	..	..	150 0 0	0 7 8	150 0 0	49 12 4	50 0 0
Mangaonoho ..	..	..	200 0 0	..	200 0 0	..	200 0 0
Vinegar Hill Road ..	..	..	..	131 10 2	131 10 2	68 9 10	200 0 0
Gorge-Ohutu Improved-farm Settlement ..	..	..	..	494 10 0	494 10 0	5 10 0	500 0 0
Horouta ..	..	..	..	435 0 5	435 0 5	564 19 7	1,000 0 0
Moawhango Bridge (Horouta) ..	..	..	..	..	..	1,000 0 0	1,000 0 0
Onepuhi Railway Bridge approaches (to account) ..	..	..	..	143 17 0	143 17 0	200 0 0	200 0 0
Tiriraukawa Block (Pohonuotane Block) ..	..	..	..	397 14 2	1,801 17 8	356 3 0	500 0 0
Mokohine Valley ..	..	..	{ 1,404 3 6	..	109 12 0	2 5 10	1,804 3 6
Taihape-Paengaroa (same as Hautapu-Sommerville) ..	..	..	109 12 0	..	109 12 0	1,400 0 0	1,400 0 0
Kakariki Bridge (approaches) ..	..	..	..	2,348 17 8	2,348 17 8	51 2 4	2,400 0 0
Hautapu (I., V., VI., IX., X.) and Tiriraukawa ..	..	..	..	..	..	..	..
(IV., VIII.) Blocks, Upper Makohine ..	..	..	149 0 0	..	149 0 0	..	149 0 0
Paraekaretu Block ..	..	..	4,891 0 0	..	4,891 0 0	..	4,891 0 0
To Kapua Block (Sommerville and Knights of Labour) ..	..	..	781 5 8	685 10 0	1,466 15 8	14 0 0	1,480 15 8
Te Kapua ..	..	..	139 2 6	..	139 2 6	..	139 2 6
Otiri Block ..	..	..	2,670 6 6	..	2,670 6 6	..	2,670 6 6
Marton to Murimotu ..	..	..	22 15 0	400 5 0	423 0 0	..	423 0 0
Murray's Track ..	..	..	772 12 9	..	772 12 9	..	772 12 9
Watershed and Murray's ..	..	..	..	36 14 8	36 14 8	263 5 9	300 0 0
Watershed Road ..	..	..	200 0 0	..	200 0 0	..	200 0 0
Pohonuotane ..	..	..	59 14 9	..	59 14 9	..	59 14 9
Pohinuotane Block ..	..	..	..	..	..	..	..
Mangapapa ..	..	..	618 9 0	..	618 9 0	..	618 9 0
Pohonuotane Block, Hunterville 1, 2, 3 ..	..	..	2,500 0 0	..	2,500 0 0	1,000 0 0	3,500 0 0
Rangitikei Bridge, Vinegar Hill, £1 for £1 ..	..	..	497 0 0	..	497 0 0	..	497 0 0
Hales's Track to Murimotu ..	..	..	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Bridge over Wangahu ..	..	..	..	..	..	500 0 0	500 0 0
Whangape River Bridge, £1 for £1 ..	..	..	..	..	..	..	..
Flood subsidies ..	..	..	350 0 0	..	350 0 0	..	350 0 0
Temporary bridges, Rangitikei ..	..	..	..	..	..	..	..
Lands and Survey Offices, Wanganui ..	..	..	17,000 0 0	..	17,000 0 0	300 0 0	300 0 0
To relieve Wanganui Bridge from tolls ..	..	..	36,275 18 9	..	36,275 18 9	..	36,275 18 9
Patea to Wanganui ..	..	..	14 5 7	..	14 5 7	..	14 5 7
Wairoa Survey District ..	..	..	686 0 0	..	686 0 0	..	686 0 0
Waitotara Valley ..	..	..	..	..	..	..	..
Carried forward ..	..	..	212,622 17 1	20,974 2 10	233,596 19 11	15,872 8 9	249,469 8 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1888. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1889. £ s. d.	Total Net Expenditure to 31st March, 1889. £ s. d.	Liabilities on Accounts, Contracts, &c., 31st March, 1889. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	212,622 17 1	20,974 2 10	233,596 19 11	15,872 8 9	249,469 8 8
WELLINGTON LAND DISTRICT—continued.							
Tokomaru Block ..	Waitotara	Patea	1,995 3 4	..	1,995 3 4	..	1,995 3 4
Te Ngane Block ..	"	"	200 0 0	..	200 0 0	167 0 0	367 0 0
Te Ngane No. 2 Block ..	"	"	..	..	..	..	..
Omahine Block ..	"	"	114 0 0	..	114 0 0	..	114 0 0
Waverley-Patea Road ..	"	"	130 0 0	..	130 0 0	..	130 0 0
Mangawhio Road ..	"	"	190 9 3	..	190 9 3	..	190 9 3
Okotuku ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Momahaki Village Settlement Block ..	"	"	1,310 17 8	..	1,310 17 8	49 2 4	1,360 0 0
Momahaki-Waitotara ..	"	"	3,602 13 1	..	3,602 13 1	..	3,602 13 1
Waitotara-Omahine ..	"	"	3,524 1 9	..	3,524 1 9	..	3,524 1 9
Waitotara River Suspension Bridge ..	"	"	400 0 0	..	400 0 0	..	400 0 0
Road through University Reserve ..	"	"	..	..	..	..	..
Rangitikei Bridge, Mangaweka ..	"	"	..	..	..	..	..
Awarua ..	Kiitea and Rangitikei	Rangitikei	4,217 17 8	452 13 5	4,670 11 1	150 0 0	4,820 11 1
Rangitikei Bridge, Otara, £1 for £1 ..	"	"	15,050 19 5	1,680 9 3	16,731 8 8	47 6 7	17,178 5 5
Kawatana-Hautapu ..	"	"	672 13 1	..	672 13 1	655 7 0	1,327 10 1
Kawatana ..	"	"	438 16 8	..	438 16 8	1,000 0 0	1,438 16 8
Kawatana Valley Road ..	"	"	616 19 11	..	616 19 11	..	616 19 11
Kawatana Block ..	"	"	..	..	..	..	..
Kawatana Improved-farm Settlement ..	"	"	860 19 0	1,678 14 9	2,538 13 9	1,071 5 3	3,609 8 2
Otamakapua ..	"	"	1,454 4 7	400 10 3	1,854 14 0	163 10 9	2,017 4 9
Otamakapua and Waitapu ..	"	"	2,288 0 9	12 14 0	2,300 14 9	222 12 1	2,522 26 0
Ngairo Road ..	"	"	4,464 8 2	..	4,464 8 2	..	4,464 8 2
Hautapu-Ruahine ..	"	"	70 10 9	127 3 2	197 13 11	2 6 1	200 0 0
Marton 1 and 2 ..	"	"	1,359 3 10	1,013 7 2	2,372 11 0	22 9 0	2,394 10 0
Hautapu-Ruahine (Marton 1 and 2) ..	"	"	..	259 0 3	259 0 3	740 19 9	1,000 0 0
Hautapu No. 2 Block ..	"	"	899 4 9	..	899 4 9	..	899 4 9
Mangawhaririki ..	"	"	4,373 14 4	152 15 6	4,525 9 10	11 1 5	4,536 10 5
Hautapu Block ..	"	"	1,694 8 7	19 7 3	1,713 15 10	0 4 2	1,714 0 0
Hautapu ..	"	"	8,415 6 3	916 0 6	9,331 6 9	583 19 6	9,915 6 3
Hautapu No. 2 ..	"	"	1,573 0 0	..	1,573 0 0	..	1,573 0 0
Kelpie Road ..	"	"	730 9 0	176 11 8	907 0 8	123 8 4	1,030 9 0
Karewarewa Block ..	"	"	742 1 6	136 17 6	878 19 2	363 2 6	1,242 1 8
Kew ..	"	"	319 1 9	17 8 10	336 9 9	82 11 2	419 1 9
Onslow ..	"	"	..	..	..	..	..
Onslow Block ..	"	"	..	..	..	..	..
Pemberton Improved-farm Settlement ..	"	"	2,720 9 2	31 18 5	2,751 17 7	100 0 0	2,851 17 7
Pemberton-Wairaki (Pukerimu) ..	"	"	888 7 6	32 3 0	920 10 6	468 1 7	1,388 8 3
Carried forward ..	..	..	278,040 18 10	28,592 8 1	306,633 6 11	22,089 11 3	328,722 18 2

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	278,040 18 10	28,592 8 1	306,633 6 11	22,089 11 3	328,722 18 2
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Watershed Road ..	Kiwiotea	Rangitikei	1,180 3 9	..	1,180 3 9	..	1,180 3 9
Kimbolton-Wairaki ..	"	"	865 14 3	..	865 14 3	..	865 14 3
Kimbolton Road extension ..	"	"	1,008 4 11	..	1,008 4 11	..	1,008 4 11
Kimbolton Road-Oroua ..	"	"	496 2 0	..	496 2 0	..	496 2 0
Kimbolton ..	"	"	449 15 0	553 10 11	1,003 5 11	625 14 10	1,629 0 9
Conspicuous Road ..	"	"	161 3 11	698 17 1	860 1 0	2 3 8	862 4 8
Umutoi ..	"	"	196 14 1	53 5 11	250 0 0	..	250 0 0
Umutoi Block ..	"	"	550 0 0	..	550 0 0	..	550 0 0
Pakihikura ..	"	"	490 0 0	..	490 0 0	..	490 0 0
Road, Oroua River ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Aputa Road and Bridge ..	"	"	..	..	..	300 0 0	300 0 0
Waitapu Block ..	"	"	1,379 6 6	..	1,379 6 6	..	1,379 6 6
Mangiroa-Coal Creek Block ..	Kiwiotea and Pohangina	"	2,030 0 0	..	2,030 0 0	..	2,030 0 0
Main Road, Mangiroa-Coal Creek ..	"	"	..	486 7 0	486 7 0	0 1 3	486 8 3
Mangiroa-Coal Creek ..	"	"	452 2 5	..	452 2 5	..	452 2 5
Oroua Bridge ..	"	"	1,405 6 7	..	1,405 6 7	..	1,405 6 7
Apiti District ..	Pohangina	"	500 0 0	..	500 0 0	..	500 0 0
Apiti Bridge ..	"	"	..	..	..	275 0 0	275 0 0
Umutoi Table Flat ..	"	"	139 17 1	72 6 0	212 3 1	27 14 0	239 17 1
Pohangina Block ..	"	"	1,181 0 0	..	1,181 0 0	..	1,181 0 0
Tumpo Road, Apiti-Norsewood ..	"	"	366 19 5	132 17 6	499 16 11	0 5 6	500 2 5
Salisbury and Delaware Block ..	"	"	3,348 0 0	..	3,348 0 0	..	3,348 0 0
Salisbury and Delaware ..	"	"	1,669 3 10	194 7 0	1,863 10 10	5 13 0	1,869 3 10
Totara Reserve (road deviation) ..	"	"	..	..	..	200 0 0	200 0 0
Pohangina ..	"	"	3 10 0	235 17 5	239 7 5	5 12 7	245 0 0
Pohangina Valley Road ..	"	"	578 9 0	..	578 9 0	..	578 9 0
Upper Pohangina Valley ..	"	"	998 7 8	400 0 2	1,398 7 10	1 12 2	1,400 0 0
Pohangina Valley Forest Reserve ..	"	"	425 0 0	..	425 0 0	150 0 0	575 0 0
East side of Pohangina River ..	"	"	920 17 6	..	920 17 6	..	920 17 6
Oroua-Coal-Creek, Pohangina-Oroua ..	"	"	1,994 2 2	..	1,994 2 2	..	1,994 2 2
Malton ..	"	"	..	148 6 8	148 6 8	251 13 4	400 0 0
Malton Block ..	"	"	302 0 0	..	302 0 0	..	302 0 0
Norsewood-Apiti ..	Pohangina and Waipawa..	Rangitikei and Waipawa..	319 16 2	1,099 18 7	1,419 14 9	15 4 10	1,434 19 7
Bridge Approach, Orepuhi ..	Rangitikei and Oroua ..	Manawatu and Rangitikei	150 0 0	..	150 0 0	..	150 0 0
Manawatu Gorge ..	Oroua and Pahiatua	Pahiatua and Palmerston	117,236 6 4	..	117,236 6 4	..	117,236 6 4
Palmerston North Forest Reserve ..	"	"	877 9 5	..	877 9 5	..	877 9 5
Blocks V., VI., IX., X., and XIII., Kairanga Survey District, Palmerston North, 24 miles, to open 8,582 acres	Oroua	Palmerston "	1,524 7 2	..	1,524 7 2	..	1,524 7 2
Carried forward	..	..	421,740 18 0	32,663 2 4	454,409 0 4	23,950 6 5	478,359 6 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities Contracts, &c. 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	421,740 18 0	32,668 2 4	454,409 0 4	23,950 6 5	478,359 6 9
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Fitzherbert Bridge, £1 for £1 (to account)	Oroua	Palmerston	3,738 8 0	1,000 0 0	3,738 8 0	..	1,000 0 0
Blocks V., VI., IX., and XIII., Kairanga Survey District, Palmerston North	"	"	..	..	..	..	3,738 8 0
Kairanga Drain ..	"	"	851 8 4	..	851 8 4	..	851 8 4
Repairs, Fitzherbert Bridge ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Roads in Fitzherbert Block ..	"	"	1,050 5 3	..	1,050 5 3	..	1,050 5 3
Roads, Fitzherbert Block ..	"	"	400 0 0	..	400 0 0	..	400 0 0
Lower Gorge Bridge (to account of contribution, £2,000)	"	"	..	..	..	1,500 0 0	1,500 0 0
Alfredton-Weber Road ..	Wairarapa North and Pa-tangata	Pahiatua	24,997 0 1	3,051 2 3	28,048 2 4	480 11 9	28,528 14 1
Akitio Improved-farm Settlement	..	..	2,875 14 8	1,776 17 1	4,652 11 9	62 6 10	4,714 18 7
Seventy-mile Bush ..	Pahiatua and Waipawa	Pahiatua and Waipawa	61,326 5 7	..	61,326 5 7	..	61,326 5 7
Makairo-Kumeroa ..	"	"	40 15 0	257 11 9	298 6 9	342 8 3	61,640 15 0
Pahiatua-Palmerston North ..	"	"	2,581 12 7	..	2,581 12 7	..	2,581 12 7
Pahiatua-Palmerston ..	"	"	159 11 8	142 5 6	301 17 2	657 14 6	959 11 8
Mangatoro Valley ..	"	"	5,317 13 11	256 18 0	5,574 11 11	43 2 0	5,617 13 11
Aohanga-Waewaepa Road ..	"	"	377 11 11	..	377 11 11	..	377 11 11
Upper Manawatu Gorge Road ..	"	"	22 8 1	..	22 8 1	..	22 8 1
Upper Manawatu Roads ..	"	"	794 0 0	185 18 0	185 18 0	614 2 0	800 0 0
Hall Special Settlement ..	"	"	1,196 16 8	144 17 3	1,341 13 11	..	1,341 13 11
Hall Association Block ..	"	"	3,762 2 7	330 18 0	4,093 0 7	355 2 9	1,696 16 8
Balance-Manawatu Gorge ..	"	"	34 2 6	..	34 2 6	91 6 2	4,184 6 9
Makairo Road ..	"	"	134 0 3	..	134 0 3	..	134 0 3
Mangatoro Township (telling)	"	"	131 0 0	..	131 0 0	..	131 0 0
Coonor Block ..	"	"	..	..	..	200 0 0	200 0 0
Coonor Association ..	"	"	1,807 0 10	564 6 1	2,371 6 11	235 13 11	2,607 0 10
Coonor Farm Homestead Association	"	"	..	..	..	..	..
Woodville-Aohanga ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Waewaepa, £1 for £1 ..	"	"	425 0 0	206 3 10	206 3 10	98 16 2	300 0 0
Toritea Road ..	"	"	..	..	..	..	425 0 0
Toritea-Makuri ..	"	"	212 3 11	212 3 11	212 3 11	487 16 1	700 0 0
Tiraumea North ..	"	"	218 7 4	..	218 7 4	..	218 7 4
Kaitawa Ridge Road ..	"	"	4 4 0	362 6 4	366 10 4	33 9 8	400 0 0
Man'garamarama Road ..	"	"	1,610 14 2	..	1,610 14 2	..	1,610 14 2
Thompson's ..	"	"	261 10 0	..	261 10 0	..	261 10 0
Tiraumea-Makuri ..	"	"	238 10 0	..	238 10 0	..	238 10 0
Tiraumea Bridge (Subsidy, Hull's Crossing)	"	"	..	..	..	..	..
Tiraumea Bridge (Subsidy, Hull's Crossing)	"	"	..	..	..	..	..
Carried forward ..	..	..	536,747 1 5	41,159 10 4	577,906 11 9	29,147 16 6	607,054 8 3

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1888.	Net Expenditure during 12 Months ended 31st March, 1889.	Total Net Expenditure to 31st March, 1889.	Liabilities on Authorities, Contracts, &c., 31st March, 1889.	Total Net Expenditure and Liabilities.
Brought forward ..	..	..	£ s. d. 536,747 1 5	£ s. d. 41,159 10 4	£ s. d. 577,906 11 9	£ s. d. 29,147 16 6	£ s. d. 607,054 8 3
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Mangatainoka Bridge, at Tutaeakara Crossing, £1 for £1	Pahiatua	..	..	3 12 0	3 12 0	596 8 0	600 0 0
Makuri, Section 12, Block X.	"	"	..	..	..	50 0 0	50 0 0
McKenzie Special Settlement Block (Tutaekara Railway-station)	"	"	..	..	..	150 0 0	150 0 0
Ngaturi-Aohanga ..	"	"	..	..	..	350 0 0	350 0 0
Nikau-Omata ..	"	"	..	..	..	100 0 0	100 0 0
Ohinereia Road ..	"	"	..	..	..	50 0 0	50 0 0
Pahiatua-Railway-station (repairs) £1 for £1	"	"	..	96 0 0	96 0 0	204 0 0	300 0 0
Tutaekara-Nikau ..	"	"	..	..	..	100 0 0	100 0 0
Upper Tiraumea Valley ..	"	"	..	..	..	250 0 0	250 0 0
Ballance Bridge (to account) ..	"	"	..	..	..	300 0 0	300 0 0
Mangatainoka River Bridge, Hamua (to account)	"	"	..	..	..	300 0 0	300 0 0
Tiraumea Bridge—Maturi contribution ..	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Tiraumea Bridge ..	"	"	2,244 10 10	..	2,244 10 10	..	2,244 10 10
Tiraumea Valley Road ..	"	"	886 19 4	125 2 8	1,012 2 0	274 17 4	1,286 19 4
Mangatainoko Roads ..	"	"	5,411 18 3	..	5,411 18 3	..	5,411 18 3
Mangahao Bridge ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Mangatainoka Bridge ..	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Mangatainoka, on Bridge Road ..	"	"	819 7 10	..	819 7 10	..	819 7 10
Makakahi Road ..	"	"	624 5 8	403 14 4	1,028 0 0	..	1,028 0 0
Bridges Road to Makakahi ..	"	"	316 12 6	..	316 12 6	..	316 12 6
Makakahi Bridge to Mangahao ..	"	"	1,609 0 8	..	1,609 0 8	..	1,609 0 8
South Pahiatua Road ..	"	"	7,593 9 3	117 9 2	7,710 18 5	82 10 10	7,793 9 3
Upper Makuri Valley Road ..	"	"	400 0 0	..	400 0 0	..	400 0 0
Te Aupapa Road and Makuri Bridge ..	"	"	..	13 8 9	13 8 9	46 11 3	60 0 0
Makuri Township ..	"	"	733 11 8	..	733 11 8	..	733 11 8
Makuri Township (unsold) ..	"	"	295 0 0	..	295 0 0	..	295 0 0
Makuri Bridge, near Township ..	"	"	3,925 8 4	..	3,925 8 4	..	3,925 8 4
Makuri Gorge Road ..	"	"	311 1 6	..	311 1 6	..	311 1 6
Tutaekura Road ..	"	"	1,287 11 3	99 0 3	1,386 11 3	..	1,386 11 3
Towai Road ..	"	"	675 19 9	..	675 19 9	..	675 19 9
Waivera Block ..	"	"	1,521 10 1	..	1,521 10 1	..	1,521 10 1
Waivera ..	"	"	..	..	..	240 0 0	240 0 0
Mount Marchant Road, £1 for £1	"	"	200 0 0	..	200 0 0	..	200 0 0
Mangone Valley ..	"	"	96 16 9	..	96 16 9	..	96 16 9
Carried forward ..	..	..	568,200 0 1	42,017 17 6	610,217 17 7	32,242 3 11	642,460 1 6

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
Brought forward							
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Mangeone-Tiraumea .. .. .	..	Pahiatua-Masterton ..	£ 568,200 0 1	£ s. d. 42,017 17 6	£ 610,217 17 7	£ s. d. 32,242 3 11	£ s. d. 642,460 1 6
Pori .. .. .	..	Pahiatua-Masterton ..	1,246 4 6	..	1,246 4 6	..	1,246 4 6
Tiraumea River Road-Pa Valley Road ..	..	" ..	150 0 0	..	150 0 0	..	150 0 0
Makuri-Pongaroa .. .. .	..	" ..	413 7 10	28 17 0	413 7 10	371 3 0	413 7 10
Makuri-Aohanga Road (Rakanui) .. .. .	..	Pahiatua ..	10,406 4 1	3,210 4 9	13,616 8 10	39 15 3	13,656 4 1
Puketoi .. .. .	..	" ..	3,040 6 11	1,382 15 5	4,423 2 4	17 18 5	4,441 0 9
Puketoi-Aohanga .. .. .	..	Masterton and Pahiatua ..	12,374 18 9	..	12,374 18 9	..	12,374 18 9
Pangaitioka Valley .. .. .	..	" ..	..	50 15 0	50 15 0	65 5 0	116 0 0
Mangaitioka Valley .. .. .	..	" ..	19,317 15 2	397 11 0	19,317 15 2	..	19,317 15 2
North Wairarapa (flood damages, £1 for £1)	..	Masterton ..	..	..	..	102 9 0	500 0 0
Rising Sun Association .. .. .	..	Masterton and Pahiatua ..	200 0 0	..	200 0 0	..	200 0 0
Pahiatua No. 1 .. .. .	..	Pahiatua ..	900 14 7	778 19 11	1,679 14 6	45 5 6	1,725 0 0
Pahiatua No. 2 .. .. .	..	" ..	1,297 19 5	498 6 11	1,796 6 4	3 13 8	1,800 0 0
Pahiatua No. 3 .. .. .	..	" ..	1,201 8 1	597 0 5	1,798 8 6	2 19 7	1,801 8 1
Aohanga, Waiowaka .. .. .	..	" ..	748 10 6	651 6 4	1,399 16 10	0 3 2	1,400 0 0
Kaikoura Farm Homestead Settlement Roads	..	" ..	..	..	..	300 0 0	300 0 0
Pongaroa School Road (metalling)	..	" ..	..	..	..	200 0 0	200 0 0
Section 183, Block IV. Aohanga-Aohanga Valley	..	" ..	..	..	..	100 0 0	100 0 0
Waihi-Akitio .. .. .	..	" ..	..	24 1 11	24 1 11	200 0 0	200 0 0
Waiowaka Road Extension .. .. .	..	" ..	..	..	..	175 18 1	200 0 0
Waihoku Valley .. .. .	..	" ..	..	..	..	200 0 0	200 0 0
Waiatukaka, near Pongaroa .. .. .	..	" ..	..	..	..	150 0 0	150 0 0
Makuri-Pongaroa Bridges (to account)	..	" ..	..	..	..	300 0 0	300 0 0
Shipping Shed, Aohanga, East Coast	..	" ..	..	..	..	400 0 0	400 0 0
Waihi .. .. .	..	" ..	..	..	..	200 0 0	200 0 0
Masterton Reform Association .. .. .	..	" ..	678 7 2	267 15 6	946 2 8	32 4 6	978 7 2
Mangatiti Improved-farm Settlement	..	" ..	968 5 10	284 19 6	1,253 5 4	215 0 6	1,468 5 10
Aohanga Gorge Road .. .. .	..	" ..	952 11 8	1,166 12 4	2,119 4 0	280 16 0	2,400 0 0
Rakanui-Makuri-Pongaroa Junction	..	" ..	757 5 9	1,217 16 11	1,975 2 8	182 3 1	2,157 5 9
Pahiatua No. 4 .. .. .	..	" ..	..	..	..	..	..
Road to Native Land K, No. 2	..	" ..	347 5 0	242 3 3	589 8 3	57 16 9	647 5 0
Upper Mangatiti Road .. .. .	..	" ..	..	56 13 0	56 13 0	98 7 0	150 0 0
Christchurch Farm-homestead Block	..	" ..	1,369 13 10	..	1,369 13 10	..	1,369 13 10
Christchurch Association .. .. .	..	" ..	210 0 9	221 9 10	431 10 7	528 10 2	960 0 9
Puketoi-Aohanga Block .. .. .	..	" ..	304 14 5	8 12 0	313 6 5	5 13 7	319 0 0
Mecalickstone .. .. .	..	" ..	76 6 4	299 1 3	375 7 7	200 18 9	576 6 4
Mecalickstone Farm-homestead Block	..	" ..	1,503 0 0	..	1,503 0 0	..	1,503 0 0
Carried forward	..	..	626,665 0 8	53,402 19 9	680,068 0 5	36,713 4 11	716,781 5 4

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	626,665 0 8	53,402 19 9	680,068 0 5	36,713 4 11	716,781 5 4
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Hua .. .. .	Wairarapa North	Pahiatua .. .. .	1,354 14 10	268 11 9	1,623 6 7	59 8 3	1,682 14 10
Mangatainoka River Bridge (Newman-Stirling), on account .. .. .	"	"	.. .. .	.. .. .	.. .. .	200 0 0	200 0 0
East Puketoi .. .. .	"	Pahiatua and Masterton .. .. .	2,681 8 0	742 3 3	2,681 8 0	.. .. .	2,681 8 0
Burling's-Mecalikstone .. .. .	"	"	327 1 6	92 19 4	1,069 4 9	7 16 9	1,077 1 6
Smith's Footbridge-Totara Reserve .. .. .	"	Masterton .. .. .	.. .. .	.. .. .	92 19 4	7 0 8	100 0 0
Hukunui to Hawera, £1 for 10s. .. .. .	"	"	500 0 0	.. .. .	500 0 0	.. .. .	500 0 0
Hukunui-Masterton Special Settlement .. .. .	"	"	.. .. .	237 6 1	237 6 1	2 13 11	300 0 0
Port Road, Puketoi and Tiramea Bridge and Road, Napier's Crossing .. .. .	"	"	900 0 0	.. .. .	900 0 0	.. .. .	900 0 0
Kakariki Block .. .. .	"	"	1,562 0 0	.. .. .	1,562 0 0	.. .. .	1,562 0 0
Kakariki Special Settlement .. .. .	"	"	.. .. .	287 2 3	287 2 3	112 17 9	400 0 0
Stirling Block .. .. .	"	"	1,191 14 9	.. .. .	1,191 14 9	.. .. .	1,191 14 9
Newman-Sterling .. .. .	"	"	300 0 0	300 0 0	600 0 0	.. .. .	600 0 0
Waipoua River Bridge .. .. .	"	"	.. .. .	.. .. .	.. .. .	200 0 0	200 0 0
Tararua .. .. .	"	"	123 6 0	.. .. .	123 6 0	.. .. .	123 6 0
Eketahuna County roads (flood-damages) .. .. .	"	"	200 0 0	.. .. .	200 0 0	.. .. .	200 0 0
Wellington Settlement-Forest Reserve .. .. .	"	"	200 0 0	.. .. .	200 0 0	.. .. .	200 0 0
Eketahuna-Sterling .. .. .	"	"	297 19 1	.. .. .	297 19 1	.. .. .	297 19 1
Te Maru .. .. .	"	"	.. .. .	.. .. .	.. .. .	400 0 0	400 0 0
Mangaone Bridge .. .. .	"	"	252 7 3	.. .. .	252 7 3	.. .. .	252 7 3
Eketahuna-Parkville .. .. .	"	"	{ 300 0 0	.. .. .	300 0 0	.. .. .	300 0 0
Parkville-Mangatainoka .. .. .	"	"	{ 200 0 0	.. .. .	200 0 0	.. .. .	200 0 0
Ihura Valley Road .. .. .	"	"	300 0 0	.. .. .	300 0 0	.. .. .	300 0 0
Eketahuna-Alfredton .. .. .	"	"	50 0 0	50 0 0	100 0 0	.. .. .	150 0 0
Flat Bush Road .. .. .	"	"	.. .. .	.. .. .	.. .. .	.. .. .	50 0 0
Kakaamu .. .. .	"	"	.. .. .	.. .. .	.. .. .	200 0 0	200 0 0
Kuware .. .. .	"	"	.. .. .	.. .. .	.. .. .	130 0 0	130 0 0
Lang's Section, Wairere (Dagg's Road), £1 for £1 .. .. .	"	"	.. .. .	.. .. .	.. .. .	150 0 0	150 0 0
Mangamahoe-Panemango .. .. .	"	"	.. .. .	.. .. .	.. .. .	250 0 0	250 0 0
Mangaparapa, £1 for £1 .. .. .	"	"	.. .. .	.. .. .	.. .. .	100 0 0	100 0 0
Mount Baker (Tawataia Tollgate), Mangamahoe .. .. .	"	"	.. .. .	.. .. .	.. .. .	200 0 0	200 0 0
Tawataia Road .. .. .	"	"	.. .. .	.. .. .	.. .. .	250 0 0	250 0 0
Tinui Valley .. .. .	"	"	.. .. .	.. .. .	.. .. .	150 0 0	150 0 0
West Road .. .. .	"	"	.. .. .	.. .. .	.. .. .	100 0 0	100 0 0
Tiramea Bridge No. 1 (Edwards's Crossing) .. .. .	"	"	.. .. .	.. .. .	.. .. .	200 0 0	200 0 0
South Mangaone Road .. .. .	"	"	214 7 4	.. .. .	214 7 4	150 0 0	150 0 0
Mangaone (Norling's) .. .. .	"	"	138 13 6	.. .. .	.. .. .	100 0 0	214 7 4
Carried forward .. .. .	..	..	637,758 12 11	55,502 8 11	693,261 1 10	39,933 2 3	733,194 4 1

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward.	..	..	637,758 12 11	55,502 8 11	693,261 1 10	89,933 2 3	733,194 4 1
ROADS, BRIDGES, ETC.—continued.	Wairarapa North	Masterton	3,539 1 9	..	3,539 1 9	..	3,539 1 9
WELLINGTON LAND DISTRICT—continued.	"	"	100 0 0	..	100 0 0	..	100 0 0
Mount Baker (Pioneer)	"	"	239 0 0	5 0 0	244 0 0	66 0 0	310 0 0
Mount Baker Valley	"	"	..	217 7 9	217 7 9	82 12 3	300 0 0
Mangaoronga Road	"	"	..	7 6 10	1,174 0 0	..	1,174 0 0
Kaiparoro	"	"	1,166 13 2	..	1,174 0 0	..	1,174 0 0
Kaiparoro Block ..	"	"	50 0 0	..	50 0 0	..	50 0 0
Kaiparoro No. 2 Block	"	"	453 0 10	96 19 2	550 0 0	..	550 0 0
Barton's Road	"	"	..	..	..	200 0 0	200 0 0
Barton's Road—Mangamahoe Junction	"	"	..	..	..	150 0 0	150 0 0
Barton's Road—McQuarrie's Boundary	"	"	..	..	..	200 0 0	200 0 0
Bideford Road <i>via</i> Mangapeka, £1 for £1	"	"	103 10 8	..	103 10 8	150 0 0	253 10 8
Bowen's Road—Hastwell	"	"	4,118 0 7	..	4,118 0 7	..	4,118 0 7
Rangituman Block	"	"	200 0 0	..	200 0 0	..	200 0 0
Mauriceville roads (storm-damages)	"	"	652 1 2	..	652 1 2	..	652 1 2
Mauriceville West	"	"	1,022 15 3	..	1,022 15 3	..	1,022 15 3
Mangamahoe Road	"	"	..	353 8 4	353 8 4	146 11 8	500 0 0
Mikimiki Bridge ..	"	"	150 0 0	..	100 0 0	..	100 0 0
Driscoll's Road	"	"	1,077 11 7	50 0 0	1,127 11 7	..	1,127 11 7
Dagg's Road	"	"	350 0 0	..	350 0 0	..	350 0 0
Barton's Road—Wairere	"	"	..	..	..	380 0 0	380 0 0
Cleland's Road	"	"	..	..	..	450 0 0	450 0 0
Wingate Road	"	"	..	..	..	180 0 0	180 0 0
Tenui Bridge (contribution)	"	"	392 4 7	18 5 2	410 9 9	25 10 3	436 0 0
Alfredton-Tenui (contribution)	"	Wairarapa and Masterton	135 12 6	..	135 12 6	..	135 12 6
Te Mara Block	"	"	135 9 5	181 8 6	316 17 11	183 2 1	500 0 0
Mikimiki	"	"	100 0 0	..	100 0 0	100 0 0	200 0 0
Dannevirke-Centennial Block	"	"	..	4 3 0	4 3 0	195 17 0	200 0 0
Uruti-Castlepoint	"	Wairarapa	..	..	..	150 0 0	150 0 0
Kaiwhata, Run 49	"	"	..	..	..	..	..
Small grazing-run 51, Rewa S.D.	"	"	100 0 0	..	100 0 0	..	100 0 0
Tenui Bridge and Road (contribution)	"	"	..	..	..	600 0 0	600 0 0
Kaiwhata Run (near Brancepeth)	"	"	200 0 0	33 13 6	233 13 6	16 6 6	250 0 0
Taneru Bridge (Masterton—East Coast), £1 for £1 (to account)	"	"	..	..	..	150 0 0	150 0 0
Kaiwhata Rewa ..	"	Wairarapa, Masterton, and Pahiatua	1,500 0 0	..	1,500 0 0	..	1,500 0 0
Craigie Lee (Douglas Road)	"	"	..	..	..	62 19 2	1,770 12 6
Wairarapa East ..	"	Wairarapa	1,270 12 6	437 0 10	1,707 13 4	233 14 3	1,930 0 0
Kaiwhata Valley, Kaiwhata, and Pahaoa	"	"	432 4 0	464 1 9	896 5 9	..	1,390 0 0
Kaitangata	"	"	..	..	..	..	..
Carried forward	..	..	655,246 10 11	57,471 3 9	712,717 14 8	43,655 15 5	756,373 10 1

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contractors, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. ..	..	..	655,246 10 11	57,471 3 9	712,717 14 8	43,655 15 5	756,373 10 1
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Kaitangata Block .. ..	Wairarapa South	Wairarapa	656 0 0	..	656 0 0	..	656 0 0
Ruamahanga Bridge .. ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Ruamahanga Bridge (£1 for £1), Masterton-Gladstone Road .. ..	"	"	..	500 0 0	500 0 0	..	500 0 0
Ruamahanga Bridge (Taratahi—Carterton) flood-damages .. ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Cameron's-Pahaoa .. ..	"	"	..	..	..	200 0 0	200 0 0
Gladstone-Flat Pont .. ..	"	"	..	..	..	300 0 0	300 0 0
Mangatarere .. ..	"	"	..	..	..	150 0 0	150 0 0
Range Road .. ..	"	"	..	..	..	150 0 0	150 0 0
Wharau-Kawhata .. ..	"	"	..	..	..	300 0 0	300 0 0
Jackson's Creek Bridge (East Coast Main Road)	"	"	..	..	..	200 0 0	200 0 0
Sutherland's Bridge (subsidy)	"	"	581 6 11	..	581 6 11	50 0 0	50 0 0
Waiohine Bridge (Matarawa) .. ..	"	"	532 18 4	..	532 18 4	..	532 18 4
Waiohine Bridge .. ..	"	"	13 15 6	..	13 15 6	..	13 15 6
Bridge over Waiohine .. ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Gladstone-East Coast (restoring) .. ..	"	"	300 0 0	..	300 0 0	..	300 0 0
Wainuioru-East Coast .. ..	"	"	150 0 0	50 0 0	200 0 0	170 0 0	370 0 0
Turner's Road-Wainuioru .. ..	"	"	250 0 0	119 16 11	250 0 0	50 0 0	300 0 0
Rocky Hill-Wainuioru .. ..	"	"	..	..	119 16 11	180 3 1	300 0 0
Waiohine .. ..	"	"	..	250 0 0	250 0 0	..	250 0 0
Flat Point Road .. ..	"	"	1,430 7 9	..	1,430 7 9	..	1,430 7 9
Sandon Township .. ..	Manawatu	Manawatu	0 18 0	..	0 18 0	..	0 18 0
Manawatu Bridge at Foxton .. ..	Manawatu and Horowhenua	"	..	..	..	1,500 0 0	1,500 0 0
Manawatu, Wirokino Bridge, £1 for £1 (to account)	"	"	..	..	..	1,000 0 0	1,000 0 0
Otaki Bridge (to account) .. ..	"	Otaki	599 10 9	..	599 10 9	..	599 10 9
Foxton-Otaki (inland) .. ..	"	Manawatu and Otaki	512 2 8	..	512 2 8	..	512 2 8
Otaki-Foxton .. ..	"	"	450 0 0	280 0 0	730 0 0	270 0 0	1,000 0 0
Bridges over Tokomaru, Ohau, Waikawa, and Otaki Rivers (contribution) .. ..	Horowhenua ..	"	107 0 0	..	107 0 0	..	107 0 0
Crossing at Levin .. ..	"	Manawatu	..	..	..	150 0 0	150 0 0
Road through Ihakara's Reserve (Levin) .. ..	"	"	440 0 0	..	440 0 0	..	440 0 0
Horowhenua 11B .. ..	"	Otaki	..	..	..	400 0 0	400 0 0
Waikanae-Te Horo .. ..	"	"	..	70 0 0	70 0 0	..	70 0 0
Ohau Low Level Bridge .. ..	"	"	510 0 0	..	510 0 0	..	510 0 0
Mount Holdsworth Road .. ..	Horowhenua and Wairarapa South	Otaki and Wairarapa	..	..	..	..	..
Mount Holdsworth tracks .. ..	Ditto	Masterton	233 18 5	..	233 18 5	366 1 7	600 0 0
Wellington Fruit-growers Association Block .. ..	Horowhenua and Hutt	Otaki	1,433 0 0	..	1,433 0 0	..	1,433 0 0
Carried forward .. ..	..	..	663,813 10 10	58,974 19 1	722,788 9 11	49,092 0 1	771,880 10 0

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward.	..	..	663,813 10 10	58,974 19 1	722,788 9 11	49,092 0 1	771,880 10 0
ROADS, BRIDGES, ETC.—continued.							
WELLINGTON LAND DISTRICT—continued.							
Paikakariki-Waikanae-Hadfield ..	Horowhenua and Hutt	..	1,653 7 11	500 0 0	2,153 7 11	..	2,153 7 11
Waikanae to Hutt Road ..	"	..	1,735 3 2	.. 0 0	1,735 3 2	..	1,735 3 2
Akatarawa-Waikanae ..	"	..	..	100 0 0	100 0 0	50 0 0	150 0 0
Mungaroa to Waikanae ..	"	..	4,523 2 11	..	4,523 2 11	..	4,523 2 11
Whiteman's Valley Road ..	Hutt	..	400 0 0	100 0 0	500 0 0	..	500 0 0
Moonshine ..	"	..	100 0 0	..	100 0 0	100 0 0	200 0 0
Belmont S.D. to Sections 236-237, Block X.	"	..	..	..	..	50 0 0	50 0 0
Hutt to Lowry Bay ..	"	..	290 0 0	..	290 0 0	..	290 0 0
Mangaroa Valley ..	"	..	..	..	..	200 0 0	200 0 0
Paikakariki-Paraparaumu (to account) ..	"	..	..	..	..	500 0 0	500 0 0
Paparangi Estate Road ..	"	..	..	..	..	36 0 0	36 0 0
Sections 48 and 56, Block V., Rimutaka	"	..	..	..	..	100 0 0	100 0 0
Karori Road ..	"	..	153 1 8	..	153 1 8	..	153 1 8
Korokoro Settlement Roads ..	"	..	..	..	..	400 0 0	400 0 0
Ngauranga-Horokiwi ..	"	..	..	100 0 0	100 0 0	..	100 0 0
Otawhao Road ..	Waipawa	..	400 0 0	..	400 0 0	..	400 0 0
Waitangi Bridge (Chatham Islands) ..	"	..	326 14 10	..	326 14 10	..	326 14 10
Village Settlements (see also General) ..	"	..	307 13 6	561 12 0	869 5 6	142 10 7	1,011 16 1
Chatham Islands roads ..	"	..	..	1 10 0	1 10 0	98 10 0	100 0 0
To purchase roads to Crown lands ..	"	..	519 10 7	..	519 10 7	..	519 10 7
Grant in aid for bridge over Manawatu River	"	..	3,198 15 1	..	3,198 15 1	..	3,198 15 1
Sundry roads, Wellington ..	"	..	347 1 11	..	347 1 11	..	347 1 11
South End, North Island Main Trunk Railway	"	..	38,205 16 0	..	38,205 16 0	..	38,205 16 0
Tools, &c. ..	"	..	504 9 8	..	504 9 8	..	504 9 8
Miscellaneous and Engineering ..	"	..	7,745 3 4	150 13 7	7,895 16 11	679 6 5	8,575 3 4
Total, Wellington Land District	..	..	724,223 11 5	60,488 14 8	784,712 6 1	51,448 7 1	836,160 13 2
NELSON LAND DISTRICT—							
Ferntown-Pakawan ..	Collingwood	..	250 0 0	..	250 0 0	..	250 0 0
Clifton-Pohara Beach ..	"	..	507 1 1	59 9 6	567 10 6	40 10 6	607 1 1
Collingwood-Quartz Ranges ..	"	..	4,699 7 5	..	4,699 7 5	..	4,699 7 5
Aore Valley-Karamia ..	"	..	364 0 0	..	364 0 0	..	364 0 0
Mackay Pass Road ..	"	..	4,733 6 5	..	4,733 6 5	..	4,733 6 5
Takaka-Anatoki and Collingwood	"	..	2,000 0 0	..	2,000 0 0	..	2,000 0 0
Takaka Valley ..	"	..	..	..	..	..	..
Carried forward	..	..	12,553 14 11	59 9 6	12,613 4 5	40 10 6	12,653 14 11

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities' Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward ..	..	..	12,553 14 11	59 9 6	12,613 4 5	40 10 6	12,653 14 11
ROADS, BRIDGES, ETC.—continued.							
NELSON LAND DISTRICT—continued.							
Takaka Tramway ..	Collingwood	Motueka	8,000 0 0	..	8,000 0 0	..	3,000 0 0
Takaka-Riwaka and Collingwood ..	"	"	1,550 0 0	75 5 0	1,625 5 0	..	1,625 5 0
Takaka-Stockyard ..	"	"	257 14 1	..	257 14 1	..	257 14 1
Takaka-Riwaka ..	"	"	124 15 0	..	124 15 0	..	124 15 0
Takaka Road ..	"	"	21 6 0	..	21 6 0	..	21 6 0
Takaka roads and bridges ..	"	"	231 11 0	..	231 11 0	52 14 6	284 5 6
East Takaka Road ..	"	"	127 0 0	..	127 0 0	..	127 0 0
Takaka-Karamea ..	"	"	289 3 4	..	289 3 4	..	289 3 4
Pekawau-Tamatea ..	"	"	..	..	..	300 0 0	300 0 0
Motupipi River Bridge ..	"	"	..	..	..	300 0 0	300 0 0
Takaka River protective-works ..	"	"	..	500 0 0	500 0 0	..	500 0 0
Waimea County roads and bridges ..	Waimea	City of Nelson and Motueka	650 0 0	..	650 0 0	..	650 0 0
Marahau Valley ..	"	Motueka	100 0 0	..	100 0 0	..	100 0 0
Sandy Bay ..	"	"	300 0 0	..	300 0 0	..	300 0 0
Riwaka, Sandy Bay ..	"	"	30 0 0	..	30 0 0	100 0 0	130 0 0
Riwaka Bridge ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Riwaka Valley Road ..	"	"	600 0 0	..	600 0 0	..	600 0 0
Riwaka Valley Track ..	"	"	60 0 0	..	60 0 0	..	60 0 0
Little Sydney Road ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Little Sydney Road, Riwaka ..	"	"	62 12 6	..	62 12 6	..	62 12 6
Little Sydney Road and branch track ..	"	"	90 16 2	9 3 10	100 0 0	..	100 0 0
Rawson's Creek, Riwaka ..	"	"	..	25 7 0	25 7 0	24 13 0	50 0 0
Brooklands Valley Road ..	"	"	178 6 6	..	178 6 6	..	178 6 6
Brooklyn Valley Road ..	"	"	50 0 0	19 15 0	69 15 0	30 5 0	100 0 0
Motueka River Protection ..	"	"	100 0 0	85 0 0	185 0 0	115 0 0	300 0 0
Tracks, Mount Arthur ..	"	"	391 16 8	101 8 9	493 0 0	7 0 0	500 0 0
Roads, Lower Moutere (flood-damages) ..	"	"	1,661 18 10	..	1,661 18 10	..	1,661 18 10
Motueka-Waiwera Valley ..	"	"	26 1 1	73 18 11	100 0 0	..	100 0 0
Ngatimoti Bridge ..	"	"	604 7 11	..	604 7 11	..	604 7 11
Graham River Bridge ..	"	"	125 0 0	..	125 0 0	..	125 0 0
Baton-Karamea ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Orinoco-Rosedale ..	"	"	963 14 0	..	963 14 0	..	963 14 0
Lloyds Valley Road ..	"	"	250 0 0	..	250 0 0	..	250 0 0
Wangamoa ..	"	"	..	85 15 11	85 15 11	14 4 1	100 0 0
Nelson-Blenheim (Nelson end) ..	"	Nelson	..	..	..	150 0 0	150 0 0
Norris's Gully-Stewart's ..	"	Motueka	..	80 0 0	80 0 0	20 0 0	100 0 0
Riwaka Valley ..	"	"	..	..	..	100 0 0	100 0 0
School Hill-Ngatimoti ..	"	"	..	..	..	500 0 0	500 0 0
Tadmor Valley ..	"	"	..	..	..	..	..
Carried forward ..	..	..	25,199 17 7	1,114 18 11	26,314 16 6	1,904 7 1	28,219 8 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	25,199 17 7	1,114 18 11	26,314 16 6	1,904 7 1	28,219 3 7
NELSON LAND DISTRICT—continued.	..	..					
Roads, Bridges, ETC.—continued.	..	..					
Upper Moutere Roads	Waimaea	Motueka	..	..	..	50 0 0	50 0 0
Croixelles-Elaine's Bay	"	Nelson	..	..	..	100 0 0	100 0 0
Matat Valley Bridge	"	"	..	..	..	200 0 0	200 0 0
Wairoa (Brightwater Bridge)	"	"	..	..	..	250 0 0	250 0 0
Wairoa Bridge, £1 for £1 (to account)	"	Nelson and Motueka	..	..	..	250 0 0	250 0 0
Dovedale	"	Motueka	560 0 0	..	560 0 0	..	560 0 0
Dove River Bridge	"	"	200 0 0	..	200 0 0	..	200 0 0
Quail Valley	"	"	100 0 0	..	100 0 0	50 0 0	150 0 0
Pigeon Valley—Dovedale	"	"	430 0 0	..	430 0 0	..	430 0 0
Pigeon Valley—Motueka	"	"	709 4 6	..	709 4 6	..	709 4 6
Aniseed Valley Road	"	"	..	142 3 9	142 3 9	57 16 3	200 0 0
Wakefield—Stanley Brook	"	"	600 0 0	100 0 0	700 0 0	..	700 0 0
Neudorf—Dovedale	"	Motueka and City of Nelson	50 0 0	..	50 0 0	50 0 0	100 0 0
Waimaea West	"	City of Nelson	100 0 0	..	100 0 0	..	100 0 0
Okiwi-Ronga	"	"	50 0 0	..	50 0 0	..	50 0 0
Port-Stoke, Rocks Road	"	"	1,531 8 0	..	1,531 8 0	..	1,531 8 0
Maitai Road	"	"	199 0 5	100 1 0	299 1 5	199 19 0	499 0 5
Bridge over Wairoa in Waimaea District	"	Motueka	3 18 0	..	3 18 0	..	3 18 0
Wairoa Bridge	"	"	150 0 0	..	150 0 0	..	150 0 0
Wairoa Gorge Road	"	"	1,082 18 9	50 0 0	1,082 18 9	50 0 0	1,132 18 9
Wakefield District	"	"	160 0 0	..	160 0 0	..	160 0 0
Trass Valley	"	"	160 0 0	..	160 0 0	..	160 0 0
Pretty Bridge Valley	"	"	200 0 0	..	200 0 0	..	200 0 0
Wakefield, Quail Valley	"	"	100 0 0	..	100 0 0	..	100 0 0
Tadmor-Motupiko	"	"	..	..	..	300 0 0	300 0 0
Tadmor and Sherry to Buller	"	"	5,482 16 11	..	5,482 16 11	..	5,482 16 11
Riwaka-Takaka Hill	Waimaea and Collingwood	"	..	..	..	100 0 0	100 0 0
Oparara River	Buller	"	355 11 6	..	355 11 6	..	355 11 6
Mudflat-Karamea	"	"	200 0 0	..	200 0 0	..	200 0 0
Mokihinui-Karamea	"	"	1,812 8 6	..	1,812 8 6	..	1,812 8 6
Karamea-Mokihinui	"	"	..	..	..	..	..
Granity Creek—Ngakawau	"	Buller	200 0 0	..	200 0 0	150 0 0	350 0 0
Torea southwards	"	"	500 0 0	..	500 0 0	..	500 0 0
Track (railway)—Mileron	"	"	..	..	..	..	..
Seddonville Cemetery	"	"	..	..	..	..	..
Fairdown—Waimangaroa	"	"	17,725 18 9	..	17,725 18 9	..	17,725 18 9
Westport—Lyell	"	"	1,115 16 4	..	1,115 16 4	..	1,115 16 4
Nile Bridge	"	Grey	100 0 0	..	100 0 0	..	100 0 0
Fox River Bridge	"	"	..	..	..	..	..
Carried forward	..	..	59,028 19 3	1,507 3 8	60,536 2 11	3,712 2 4	64,248 5 3

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	59,028 19 3	1,507 3 8	60,536 2 11	3,712 2 4	64,248 5 3
ROADS, BRIDGES, ETC.—continued.							
NELSON LAND DISTRICT—continued.							
Lyell Cemetery Road	..	Buller	633 17 10	..	633 17 10	75 0 0	75 0 0
Karamea-Wangapeka	..	Waimea and Buller	657 10 11	..	657 10 11	..	657 10 11
Wangapeka-Wanganui	..	"	18,342 11 10	4,533 6 7	22,875 18 5	..	22,875 18 5
Belgrove-Westport-Reefton	..	Motueka and Buller	762 19 11	..	762 19 11	..	762 19 11
Bridge over Granity Creek	..	Buller	1,797 10 1	..	1,797 10 1	..	1,797 10 1
Bridge over Owen Creek	..	"	363 0 0	..	363 0 0	..	363 0 0
Mangles	..	"	436 19 0	..	436 19 0	..	436 19 0
Larry's Creek Bridge	..	"	2,841 16 0	..	2,841 16 0	..	2,841 16 0
Bridge over Matiri	..	"	..	..	..	100 0 0	100 0 0
Slips Road	..	"	246 0 1	..	246 0 1	..	246 0 1
Upper Buller Road	..	"	10,507 5 9	..	10,507 5 9	..	10,507 5 9
Hampden-Marua	..	"	..	..	..	50 0 0	50 0 0
Hampden Cemetery-Murchison	..	"	1,413 4 4	..	1,413 4 4	..	1,413 4 4
Horse Bridge over Makakitaki	..	"	79 4 4	..	79 4 4	..	79 4 4
Expenses taking poll re Buller Bridge	..	"	8,804 2 7	..	8,804 2 7	..	8,804 2 7
Bridge over Inangahua, Buller Junction	..	"	141 17 6	..	141 17 6	..	141 17 6
Inangahua Bridge, Maintenance	..	"	844 10 0	..	844 10 0	..	844 10 0
Boatmans	..	"	2,099 6 7	..	2,099 6 7	..	2,099 6 7
Bridge over Inangahua at Reefton	..	"	3,870 18 1	..	3,870 18 1	..	3,870 18 1
Reefton-Marua-Inangahua	..	"	125 14 0	..	125 14 0	..	125 14 0
Bridge over Little Grey at Devery's	..	Grey	..	..	..	..	..
Bridge over Ahaura	..	"	4,971 8 5	175 10 0	5,146 8 5	24 10 0	5,170 8 5
Ahaura-Haupere	..	"	1,678 11 0	..	1,678 11 0	..	1,678 11 0
Bridge over Grey at Cobden	..	"	2,688 2 1	..	2,688 2 1	..	2,688 2 1
Cobden-Seventeen-mile Diggings	..	"	2,083 9 6	..	2,083 9 6	..	2,083 9 6
Grey Valley-Teremakau	..	"	6,210 13 10	..	6,210 13 10	..	6,210 13 10
Ahaura (Masons)-Haupiri	..	"	2,065 1 8	..	2,065 1 8	..	2,065 1 8
Ahaura-Amuri	..	"	14,937 18 4	..	14,937 18 4	60 0 0	15,000 18 4
Ahaura-Kopara and Amuri	..	"	57 6 0	..	57 6 0	..	57 6 0
Blackball Cemetery (clearing and fencing)	..	Amuri	2,420 11 8	..	2,420 11 8	100 0 0	2,520 11 8
Bridge over Waiau at Hammer Plains	..	"	2,951 15 5	728 3 3	3,679 18 8	1,271 16 9	4,951 15 5
Tophouse-Wairau Gorge	..	"	608 19 0	..	608 19 0	..	608 19 0
Hammer District Works at Hammer	..	"	..	1,000 0 0	1,000 0 0	150 0 0	1,150 0 0
Works at Hammer and Sanatorium	..	"	7 7 3	..	7 7 3	1,000 0 0	1,007 7 3
Hammer Road	..	"	11,640 14 11	..	11,640 14 11	..	11,640 14 11
Waiau River Road (round south side), £1 for £1	..	"	..	..	..	100 0 0	100 0 0
Waiau Bridge repairs	..	"	..	..	..	..	..
Bridge over Waiau, Amuri County	..	"	..	..	..	..	..
Culverden-Hammer Plains	..	"	..	..	..	..	..
Carried forward	..	..	165,319 7 2	7,944 3 6	173,263 10 8	6,643 9 1	179,906 19 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ROADS, BRIDGES, ETC.—continued.	..	..	165,319 7 2	7,944 3 6	173,263 10 8	6,643 9 1	179,906 19 9
NELSON LAND DISTRICT—continued.	..	..	13,731 15 1	..	13,731 15 1	..	13,731 15 1
Nelson-Reefion and Greymouth Bridges	Wairarapa, Buller, Grey, and Inangahua	Motueka, Buller, and Grey	65,490 8 5	..	65,490 8 5	..	65,490 8 5
Nelson, Westport, Greymouth, and Hokitika	Ditto	City of Nelson, Motueka, Buller, Grey, and West- land	5,926 19 10	164 4 10	6,091 4 8	239 14 2	6,330 18 10
Belgrave-Tophouse-Tarndale	..	Motueka and Ashley	1,653 4 1	..	1,653 4 1	..	1,653 4 1
Maruia-Amuri	..	Buller and Ashley	211 10 2	..	211 10 2	..	211 10 2
Grey Valley via Clarke-Marua	..	Buller and Grey	73,197 4 8	..	73,197 4 8	..	73,197 4 8
Buller-Arnould	..	"	9,795 10 2	..	9,795 10 2	..	9,795 10 2
Bridges on Roads Nelson-Reefion	..	Buller and Motueka	..	..	..	..	..
French Pass, Admiralty Bay, and Croixelles Tracks	..	Nelson	794 0 1	..	794 0 1	200 0 0	200 0 0
Sundry Roads and Bridges, Nelson	..	..	20 0 0	..	20 0 0	..	794 0 1
Purchase of Roads	..	..	791 0 0	..	791 0 0	..	20 0 0
To Purchase of Roads through Crown lands	..	..	10 0 0	..	10 0 0	200 0 0	791 0 0
Village Settlements (see also General)	..	..	2,435 17 7	62 0 0	2,497 17 7	108 0 0	190 0 0
Miscellaneous and Engineering	..	..	339,856 17 3	8,170 8 4	347,527 5 7	7,391 3 3	2,605 17 7
Total, Nelson Land District	..	..	..	..	..	..	354,918 8 10
MARLBOROUGH LAND DISTRICT—	..	..	42 15 6	116 16 6	159 12 0	33 3 6	192 15 6
Beatrice Bay-Kenny's Isle	..	Wairarapa	..	56 2 0	56 2 0	43 18 0	100 0 0
Hakahaka-Opihi	..	"	420 14 1	175 9 3	596 3 4	24 10 9	620 14 1
Anakoa-Manaroa	..	"	..	..	..	150 0 0	150 0 0
Wet Inlet-Coral Bay	..	"	320 9 6	344 5 0	664 14 6	55 15 0	720 9 6
Manaroa-Okoha	..	"	11 4 0	33 5 0	44 9 0	166 15 0	211 4 0
Coral Bay-Homewood	..	"	347 19 4	1 11 6	349 10 10	48 8 6	397 19 4
Manaroa-Hopai	..	"	67 0 2	365 2 10	432 3 0	34 17 2	467 0 2
Kenepuru-Anakoa	..	"	222 9 0	117 3 3	339 12 3	182 16 9	522 9 0
Orail Bay Track	..	"	798 7 10	..	798 7 10	..	798 7 10
Waitaria-Manaroa	..	"	156 19 8	134 18 0	291 17 8	75 2 0	366 19 8
Kenepuru-Manaroa	..	"	247 8 0	96 13 3	344 1 3	63 6 9	407 8 0
Arapawa-Te Awaiti	..	"	199 14 4	3 13 6	203 7 10	196 6 6	399 14 4
Tracks, Queen Charlotte Sound	..	"	1,171 19 0	..	1,171 19 0	..	1,171 19 0
Tracks, Pelorus and Queen Charlotte Sound	..	"	50 0 0	14 3 6	64 3 6	35 16 6	100 0 0
Torea Neck	..	"	..	..	..	..	..
Carried forward	..	..	4,057 0 5	1,449 3 7	5,506 4 0	1,110 16 5	6,617 0 5

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	4,057 0 5	1,449 3 7	5,506 4 0	1,110 16 5	6,617 0 5
ROADS, BRIDGES, ETC.—continued.							
MARLBOROUGH LAND DISTRICT—continued.							
Te Mēhia Bay—Portage Bay ..	..	..	55 2 7	217 7 10	272 10 5	82 12 2	355 2 7
Ohinitaka—Te Mēhia ..	..	..	271 17 10	33 2 0	304 19 10	16 18 0	321 17 10
Tracks to Mahau Sounds ..	..	..	30 9 6	..	30 9 6	..	30 9 6
Pelorus to Queen Charlotte Sound ..	..	..	224 19 0	..	224 19 0	..	224 19 0
Tory Heads—Waimōanga and Picton ..	..	..	384 17 4	302 6 9	687 4 1	97 13 3	784 17 4
Waimōanga—Port Underwood Track ..	..	..	336 16 11	14 7 6	351 4 5	85 12 6	436 16 11
Robin Hood Bay—Ocean Bay ..	..	..	52 0 0	107 9 3	159 9 3	92 10 9	252 0 0
White's Bay—Port Underwood ..	..	..	267 0 3	0 14 6	267 14 9	149 5 6	417 0 3
Kenepuru—Endeavour Inlet ..	..	..	..	..	..	150 0 0	150 0 0
Okaha—Titirangi ..	..	..	..	..	..	200 0 0	200 0 0
Onahan Bay—Kenepuru ..	..	..	..	..	..	150 0 0	150 0 0
Piripaua Neck—Cutting Sound ..	..	..	..	..	..	100 0 0	100 0 0
Torea Bay Wharf—Road ..	..	..	..	..	..	100 0 0	100 0 0
Waitaria—Te Mauka-a-mau ..	..	..	..	..	..	200 0 0	200 0 0
Tawhitiui—Rai ..	..	..	..	..	..	159 18 10	716 14 6
Nydia Bay—Havelock ..	..	..	516 14 6	40 1 2	556 15 8	271 18 0	881 5 8
Harvey's Bay—Pelorus Sound ..	..	..	581 5 8	28 2 0	609 7 8	11 5 2	150 0 0
Fairy Bay—North-west Bay ..	..	..	..	138 14 10	138 14 10	20 0 0	20 0 0
Tennyson Inlet ..	..	..	..	..	..	100 0 0	100 0 0
Mahakipawa—Kenepuru ..	..	..	199 19 10	..	199 19 10	..	199 19 10
Rai-Ronga and Wangamea Roads ..	..	..	53 11 10	..	53 11 10	..	53 11 10
Nelson-Havelock and Bridges ..	..	..	1,925 19 6	425 15 6	2,351 15 0	123 5 0	2,475 0 0
Brown River Bridge ..	..	..	200 0 0	..	200 0 0	..	200 0 0
Alfred Creek Bridge ..	..	..	200 0 0	..	200 0 0	..	200 0 0
Ronga Valley Road ..	..	..	562 7 10	..	562 7 10	250 0 0	812 7 10
Pelorus District and Rai Valley ..	..	..	28,660 14 3	..	28,660 14 3	..	28,660 14 3
Pelorus District and Rai Valley ..	..	..	3,722 19 2	..	3,722 19 2	..	3,722 19 2
Wharf at Havelock ..	..	..	441 6 10	..	441 6 10	..	441 6 10
Picton—Queen Charlotte Sound ..	..	..	538 3 3	173 1 5	711 4 8	126 18 7	838 3 3
Double Bay ..	..	..	109 8 0	..	109 8 0	10 0 0	119 8 0
Starborough ..	..	..	284 5 8	..	284 5 8	115 14 4	400 0 0
Picton—Waikawa ..	..	..	151 16 10	97 6 0	249 2 10	2 14 0	251 16 10
Saxton Pass ..	..	..	..	..	..	100 0 0	100 0 0
Grove Wharf and Shed ..	..	..	87 13 0	0 10 0	88 3 0	11 17 0	100 0 0
Tophouse Road ..	..	..	..	..	..	100 0 0	100 0 0
Havelock—Tuamarina Road ..	..	..	300 0 0	..	300 0 0	..	300 0 0
Kaituna—Tuamarina ..	..	..	550 0 0	..	550 0 0	150 0 0	700 0 0
Sundry Roads and Bridges, Marlborough ..	..	..	508 0 11	..	508 0 11	..	508 0 11
Onamalutu Valley ..	..	..	200 0 0	..	200 0 0	..	200 0 0
Carried forward ..	..	..	45,190 5 3	3,312 8 0	48,502 13 3	4,088 19 6	52,591 12 9

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	45,190 5 3	3,312 8 0	48,502 13 3	4,088 19 6	52,591 12 9
ROADS, BRIDGES, ETC.—continued.							
MARLBOROUGH LAND DISTRICT—continued.							
Blenheim-Havelock Ferry-house	Marlborough	Wairau	200 0 0	..	200 0 0	..	200 0 0
Bartlett's Creek	"	"	200 0 0	..	200 0 0	..	200 0 0
Spring Creek Bridge	"	"	200 0 0	..	200 0 0	..	200 0 0
Spring Creek Wharf	"	"	95 0 0	..	95 0 0	..	95 0 0
Drain Wairau River-Gravel-pit	"	"	39 13 0	39 13 0	39 13 0	60 7 0	100 0 0
Omaka Bridge contributions	"	"	266 14 3	33 5 9	300 0 0	99 14 3	399 14 3
Wairau River overflow subsidy, £1 for £1	"	"	..	400 0 0	400 0 0	1,600 0 0	2,000 0 0
Bridge over Wairau near Blenheim	"	"	4,362 8 3	..	4,362 8 3	..	4,362 8 3
Bluff Cove and Port Underwood	"	"	100 0 0	24 16 2	100 0 0	75 3 10	100 0 0
Footbridge, Taylor River	"	"	..	..	..	..	..
Blind River Road	"	"	439 8 0	..	439 8 0	150 12 0	590 0 0
Redwood Pass Road	"	"	1,300 0 0	300 0 0	1,600 0 0	..	1,600 0 0
Anakiwi-Grove	"	"	..	68 9 3	68 9 3	..	..
Awatere Railway and Traffic Bridge	"	"	..	..	..	..	..
North Bank	"	"	8,484 11 1	..	8,484 11 1	..	8,484 11 1
Awatere Valley Road	"	"	..	190 13 0	190 13 0	9 7 0	200 0 0
Havelock-Blenheim	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Jordan Bridge, Awatere	"	"	..	100 0 0	100 0 0	..	100 0 0
Awatere River (Taylor-Redwood Pass)	"	"	..	..	..	..	..
Maddocks and Hodder Cutting	"	"	..	..	..	..	..
Mahakipawa-Moetapu	"	"	..	..	..	100 0 0	100 0 0
Molesworth-Jollie's Pass	"	"	..	..	..	100 0 0	100 0 0
Pember's Road-Pukaka	"	"	..	..	..	200 0 0	200 0 0
Picton-Blenheim (Mudford Flat)	"	"	..	..	..	..	..
River Conservation (Omaka Ford)	"	"	..	..	..	100 0 0	100 0 0
Saltwater Creek-Fulton's Gate	"	"	..	..	..	100 0 0	100 0 0
Tuamarina-Boulder Bank	"	"	..	..	..	150 0 0	150 0 0
Three-bridges Flat-Rikiranga (to account)	"	"	..	..	..	50 0 0	50 0 0
Waipohai River (protection)	"	"	..	..	..	300 0 0	300 0 0
Okiri-Ronga	"	"	..	..	..	100 0 0	100 0 0
Havelock Mudflat Bridge	"	Nelson	..	55 0 0	55 0 0	150 0 0	200 0 0
Maher's Flat Bridge and Road	"	Wairau	..	..	..	..	..
Omaka-Tynesfield Bridge, £1 for £1	"	"	..	..	..	100 0 0	100 0 0
Okaramio Creek Bridge	"	"	..	..	..	100 0 0	100 0 0
Rocky Creek Bridge	"	"	..	..	..	100 0 0	100 0 0
Wairau River Bridge	"	"	..	..	..	100 0 0	100 0 0
Wakamarina and Kaituna Bridges	"	"	..	..	..	150 0 0	150 0 0
Awatere Bridge, Limestone Gorge	"	"	..	..	..	200 0 0	200 0 0
Bridge over Clarence River, Clarence Bridge	"	Ashley	18,683 0 10	70 15 5	18,753 15 5	129 4 7	18,883 0 10
Carried forward	..	..	80,081 19 8	5,094 8 7	85,176 8 5	9,444 18 11	94,621 7 2

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c. 31st March, 1899.	Total Net Expenditure and Liabilities.
Brought forward	..	..	£ s. d. 80,031 19 8	£ s. d. 5,094 8 7	£ s. d. 85,066 8 3	£ s. d. 9,444 18 11	£ s. d. 94,511 7 2
ROADS, BRIDGES, ETC.—continued.							
MARLBOROUGH LAND DISTRICT—continued.							
Road through Reserve "A"	..	..	..	..	..	..	..
Conway Reserve-Accommodation-house Road	..	..	..	..	..	..	..
Kaikoura-Clarence	..	..	14,424 6 1	..	14,424 6 1	..	14,424 6 1
Cribb Creek	..	..	..	..	..	..	..
Hundalee Block	..	..	5,996 6 0	1,503 14 0	7,500 0 0	..	7,500 0 0
Hapuka and Puhipuhi Rivers	..	..	..	350 18 5	350 18 5	..	350 18 5
Reserve West of Kahautara	..	..	..	..	..	..	..
Kahautara-Conway	..	..	3,069 11 9	7,381 1 4	10,450 13 1	1,689 1 1	12,139 14 2
Pine Valley Block	..	..	..	..	..	..	..
Kaitao Block	..	..	..	..	..	..	..
Puhipuhi Block	..	..	..	..	..	..	..
Kaikoura-Waiatu	..	..	33,630 11 11	522 10 0	33,630 11 11	..	33,630 11 11
Blenheim-Kaikoura-Waiatu	..	..	140 16 4	40 19 11	181 16 3	977 10 0	1,500 0 0
Miscellaneous and Engineering	..	..	..	..	..	159 0 1	300 0 0
Total, Marlborough Land District	..	..	137,293 11 9	14,883 12 3	152,127 4 0	14,040 10 1	166,167 14 1
WESTLAND LAND DISTRICT—							
Bridge over Grey at Cobden	..	..	13 10 0	..	13 10 0	..	13 10 0
Grey mouth-Arnold	..	..	5,058 1 5	..	5,058 1 5	..	5,058 1 5
Clarke River Road	..	..	..	..	..	150 0 0	150 0 0
Stillwater-Maori Gully	..	..	1,869 2 0	..	1,869 2 0	..	1,869 2 0
Paeroa-Teremakau	..	..	500 11 2	..	500 11 2	..	500 11 2
Marsden-Paroa	..	..	798 8 0	..	798 8 0	..	798 8 0
Stillwater Bridge	..	..	2,538 3 0	..	2,538 3 0	150 0 0	150 0 0
Marsden-Maori Creek	..	..	500 0 0	..	500 0 0	..	500 0 0
Hobonui Bridge	..	..	..	..	..	..	..
Greenstone Bridge	..	..	2,756 5 6	..	2,756 5 6	500 0 0	2,756 5 6
Greenstone-Lake Brunner	..	..	684 5 4	..	684 5 4	..	684 5 4
Pounamou-Teremau	..	..	1,103 13 5	11 19 0	1,115 12 5	119 5 4	1,234 17 9
Greenstone-Teremakau	..	..	1,986 16 0	..	1,986 16 0	..	1,986 16 0
Teremakau-Bell Hill Road	..	..	198 18 5	..	198 18 5	..	198 18 5
Bell Hill-Mount Alexander	..	..	100 0 0	..	100 0 0	..	100 0 0
Mount Howe Track	..	..	1,379 18 0	5 3 6	1,385 1 6	145 16 6	1,530 18 0
Bridge over Teremakau, Kumara	..	..	103,447 12 11	..	103,447 12 11	..	103,447 12 11
Grey mouth-Okarito	..	..	300 0 0	..	300 0 0	..	300 0 0
Grey County (flood-damage)	..	..	..	..	..	..	..
Carried forward	..	..	123,235 5 2	17 2 6	123,252 7 8	1,065 1 10	124,317 9 6



TABLE NO. 4—continued.

STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward ..	..	..	804,502 3 8	7,214 0 4	311,716 4 0	8,151 0 11	319,867 4 11
ROADS, BRIDGES, ETC.—continued.							
WESTLAND LAND DISTRICT—continued.	Westland	Westland	438 13 9	299 10 9	438 13 9	..	438 13 9
Lake Mapourika ..	..	..	..	..	299 10 9	0 9 3	300 0 0
Lake Wahapo—Wairangi River (widening) ..	..	..	1,033 10 0	..	1,033 10 0	..	1,033 10 0
Extension south of Okarito ..	..	..	165 15 11	77 19 5	243 15 4	262 0 7	505 15 11
Franz Josef Glacier ..	..	..	8,077 5 0	..	8,077 5 0	..	8,077 5 0
Mapourika—Gillespies ..	..	..	1,000 0 0	267 3 6	1,000 0 0	..	1,000 0 0
Waikupa—Cook's River Flat ..	..	..	143 5 3	Cr. 0 12 4	Cr. 0 12 4	500 0 0	503 5 3
Tracks to Fox Glacier ..	..	..	..	..	..	..	493 7 8
Cook's Valley—Karangarua ..	..	..	2,265 18 8	138 11 3	2,265 18 8	..	2,265 18 8
Cook's River Flat ..	..	..	106 0 7	..	106 0 7	..	106 0 7
Cook's River (upper) ..	..	..	509 7 4	..	509 7 4	..	509 7 4
Cook's River southward ..	..	..	..	..	..	..	..
Gillespie's Beach—Manakai-au ..	..	..	149 3 0	..	149 3 0	150 0 0	299 3 0
Hunt's Beach—Manakai-au ..	..	..	539 1 6	..	539 1 6	..	539 1 6
Hunt's Beach—Makawhio ..	..	..	340 17 6	..	340 17 6	..	340 17 6
Jacob's River—Bruce Bay ..	..	..	1,206 2 11	..	1,206 2 11	..	1,206 2 11
Makawhio—Mahitahi ..	..	..	1,400 0 0	..	1,400 0 0	..	1,400 0 0
Mahitahi—Paringa ..	..	..	1,510 18 5	..	1,510 18 5	..	1,510 18 5
Moeraki Crossing—Otomou ..	..	..	16,234 16 9	..	16,234 16 9	..	16,234 16 9
Mahitahi—Haast ..	..	..	5,804 17 6	345 0 9	6,149 18 3	154 19 3	6,304 17 6
Haast Pass Track ..	..	..	475 0 3	157 11 9	632 12 0	142 8 3	775 0 3
Turnbull River Road ..	..	..	1,809 9 2	..	1,809 9 2	..	1,809 9 2
Cascade Valley Road ..	..	..	47 15 11	..	47 15 11	..	47 15 11
Sundry roads, &c., Westland ..	..	..	1,980 0 0	..	1,980 0 0	..	1,980 0 0
In the County of Westland ..	..	..	532 0 0	..	532 0 0	..	532 0 0
Westland Ferry-service (maintenance) ..	..	..	260 0 0	150 0 0	410 0 0	..	410 0 0
Westland County roads ..	..	..	2,613 13 3	..	2,613 13 3	..	2,613 13 3
Westland, general ..	..	..	972 5 11	34 10 0	1,006 15 11	65 10 0	1,072 5 11
Miscellaneous and Engineering ..	..	..	..	..	..	..	..
Total, Westland Land District ..	..	..	354,118 2 3	8,683 15 5	362,801 17 8	9,590 13 6	372,392 11 2
ANTWERPURY LAND DISTRICT:—							
Cheviot Estate: Expenses incurred prior to opening the Cheviot Estate Account ..	Cheviot	Ashley	3,536 12 1	..	3,536 12 1	..	3,536 12 1
Cheviot Cheese Factory, subsidy ..	..	..	700 0 0	..	700 0 0	..	700 0 0
Cheviot roads ..	..	..	4,323 10 7	..	4,323 10 7	..	4,323 10 7
Dray-road through Cheviot hill country ..	..	..	100 8 0	..	100 8 0	..	100 8 0
Carried forward ..	..	..	8,660 10 8	..	8,660 10 8	..	8,660 10 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	8,660 10 8	..	8,660 10 8	..	8,660 10 8
CANTERBURY LAND DISTRICT—continued. Foster's Cutting, Grete, Cheviot .. .. .	Cheviot	Ashley ..	..	..	..	150 0 0	150 0 0
Port Robinson (grouse) .. .. .	"	"	..	4 2 6	4 2 6	195 17 6	200 0 0
Waipara—Cheviot .. .. .	Ashley ..	"	200 0 0	100 0 0	300 0 0	150 0 0	450 0 0
To Upper Ashley over Okuku Pass .. .. .	"	"	8,630 4 8	..	8,630 4 8	..	8,630 4 8
Blackhills Road .. .. .	"	"	970 0 0	..	970 0 0	..	970 0 0
Oxford Bush—Upper Ashley .. .. .	"	"	3,996 2 3	..	3,996 2 3	..	3,996 2 3
To deferred-payment lands, Waikari .. .. .	"	"	784 19 1	..	784 19 1	..	784 19 1
To deferred-payment lands, Teviotdale .. .. .	"	"	1,764 4 11	..	1,764 4 11	..	1,764 4 11
Ashley Gorge Drain .. .. .	"	"	..	..	..	50 0 0	50 0 0
Glentui Road .. .. .	"	"	683 5 4	..	683 5 4	..	683 5 4
Broomfield Block .. .. .	"	"	..	..	..	300 0 0	300 0 0
Mount Grey Downs .. .. .	"	"	468 0 0	..	468 0 0	..	468 0 0
Oxford Bush Road extension .. .. .	"	"	166 15 0	..	166 15 0	133 5 0	300 0 0
Ashley, irrigation .. .. .	"	"	188 14 10	100 0 0	288 14 10	1,088 14 10	1,377 9 8
Irrigation-works, Eyre and Waimakariri .. .. .	"	Ashley and Kaiapoi	3,400 0 0	..	3,400 0 0	..	3,400 0 0
Waimakariri—Ashley, irrigation .. .. .	"	"	1,011 5 2	463 7 6	1,474 12 8	36 12 6	1,511 5 2
Ashley Bridge (to account) .. .. .	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Waimakariri Bridge (Kaiapoi) .. .. .	"	Kaiapoi	..	..	..	275 0 0	275 0 0
Ashley Bridge protective works .. .. .	"	Ashley and Kaiapoi	..	..	..	150 0 0	150 0 0
Christchurch—Hokitika (Bealey Valley) .. .. .	Selwyn	"	1,778 11 1	..	1,778 11 1	..	1,778 11 1
Selwyn Bridge (construction), £1 for £1 .. .. .	"	Selwyn	..	500 0 0	500 0 0	1,000 0 0	1,500 0 0
Mathias Pass Road .. .. .	"	"	2,046 15 10	..	2,046 15 10	..	2,046 15 10
Canal Bridge, Ellesmere .. .. .	"	"	..	..	..	150 0 0	150 0 0
Kowai Bridge, £1 for £1 .. .. .	"	"	..	..	..	600 0 0	600 0 0
Canterbury Colliery Tramway .. .. .	"	"	..	..	..	1,200 0 0	1,200 0 0
Lake Ellesmere drainage .. .. .	"	"	..	..	..	..	..
Summit Road .. .. .	Akaroa and Selwyn	Geraldine	753 17 4	..	753 17 4	..	753 17 4
Peninsula Road, Akaroa (£1 for £1) .. .. .	Akaroa ..	Ellesmere	296 1 3	..	296 1 3	..	296 1 3
Akaroa Head Lighthouse Road .. .. .	"	"	375 0 0	..	375 0 0	..	375 0 0
Roads to Co-operative Dairy Factories, Akaroa .. .. .	"	"	100 0 0	..	100 0 0	..	100 0 0
Chertsey Village Settlement water-supply .. .. .	"	"	300 0 0	..	300 0 0	..	300 0 0
Blackford—Redcliffe .. .. .	Ashburton	Selwyn	23 0 0	..	23 0 0	..	23 0 0
Reserve 1496, Ashburton .. .. .	"	"	600 0 0	..	600 0 0	..	600 0 0
Bridge, Ashburton (subsidy) .. .. .	"	Ashburton	45 0 0	..	45 0 0	55 0 0	100 0 0
Ruapuna water-supply .. .. .	"	"	75 0 0	..	75 0 0	..	7,000 0 0
Highbank .. .. .	"	"	..	..	..	31 0 0	106 0 0
Rangitata Light-traffic Bridge .. .. .	"	Selwyn	..	..	..	100 0 0	100 0 0
Rangitata River-mouth protective works (Reserve 100) .. .. .	"	Geraldine	..	..	..	500 0 0	500 0 0
Carried forward .. .. .	..	..	45,150 12 5	1,404 14 4	46,555 6 9	6,665 9 10	53,220 16 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on Roads, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	45,150 12 5	1,404 14 4	46,555 6 9	6,665 9 10	53,220 16 7
CANTERBURY LAND DISTRICT—continued.							
Orari Bridge (to account) ..	Geraldine	Geraldine	500 0 0	..	500 0 0	..	500 0 0
Hae-hae-te-moana ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Te-moana Gorge ..	"	"	120 0 0	..	120 0 0	..	120 0 0
Arowhenua Native Road ..	"	"	..	..	..	50 0 0	50 0 0
Arundel water-supply ..	"	"	..	..	..	100 0 0	100 0 0
Orari Domain ..	"	"	..	..	..	50 0 0	50 0 0
Ophi Bridge (to account) ..	Geraldine and Levels	Geraldine and Levels	..	..	..	300 0 0	300 0 0
Tengawai (£1 for £1) ..	Mackenzie	Mackenzie	30 0 0	25 0 0	55 0 0	45 0 0	100 0 0
Tengawai Stock Bridge (£1 for £1) ..	"	"	..	28 17 6	28 17 6	51 2 6	80 0 0
Burke's Pass, Mackenzie County ..	"	"	249 18 10	..	249 18 10	..	249 18 10
Road to Mount Cook and Glaciers ..	"	"	2,186 9 8	22 18 10	2,209 8 6	477 1 2	2,686 9 8
Pukaki-Mount Cook ..	"	"	1,588 0 11	458 7 1	2,046 8 0	341 12 11	2,388 0 11
Forks River Bridge, Mount Cook Road (to account) ..	"	"	..	..	..	600 0 0	600 0 0
Contribution towards erection of Pukaki Bridge (£1 for £1) ..	"	"	850 0 0	..	850 0 0	..	850 0 0
Orari River-protective works ..	"	"	..	..	..	200 0 0	200 0 0
Tracks, Mount Cook and Glaciers ..	"	"	160 14 6	223 13 6	384 8 0	214 10 0	598 18 0
Mount Cook Hermitage (works at) ..	"	"	396 1 9	..	396 1 9	..	396 1 9
Hooker Bridge ..	"	"	1 12 4	113 6 9	114 19 1	6 13 3	121 12 4
Fairlie-Pukaki ..	"	"	300 0 0	205 14 4	505 14 4	194 5 8	700 0 0
Camp Valley ..	"	"	..	..	..	250 0 0	250 0 0
Rocky Gully Bridge, £1 for £1 ..	"	"	..	47 10 0	47 10 0	..	50 0 0
Lake Pukaki (planting) ..	"	"	..	..	..	50 0 0	50 0 0
Mount Cook Road (stable and shelter-shed) ..	"	"	398 2 6	..	398 2 6	250 0 0	250 0 0
Pukaki-Omarana ..	"	"	800 0 0	..	800 0 0	100 0 0	498 2 6
Ohau Bridge (£1 for £1) ..	Mackenzie and Waitaki	Mackenzie and Waitaki	..	..	..	..	800 0 0
Ophi River protective works ..	"	"	510 18 3	..	510 18 3	200 0 0	200 0 0
Bridge over Upper Waitaki ..	Mackenzie and Levels	Mackenzie and Levels	..	..	..	..	510 18 3
Clément's Road ..	Waimate	Waimate	363 11 4	..	363 11 4	250 0 0	363 11 4
Waimate Reserves ..	"	"	863 8 5	..	863 8 5	..	363 11 4
Waihao-Hakateramea ..	"	"	..	..	..	100 0 0	100 0 0
Kapua Village Settlement drain ..	"	"	..	..	..	100 0 0	100 0 0
Kapua-Waimate Gorge drain ..	"	"	..	..	..	38 0 0	38 0 0
Nukuroa (railway gates) ..	"	"	..	..	..	38 0 0	38 0 0
Studholme Junction cattle-stops ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Cliff Road ..	"	"	..	91 12 2	91 12 2	96 7 10	188 0 0
Nukuroa-Studholme Junction ..	Waimate and Geraldine	Waimate and Geraldine	500 0 0	..	500 0 0	..	500 0 0
Pareora Bridge ..	Borough of Wobolston	Wobolston	..	..	..	100 0 0	100 0 0
Roimata Settlement drains ..	"	"	..	..	..	..	..
Carried forward ..	..	..	55,319 10 11	2,621 14 6	57,941 5 5	10,870 13 2	68,811 18 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward.							
ROADS, BRIDGES, ETC.—continued.							
CANTERBURY LAND DISTRICT—continued.							
Sundry roads, Canterbury ..	..	..	818 11 9	..	818 11 9	..	818 11 9
To village and deferred payment blocks ..	..	..	1,399 15 10	..	1,399 15 10	..	1,399 15 10
Village settlements (see also General) ..	..	..	132 5 0	Cr. 50 0 0	82 5 0	50 0 0	132 5 0
Miscellaneous roads and bridges ..	..	..	..	..	..	500 0 0	500 0 0
Miscellaneous and Engineering ..	..	..	2,280 8 3	82 8 10	2,362 17 1	87 11 2	2,450 8 3
Total, Canterbury Land District	..	..	59,950 11 9	2,854 3 4	62,604 15 1	11,508 4 4	74,112 19 5
OTAGO LAND DISTRICT—							
Martin's Bay Settlement ..	Lake	..	200 0 0	..	200 0 0	..	200 0 0
Lake Wanaka Steamer Subsidy ..	"	..	280 0 0	65 0 0	345 0 0	95 0 0	440 0 0
Martin's Bay—Lake Wakatipu ..	"	..	50 0 0	..	50 0 0	..	50 0 0
Martin's Bay—Lake Wakatipu ..	"	..	503 2 3	..	503 2 3	400 0 0	903 2 3
Queenstown Jetty ..	"	..	1,500 0 0	..	1,500 0 0	..	1,500 0 0
Arrowtown—Crown Terrace ..	"	..	1,805 3 7	..	1,805 3 7	..	1,805 3 7
Glenorchy up Rees and Dart ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Glenorchy—Earnslaw ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Rees River Road ..	"	..	2,379 11 4	100 0 0	2,479 11 4	200 0 0	2,679 11 4
Pembroke—Maunikitiki ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Dart River Road ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Bent Burn—Glacier Burn ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Lake Wanaka Wharves ..	"	..	30 0 0	..	30 0 0	..	30 0 0
Tracks Head of Lake Wakatipu ..	"	..	95 15 0	150 0 0	245 15 0	254 5 0	500 0 0
Lake Te Anau—Wakatipu ..	"	..	..	599 13 9	599 13 9	400 6 3	1,000 0 0
Albert Burn Track ..	"	..	..	175 0 0	175 0 0	25 0 0	200 0 0
Hollyford Valley ..	"	..	159 0 0	41 0 0	200 0 0	..	200 0 0
Glenhu—Roy's Peninsula ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Ben Lomond Run ..	"	..	..	..	..	400 0 0	400 0 0
Lower Wanaka Block ..	"	..	..	101 0 0	101 0 0	..	101 0 0
To West Coast Sounds ..	Lake and Wallace	..	2,406 15 8	..	2,406 15 8	..	2,406 15 8
Lake Te Anau—Sutherland Falls ..	"	..	391 7 5	166 11 4	557 18 9	83 8 8	641 7 5
Tracks—Western Sounds ..	"	..	2,605 4 1	2,664 2 10	5,269 6 11	730 17 2	6,000 4 1
Clyde—Queenstown ..	Lake and Vincent	..	250 0 0	..	250 0 0	..	250 0 0
Bendigo—Matakanui ..	Vincent	..	..	88 6 7	88 6 7	511 13 5	600 0 0
Makarora—Haast Valley ..	"	..	379 12 6	..	379 12 6	..	379 12 6
Makarora Valley ..	"	..	400 0 0	201 11 0	601 11 0	148 9 0	750 0 0
Cronwell—Hawea—Lindis Pass ..	"	..	..	..	..	300 0 0	300 0 0
Carried forward	..	..	13,935 11 10	4,352 5 6	18,287 17 4	3,548 19 6	21,836 16 10

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	Country.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	18,935 11 10	4,352 5 6	18,287 17 4	8,548 19 6	21,836 16 10
OTAGO LAND DISTRICT—continued.							
Roads, Bridges, &c.—continued.							
Chatto Creek-Tinkers	Vincent	Tuapeka	..	300 0 0	300 0 0	..	300 0 0
Lauder District, Blocks III., IV., V., and VI.	"	Tuapeka	..	300 0 0	300 0 0	250 0 0	250 0 0
Ophir District Water-supply	"	Wakatipu	300 0 0	..	300 0 0	..	300 0 0
Tracks, Hawea Lake	"	Tuapeka	..	..	300 0 0	150 0 0	450 0 0
Tiger Hill Block	"	"	604 15 0	..	604 15 0	..	604 15 0
Upper Clutha Blocks	"	"	400 0 0	..	400 0 0	..	400 0 0
Kawarau-Nevis	"	Wakatipu	2,946 7 6	..	2,946 7 6	..	2,946 7 6
Bridge over Clutha at Cromwell	"	Tuapeka	5,000 0 0	..	5,000 0 0	..	5,000 0 0
Bridge over Clutha at Alexandra	"	"	100 0 0	50 0 0	150 0 0	..	150 0 0
McCabe's Coal-pit-Gibbsston	"	Wakatipu	..	..	..	..	..
Tourists' Accommodation-house, Morven Hills	"	"	500 0 0	500 0 0	1,000 0 0	300 0 0	1,300 0 0
Ida Valley	"	"	200 0 0	..	200 0 0	..	200 0 0
Galloway Station-Ida Valley	"	Tuapeka	300 0 0	..	300 0 0	..	300 0 0
Rough Ridge-Poolburn	"	Tuapeka and Maniototo	300 0 0	..	300 0 0	700 0 0	1,000 0 0
Roughridge-Poolburn-Tuapeka	"	Tuapeka	300 0 0	..	300 0 0	..	300 0 0
Lauder-Blackstone	"	Tuapeka	300 0 0	..	300 0 0	..	300 0 0
Lauder-Tiger Hill Block	Vincent and Maniototo	Wakatipu	400 0 0	..	400 0 0	..	400 0 0
Lauder-Blackstone Block	Vincent and Lake	Wakatipu	200 0 0	..	200 0 0	..	200 0 0
Lower Hawea-Lower Wanaka	Vincent and Waitaki	Wakatipu and Waitaki	1,261 0 0	..	1,261 0 0	..	1,261 0 0
Lindis Pass Road	Waitaki	Waitaki	252 7 5	6 9 3	258 16 8	1 3 4	1,260 0 0
Kurov Run	"	"	300 0 0	..	300 0 0	..	300 0 0
Section 4, Block VIII., Maruwhenua	"	"	..	..	..	..	..
Donnet and Maruwhenua Block	"	"	..	..	..	..	..
Maruwhenua Bridge	"	"	..	..	..	..	..
Upper Waitaki (Ahuriri or Otematata Pass) (to account)	"	"	..	..	..	..	..
Moeraki District	"	Waihemo	167 10 8	..	167 10 8	..	167 10 8
Port Road Beach, Moeraki	"	"	100 0 0	200 0 0	300 0 0	100 0 0	400 0 0
Connecting Road, Block IX., Moeraki	"	"	520 0 0	..	520 0 0	..	520 0 0
Karigi Road	"	"	154 16 0	145 4 0	300 0 0	154 16 0	454 16 0
Run 109	"	"	100 0 0	..	100 0 0	..	100 0 0
Wainakuru Slate Quarry (road to)	"	"	..	..	..	200 0 0	200 0 0
Herbert, Main Road (£1 for £1)	"	"	..	..	..	100 0 0	100 0 0
Kakanui Bridge, £1 for £1	"	"	6,368 7 4	35 18 0	6,404 5 4	500 0 0	500 0 0
Livingstone-Kyeburn	Waitaki and Maniototo	Waihemo	1,649 0 0	..	1,649 0 0	114 2 0	6,518 7 4
Blackstone and Lauder	Maniototo	"	200 0 0	..	200 0 0	76 0 0	1,649 0 0
Lauder-Blackstone Block	"	"	300 0 0	..	300 0 0	300 0 0	500 0 0
Blackstone-Gimmerburn Block	"	"	..	..	..	..	300 0 0
Naseby, Maniototo, and Gimmerburn	"	"	..	..	..	..	..
Carried forward	..	..	36,859 15 9	5,889 16 9	42,749 12 6	7,195 0 10	49,944 13 4

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	36,859 15 9	5,889 16 9	42,749 12 6	7,195 0 10	49,944 13 4
ROADS, BRIDGES, &c.—continued.							
ORAGO LAND DISTRICT—continued.							
Naseby, No. 2 Block	Maniototo	Waihero	..	..	..	313 0 0	313 0 0
Runs 219c, 306, and 306A	..	..	400 0 0	..	400 0 0	400 0 0	400 0 0
Run 206A (Naseby)	..	..	300 0 0	..	300 0 0	200 0 0	500 0 0
Run 206F (Maniototo)	..	..	300 0 0	..	300 0 0	80 0 0	380 0 0
Kyeburn District..	..	..	500 0 0	..	500 0 0	..	500 0 0
Komako Township	..	..	..	..	..	100 0 0	100 0 0
Kyeburn-Naseby..	..	..	..	..	..	150 0 0	150 0 0
Run 219	..	..	..	..	..	150 0 0	150 0 0
Naseby, Blocks I., VI., VII., VIII.	..	..	..	..	..	400 0 0	400 0 0
Maniototo, Blocks I., XVIII.	..	..	..	..	..	..	..
Gimmerburn, Block I.	..	..	1,240 0 0	..	1,240 0 0	..	1,240 0 0
Maniototo	..	..	100 0 0	..	100 0 0	..	100 0 0
Maniototo Block	..	..	500 0 0	..	500 0 0	250 0 0	750 0 0
Taieri River Bridge, Kokonga	..	..	200 0 0	..	200 0 0	..	200 0 0
Taieri Lake, Block XV., Maniototo	..	..	450 0 0	..	450 0 0	..	450 0 0
Run 222	..	..	..	..	..	100 0 0	100 0 0
Block XI., Maniototo	..	..	..	..	..	50 0 0	50 0 0
Block XVI., Maniototo	..	..	300 0 0	..	300 0 0	200 0 0	500 0 0
Maniototo, Block II.	..	..	700 0 0	..	700 0 0	200 0 0	900 0 0
Maniototo, Block III.	..	..	400 0 0	350 0 0	750 0 0	..	700 0 0
Gimmerburn District	..	..	1,093 0 0	..	1,093 0 0	..	1,093 0 0
Gimmerburn Block	..	..	1,450 0 0	..	1,450 0 0	300 0 0	1,750 0 0
Swinburn and Rock and Pillar	..	..	650 0 0	..	650 0 0	..	650 0 0
Run 210	..	..	300 0 0	..	300 0 0	..	300 0 0
Dunback-Swinburn	..	..	200 0 0	..	200 0 0	500 0 0	700 0 0
Hamilton Bridge	..	..	..	..	..	400 0 0	400 0 0
Capburn Bridge, £1 for £1	..	..	..	..	..	..	..
Upper Taieri and Rock and Pillar	..	..	..	..	..	..	..
Runs 204, 204A, Upper Taieri-Rock and Pillar (to account)	..	..	..	..	..	..	..
Ranturly Township	..	..	..	..	..	200 0 0	200 0 0
Kyeburn Bridge (to account)	..	..	200 0 0	..	200 0 0	250 0 0	250 0 0
Swinburn Farm-homestead Block	..	..	288 0 0	..	288 0 0	88 0 0	388 0 0
Swinburn Special Settlement	..	..	..	..	..	..	..
Hyde Bridge, Taieri River	..	..	..	..	..	250 0 0	250 0 0
Runs 225A and 225T to 225Z	..	..	1,500 0 0	..	1,500 0 0	200 0 0	1,700 0 0
Through Runs 171 and 171A	..	..	260 0 0	..	260 0 0	..	260 0 0
Hummockside District	..	..	3,257 6 4	200 0 0	3,457 6 4	150 0 0	3,607 6 4
Waikari to Waitati	..	..	..	..	..	..	..
Carried forward	..	..	51,448 2 1	6,439 16 9	57,887 18 10	11,726 0 10	69,613 19 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c. 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward ..	..	..	51,448 2 1	6,439 16 9	57,887 18 10	11,726 0 10	69,613 19 8
OTAGO LAND DISTRICT—continued.							
Blueskin, £1 10s. for £1 ..	Waikouaiti	Waikouaiti	..	105 0 0	105 0 0	..	105 0 0
Brinn's Point, Cemetery Road ..	"	"	..	..	..	25 0 0	25 0 0
Corner Bush—Merton ..	"	"	..	..	..	100 0 0	100 0 0
Seacliff Asylum Reserve—Native Reserve ..	"	"	..	..	..	200 0 0	200 0 0
Waikouaiti Bridge (repairs) ..	"	Chalmers	..	..	..	..	..
Waikouaiti Bridge ..	"	"	600 0 0	..	600 0 0	..	600 0 0
Brinn's Point and Merton ..	"	"	250 0 0	..	250 0 0	..	250 0 0
Waitati ..	"	"	..	..	..	..	..
Seacliff Asylum Road ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Fuketeraki Station—Beach ..	"	"	409 19 2	50 0 0	459 19 2	10 0 10	470 0 0
Warrington ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Waitaki Road ..	"	"	541 1 7	..	541 1 7	..	541 1 7
Lower Harbour Road ..	"	"	..	150 0 0	150 0 0	..	150 0 0
Maori Kaika Road, Otago Heads ..	"	"	1,081 8 6	..	1,081 8 6	..	1,081 8 6
Normanby—Mount Cargill ..	"	Dunedin	..	100 0 0	100 0 0	..	100 0 0
North Harbour and Blueskin Block XI. ..	"	"	..	..	..	50 0 0	50 0 0
Fine Hill ..	"	"	..	..	..	100 0 0	100 0 0
Peninsula Beach Road (prison labour) ..	"	"	80 2 3	..	80 2 3	..	80 2 3
Peninsula Beach Road, Portobello ..	Peninsula	Chalmers	..	188 4 3	188 4 3	221 6 9	251 9 0
Otago Peninsula (Block II., from Section 60 through 71, &c.) ..	"	"	600 0 0	348 8 10	948 8 10	191 15 9	380 0 0
Tomahawk Road ..	"	"	200 0 0	..	200 0 0	16 16 2	965 0 0
Blair-Taieri ..	Taieri	Taieri	..	100 0 0	100 0 0	..	200 0 0
Taieri Bridge—Nenthorn Bridge ..	"	"	175 0 0	..	175 0 0	..	100 0 0
Block XII., Nenthorn ..	"	"	300 0 0	..	300 0 0	..	175 0 0
Silverpeak, &c. ..	"	"	320 0 0	..	320 0 0	..	300 0 0
Hindon ..	"	"	1,005 0 0	..	1,005 0 0	..	320 0 0
Run 75 (Boyd's) ..	"	"	3,000 0 0	..	3,000 0 0	..	1,005 0 0
Bridge over Kaikorai Stream ..	"	"	400 0 0	..	400 0 0	..	3,000 0 0
Grant in aid of bridge at Kaikorai on Main South Road ..	"	"	456 0 0	..	456 0 0	..	400 0 0
Bridge over Taieri Main South Road ..	"	"	12,581 19 0	..	12,581 19 0	..	456 0 0
Taieri Bridge, Otago, £1 for £3 ..	"	"	499 1 0	..	499 1 0	..	12,581 19 0
Green Island—Brighton ..	"	"	990 13 0	..	990 13 0	..	499 1 0
Henley protective river-works ..	"	"	250 0 0	..	250 0 0	..	990 13 0
Taieri River Road ..	"	"	200 0 0	..	200 0 0	..	250 0 0
Henley Road ..	"	"	100 0 0	..	100 0 0	..	200 0 0
Maungatua and Waipori ..	"	Tuapeka and Taieri	..	..	..	400 0 0	100 0 0
Taieri Bridge—Pukekura ..	"	Bruce	..	..	..	200 0 0	400 0 0
Carried forward ..	..	..	75,788 6 7	7,481 4 10	83,269 11 5	13,241 0 4	96,510 11 9

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	..	75,788 6 7	7,481 4 10	83,269 11 5	13,241 0 4	96,510 11 9
OTAGO LAND DISTRICT—continued.							
Roads, Bridges, etc.—continued.							
Teviot Small-grazing Runs ..	Tuapeka	..	100 0 0	..	100 0 0	..	100 0 0
Teviot Block ..	"	..	16,403 13 2	..	16,403 13 2	..	16,403 13 2
Bridges over Clutha and Beaumont and Roxburgh (grant-in-aid)	"	..	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Through Blocks VIII. and X., Benger ..	"	..	6,000 0 0	..	6,000 0 0	..	6,000 0 0
Beaumont-Miller's Flat ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Kelso-Greenvale ..	"	..	1,145 2 3	..	1,145 2 3	..	1,145 2 3
Tapanui Railway—Run 140 ..	"	..	110 4 0	..	110 4 0	230 0 0	340 4 0
Glenkenich ..	"	..	99 19 11	..	99 19 11	..	99 19 11
Black Hill—Main Dunedin Road	"	..	..	..	..	400 0 0	400 0 0
Beaumont Block ..	"	..	1,266 0 0	..	1,266 0 0	..	1,266 0 0
Rankleburn, &c. ..	"	..	1,810 13 5	223 6 7	2,034 0 0	576 13 5	2,610 13 5
Beaumont and Rankleburn ..	"	..	300 0 0	..	300 0 0	..	300 0 0
Tuapeka Mouth Point ..	"	..	367 0 0	..	367 0 0	..	367 0 0
Tuapeka West Block ..	"	..	1,148 7 3	..	1,148 7 3	..	1,148 7 3
Run 106 ..	"	..	1,200 0 0	..	1,200 0 0	..	1,200 0 0
Waitahuna—Run 52c ..	"	..	750 0 0	..	750 0 0	150 0 0	900 0 0
Waitahuna Bridge ..	"	..	..	..	..	150 0 0	150 0 0
Rankleburn, Block III. ..	"	..	..	..	..	200 0 0	200 0 0
Waitahuna—Lawrence ..	"	..	..	..	..	..	..
Waitahuna—Waipori ..	"	..	..	..	..	..	..
Lawrence-Clyde ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Switzers Track—Spylaw and Clutha ..	"	..	690 5 8	..	690 5 8	..	690 5 8
Wakaia Bush—Clutha Valley	"	..	3,500 0 0	..	3,500 0 0	..	3,500 0 0
Table Hill ..	"	..	150 0 0	..	150 0 0	..	150 0 0
Taiari Beach and South Roads ..	"	..	..	..	..	150 0 0	150 0 0
Matau-Kaitangata, £1 for £1 (to account)	"	..	..	..	..	500 0 0	500 0 0
Matau River protective-works (Inch Clutha)	"	..	..	..	..	200 0 0	200 0 0
Taiari Mouth Point ..	"	..	300 0 0	..	300 0 0	..	300 0 0
Clarendon District ..	"	..	75 0 0	..	75 0 0	..	75 0 0
Bridge, Tokomairi River, North Branch ..	"	..	250 0 0	..	250 0 0	..	250 0 0
Kaitangata—Wangaloa ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Matau Bridge (contribution) ..	"	..	300 0 0	..	300 0 0	150 0 0	450 0 0
Pomahaka Bridge, £1 for £1 ..	"	..	350 0 0	..	350 0 0	..	350 0 0
Pomahaka—Clutha ..	"	..	300 0 0	100 0 0	400 0 0	..	400 0 0
Pomahaka Bridge (Glydevale) ..	"	..	..	..	..	500 0 0	500 0 0
Pomahaka Bridge (Kelso) ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Waipahi Bridge (subsidy) ..	"	..	150 0 0	..	150 0 0	100 0 0	250 0 0
Carried forward	..	..	115,554 12 3	7,804 11 5	123,359 3 8	16,547 13 9	139,906 17 5

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contractors, &c., 31st March, 1899.	Total Net Expenditure and Liabilities.	
£	s.	d.	£	s.	d.	£	s.	d.
Brought forward ..	..	..	115,544 12 3	7,804 11 5	123,359 3 8	16,547 13 9	139,906 17 5	
OTAGO LAND DISTRICT—continued.								
Glenomaru and Owaka ..	Clutha	..	1,146 16 2	.. 0 0	1,146 16 2	..	1,146 16 2	
Block IV., Catlin's District ..	"	..	624 13 0	90 0 0	624 13 0	..	90 0 0	
Glenomaru Block ..	"	..	61 4 0	188 1 10	249 5 10	..	624 13 0	
Catherwood's Road ..	"	..	1,884 11 11	87 19 0	1,972 10 11	110 15 6	249 5 10	
Hunt's Road ..	"	..	1,045 8 4	..	1,045 8 4	..	2,083 6 5	
Cannibal Bay Road ..	"	..	300 0 0	118 18 11	418 18 11	181 1 1	1,045 8 4	
Barr's Road ..	"	..	994 1 9	224 11 2	1,218 12 11	20 8 10	1,600 0 0	
Glenomaru ..	"	..	224 11 9	93 12 7	318 4 4	406 7 5	1,239 1 9	
Glenomaru, Block IV. ..	"	..	150 0 0	..	150 0 0	..	724 11 9	
Glenomaru, Block V. ..	"	..	100 0 0	..	100 0 0	..	150 0 0	
Owaea (Campbell's) ..	"	..	100 0 0	..	100 0 0	..	100 0 0	
Owaka Railway-station, £1 for £1 ..	"	..	100 0 0	..	100 0 0	..	100 0 0	
Owaka-Catlin's Lake ..	"	..	..	160 0 0	160 0 0	..	160 0 0	
Katea-Dairy Factory, Owaka ..	"	..	95 7 7	84 12 5	180 0 0	..	180 0 0	
Glenomaru, Blocks III., IV., V., VII., and X. ..	"	..	130 15 4	176 11 2	307 6 6	223 8 10	530 15 4	
Catlin's Roads ..	"	..	1,367 6 3	43 4 10	1,410 11 1	56 15 2	1,467 6 3	
Catlin's and Tantuku ..	"	..	11,340 15 11	..	11,340 15 11	80 0 11	11,420 16 10	
Waikawa-Catlin's ..	"	..	22,703 8 5	2,670 0 7	25,373 9 0	608 9 0	25,981 18 0	
Block VIII., Catlin's ..	"	..	102 16 4	215 10 10	318 7 2	31 12 10	350 0 0	
Block I., Catlin's ..	"	..	194 6 1	14 7 5	208 13 6	585 12 7	794 6 1	
Block II., Catlin's ..	"	..	50 0 0	..	50 0 0	..	50 0 0	
Catlin's, Blocks I., II., and IV. ..	"	..	316 11 2	200 0 0	200 0 0	..	200 0 0	
Catlin's, Blocks IV., V., VII., and VIII. ..	"	..	8,189 16 4	383 11 11	700 3 1	356 16 11	1,057 0 0	
Woodlands Improved-farm Settlement ..	"	..	4,673 15 5	396 2 2	3,572 8 0	838 4 7	4,410 12 7	
Woodlands ..	"	..	39 14 6	..	5,069 17 7	103 10 3	5,173 7 10	
Woodlands (B2) Improved-farm Settlement ..	"	..	..	..	39 14 6	1,100 0 0	1,139 14 6	
Manuka Island-Balclutha ..	"	..	..	..	..	200 0 0	200 0 0	
Tantuku, Block VIII. ..	"	..	..	..	..	250 0 0	250 0 0	
Woodlands-Tahakopa ..	"	..	..	46 5 4	46 5 4	53 14 8	100 0 0	
Waiwera Bridge, subsidy (Dunedin-Invercargill), £1 for £1 ..	"	..	..	..	..	400 0 0	400 0 0	
Glenomaru, Blocks III., IV., V., VII., and X. ..	"	..	529 4 4	..	529 4 4	48 4 8	48 4 8	
Ratanui Road ..	"	..	200 0 0	152 18 11	352 18 11	147 1 1	529 4 4	
Ratanui-Whitehead ..	"	..	50 0 0	..	50 0 0	..	500 0 0	
Wingfield Road, Ratanui ..	"	..	..	4 0 0	4 0 0	396 0 0	50 0 0	
Bridge over Tahakopa, Block VIII., Rimu ..	"	..	635 8 4	..	635 8 4	..	400 0 0	
Long Point Road ..	"	..	..	..	..	200 0 0	635 8 4	
Mouat's Saddle ..	"	..	..	..	..	..	200 0 0	
Carried forward ..	..	..	167,805 5 2	13,537 12 2	181,342 17 4	22,945 18 1	204,288 15 5	

TABLE NO. 4.—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities' Contracts, &c. 31st March, 1899.	Total Net Expenditure and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	..	167,805 5 2	13,537 12 2	181,342 17 4	22,945 18 1	204,288 15 5
ROADS, BRIDGES, ETC.—continued.							
OTAGO LAND DISTRICT—continued.							
Purakauti Stream	Clutha	..	201 2 5	35 12 0	236 14 5	20 10 3	257 4 8
Kaler's Road (felling)	"	..	157 15 4	..	157 15 4	200 0 0	357 15 4
Warcock's Road	"	..	55 14 0	27 2 1	82 16 1	17 3 11	100 0 0
Tahaukupu	"	..	716 8 2	396 5 0	1,112 13 2	3 15 0	1,116 8 2
Rimu, Block XIII.	"	..	194 9 9	200 5 9	394 15 6	..	394 15 6
Tahaukupu Block	"	..	675 11 10	..	675 11 10	..	675 11 10
Tautuku River Landing-sheds, &c.	"	..	300 0 0	..	300 0 0	..	300 0 0
Tautuku	"	..	483 17 5	..	483 17 5	600 0 0	1,083 17 5
Waikoikoi Bridge	"	..	125 0 0	..	125 0 0	..	125 0 0
Rimu	"	..	554 4 9	..	554 4 9	..	554 4 9
Rimu Improved-farm Settlement	"	..	1,775 16 1	857 11 3	2,633 7 4	115 10 10	2,748 18 2
Rimu, Block XIV.	"	..	..	149 16 0	149 16 0	350 4 0	500 0 0
Heathfield Improved-farm Settlement	"	..	4,648 6 0	521 6 6	5,169 12 6	843 10 10	5,513 3 4
Waipati Improved-farm Settlement	"	..	3,457 8 10	1,075 17 4	4,533 6 2	126 17 6	4,660 3 8
Leithen Bush Track	"	..	..	200 0 0	200 0 0	..	200 0 0
Subsidy, Clutha Bridge	"	..	2,500 0 0	..	2,500 0 0	..	2,500 0 0
Balclutha-Pukepito £1 for £1 (along Clutha River)	"	..	..	..	..	150 0 0	150 0 0
Anderson's Bay	"	..	100 0 0	175 0 0	275 0 0	25 0 0	300 0 0
Caversham Industrial School Reserve	Caversham	..	50 0 0	..	50 0 0	..	50 0 0
Cargill Street, Caversham	"	..	100 0 0	..	100 0 0	..	100 0 0
Water of Leith protective works	"	..	250 0 0	150 0 0	400 0 0	145 0 0	545 0 0
Ravensbourne	City and Taieri	..	1,515 7 0	75 0 0	1,590 7 0	3 14 6	1,594 1 6
Gladstone, Upper Junction	Chalmers	..	250 0 0	..	250 0 0	..	250 0 0
Normanby, Mount Cargill	Dunedin City	..	150 0 0	..	150 0 0	..	150 0 0
Sundry roads and bridges, Otago	"	..	1,001 5 1	..	1,001 5 1	..	1,001 5 1
Native Districts	"	..	735 5 11	..	735 5 11	..	735 5 11
Education Reserves	"	..	1,821 3 9	..	1,821 3 9	..	1,821 3 9
Purchase of Roads	"	..	542 17 6	..	542 17 6	..	542 17 6
Miscellaneous and engineering	"	..	6,336 6 7	100 0 0	6,436 6 7	440 0 0	6,876 6 7
To open up Otago Runs	"	..	11,732 19 11	..	11,732 19 11	..	11,732 19 11
Village Settlements (see also General)	"	..	78 15 3	182 6 3	261 1 6	66 18 6	328 0 0
Total, Otago Land District	..	..	208,375 0 9	17,683 14 4	226,058 15 1	25,554 3 5	251,612 18 6

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., 31st March, 1899.	Total Net Expenditure on Contracts and Liabilities.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—							
Ahol-Nokomai Saddle ..	Lake	Wakatipu	200 0 0	300 0 0	200 0 0	..	200 0 0
Eyre Creek Bridge ..	"	Wallace	150 0 0	..	300 0 0	..	300 0 0
Gow's Creek Stock-bridge ..	"	Wakatipu	400 0 0	..	400 0 0	..	400 0 0
Dome Creek Bridge ..	"	"	499 5 6	..	499 5 6	..	499 5 6
Tomogalak Creek—D.P. land ..	"	"	100 0 0	..	100 0 0	300 0 0	400 0 0
Dipton-Balfour ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Boundary Creek Bridge ..	"	"	..	..	..	125 0 0	125 0 0
Argyle Bridge ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Waikaka-Wendon and Greenvale ..	"	"	500 0 0	..	500 0 0	..	500 0 0
Wendon District ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Wendonside ..	"	"	594 0 0	..	594 0 0	..	594 0 0
Riversdale-Switzer ..	"	"	850 0 0	..	850 0 0	..	850 0 0
Pyramid Bridge ..	"	"	..	..	..	150 0 0	150 0 0
Wendon District, Section 80, Block I., and Main Road, Blocks VIII., IX., and XIV.	"	"	..	..	..	150 0 0	150 0 0
Garneburn, Hickey's Ford ..	"	"	2,000 0 0	..	2,000 0 0	300 0 0	300 0 0
Wakaia River Bridge (£1 for £3)	"	Wakatipu and Clutha	320 0 0	..	320 0 0	..	320 0 0
Wakaia Siding-Waikaka Township	"	Awarua	..	..	..	600 0 0	600 0 0
Hillend-Dipton Flat ..	"	Wakatipu	200 0 0	..	200 0 0	..	200 0 0
Main North Road (£1 for £1)	"	"	500 0 0	..	500 0 0	..	500 0 0
Waikaka-Pyramid ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Pyramid Bridge-Waikaka ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Waimea Valley Road ..	"	"	150 0 0	..	150 0 0	..	150 0 0
Otamita Retreat ..	"	Mataura	1,998 17 2	..	1,998 17 2	..	1,998 17 2
Bridge over Mataura at Otama	"	Wakatipu	200 0 0	..	200 0 0	..	200 0 0
Reaby Retreat ..	"	Mataura	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Gore Bridge ..	"	"	449 18 9	..	449 18 9	150 0 0	599 18 9
Centre Bush-Otapiri ..	"	Awarua	100 0 0	..	100 0 0	..	100 0 0
Woodend ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Otapiri ..	"	"	100 0 0	..	100 0 0	..	100 0 0
Clark's Road-Greenhills ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Winton Tramway-Winton Forest	"	"	200 0 0	..	200 0 0	50 0 0	250 0 0
Myross Bush ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Tanner's Road, Winton ..	"	"	..	100 0 0	100 0 0	..	100 0 0
Kent Road ..	"	"	750 0 0	..	750 0 0	100 0 0	850 0 0
Winton Drains ..	"	"	..	..	..	200 0 0	200 0 0
Mataura-Winton and Channel	"	"	13,116 7 10	..	13,116 7 10	..	13,116 7 10
Forest Hill Tramway Road ..	"	"	1,494 19 5	..	1,494 19 5	..	1,494 19 5
Branch road-Forest Hill ..	"	"	598 9 0	..	598 9 0	..	598 9 0
Forest Hill Road ..	"	"	..	300 0 0	300 0 0	200 0 0	500 0 0
Carried forward	..	..	27,621 17 8	700 0 0	28,321 17 8	2,925 0 0	30,646 17 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on Roads, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	27,621 17 8	700 0 0	28,321 17 8	2,325 0 0	30,646 17 8
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—continued.							
Otapiri Bridge—Forest Hill District	Southland	Awarua	78 15 0	6 12 10	85 7 10	150 0 0	150 0 0
Hokonui-Forest Hill Block ..	"	"	1,700 9 5	..	1,700 9 5	517 7 2	602 15 0
Forest Hill, Macdonald Road	"	Mataura	100 0 0	..	100 0 0	996 15 3	2,697 4 8
Dunsdale ..	"	Invercargill	..	..	..	100 0 0	100 0 0
Buxall Road ..	"	Mataura	..	..	..	100 0 0	100 0 0
Baird's Road, Block IX., Walkawa	"	Awarua	..	..	..	200 0 0	200 0 0
Bluff Road—Campbelltown ..	"	"	..	..	..	150 0 0	150 0 0
Campbelltown Hundred, Block VIII.	"	"	..	..	..	100 0 0	100 0 0
Centre Bush Village ..	"	"	..	..	..	100 0 0	100 0 0
Hokonui-Henderson's Road ..	"	"	..	..	..	200 0 0	200 0 0
Lands Bridge—Railway-station	"	"	..	..	..	300 0 0	300 0 0
Mill and Flora Road ..	"	"	..	..	..	200 0 0	200 0 0
Murphy's Road (£1 for £1)	"	"	..	..	..	50 0 0	50 0 0
Otatara ..	"	"	..	..	..	100 0 0	100 0 0
Laura Creek Bridge ..	"	"	..	..	..	100 0 0	100 0 0
Winton Creek Bridge ..	"	"	..	..	..	50 0 0	50 0 0
Winton Creek Bridge, Section 9 (Winton Hundred)	"	"	..	..	..	50 0 0	50 0 0
Through Runs 177 and 257 ..	"	"	5,002 0 0	..	5,002 0 0	50 0 0	5,002 0 0
Hedgehope-Mataura ..	"	Mataura	300 0 0	..	300 0 0	..	300 0 0
Makarewa-Hedgehope Flood-channel	"	Awarua and Mataura	..	..	..	300 0 0	300 0 0
Waimumu Bridge ..	"	Awarua	100 0 0	..	100 0 0	..	100 0 0
Mabel District ..	"	Mataura	300 0 0	200 0 0	500 0 0	..	500 0 0
Hedgehope-Tiupua and Dunsdale Bridges	"	"	..	..	..	500 0 0	500 0 0
Mataura River protective works	"	"	200 0 0	..	200 0 0	..	200 0 0
Invercargill Hundred, Block XXIII.	"	"	199 1 1	..	199 1 1	..	199 1 1
Hedgehope Road ..	"	Awarua	200 0 0	..	200 0 0	..	200 0 0
Makarewa-Hedgehope ..	"	"	200 0 0	..	200 0 0	..	200 0 0
Main North Road, Winton ..	"	"	25 0 0	..	25 0 0	800 0 0	800 0 0
Orion and Minerva Roads, Makarewa	"	"	..	..	..	25 0 0	25 0 0
Devereaux-East Winton ..	"	"	520 0 0	..	520 0 0	50 0 0	50 0 0
Bush land east of Makarewa	"	"	..	74 3 6	74 3 6	..	74 3 6
Outfall drainage, Otatara ..	"	"	150 0 0	..	150 0 0	175 16 6	250 0 0
Wallacetown-Ryal Bush ..	"	"	..	..	..	..	150 0 0
Section 795, Hokonui ..	"	"	250 0 0	200 0 0	450 0 0	..	450 0 0
Wallacetown-Spar Bush-Waimatuku Flat	"	"	635 19 3	..	635 19 3	100 0 0	550 0 0
Makarewa Bridge ..	"	"	..	..	..	100 0 0	735 19 3
Moturimu ..	"	"	..	..	..	80 0 0	80 0 0
Carried forward	..	..	37,583 2 5	1,180 16 4	38,763 18 9	7,994 19 11	46,758 17 8

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	37,583 2 5	1,180 16 4	38,763 18 9	7,994 18 11	46,758 17 8
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—continued.							
Linds Bridge ..	Southland	..	100 0 0	..	100 0 0	..	100 0 0
Grove Bush ..	"	..	200 0 0	..	200 0 0	..	200 0 0
Centre Bush ..	"	..	..	..	..	100 0 0	100 0 0
Makarewa-Grove Bush ..	"	..	400 0 0	..	400 0 0	250 0 0	650 0 0
Bush land, Makarewa ..	"	..	150 0 0	..	150 0 0	..	150 0 0
Wright's Bush ..	"	..	100 0 0	..	100 0 0	..	100 0 0
Wallacetown-Tomoporakau ..	"	..	150 0 0	..	150 0 0	..	150 0 0
Mill Road, Makarewa, Block X., Sections 32 and 33 ..	"	..	..	200 0 0	200 0 0	..	200 0 0
Invercargill Hundred, Block X. ..	"	..	200 0 0	..	200 0 0	..	200 0 0
Invercargill Hundred, Block XXIII ..	"	..	307 14 6	14 2 3	321 16 9	78 3 3	400 0 0
Invercargill Hundred, Blocks XIV., XV. ..	"	..	..	..	..	200 0 0	200 0 0
Waikiwi Suburban ..	"	..	150 0 0	..	150 0 0	..	150 0 0
Waikiwi ..	"	..	..	..	..	20 0 0	20 0 0
Invercargill Hundred, XV. ..	"	..	..	99 15 0	100 0 0	..	100 0 0
Invercargill Hundred, Blocks XVII. and XX. ..	"	..	200 0 0	144 19 9	344 19 9	55 0 3	400 0 0
Oreti Bridge, Wray's Bush Road (to account) ..	"	..	..	..	..	250 0 0	250 0 0
Otapiri Bridge ..	"	..	..	..	..	150 0 0	150 0 0
Outfall drain, Block VIII. (Campbelltown Hundred) ..	"	..	..	..	..	150 0 0	150 0 0
Balfour Bridge, Mataura River (to account) ..	"	..	..	..	..	50 0 0	50 0 0
Invercargill Hundred, Block XXII. ..	"	..	..	..	..	300 0 0	300 0 0
Main East Road, near Invercargill ..	"	..	..	..	..	300 0 0	300 0 0
Seaward Bush Roads ..	"	..	100 0 0	246 14 11	346 14 11	..	346 14 11
Miller's Road, Hedgehope ..	"	..	595 5 11	..	595 5 11	3 5 1	845 5 11
Seaward Bush Township (McQuarrie Road) ..	"	..	100 0 0	33 11 0	133 11 0	166 9 0	200 0 0
Invercargill-Tisbury ..	"	..	400 0 0	..	400 0 0	..	400 0 0
Maclean's Road, Seaward Bush ..	"	..	..	0 3 6	0 3 6	69 16 6	70 0 0
Tisbury ..	"	..	200 0 0	..	200 0 0	..	200 0 0
Tramway Road ..	"	..	..	150 0 0	150 0 0	..	150 0 0
Appleby-Tisbury ..	"	..	344 6 7	..	344 6 7	..	344 6 7
Wahopai Bridge ..	"	..	1,100 0 0	..	1,100 0 0	..	1,100 0 0
Tisbury-Waimatua ..	"	..	899 13 0	..	899 13 0	..	899 13 0
Kingswell Creek ..	"	..	..	97 9 2	97 9 2	..	97 9 2
Kingswell Creek-Seaward Bush ..	"	..	..	..	..	102 10 10	200 0 0
Kingswell Creek-Seaward Bush, £1 for £1 ..	"	..	9 16 6	190 3 6	199 19 12	300 0 0	300 0 0
Waimatuku Bush ..	"	..	600 0 0	100 0 0	700 0 0	109 16 6	809 16 6
Millwood Settlement ..	"	..	75 0 0	..	75 0 0	50 0 0	125 0 0
Bay Road-Otatara Bush ..	"	..	1,179 18 3	..	1,179 18 3	..	1,179 18 3
Otatara Bush ..	"	..	500 0 0	..	500 0 0	..	500 0 0
Carried forward	..	..	45,645 2 2	2,457 15 5	48,102 17 7	10,700 0 4	58,802 17 11

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	45,645 2 2	2,457 15 5	48,102 17 7	10,700 0 4	58,802 17 11
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—continued.	Southland	Awarua	..	..	..	200 0 0	200 0 0
Longbush, Makarewa, Myross, and Wallacetown	..	..	..	..	..	..	..
Township (£1 for £1)	..	Invercargill	694 4 11	..	694 4 11	..	694 4 11
Clifton-Seaward Bush	..	..	..	55 19 1	55 19 1	..	100 0 0
Clifton-Tisbury	..	..	850 0 0	50 0 0	900 0 0	..	900 0 0
Invercargill Hundred	..	Awarua	216 16 3	..	216 16 3	..	216 16 3
Acker's Village Block	..	..	120 10 1	..	120 10 1	150 0 0	270 10 1
Acker's Village	..	..	..	..	..	250 0 0	250 0 0
Block VIII., Winton Hundred	..	..	100 0 0	..	100 0 0	..	100 0 0
Blocks II. and III., Campbelltown	..	..	100 0 0	..	100 0 0	..	100 0 0
Woodend-Bushy Point	..	Awarua and Mataura	6,064 15 11	..	6,064 15 11	..	6,064 15 11
Seaward Forest-Coast	..	Mataura	1,050 0 0	..	1,050 0 0	..	1,050 0 0
Campbelltown Hundred	..	Awarua	100 0 0	..	100 0 0	..	100 0 0
West's-Mokotua	..	..	500 0 0	..	500 0 0	..	500 0 0
Seaward Moss-Awarua Bay	..	..	650 0 0	..	650 0 0	..	650 0 0
Seaward Forest-Deferred-payment Block	..	..	79 8 8	..	79 8 8	..	79 8 8
Haberfield's-Beach	..	..	253 1 6	245 18 6	500 0 0	3 1 6	503 1 6
Campbelltown Point Road	..	..	600 0 0	..	600 0 0	..	600 0 0
Campbelltown Hundred and Campbelltown	..	..	50 0 0	..	50 0 0	..	50 0 0
Girdler's Road	..	..	1,066 17 7	..	1,066 17 7	133 2 5	1,200 0 0
Campbelltown	..	..	700 0 0	200 0 0	900 0 0	..	900 0 0
Bluff Road	..	..	120 1 8	..	120 1 8	400 0 0	520 1 8
Oteramika Block	..	..	700 0 0	44 15 10	744 15 10	255 4 2	1,000 0 0
Oteramika	..	..	250 0 0	..	250 0 0	250 0 0	500 0 0
Mataura Island Dairy Factory—Pine Bush Railway-station	..	Mataura	..	..	..	..	..
Hokonui-Forest Hill	..	Awarua	200 0 0	..	200 0 0	200 0 0	200 0 0
Timpany's Hill to Gorge Railway-station, Oteramika	..	Mataura	..	..	..	..	..
Toetoe's, Block X.	..	..	..	..	..	200 0 0	200 0 0
Owari Bridge	..	..	150 0 0	..	150 0 0	..	150 0 0
Mokoreta Valley (£1 for £1)	..	..	200 0 0	..	200 0 0	..	200 0 0
Wyndham Bridge (£1 for £1)	..	..	250 0 0	..	250 0 0	..	250 0 0
Bridges, Fortrose-Wyndham	..	..	2,385 6 11	1,247 5 1	3,632 12 0	580 14 11	4,213 6 11
Haldane Improved-farm Settlement	..	..	1,499 18 2	..	1,499 18 2	..	1,499 18 2
Wyndham via Mimiha-Otarua	..	..	3,038 14 3	341 6 8	3,380 0 11	411 12 4	3,791 13 8
Waikawa Improved-farm Settlement	..	..	1,533 9 3	843 0 10	2,376 10 1	156 19 2	2,533 9 3
Waikawa-Wyndham Valley	..	..	380 6 1	128 18 4	509 4 5	271 1 8	780 6 1
Moturimu Improved-farm Settlement	..	..	500 0 0	..	500 0 0	300 0 0	800 0 0
Fortrose-Tokarui-Waikawa	..	..	..	..	..	100 0 0	100 0 0
Mokoreta, Blocks VII. and IX. (£1 for £1)	..	..	..	..	..	..	..
Carried forward	..	..	70,048 13 5	5,615 19 9	75,664 13 2	14,805 17 5	90,270 10 7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1899. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward .. .. .	..	..	70,048 13 5	5,615 19 9	75,664 13 2	14,605 17 5	90,270 10 7
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—continued.							
Southland Bridges and Fortrose Jetty (flood-damages)	Southland	Mataura	800 0 0	116 3 11	208 15 5	93 16 1	302 11 6
Waikawa, Block VII.	"	"	92 11 6	..	208 15 5	150 0 0	150 0 0
Waikawa (II.) Block	"	"	..	250 0 0	..	..	250 0 0
Waikawa Bridge ..	"	"	568 7 4	..	568 7 4	..	568 7 4
Waikawa-Otara ..	"	"	..	..	..	600 0 0	600 0 0
Blocks X., XI., XII., and XIII., Waikawa district.	"	"	100 0 0	..	100 0 0	..	100 0 0
Quarry Hills ..	"	"	..	116 18 1	116 18 1	33 1 11	150 0 0
Block XIV., Mokoreta ..	"	"	492 13 2	..	492 13 2	1,075 0 0	1,567 13 2
Mokoreta-Scrubby Hill Block	"	"	7,929 12 5	267 10 1	7,597 2 6	532 9 11	8,129 12 5
Waikawa-Otara Block ..	"	"	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Otara to Waikawa and Bridge, over Tokanu	"	"	9,784 5 7	476 13 4	10,260 18 11	1,323 6 8	11,584 5 7
Waikawa District ..	"	Mataura and Clutha	..	..	..	150 0 0	150 0 0
Gore-Pukerua ..	"	Mataura	..	..	..	200 0 0	200 0 0
Graham Road ..	"	"	..	..	..	100 0 0	100 0 0
Naigara Bridge Road, Block VII., Waikawa	"	"	..	..	..	100 0 0	100 0 0
Neil's Road to termination of Seaward Bush Railway	"	"	..	..	..	200 0 0	200 0 0
Seaward Downs ..	"	"	..	..	..	200 0 0	200 0 0
Waikawa Block VIII.	"	"	..	..	..	150 0 0	150 0 0
Waimahaka-Block VII., Mokoreta	"	"	..	..	..	200 0 0	200 0 0
Wyndham Valley (Carlie to Bews)	"	"	..	..	..	200 0 0	200 0 0
Mimihaun Bridge ..	"	"	..	..	..	200 0 0	200 0 0
Line of Hundreds..	Southland and Wallace	Wallace and Awarua	..	..	..	350 0 0	350 0 0
Heddon Bush-Centre Bush	"	Wallace	9 0 0	..	9 0 0	200 0 0	200 0 0
Bridge over Oreti at Elbow	"	Wallace	1,000 8 6	..	1,000 8 6	..	1,000 8 6
Kelso-Waikaka ..	Southland and Clutha	Wakatipu and Clutha	247 7 7	335 16 9	247 7 7	760 0 0	1,007 7 7
Manapouri-Dusky Sound	Wallace and Ford	Wallace	4 11 2	..	340 7 11	164 3 3	504 11 2
Te Anau-George Sound	Wallace	"	140 0 0	165 13 0	140 0 0	54 7 0	140 0 0
Te Anau Jetty ..	"	"	30 0 0	..	195 13 0	..	250 0 0
Manapouri-Te Anau	"	"	1,307 19 9	..	1,307 19 9	300 0 0	1,607 19 9
Mossburn-Te Anau	"	"	350 0 0	..	350 0 0	..	350 0 0
Mossburn Bridge..	"	"	400 0 0	..	400 0 0	..	400 0 0
Mossburn-Manapouri	"	"	228 19 0	2 6 0	231 5 0	268 15 0	500 0 0
Mararoa Bridge ..	"	"	425 0 0	..	425 0 0	..	425 0 0
Blackmount to D.P. land	"	"	100 0 0	..	100 0 0	50 0 0	150 0 0
Small grazing Run, No. 23	"	"	..	122 10 0	122 10 0	77 10 0	200 0 0
Horse-bridge, Wairaki River	"	"	..	63 10 5	63 10 5	336 9 7	2,789 0 8
Black Creek Bridge and Road	"	"	2,389 0 8	100 0 0	2,452 11 1	..	100 0 0
Black Creek Bridge	"	"	250 0 0	..	250 0 0	..	250 0 0
Papatotara—Improved-farm Settlement	"	"	901 9 8	47 11 5	949 1 1	21 5 11	970 7 0
Avondale Saddle ..	"	"	196 12 1	3,678 17 3	3,870 9 4	1,215 5 3	5,085 14 7
Loneker Settlement	"	"	..	172 12 0	172 12 0	427 8 0	600 0 0
Lilburn Roads ..	"	"	..	..	..	..	..
Waiatu Bridge, Clifden (to account)	"	"	..	..	..	..	..
Oravia-Clifden ..	"	"	..	..	..	..	..
Carried forward .. .. .	..	..	98,196 11 10	11,527 2 0	109,723 13 10	24,138-16 0	133,862 9 10

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898. £ s. d.	Net Expenditure during 12 Months ended 31st March, 1899. £ s. d.	Total Net Expenditure to 31st March, 1899. £ s. d.	Liabilities on Authorities, Contracts, &c., 31st March, 1899. £ s. d.	Total Net Expenditure and Liabilities. £ s. d.
Brought forward	..	..	98,196 11 10	11,527 2 0	109,723 13 10	24,138 16 0	133,862 9 10
ROADS, BRIDGES, ETC.—continued.							
SOUTHLAND LAND DISTRICT—continued.							
Clifden Ferry—Eastern Bush (Limestone Gorge)	Wallace	Wallace	300 0 0	59 10 0	300 0 0	340 10 0	300 0 0
Clifden—Redcliff Creek	"	"	200 0 0	..	59 10 0	150 0 0	400 0 0
Heddon Bush	"	"	150 0 0	..	150 0 0	..	350 0 0
Grassy Creek	"	"	1,190 0 0	..	1,190 0 0	..	150 0 0
Wreys Bridge (subsidy)	"	"	8,000 0 0	..	1,190 0 0	..	1,190 0 0
Lillburn, Monowai, and Alton	"	"	40 0 0	..	8,000 0 0	..	8,000 0 0
Tracks—McLaren's Run	"	"	74 17 6	53 18 5	128 15 11	146 1 7	274 17 6
Lower Waiau Ferry	"	"	550 0 0	..	550 0 0	..	550 0 0
Otautau Bridge	"	"	250 0 0	..	250 0 0	..	250 0 0
Otautau Bridge (subsidy)	"	"	..	..	..	300 0 0	300 0 0
Fairfax Bridge (to account)	"	"	1,642 14 10	61 15 4	1,704 10 2	388 4 8	2,092 14 10
Longwood, Blocks XVI. and I.	"	"	258 0 11	74 3 6	74 3 6	425 16 6	500 0 0
Orepuki—Waiau	"	"	100 0 0	..	258 0 11	..	258 0 11
Longwood, Blocks XVI. and X.	"	"	258 0 11	..	100 0 0	..	100 0 0
Aparima Bridge	"	"	258 11 6	399 6 0	657 17 6	200 14 0	858 11 6
Longwood, Blocks XV., XVI., and XVII.	"	"	549 13 6	..	549 13 6	..	549 13 6
Riverton—Orepuki	"	"	300 0 0	..	300 0 0	..	300 0 0
Jacob's River (subsidy)	"	"	3,652 7 2	394 13 7	3,987 0 9	365 6 5	4,352 7 2
Orepuki—Wairaurahiri	"	"	600 0 0	..	600 0 0	..	800 0 0
Riverton—Colac Bay	"	"	..	..	..	200 0 0	200 0 0
Otautau Stream Bridge	"	"	..	..	..	100 0 0	100 0 0
Aparima Protective Works, £1 for £1	"	"	..	..	..	250 0 0	250 0 0
Clifden Bridge—Papatotara	"	"	..	..	..	250 0 0	250 0 0
Clifden—Otautau (Main Road)	"	"	..	..	..	200 0 0	200 0 0
Dipton—Hamilton Burn	"	"	..	..	..	100 0 0	100 0 0
Forde's Road (Groper's Bush)	"	"	..	1 6 6	1 6 6	198 13 6	200 0 0
Longwood, Block XVIII.	"	"	..	..	..	200 0 0	200 0 0
Manapouri—Flaxy Creek	"	"	..	5 8 0	5 8 0	244 12 0	250 0 0
Redcliff—Manapouri	"	"	..	..	..	60 0 0	60 0 0
Sunnyside—Woodlands	"	"	..	..	..	250 0 0	250 0 0
Waiau District, Blocks VIII. and X. (sheep-track)	"	"	150 0 0	..	150 0 0	100 0 0	250 0 0
Half-moon Bay Wharf, Stewart Island	Stewart Island	Awatua	100 0 0	..	100 0 0	..	100 0 0
Half-moon Bay Tramway	"	"	250 0 0	..	250 0 0	..	250 0 0
Port William—Half-moon Bay	"	"	2,590 12 5	..	2,590 12 5	..	2,590 12 5
Stewart Island roads	"	"	..	..	..	100 0 0	100 0 0
Stewart Island Wharf	"	"	9,394 2 11	..	9,394 2 11	..	9,394 2 11
Sundry roads	"	"	Cr. 36 5 0	..	Cr. 36 5 0	..	9 9 0
Sundry Roads (Native labour)	"	"	1,148 15 8	..	1,148 15 8	..	263 15 0
Village Settlements (see also General)	"	"	2,548 9 0	..	2,654 19 4	..	1,148 15 8
Purchase of roads	"	"	..	106 10 4	..	198 9 8	2,848 9 0
To open up Southland runs	"	"	..	..	..	..	..
Miscellaneous and Engineering	"	"	..	..	..	..	..
Total, Southland	..	..	132,468 1 3	12,623 13 8	145,091 14 11	29,402 4 4	174,493 19 3

TABLE No. 4—*continued*.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—*continued*.

Name of Work.	County.	Electorate.	Total Net Expenditure to 31st March, 1898.		Net Expenditure during 12 Months ended 31st March, 1899.		Total Net Expenditure to 31st March, 1899.		Liabilities on Authorities, Contracts, &c., 31st March, 1899.		Total Net Expenditure and Liabilities.	
			£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
ROADS, BRIDGES, ETC.— <i>continued</i> .												
GENERAL:—												
Expenditure under miscellaneous public works votes (see Table No. 7 of 1884)	..	..	322,358	5 4	..	..	322,358	5 4	..	..	322,358	5 4
Works not specifically appropriated—viz., roads, bridges, and drains	..	..	1,429	14 4	480	9 0	1,910	3 4	914	4 6	2,824	7 10
Miscellaneous and Engineering—Main Roads	..	..	33	14 0	..	..	33	14 0	..	..	33	14 0
Schools in outlying districts	..	..	1,958	13 0	25	0 0	1,978	13 0	125	0 0	2,103	13 0
Improved farms not specifically appropriated—viz., for felling, clearing, building, fencing, grassing, tools, explosives, &c.	..	..	Cr. 10	0 0	..	..	Cr. 10	0 0	500	0 0	490	0 0
Miscellaneous and Engineering—Roads to give access	..	..	204	4 0	..	..	204	4 0	..	..	204	4 0
Miscellaneous roads and bridges in Native districts	..	..	140	14 11	163	5 3	304	0 2	486	14 9	740	14 11
Native land purchases—Surveys	..	..	18,565	19 5	..	..	18,565	19 5	..	..	18,565	19 5
Native land purchases—New purchases	..	..	167	1 0	..	..	167	1 0	500	0 0	667	1 0
Portion of subsidies to local bodies	..	..	143,553	12 11	..	..	143,553	12 11	..	..	143,553	12 11
Contingencies and subsidies to local bodies for providing work for unemployed	..	..	54,308	16 1	..	..	54,308	16 1	..	..	54,308	16 1
Co-operative work for unemployed—viz., roads, drains, passages, tools, stores, tents, &c.	..	..	21,975	15 11	..	..	21,975	15 11	1,163	0 0	23,143	15 11
Advance to co-operative workmen for dwelling-houses	..	..	157	10 0	..	..	157	10 0	240	0 0	397	10 0
Flood-damages to roads and bridges (to account)	..	..	5,037	18 10	9,544	3 6	14,582	2 4	4,417	17 8	19,000	0 0
Miscellaneous—Roads and material	..	..	1,319	18 1	79	3 10	1,399	1 11	120	16 2	1,519	18 1
GRANTS-IN-AID:—												
Grants-in-aid under "The Roads and Bridges Construction Act, 1882"	..	..	375,213	14 10	..	..	375,213	14 10	..	..	375,213	14 10
LOCAL BODIES:—												
Payments of thirds, &c.	..	..	1,495	5 5	..	..	1,495	5 5	..	..	1,495	5 5
Village settlements (see also Village Settlements, under Land Districts)	..	..	51,095	17 6	..	..	51,095	17 6	200	0 0	51,295	17 6
Purchase of land for roads	..	..	..	..	691	9 2	691	9 2	888	10 10	1,580	0 0
Wire rope for bridges	..	..	..	..	..	..	..	..	1,000	0 0	1,000	0 0
Advance to improved-farm settlers for buildings, gardens, fences, &c.	..	..	..	..	..	..	..	..	1,200	0 0	1,200	0 0
Refund of revenue credited to Vote 91 in error	..	..	..	..	Cr. 3	8 0	Cr. 3	8 0	..	..	Cr. 3	8 0
Total, General	..	..	999,001	15 7	10,980	2 9	1,009,981	18 4	11,711	3 11	1,021,693	2 3
Grand Total	..	..	4,477,564	11 8	265,905	3 2	4,743,469	14 10	299,742	9 4	5,043,212	4 2

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—continued.

	Net Expenditure to 31st March, 1899.		Net Expenditure during 12 Months ended 31st March, 1899.		Total Net Expenditure to 31st March, 1899.		Liabilities on Authorities, Contracts, &c., 31st March, 1899.		Total Net Expenditure and Liabilities.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
<b>ROADS ON GOLDFIELDS:—</b>										
Subsidies towards the construction of roads and tracks in mining districts, and minor works for the development of minerals, upon a subscription of one-half being contributed	96,424	5 0	4,752	17 9	101,177	2 9	2,473	0 8	103,650	3 5
Roads to open up mineral lands ...	1,885	11 1	...	...	1,885	11 1	...	...	1,885	11 1
<b>AUCKLAND:—</b>										
Assistance to Piako County Council towards constructing tramway from Te Aroha Mountain to batteries	6,000	0 0	...	...	6,000	0 0	...	...	6,000	0 0
Opening Mokau River for development of coal-mine	552	8 0	...	...	552	8 0	...	...	552	8 0
Kuaotunu to Coromandel ...	1,470	0 0	...	...	1,470	0 0	...	...	1,470	0 0
Whakapara to Puhipuhi ...	250	0 0	100	0 0	350	0 0	100	0 0	450	0 0
Kiripaka to Coal-mines ...	...	...	80	0 0	80	0 0	20	0 0	100	0 0
Helena Bay to Whakapara ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Gordon Settlement to Waharoa ...	600	0 0	...	...	600	0 0	...	...	600	0 0
Waiorongomai Road ...	300	0 0	...	...	300	0 0	150	0 0	450	0 0
Approach to railway bridge, Te Aroha	150	0 0	...	...	150	0 0	...	...	150	0 0
Thompson's Track ...	3,523	19 11	...	...	3,523	19 11	500	0 0	4,023	19 11
Hikutaia to Waihi ...	1,815	0 0	510	0 0	2,325	0 0	290	0 0	2,615	0 0
Upper Waitekauri Bridge ...	250	0 0	...	...	250	0 0	...	...	250	0 0
Paeroa to Waitoa ...	205	13 4	379	8 9	585	2 1	550	11 3	1,135	13 4
Road formation, Waitekauri to Cross Road	271	11 11	...	...	271	11 11	...	...	271	11 11
Junction Waihi Road to New Find, Waitekauri	328	8 0	...	...	328	8 0	...	...	328	8 0
Waihi to Whangamata ...	300	0 0	58	6 0	358	6 0	141	14 0	500	0 0
Paeroa to Te Aroha ...	665	0 0	82	1 5	747	1 5	117	18 7	865	0 0
Karangahake Bridge ...	113	8 7	405	13 8	519	2 3	...	...	519	2 3
Waitekauri to Wharekuraupunga ...	...	...	98	8 6	98	8 6	...	...	98	8 6
Hikutaia to Waitekauri ...	...	...	614	5 4	614	5 4	135	14 8	750	0 0
Komata Reefs to Paeroa ...	...	...	300	0 0	300	0 0	200	0 0	500	0 0
Komata Reefs to Waitekauri ...	...	...	200	0 0	200	0 0	...	...	200	0 0
Tairua to Whenuakite ...	250	0 0	150	0 0	400	0 0	50	0 0	450	0 0
Tiki to Kaimarama ...	410	0 0	200	0 0	610	0 0	100	0 0	710	0 0
Mercury Bay to Whenuakite and Boat Harbour	300	0 0	200	0 0	500	0 0	50	0 0	550	0 0
Tiki to Opitonui (£1 for 1£) ...	...	...	...	...	...	...	400	0 0	400	0 0
Tapu Creek extension ...	418	5 8	200	0 0	618	5 8	200	0 0	818	5 8
Thames to Waikawau ...	1,350	11 7	385	0 0	1,735	11 7	115	0 0	1,850	11 7
Thames to Hikutaia ...	1,205	0 2	225	19 11	1,431	0 1	100	0 0	1,531	0 1
Puru Creek Road ...	300	0 0	100	0 0	400	0 0	200	0 0	600	0 0
Turua to Netherton ...	350	0 0	300	0 0	650	0 0	350	0 0	1,000	0 0
Hikutaia to Whangamata, "Wires" Track	671	11 5	355	17 7	1,027	9 0	144	11 0	1,172	0 0
Upper Waiotahi Road ...	492	10 0	...	...	492	10 0	...	...	492	10 0
Inland from Omaha ...	400	0 0	...	...	400	0 0	...	...	400	0 0
Upper Tararu Road ...	625	16 11	177	3 3	803	0 2	264	0 0	1,067	0 2
Matatoki Road ...	138	14 2	61	5 10	200	0 0	189	0 0	389	0 0
Puriri to Tairua ...	936	16 4	203	5 2	1,140	1 6	397	4 3	1,537	5 9
Wharepona Settlement Road ...	280	6 5	88	5 0	368	11 5	111	0 0	479	11 5
Omaha to Whangamata ...	106	4 0	743	16 0	850	0 0	375	0 0	1,225	0 0
Drains, Hikutaia ...	...	...	100	0 0	100	0 0	...	...	100	0 0
Roads, Katikati and Tauranga	530	0 0	696	17 5	1,226	17 5	...	...	1,226	17 5
Roads, Great Barrier Island ...	604	4 2	...	...	604	4 2	...	...	604	4 2
Waikawau to Manaia ...	1,500	0 0	200	0 0	1,700	0 0	500	0 0	2,200	0 0
Tapu to Waikawau ...	750	10 0	...	...	750	10 0	...	...	750	10 0
Thames to Manaia ...	500	0 0	...	...	500	0 0	...	...	500	0 0
Whangamata Harbour to Reefs	141	10 6	...	...	141	10 6	...	...	141	10 6
Karangahake through Ohinemuri Gorge	1,000	0 0	...	...	1,000	0 0	...	...	1,000	0 0
Tereohanga Gorge to Puhipuhi ...	800	0 0	...	...	800	0 0	...	...	800	0 0
Cabbage Bay to Port Charles ...	1,685	0 0	200	0 0	1,885	0 0	200	0 0	2,085	0 0
Tiki to Mahakirau ...	250	0 0	...	...	250	0 0	...	...	250	0 0
Kuaotunu to Mercury Bay ...	1,100	0 0	100	0 0	1,200	0 0	150	0 0	1,350	0 0
Karangahake to Waihi ...	468	15 0	...	...	468	15 0	...	...	468	15 0
Tiki to Waikawau ...	600	0 0	...	...	600	0 0	...	...	600	0 0
Waitekauri to New Find ...	250	0 0	...	...	250	0 0	...	...	250	0 0
Sylvia up Tararu Creek ...	150	0 0	...	...	150	0 0	...	...	150	0 0
Matawai to Kaimarama ...	150	0 0	...	...	150	0 0	...	...	150	0 0
Driving Creek to Cape Colville ...	175	0 0	...	...	175	0 0	...	...	175	0 0
Cabbage Bay to Mines ...	400	0 0	...	...	400	0 0	...	...	400	0 0
Bridge over Waitekauri Creek ...	...	...	...	...	...	...	160	0 0	160	0 0
Carried forward ...	134,496	2 2	12,268	11 7	146,764	13 9	8,734	14 5	155,499	8 2

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

	Net Expenditure to 31st March, 1898.		Net Expenditure during 12 Months ended 31st March, 1899.		Total Net Expenditure to 31st March, 1899.		Liabilities on Authorities, Contracts, &c., 31st March, 1899.		Total Net Expenditure and Liabilities.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Brought forward ...	134,496	2 2	12,268	11 7	146,764	13 9	8,734	14 5	155,499	8 2
ROADS ON GOLDFIELDS—continued.										
AUCKLAND—continued.										
Grace Darling Road ...	...	...	142	0 0	142	0 0	75	0 0	217	0 0
Waitekauri to Golden Cross ...	...	...	539	14 6	539	14 6	515	5 6	1,055	0 0
Roads, Netherton ...	...	...	45	0 0	45	0 0	155	0 0	200	0 0
Mangaiti and Waitoa Road and Punt ...	...	...	77	13 9	77	13 9	72	6 3	150	0 0
River Protection-works, Te Aroha...	...	...	200	0 0	200	0 0	...	...	200	0 0
Coromandel to Cabbage Bay ...	250	0 0	250	0 0	500	0 0	100	0 0	600	0 0
Tokatea to Kennedy Bay ...	200	0 0	200	0 0	400	0 0	300	0 0	700	0 0
Tiki to Manaia ...	300	0 0	250	0 0	550	0 0	100	0 0	650	0 0
Manaia to Mines ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Whitianga to Mahakirau ...	300	0 0	150	0 0	450	0 0	50	0 0	500	0 0
Whangapoua Mill Road ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Kuaotunu Bridge ...	200	0 0	...	...	200	0 0	...	...	200	0 0
Coromandel to Whangapoua ...	...	...	200	0 0	200	0 0	200	0 0	400	0 0
Coromandel to Kuaotunu <i>via</i> Mata- rangi ...	...	...	350	0 0	350	0 0	350	0 0	700	0 0
Kikowhakare to Cabbage Bay ...	...	...	200	0 0	200	0 0	100	0 0	300	0 0
Extending Wharf Road, Coromandel	...	...	...	...	...	...	500	0 0	500	0 0
Bridge, Ring's Road ...	...	...	...	...	...	...	250	0 0	250	0 0
Taumatawahine Bridge ...	...	...	...	...	...	...	300	0 0	300	0 0
Tokatea to Matamataharakeke ...	...	...	...	...	...	...	100	0 0	100	0 0
Cemetery Road, Kuaotunu ...	...	...	...	...	...	...	100	0 0	100	0 0
Whitianga to Kaimarama ...	...	...	...	...	...	...	150	0 0	150	0 0
Mahakirau Goldfield Road ...	...	...	...	...	...	...	100	0 0	100	0 0
Tiki to Matawai ...	...	...	...	...	...	...	150	0 0	150	0 0
Tiki to Te Koumu ...	...	...	...	...	...	...	100	0 0	100	0 0
Opitonui Road ...	...	...	...	...	...	...	200	0 0	200	0 0
Repairs, Mata Bridge ...	...	...	300	0 0	300	0 0	...	...	300	0 0
Waiomo to Mines ...	...	...	...	...	...	...	200	0 0	200	0 0
Tauranga to Te Puke ...	...	...	...	...	...	...	200	0 0	200	0 0
Waihi to Katikati ...	...	...	...	...	...	...	500	0 0	500	0 0
Papamoa to Te Puke ...	...	...	...	...	...	...	150	0 0	150	0 0
Blind Bay to Whangaparapara ...	...	...	509	10 2	509	10 2	65	9 10	575	0 0
NELSON:—										
Repairs to Nile Bridge ...	831	2 6	...	...	831	2 6	...	...	831	2 6
Lyell to Mokihinui <i>via</i> Eight-mile	5,098	8 6	...	...	5,098	8 6	...	...	5,098	8 6
Mokihinui Quartz-reefs to Specimen Creek ...	1,238	7 5	...	...	1,238	7 5	...	...	1,238	7 5
Brighton to Seventeen-mile Beach <i>via</i> Terraces ...	1,789	7 2	...	...	1,789	7 2	...	...	1,789	7 2
Cobden to Seventeen-mile Beach ...	3,436	1 4	...	...	3,436	1 4	...	...	3,436	1 4
Wangapeka to Karamea ...	2,000	0 0	...	...	2,000	0 0	...	...	2,000	0 0
Aorere Valley to Karamea and Moki- hinui ...	29,938	1 2	...	...	29,938	1 2	...	...	29,938	1 2
Owen Valley Road ...	2,208	9 2	...	...	2,208	9 2	...	...	2,208	9 2
Hatter's Terrace to Bell Hill and Haupiri ...	1,650	0 0	...	...	1,650	0 0	...	...	1,650	0 0
Larry's Creek to Lyell Road, near Dee River (subsidy of £1 for £1)	423	10 0	...	...	423	10 0	...	...	423	10 0
Bridle-track to Upper Anatoki ...	722	8 0	...	...	722	8 0	...	...	722	8 0
Hatter's Terrace Road (£1 for £1 subsidy) ...	400	0 0	...	...	400	0 0	...	...	400	0 0
Deep Creek to Bell Hill (£1 for £1 subsidy) ...	365	10 0	...	...	365	10 0	...	...	365	10 0
Irishman's to Lake Brunner (£1 for £1 subsidy) ...	900	0 0	...	...	900	0 0	...	...	900	0 0
Improving roads and tracks, Col- lingwood to Takaka, Motueka, and Karamea ...	11,005	18 11	...	...	11,005	18 11	...	...	11,005	18 11
Ahaura to Amuri ...	2,504	19 7	...	...	2,504	19 7	...	...	2,504	19 7
Blackball Track ...	1,185	12 5	...	...	1,185	12 5	...	...	1,185	12 5
Ahaura to Kopara Road ...	400	0 0	...	...	400	0 0	...	...	400	0 0
Nelson Creek Bridge ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Soldier's Creek Road ...	198	5 0	...	...	198	5 0	...	...	198	5 0
Gannon's to Painkiller ...	196	10 6	...	...	196	10 6	...	...	196	10 6
Pain's Ford Bridge ...	798	13 10	...	...	798	13 10	...	...	798	13 10
Red Hill Road ...	249	8 1	...	...	249	8 1	...	...	249	8 1
Track, Slate River to Rocky ...	225	0 0	...	...	225	0 0	...	...	225	0 0
Pack-track to Kill Devil ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Waimangaroa to Denniston ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Road to Lyell's Creek Extended Company's Tunnel ...	200	0 0	...	...	200	0 0	...	...	200	0 0
Road to Oparara Diggings ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Track to diggings, Cape Foulwind ...	197	11 0	...	...	197	11 0	...	...	197	11 0
Cobden to Coal Creek ...	375	0 0	...	...	375	0 0	...	...	375	0 0
Mackley's to Waipuna Terrace ...	100	0 0	...	...	100	0 0	...	...	100	0 0
Carried forward ...	204,984	6 9	15,682	10 0	220,666	16 9	13,817	16 0	234,484	12 9

TABLE No. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

	Net Expenditure to 31st March, 1898.			Net Expenditure during 12 Months ended 31st March, 1899.			Total Net Expenditure to 31st March, 1899.			Liabilities on Authorities, Contracts, &c., 31st March, 1899.			Total Net Expenditure and Liabilities.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward ...	204,984	6	9	15,682	10	0	220,666	16	9	13,817	16	0	234,484	12	9
ROADS ON GOLDFIELDS—continued.															
NELSON—continued.															
Footbridge over Blackball Creek ...	150	0	0	...	...	...	150	0	0	...	...	...	150	0	0
Road to Barrytown ...	300	0	0	...	...	...	300	0	0	...	...	...	300	0	0
Track to Crow Diggings ...	523	5	1	...	...	...	523	5	1	...	...	...	523	5	1
Ngahere to Blackball ...	400	0	0	...	...	...	400	0	0	...	...	...	400	0	0
Big River Road ...	2,602	14	11	...	...	...	2,602	14	11	...	...	...	2,602	14	11
Approaches, Matakitaiki Bridge ...	279	15	0	...	...	...	279	15	0	...	...	...	279	15	0
Bridge, Karamea River ...	3,565	19	8	...	...	...	3,565	19	8	...	...	...	3,565	19	8
Brown's Terrace to Arnold ...	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Brunnerton to Paparoa ...	175	0	0	...	...	...	175	0	0	...	...	...	175	0	0
Track to Adamstown ...	375	4	0	...	...	...	375	4	0	...	...	...	375	4	0
Hampden to Horse Terrace ...	3,450	18	6	...	...	...	3,450	18	6	...	...	...	3,450	18	6
Repairing bridges, Staunton's and Doctor's Creeks ...	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Granity Creek to Ngakawau ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Four-mile Bridge ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Fox's Bridge ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Fairdown to Waimangaroa ...	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Track up Four-mile and Nile Rivers ...	250	0	0	...	...	...	250	0	0	...	...	...	250	0	0
Charleston to Nine-mile Beach ...	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Road, Promised Land, Karamea ...	550	0	0	...	...	...	550	0	0	...	...	...	550	0	0
Track to Piper's Flat, Addison's ...	150	0	0	...	...	...	150	0	0	...	...	...	150	0	0
Snowy Creek Bridge ...	300	0	0	...	...	...	300	0	0	...	...	...	300	0	0
Footbridge, Byewash, Ngahere, to Blackball Ferry ...	210	0	0	...	...	...	210	0	0	...	...	...	210	0	0
Track to Healey's Gully ...	90	0	0	...	...	...	90	0	0	...	...	...	90	0	0
Lancashire Flat to head of Clearwater Creek ...	50	0	0	...	...	...	50	0	0	...	...	...	50	0	0
Granville Road ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Bridges, Blackwater and Greenstone ...	300	0	0	...	...	...	300	0	0	...	...	...	300	0	0
Wangapeka Track, Rolling River, to Kiwi Creek ...	149	19	10	...	...	...	149	19	10	...	...	...	149	19	10
Mud Flat to Karamea ...	112	13	6	...	...	...	112	13	6	...	...	...	112	13	6
Fencing land, Blackball Road ...	110	0	0	...	...	...	110	0	0	...	...	...	110	0	0
Protective works, Main Grey Bridge ...	191	0	0	...	...	...	191	0	0	...	...	...	191	0	0
Richmond to Collingwood ...	250	0	0	...	...	...	250	0	0	...	...	...	250	0	0
Pakawau Bush Road ...	200	0	0	225	0	0	425	0	0	...	...	...	425	0	0
Road, Seddonville to Mokihinui ...	570	0	0	200	0	0	770	0	0	150	0	0	920	0	0
Track, Seddonville to Mokihinui Mine ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
Granity Creek southwards ...	...	...	...	200	0	0	200	0	0	250	0	0	450	0	0
Wilson's Lead Road ...	150	0	0	250	0	0	400	0	0	50	0	0	450	0	0
Reefton to Maruia ...	879	18	0	555	10	0	1,435	8	0	450	0	0	1,885	8	0
Maruia Road and horse-track <i>vid</i> Caslani's ...	158	0	0	30	0	0	188	0	0	12	0	0	200	0	0
Ahaura to Haupiri ...	200	0	0	...	...	...	200	0	0	400	0	0	600	0	0
Moonlight to Paparoa ...	75	0	0	25	0	0	100	0	0	...	...	...	100	0	0
Bridges, Cobden to Seven-mile Road ...	275	0	0	67	10	0	342	10	0	...	...	...	342	10	0
Track, Fagan's Creek to top Paparoa Range ...	300	0	0	50	0	0	350	0	0	75	0	0	425	0	0
Blackball Track to Paparoa Ranges ...	700	0	0	586	10	0	1,286	10	0	314	0	0	1,600	10	0
Waipuna Road ...	100	0	0	...	...	...	100	0	0	100	0	0	200	0	0
Walker's Creek Bridge ...	...	...	...	214	12	2	214	12	2	...	...	...	214	12	2
Landing Creek Bridge ...	...	...	...	289	16	6	289	16	6	...	...	...	289	16	6
Improving ford, Granity Creek ...	...	...	...	...	...	...	...	...	...	300	0	0	300	0	0
Dee Creek Bridge ...	...	...	...	...	...	...	...	...	...	300	0	0	300	0	0
Mangles Bridge ...	248	0	8	811	7	9	1,059	8	5	2,388	2	3	3,447	10	8
Wangapeka to Wanganui ...	1,459	14	3	492	9	3	1,952	3	6	497	16	8	2,450	0	2
Table-land Horse-track ...	177	15	5	21	13	10	199	9	3	...	...	...	199	9	3
Belgrove to Westport and Reefton ...	5,464	1	8	1,464	6	9	6,928	8	5	35	13	3	6,964	1	8
Aorere Bridge ...	...	...	...	50	0	0	50	0	0	50	0	0	100	0	0
Inland road, Parapara to Takaka ...	...	...	...	...	...	...	...	...	...	500	0	0	500	0	0
Mud Flat portion, Takaka to Collingwood Inland Road ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Karamea Track ...	...	...	...	100	0	0	100	0	0	150	0	0	250	0	0
Deadman's Creek to Christmas Terrace ...	150	0	0	100	0	0	250	0	0	...	...	...	250	0	0
Big Totara River Bridge ...	...	...	...	450	0	0	450	0	0	...	...	...	450	0	0
Little Totara River Bridge ...	...	...	...	350	0	0	350	0	0	...	...	...	350	0	0
Denniston to Cascade Creek ...	...	...	...	100	0	0	100	0	0	...	...	...	100	0	0
Bradshaw's Lead Road ...	...	...	...	100	0	0	100	0	0	...	...	...	100	0	0
Road, Oparara River, Karamea ...	...	...	...	200	0	0	200	0	0	200	0	0	400	0	0
Westport to Mokihinui ...	...	...	...	500	0	0	500	0	0	250	0	0	750	0	0
Mokihinui to Reefs (widening) ...	...	...	...	250	0	0	250	0	0	250	0	0	500	0	0
Road Stony Creek to Waimangaroa ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Denniston Hill Road ...	...	...	...	1,300	18	6	1,300	18	6	148	0	5	1,448	18	11
Mokihinui to Wanganui (improving) ...	...	...	...	250	0	0	250	0	0	350	0	0	600	0	0
Carried forward ...	231,828	7	3	24,917	4	9	256,745	12	0	21,588	8	7	278,334	0	7

TABLE NO. 4—continued.  
STATEMENT showing the NET EXPENDITURE on ROADS, &c.—continued.

	Net Expenditure to 31st March, 1898.		Net Expenditure during 12 Months ended 31st March, 1899.		Total Net Expenditure to 31st March, 1899.		Liabilities on Authorities, Contracts, &c., 31st March, 1899.		Total Net Expenditure and Liabilities.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Brought forward ...	231,828	7 3	24,917	4 9	256,745	12 0	21,588	8 7	278,334	0 7
ROADS, BRIDGES, ETC.—continued.										
NELSON—continued.										
Road, Costello's Hill, Charleston (alteration) ...	...		150 0 0		150 0 0		300 0 0		450 0 0	
Dee Creek Company's Claim ...	...		...		...		175 0 0		175 0 0	
Addison's Road to Buller Road ...	...		250 0 0		250 0 0		250 0 0		500 0 0	
Snowy Creek to Reefs ...	...		295 17 0		295 17 0		154 3 0		450 0 0	
Road, Hampden Cemetery to School House, Murchison ...	...		300 0 0		300 0 0		...		300 0 0	
Bridge, Little Grey River ...	...		300 0 0		300 0 0		100 0 0		400 0 0	
Culverts, Deyil's Creek ...	...		100 0 0		100 0 0		...		100 0 0	
Dray-road, Capleston to Larry's ...	...		300 0 0		300 0 0		150 0 0		450 0 0	
Glenroy to Maruia Plains ...	...		220 0 0		220 0 0		30 0 0		250 0 0	
Paroa to Teremakau ...	225 0 0		200 0 0		425 0 0		200 0 0		625 0 0	
Widening road, Lyell to Eight-mile Canaan Road ...	200 0 0		250 0 0		250 0 0		150 0 0		400 0 0	
Bridge, Glenroy to Matakitaiki ...	...		...		200 0 0		100 0 0		300 0 0	
Mokihinui to Little River Road ...	...		...		...		300 0 0		300 0 0	
Bridge, Coal Creek ...	...		...		...		500 0 0		500 0 0	
Karamea, Mud Flat Road ...	...		...		...		400 0 0		400 0 0	
Bridges over Raleigh Creek (3) ...	...		300 0 0		300 0 0		250 0 0		250 0 0	
Bridge, Nelson Creek ...	...		450 0 0		450 0 0		...		300 0 0	
Bridge, Callaghan's Creek ...	...		100 0 0		100 0 0		300 0 0		750 0 0	
Bridge, Brandy Jack's Creek ...	...		150 0 0		150 0 0		150 0 0		250 0 0	
Track up Ten-mile Creek ...	...		100 0 0		100 0 0		...		150 0 0	
Repairs, Cobden to Barrytown Road ...	...		900 0 0		900 0 0		...		100 0 0	
Road, Cobden to Warren's Accommodation-house ...	...		500 0 0		500 0 0		184 0 0		1,084 0 0	
Cape Terrace Road, continuation ...	...		150 0 0		150 0 0		...		500 0 0	
Mosquito to Maori Creek Track ...	...		75 0 0		75 0 0		...		150 0 0	
Lake Brunner Road towards Maori Creek ...	...		150 0 0		150 0 0		25 0 0		100 0 0	
Bell Hill Road ...	...		199 9 4		199 9 4		...		150 0 0	
Lyell to Victoria Range ...	100 0 0		200 0 0		300 0 0		150 0 0		450 0 0	
Bonny Doon Road ...	500 0 0		325 0 0		825 0 0		175 0 0		1,000 0 0	
Anatoki Track ...	...		84 4 0		84 4 0		65 16 0		150 0 0	
Takaka River Foot-bridge ...	...		...		...		150 0 0		150 0 0	
Scott's Creek Bridge ...	...		170 0 0		170 0 0		...		170 0 0	
Collingwood to Parapara ...	500 0 0		290 0 0		790 0 0		10 0 0		800 0 0	
Bainham to Upper Aorere Valley ...	...		...		...		200 0 0		200 0 0	
Takaka to Collingwood Inland Road ...	...		29 2 0		29 2 0		470 18 0		500 0 0	
Vant's to Bubu ...	...		...		...		100 0 0		100 0 0	
Kaituna River protection works ...	...		...		...		150 0 0		150 0 0	
Ferntown to Pakawau ...	...		...		...		200 0 0		200 0 0	
Takaka Bridge protection works ...	...		...		...		100 0 0		100 0 0	
Repairs, Motueka Bridge ...	...		250 0 0		250 0 0		...		250 0 0	
Lloyd's Valley Road Bridges ...	...		...		...		100 0 0		100 0 0	
Thorpe to Churchill ...	...		...		...		100 0 0		100 0 0	
Neudorf to Ngatimoti ...	...		...		...		100 0 0		100 0 0	
Shaggery Road ...	...		...		...		100 0 0		100 0 0	
Riwaka to Kaiteriteri Beach Road ...	...		...		...		100 0 0		100 0 0	
Millerton Road ...	449 0 3		100 0 0		549 0 3		...		549 0 3	
Lyell Bridge to Ryan's ...	100 0 0		150 0 0		250 0 0		200 0 0		450 0 0	
Twins Road ...	...		100 0 0		100 0 0		...		100 0 0	
Promised Land, Ohinarahu Creek ...	...		...		...		300 0 0		300 0 0	
Nile Saddle to Maori Creek ...	...		...		...		150 0 0		150 0 0	
Land of Promise Road ...	...		...		...		150 0 0		150 0 0	
Seddonville to Cardiff ...	...		...		...		100 0 0		100 0 0	
Mokihinui end of Westport Road ...	...		...		...		250 0 0		250 0 0	
Foot-bridge, Buller River, below Lyell ...	...		...		...		125 0 0		125 0 0	
Painkiller to Murray Creek ...	474 0 0		189 10 6		663 10 6		214 13 6		878 4 0	
Widening Black's Point Road ...	...		...		...		350 0 0		350 0 0	
Big River to St. George ...	...		...		...		250 0 0		250 0 0	
Mangles Valley Road ...	...		...		...		350 0 0		350 0 0	
Ahaura Bridge ...	1,400 0 0		900 0 0		2,300 0 0		150 0 0		2,450 0 0	
Grey River to Moonlight ...	880 0 0		150 0 0		1,030 0 0		...		1,030 0 0	
Deviation road, Westbrook to Teremakau ...	...		...		...		300 0 0		300 0 0	
Foot-bridge, Blackball Creek ...	...		...		...		120 0 0		120 0 0	
Bridge, Cobden to Brunner Road ...	...		...		...		150 0 0		150 0 0	
Bridge, Gilmer's Creek ...	...		...		...		100 0 0		100 0 0	
Deviation, Moonlight Track ...	...		...		...		100 0 0		100 0 0	
Foot-bridge, Blackball Creek (Brunner to Moonlight Road) ...	...		...		...		150 0 0		150 0 0	
Extension, Barrytown to Paparoa Track ...	...		...		...		200 0 0		200 0 0	
Track to Lake Hochstetter ...	...		...		...		80 0 0		80 0 0	
Larry's Creek Bridge, extension ...	...		101 11 1		101 11 1		248 8 11		350 0 0	
Carried forward	236,656	7 6	33,396	18 8	270,053	6 2	31,616	8 0	301,669	14 2

TABLE NO. 4—*continued.*  
STATEMENT showing the NET EXPENDITURE ON ROADS, &c.—*continued.*

	Net Expenditure to 31st March, 1898.			Net Expenditure during 12 Months ended 31st March, 1899.			Total Net Expenditure to 31st March, 1899.			Liabilities on Authorities, Contracts, &c., 31st March, 1899.			Total Net Expenditure and Liabilities.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward ...	236,656	7	6	33,396	18	8	270,053	6	2	31,616	8	0	301,669	14	2
ROADS ON GOLDFIELDS— <i>continued.</i>															
MARLBOROUGH :—															
Wakamarina Valley ...	11	0	0	...	...	...	11	0	0	...	...	...	11	0	0
Anikiwa Jetty ...	135	15	9	...	...	...	135	15	9	...	...	...	135	15	9
Havelock to Mahakipawa ...	1,311	9	0	...	...	...	1,311	9	0	...	...	...	1,311	9	0
Onamalutu to Wakamarina Forks ...	800	0	0	...	...	...	800	0	0	250	0	0	1,050	0	0
Bartlett's Creek Track ...	200	0	0	149	4	7	349	4	7	100	0	0	449	4	7
Gravelling road through Mr. Adams's property ...	94	9	0	5	11	0	100	0	0	...	...	...	100	0	0
Gravelling Onamalutu Road ...	98	17	0	1	3	0	100	0	0	...	...	...	100	0	0
Tracks, Wakamarina and Mahaki- pawa ...	23	16	6	23	0	0	46	16	6	53	3	6	100	0	0
Re-metalling Wakamarina Road ...	468	5	0	31	15	0	500	0	0	...	...	...	500	0	0
Havelock to Tuamarina Road ...	294	3	9	42	8	6	336	12	3	108	7	9	445	0	0
Rocky Ferry to Kaituna ...	...	...	...	...	...	...	...	...	...	600	0	0	600	0	0
Picton to Grove ...	165	6	3	329	14	3	495	0	6	204	19	6	700	0	0
Bartlett's Creek to Cat Point ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Road to Mount Patriarch ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
CANTERBURY :—															
Road to open up Wilberforce quartz- reefs ...	1,830	17	7	...	...	...	1,830	17	7	...	...	...	1,830	17	7
WESTLAND :—															
Cedar Creek Road ...	4,500	0	0	...	...	...	4,500	0	0	...	...	...	4,500	0	0
Browning's Pass to Reefs (subsidy of £2 for £1) ...	2,207	10	8	...	...	...	2,207	10	8	...	...	...	2,207	10	8
Track up Waiho River ...	86	17	6	...	...	...	86	17	6	...	...	...	86	17	6
Haast Ferry to Glue-pot ...	126	0	0	...	...	...	126	0	0	...	...	...	126	0	0
Jackson's Bay to Cascade and Gorge River Districts ...	6,832	6	0	...	...	...	6,832	6	0	...	...	...	6,832	6	0
Grey Valley to Teremakau ...	900	0	0	...	...	...	900	0	0	...	...	...	900	0	0
Bridge over Mahinapua Creek ...	503	16	10	...	...	...	503	16	10	...	...	...	503	16	10
Bridge over Ogilvie Creek ...	150	0	0	...	...	...	150	0	0	...	...	...	150	0	0
Deviation Road and compensation, Larrikin's Flat ...	1,431	4	2	...	...	...	1,431	4	2	...	...	...	1,431	4	2
Gillam's Gully Track ...	287	0	0	33	0	0	320	0	0	...	...	...	320	0	0
Bridge over Kanieri River at Kokatahi ...	467	10	10	...	...	...	467	10	10	...	...	...	467	10	10
Taipo Creek to Seven-mile ...	194	5	8	119	19	8	314	5	4	230	0	4	544	5	8
Totara Bridge ...	336	0	0	...	...	...	336	0	0	...	...	...	336	0	0
Track, Waikupakupa ocean-beach to main road ...	84	8	0	16	0	0	100	8	0	...	...	...	100	8	0
Track, Totara River to Constitution Hill ...	123	1	0	...	...	...	123	1	0	16	0	0	139	1	0
Wire Bridge, Kapitea Creek, Lamp- lough Track ...	118	0	0	...	...	...	118	0	0	...	...	...	118	0	0
Butcher's Creek Bridge, Kanieri Lake Road ...	129	17	6	...	...	...	129	17	6	...	...	...	129	17	6
Extension, Tucker's Flat Road ...	103	2	6	...	...	...	103	2	6	...	...	...	103	2	6
Widening Milltown Track to Hum- phrey's Gully ...	600	0	0	...	...	...	600	0	0	500	0	0	1,100	0	0
Renewal, Fisherman's Creek Bridge Doughboy Road ...	...	...	...	300	0	0	300	0	0	100	0	0	300	0	0
Pack Track, Seddon's Terrace to Eel Creek ...	246	17	6	...	...	...	246	17	6	...	...	...	246	17	6
Prospecting Track, Greek's Gully, Kanieri Forks ...	150	0	0	...	...	...	150	0	0	...	...	...	150	0	0
Prospecting Track, Totara River to Farmer's Creek ...	150	3	0	44	10	0	194	13	0	...	...	...	194	13	0
Widening and repairing Lamplough Track ...	95	15	0	50	0	0	145	15	0	...	...	...	145	15	0
Okarito Forks to Waiho ...	...	...	...	337	1	8	337	1	8	...	...	...	337	1	8
Great South Road ...	11,496	6	0	1,418	10	6	12,914	16	6	...	...	...	12,914	16	6
Back Creek Road deviation ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Extension, Seddon's Terrace Track ...	300	6	3	...	...	...	300	6	3	...	...	...	300	6	3
New Bridge, Kapitea Creek, Loop- line Road ...	30	8	7	...	...	...	30	8	7	...	...	...	30	8	7
Stribbing's Creek Bridge ...	70	8	11	...	...	...	70	8	11	...	...	...	70	8	11
Widening Road, Lake Mapourika to Waiho ...	782	6	8	...	...	...	782	6	8	750	0	0	1,532	6	8
Repairing Jones Creek and Donog- hue Storm-channels ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Pine-tree Road ...	45	10	7	...	...	...	45	10	7	...	...	...	45	10	7
Wire Bridge, German Gully Track ...	89	0	6	...	...	...	89	0	6	...	...	...	89	0	6
New Road, Stafford to Awatuna ...	390	13	11	201	0	10	591	14	9	100	0	0	691	14	9
Karangarua Bridge ...	4	13	0	346	1	6	350	14	6	100	0	0	450	14	6
Okuru River Ford Track ...	194	19	11	1	2	2	196	2	1	94	17	11	291	0	0
Kokatahi Road ...	451	2	5	...	...	...	451	2	5	55	4	1	506	6	6
Reefton to Hokitika and Ross ...	4,890	13	5	2,262	19	4	7,153	12	9	287	0	0	7,440	12	9
Carried forward ...	280,760	13	8	39,110	0	8	319,870	14	4	35,766	1	1	355,636	15	5

**TABLE NO. 4—continued.**  
**STATEMENT showing NET EXPENDITURE ON ROADS, &c.—continued.**

	Net Expenditure to 31st March, 1898.			Net Expenditure during 12 Months ended 31st March, 1899.			Total Net Expenditure to 31st March, 1899.			Liabilities on Authorities, Contracts, &c., 31st March, 1899.			Total Net Expenditure and Liabilities.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward ...	280,760	13	8	39,110	0	8	319,870	14	4	35,766	1	1	355,636	15	5
<b>ROADS ON GOLDFIELDS—continued.</b>															
<b>WESTLAND—continued.</b>															
Okarito River Bridge ...	300	0	0	...	...	...	300	0	0	...	...	...	300	0	0
Continuation Wataroa Bluff Track ...	194	4	8	...	...	...	194	4	8	...	...	...	194	4	8
Drainage, Stafford Township ...	399	17	5	...	...	...	399	17	5	...	...	...	399	17	5
Widening Cook's River-flat Road...	366	11	6	3	4	0	369	15	6	30	4	6	400	0	0
Hokitika to Jackson's ...	1,332	16	2	402	10	10	1,735	7	0	100	0	0	1,835	7	0
Resumption of J. Holmes's land, Teremakau ...	300	0	0	...	...	...	300	0	0	...	...	...	300	0	0
Greenstone to Teremakau ...	118	12	6	121	7	9	240	0	3	...	...	...	240	0	3
Track and Wire Bridge, Upper Calary ...	...	...	...	200	0	0	200	0	0	...	...	...	200	0	0
Teremakau to Paroa ...	...	...	...	...	...	...	...	...	...	250	0	0	250	0	0
Mahinapua and South Terrace Track ...	...	...	...	250	0	0	250	0	0	...	...	...	250	0	0
Adair's Track to Mahinapua Road ...	...	...	...	150	0	0	150	0	0	...	...	...	150	0	0
Veronica Creek Track ...	...	...	...	200	0	0	200	0	0	...	...	...	200	0	0
Repairing Bridge, Donnelly's Creek ...	...	...	...	160	1	3	160	1	3	100	0	0	260	1	3
Repairs, Browning's Pass Track ...	...	...	...	9	13	0	9	13	0	90	7	0	100	0	0
Gillespie's Bluff Track ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
Galway Bluff Track ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
<b>OTAGO:—</b>															
Arthur's Point to Skipper's ...	12,167	4	1	...	...	...	12,167	4	1	...	...	...	12,167	4	1
Waikaia Bush Road ...	1,000	0	0	...	...	...	1,000	0	0	...	...	...	1,000	0	0
Arrowtown to Macetown Quartz- reefs and Motutapu Bush ...	9,720	6	8	...	...	...	9,720	6	8	...	...	...	9,720	6	8
Waitahuna Bridge, on account of reconstruction ...	750	0	0	...	...	...	750	0	0	...	...	...	750	0	0
Wakatipu to Milford Sound ...	7,240	7	11	...	...	...	7,240	7	11	...	...	...	7,240	7	11
Piers, Victoria Bridge ...	362	10	0	...	...	...	362	10	0	...	...	...	362	10	0
Artesian well boring, Maniototo Plains ...	800	0	0	...	...	...	800	0	0	...	...	...	800	0	0
Miller's Flat to Skipper's Road ...	580	0	0	...	...	...	580	0	0	...	...	...	580	0	0
Bridge and approaches, Skipper's... ..	500	0	0	600	0	0	1,100	0	0	2,144	0	0	3,244	0	0
Arrowtown to Macetown ...	900	0	0	...	...	...	900	0	0	400	0	0	1,300	0	0
Deviation, Pleasant Creek Track ...	130	0	0	...	...	...	130	0	0	...	...	...	130	0	0
Waipori to Berwick Gorge Road ...	1,476	18	9	500	0	0	1,976	18	9	...	...	...	1,976	18	9
Bridge over Clutha River at Miller's Flat ...	5,398	7	3	1,222	12	9	6,621	0	0	...	...	...	6,621	0	0
Renewal bridge to Bannockburn ...	850	0	0	...	...	...	850	0	0	...	...	...	850	0	0
Nevis Valley Road ...	400	0	0	...	...	...	400	0	0	200	0	0	600	0	0
Clyde to Queenstown ...	250	0	0	200	0	0	450	0	0	550	0	0	1,000	0	0
Punt, Hawea and Wanaka dis- tricts ...	...	...	...	...	...	...	...	...	...	300	0	0	300	0	0
Track up Shotover River ...	50	0	0	150	0	0	200	0	0	100	0	0	300	0	0
Lawrence to Clyde ...	1,500	0	0	650	0	0	2,150	0	0	100	0	0	2,250	0	0
Lawrence to Waipori ...	377	0	9	372	19	3	750	0	0	375	0	0	1,125	0	0
Roxburgh to Clyde ...	...	...	...	350	0	0	350	0	0	...	...	...	350	0	0
Waitahuna to Bruce County bound- ary ...	...	...	...	150	0	0	150	0	0	150	0	0	300	0	0
Bridge at Waipori ...	...	...	...	...	...	...	...	...	...	400	0	0	400	0	0
Garston to Nevis ...	1,965	17	2	...	...	...	1,965	17	...	...	...	...	1,965	17	2
Main Road, Beaumont to Miller's Flat ...	...	...	...	...	...	...	...	...	...	250	0	0	250	0	0
Clyde to Ophir ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Waipori Bush Road ...	...	...	...	...	...	...	...	...	...	300	0	0	300	0	0
Young Hill Creek Road ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
Skipper's to Bullendale ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Nokomai Road ...	...	...	...	...	...	...	...	...	...	250	0	0	250	0	0
<b>SOUTHLAND:—</b>															
Tracks, Merrivale District ...	500	0	0	...	...	...	500	0	0	...	...	...	500	0	0
Orepuki to Preservation Inlet ...	9,353	4	6	778	1	2	10,131	5	8	74	3	10	10,205	9	6
Tracks, Stewart Island ...	718	7	8	...	...	...	718	7	8	150	0	0	868	7	8
Waipapa to Waikawa ...	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Waipapa to Six-mile ...	100	0	0	...	...	...	100	0	0	...	...	...	100	0	0
Orepuki (Block I.)—Longwood ...	250	0	0	250	0	0	500	0	0	...	...	...	500	0	0
Riversdale to Waikaia... ..	200	0	0	...	...	...	200	0	0	...	...	...	200	0	0
Roads, Preservation Inlet ...	...	...	...	239	15	8	239	15	8	260	0	0	499	15	8
Tracks, Cromarty ...	...	...	...	207	5	0	207	5	0	200	0	0	407	5	0
Clifden Bridge, Waiau River ...	...	...	...	122	2	8	122	2	8	1,400	0	0	1,522	2	8
Road to Dredging-claims, Waimumu ...	...	...	...	...	...	...	...	...	...	100	0	0	100	0	0
Repairs to road between Sections 17 and 45, Waikaka ...	...	...	...	...	...	...	...	...	...	100	0	0	100	0	0
Colac to Round Hill ...	...	...	...	...	...	...	...	...	...	250	0	0	250	0	0
Alpha Track ...	...	...	...	...	...	...	...	...	...	200	0	0	200	0	0
Stewart Island, Road to Mines ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
Mason's Bay Track ...	...	...	...	...	...	...	...	...	...	150	0	0	150	0	0
Assistance towards prospecting* ...	2,630	16	2	...	...	...	2,630	16	2	...	...	...	2,630	16	2
Contingencies ...	727	13	4	150	2	3	877	15	7	...	...	...	877	15	7
Totals ...	344,871	10	2	46,549	16	3	391,421	6	5	45,739	16	5	437,161	2	10

\* See also Table No. 5A, Development of Goldfields.

**Development of Goldfields.—Table No. 5.**  
**STATEMENT showing the EXPENDITURE for WATER-RACES on GOLDFIELDS out of Public Works Fund to 31st March, 1899, and the LIABILITIES on that Date.**

LOCALITY AND NAME OF RACE.	EXPENDITURE.				LIABILITIES.				Total Expenditure and Liabilities.	LOCALITY AND NAME OF RACE.
	Survey and Construction, 1870-98.	Grants, Subsidies, 1870-98.	Survey and Construction 1898-99.	Grants, Subsidies, 1898-99.	Totals.	Authorities on Construction.	Authorities on Grants, Subsidies.	Contracts.	Totals.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
<b>NORTH ISLAND.</b>										
<b>AUCKLAND PROVINCIAL DISTRICT—</b>										
Thames .. .. .	80,708 19 3	..	..	..	80,708 19 3	..	..	..	..	Thames.
Tairua Water-race .. .. .	..	34 5 4	..	..	34 5 4	..	..	..	..	Tairua Water-race.
Compensation, Thames Water-race .. .. .	..	1,250 0 0	..	..	1,250 0 0	..	..	..	..	Compensation, Thames Water-race.
R. Kelly's water-race, Mata .. .. .	..	40 0 0	..	..	40 0 0	..	..	..	..	R. Kelly's water-race, Mata.
Kuaotunu Sludge-channel .. .. .	..	200 0 0	..	..	200 0 0	..	..	..	..	Kuaotunu Sludge-channel.
	80,708 19 3	1,524 5 4	..	..	82,233 4 7	..	..	..	..	<b>NORTH ISLAND.</b>
<b>MIDDLE ISLAND.</b>										
<b>WESTLAND PROVINCIAL DISTRICT—</b>										
<b>Subsidies—</b>										
Hohonui .. .. .	3 7 0	1,955 12 1	..	..	1,958 19 1	..	..	..	..	Hohonui.
Hibernian .. .. .	12 5 8	1,992 14 8	..	..	2,005 0 4	..	..	..	..	Hibernian.
New River .. .. .	21 5 0	3,496 0 3	..	..	3,517 5 3	..	..	..	..	New River.
Kanieri .. .. .	1 5 6	10,810 18 4	..	..	10,812 3 10	..	..	..	..	Kanieri.
Rimu Drainage-tunnel .. .. .	191 19 6	..	..	..	191 19 6	..	..	..	..	Rimu Drainage-tunnel.
Ross Sludge-channel .. .. .	..	1,554 10 6	..	..	1,554 10 6	..	..	..	..	Ross Sludge-channel.
Kumara No. 4 Main Tail-race .. .. .	..	2,762 17 2	..	..	2,762 17 2	..	..	..	..	Kumara No. 4 Main Tail-race.
Kumara No. 5 Main Tail-race .. .. .	..	1,000 0 0	..	..	1,110 0 0	..	110 0 0	..	110 0 0	Kumara No. 5 Main Tail-race.
Trustees Main Tail-race, Waimea .. .. .	..	3,316 6 5	..	..	5,006 15 9	..	260 0 0	..	260 0 0	Trustees Main Tail-race, Waimea.
Branch Tail-race to No. 4 Chan- nel, Payne and party .. .. .	..	885 19 1	..	..	100 0 0	..	..	..	..	Branch Tail-race to No. 4 Chan- nel, Payne and party.
Kelly's Terrace Tunnel .. .. .	460 13 7	..	1,206 9 2	414 17 6	875 11 1	..	791 18 11	..	791 18 11	Kelly's Terrace Tunnel.
Wainihinihi Water-race .. .. .	874 13 0	..	..	..	2,081 2 2	408 18 4	..	..	468 18 4	Wainihinihi Water-race.
Quinn's Creek Water-race (pur- chase) .. .. .	..	70 0 0	..	..	70 0 0	..	..	..	..	Quinn's Creek Water-race (pur- chase).
Raising dam, Loop-line .. .. .	..	493 14 2	538 2 7	..	1,031 16 9	..	..	..	..	Raising dam Loop-line.
Ngahere-Blackball .. .. .	..	200 0 0	..	..	200 0 0	..	..	..	..	Ngahere-Blackball.
Donnelly's Creek Tail-race .. .. .	..	..	..	..	..	..	828 7 5	..	828 7 5	Donnelly's Creek Tail-race.
Purchase of Byrne, O'Hallahan, and Murdoch's water-rights Government Works— Waimea-Kumara .. .. .	..	..	..	35 0 0	35 0 0	..	..	..	..	Purchase of Byrne, O'Hallahan, and Murdoch's water-rights. Government Works— Waimea-Kumara.
Mikonui .. .. .	188,613 18 2	..	633 3 1	..	189,247 1 3	1,250 7 11	..	..	1,250 7 11	Mikonui.
	25,927 4 6	..	..	..	25,927 4 6	..	..	..	25,927 4 6	<b>NELSON PROVINCIAL DISTRICT—</b>
<b>Government Works—</b>										
Nelson Creek .. .. .	90,722 10 8	..	..	..	90,722 10 8	..	..	..	..	Nelson Creek.
Napoleon Hill .. .. .	257 16 7	..	..	..	257 16 7	..	..	..	..	Napoleon Hill.
Argyle (Charleston) .. .. .	15,351 15 3	..	..	150 0 0	15,501 15 3	..	..	..	..	Argyle (Charleston).
Black's Point .. .. .	244 9 0	..	..	..	244 9 0	..	..	..	..	Black's Point.
Jones, Baxter, and party, water- race from Roaring Meg .. .. .	478 16 5	..	..	321 3 7	800 0 0	..	..	..	..	Jones, Baxter, and party, water- race from Roaring Meg.
Carried forward .. .. .	323,161 19 10	28,138 12 8	2,377 14 10	2,745 7	356,423 14 4	1,719 6 3	1,990 6 4	..	3,709 12 7	

**Development of Goldfields.—Table No. 5—continued.**  
**STATEMENT showing the EXPENDITURE for WATER-RACES on GOLDFIELDS out of Public Works Fund to 31st March, 1899, and the LIABILITIES on that Date—continued.**

LOCALITY AND NAME OF RACE.	EXPENDITURE.					LIABILITIES.				Total Expenditure and Liabilities.	LOCALITY AND NAME OF RACE.
	Survey and Construction, 1870-98.	Grants Subsidies, 1870-98.	Survey and Construction, 1898-99.	Grants, Subsidies, 1898-99.	Totals.	Authorities on Construction.	Authorities on Grants, Subsidies.	Contracts.	Totals.		
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Brought forward .. .. .	323,161 19 10	98,138 12 8	2,377 14 10	2,745 7 0	356,423 14 4	1,719 6 3	1,990 6 4	..	3,709 12 7	360,133 6 11	MIDDLE ISLAND—continued.
NELSON PROVINCIAL DISTRICT— <i>ctd.</i>											NELSON PROVINCIAL DISTRICT— <i>ctd.</i>
Government Works—continued.											Government Works—continued.
Randall Creek Water-race ..	322 18 2	179 3 4	..	38 16 8	322 18 2	..	..	..	..	322 18 2	Randall Creek Water-race.
Wills and party, water-race at Sulky Gully .. .. .	..	..	..	..	218 0 0	..	..	..	..	218 0 0	Wills and party, water-race at Sulky Gully.
OTAGO PROVINCIAL DISTRICT—											OTAGO PROVINCIAL DISTRICT—
Subsidies—											Subsidies—
Arrow .. .. .	4 6 2	612 10 0	..	..	612 10 0	..	..	..	..	612 10 0	Arrow.
Beaumont and Tuapeka ..	..	640 0 0	..	..	644 6 2	..	..	..	..	644 6 2	Beaumont and Tuapeka.
Carriek Range .. .. .	..	9,249 13 1	..	..	9,249 13 1	..	..	..	..	9,249 13 1	Carriek Range.
Mount Pisgah .. .. .	..	200 0 0	..	..	200 0 0	..	..	..	..	200 0 0	Mount Pisgah.
Lawrence Drainage-channel ..	..	2,956 14 0	..	..	2,956 14 0	..	..	..	..	2,956 14 0	Lawrence Drainage-channel.
Ophir Tail-race .. .. .	..	1,150 0 0	..	..	1,150 0 0	..	..	..	..	1,150 0 0	Ophir Tail-race.
Muddy Creek Channel .. .. .	..	850 0 0	..	..	850 0 0	..	1,000 0 0	..	1,000 0 0	1,850 0 0	Muddy Creek Channel.
St. Bath's .. .. .	..	1,000 0 0	..	187 10 0	1,187 10 0	..	812 10 0	..	812 10 0	2,000 0 0	St. Bath's.
Maerewhenua .. .. .	1,065 0 0	..	..	..	1,065 0 0	..	..	..	..	1,065 0 0	Maerewhenua.
Artesian wells, Maniototo ..	20 0 0	..	..	..	20 0 0	..	..	..	..	20 0 0	Artesian wells, Maniototo.
Improving water-supply, Oamaru ..	1,150 7 2	..	..	..	1,150 7 2	..	..	..	..	1,150 7 2	Improving water-supply Oamaru.
Mountain Hut Water-race ..	72 4 1	..	9 17 0	..	82 1 1	..	..	..	..	82 1 1	Mountain Hut Water-race.
Government Works—											Government Works—
Mount Ida .. .. .	70,766 3 1	..	..	..	70,766 3 1	..	..	..	..	70,766 3 1	Mount Ida.
Waipori .. .. .	11,263 1 0	..	..	..	11,263 1 0	..	..	..	..	11,263 1 0	Waipori.
CANTERBURY PROVINCIAL DISTRICT—											CANTERBURY PROVINCIAL DISTRICT—
Subsidy—											Subsidy—
Ninety-mile Beach Water-race ..	65 6 7	..	..	..	65 6 7	..	..	..	..	65 6 7	Ninety-mile Beach Water-race.
SOUTHLAND PROVINCIAL DISTRICT—											SOUTHLAND PROVINCIAL DISTRICT—
Subsidy—											Subsidy—
Round Hill .. .. .	..	133 19 4	..	..	133 19 4	..	..	..	..	133 19 4	Round Hill.
GENERAL—											GENERAL—
Increased water-supply .. .. .	530 4 0	100 0 0	..	..	630 4 0	..	..	..	..	630 4 0	Increased water-supply.
DEPARTMENTAL—											DEPARTMENTAL—
Salaries, travelling, advertising, &c. ..	6,720 6 8	..	..	..	6,720 6 8	..	..	..	..	6,720 6 8	Salaries, travelling, advertising, &c.
TOTALS .. .. .	415,141 16 9	45,210 12 5	2,387 11 10	2,971 13 8	465,711 14 8	1,719 6 3	3,802 16 4	..	5,522 2 7	471,233 17 3	TOTALS.
SUMMARY.											SUMMARY.
NORTH ISLAND .. .. .	80,708 19 3	1,524 5 4	..	..	82,233 4 7	..	..	..	..	82,233 4 7	NORTH ISLAND.
MIDDLE ISLAND .. .. .	415,141 16 9	45,210 12 5	2,387 11 10	2,971 13 8	465,711 14 8	1,719 6 3	3,802 16 4	..	5,522 2 7	471,233 17 3	MIDDLE ISLAND.
TOTALS .. .. .	495,850 16 0	46,734 17 9	2,387 11 10	2,971 13 8	547,944 19 3	1,719 6 3	3,802 16 4	..	5,522 2 7	553,467 1 10	TOTALS.

## Development of Goldfields.—Table No. 5a.

STATEMENT showing ASSISTANCE towards PROSPECTING, and MISCELLANEOUS SERVICES, out of Public Works Fund to 31st March, 1899, and the LIABILITIES on that Date.

	Total Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Net Expenditure to 31st March, 1899.	Liabilities on 31st March, 1899.	Total Net Expenditure and Liabilities.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Assistance towards prospecting* ..	7,995 18 7	2,143 14 1	10,139 12 8	1,103 13 1	11,243 5 9
Purchase of diamond-drill ..	722 1 5	..	722 1 5	..	722 1 5
Prospecting deep levels, Thames,—					
Queen of Beauty Claim ..	23,864 6 1	1,135 13 11	25,000 0 0	..	25,000 0 0
Inspector's fee, deep-level shaft, Thames ..	354 3 4	145 16 8	500 0 0	..	500 0 0
Compensation Proclamation of Rivers	5,196 13 10	676 0 8	5,872 14 6	..	5,872 14 6
Water Conservation—					
Reports on Coromandel Harbour and Kuaotunu Sludge Channel ..	80 12 6	..	80 12 6	..	80 12 6
Engineer's salary and expenses ..	245 15 7	414 15 9	660 11 4	..	660 11 4
Eweburn Reservoir ..	180 15 8	7,229 10 7	7,410 6 3	..	7,410 6 3
Telephone line, Bannockburn to Nevis ..	50 0 0	..	50 0 0	..	50 0 0
Reports on Ross Flat .. ..	..	249 13 0	249 13 0	..	249 13 0
Totals .. ..	38,690 7 0	11,995 4 8	50,685 11 8	1,103 13 1	51,789 4 9

\* For expenditure prior to 31st March, 1894, see Roads on Goldfields, Table No. 4 (£2,630 16s. 2d.).

## TABLE No. 6.

STATEMENT showing the EXPENDITURE on TELEGRAPHS out of Public Works Fund to 31st March, 1899.

Line.	Expenditure during Twelve Months ended 31st March, 1899.
	£ s. d.
Telephone exchanges,—	
Ashburton .. ..	13 3 0
Auckland .. ..	1,071 9 0
Blenheim .. ..	0 3 6
Christchurch.. ..	152 19 5
Dunedin .. ..	65 0 0
Gisborne .. ..	29 12 7
Greymouth .. ..	6 15 0
Hastings .. ..	25 9 8
Invercargill .. ..	28 12 4
Masterton .. ..	9 11 6
Napier .. ..	15 14 6
Nelson .. ..	1 13 0
New Plymouth .. ..	12 3 10
Oamaru .. ..	8 19 0
Palmerston North .. ..	15 17 6
Thames .. ..	4 2 0
Timaru .. ..	4 1 0
Wanganui .. ..	34 8 9
Wellington .. ..	402 11 8
New copper wires,—	
Wanganui—New Plymouth .. ..	233 10 8
Kaikoura—Waitaki .. ..	293 15 4
Waitaki—Dunedin .. ..	1 5 2
Auckland—Mokau .. ..	4,458 7 3
Auckland—Whangarei .. ..	16 1 6
Whangapoua—Opitonui .. ..	53 0 0
Waihopo Loop-line .. ..	7 19 0
Paeroa—Paeroa Railway.. ..	7 19 5
Kaeo—Saies .. ..	4 0 4
Aoroa .. ..	6 1 9
Upper Onehunga Bureau .. ..	0 6 6
Kerikeri .. ..	9 6 0
Great North Road .. ..	0 1 6
Waipapa .. ..	2 16 0
Toko—Strathmore .. ..	379 1 1
Inglewood—Tarata .. ..	30 17 6
Bell Block—Lepperton .. ..	20 10 5
Dannevirke—Weber .. ..	471 4 3
Ormond—Te Karaka .. ..	219 19 3
Te Karaka—Whataatutu .. ..	101 11 8
Carried forward .. ..	8,220 1 10

TABLE NO. 6—continued.

STATEMENT showing EXPENDITURE on TELEGRAPHS out of Public Works Fund—continued.

Line.	Expenditure during Twelve Months ended 31st March, 1899.
	£ s. d.
Brought forward .. .. .	8,220 1 10
Moawhango .. .. .	14 18 3
Feilding Racecourse .. .. .	1 16 6
Murutai .. .. .	3 19 0
Dreyerton .. .. .	3 1 7
Cunningham's .. .. .	9 1 0
Collingwood-Bainham .. .. .	244 0 9
Belgrove-Tophouse .. .. .	66 1 6
Renwicktown-Kaituna .. .. .	63 12 9
Reefton-Crushington .. .. .	80 15 9
Westport-Cardiff .. .. .	82 14 0
Ngahere-Blackball .. .. .	1 3 2
Orari-Geraldine .. .. .	46 2 5
Ashburton-Mayfield .. .. .	125 9 11
Rangiora-Fernside .. .. .	6 14 0
Rangiora-Ashley Bank .. .. .	12 5 9
Linton Downs .. .. .	0 4 0
Kaiapoi-Woodend .. .. .	12 3 6
Waikari-Hawarden .. .. .	112 7 7
German Bay .. .. .	0 2 6
Ngapara-Tokarahi .. .. .	2 8 8
Wairio-Wrey's Bush .. .. .	129 6 3
Windsor .. .. .	0 16 9
Balclutha-Warepa .. .. .	114 6 6
Drummond-Heddon Bush .. .. .	76 15 2
Colac Bay-Round Hill .. .. .	63 10 1
Merrivale-Clifden .. .. .	220 4 5
Invercargill-Otautau .. .. .	78 7 1
Eweburn-Ranfurly .. .. .	9 2 0
Cable No. 3, Oterangi-White's Bay .. .. .	925 15 2
Purchase of material, &c. .. .. .	17,823 6 2
	28,550 14 0
Expenditure to 31st March, 1898 .. .. .	800,735 4 9
Total expenditure to 31st March, 1899 .. .. .	829,285 18 9

TABLE No. 7.

STATEMENT showing the EXPENDITURE on PUBLIC BUILDINGS out of Public Works Fund to 31st March, 1899, and the LIABILITIES on that Date.

	Total Expenditure to 31st March, 1898.	Expenditure for Year ended 31st March, 1899.	Total Expenditure to 31st March, 1899.	Liabilities on Contracts, &c., 31st March, 1899.	Total Expenditure and Liabilities.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Judicial .. .. .	349,706 17 4	11,109 2 0	360,815 19 4	10,878 0 0	371,693 19 4
Postal and Telegraphic .. .. .	177,719 7 5	5,168 3 1	182,887 10 6	1,848 0 0	184,735 10 6
Customs .. .. .	6,920 0 4	.. .. .	6,920 0 4	.. .. .	6,920 0 4
Offices for Public Departments .. .. .	212,402 4 1	4,548 14 11	216,950 19 0	675 0 0	217,625 19 0
Lunatic Asylums .. .. .	404,599 2 11	17,666 13 6	422,265 16 5	5,067 0 0	427,332 16 5
School-buildings .. .. .	923,020 4 0	43,402 14 11	966,422 18 11	298 0 0	966,720 18 11
Hospitals .. .. .	48,444 0 6	.. .. .	48,444 0 6	.. .. .	48,444 0 6
Quarantine Stations .. .. .	3,833 19 3	.. .. .	3,833 19 3	.. .. .	3,833 19 3
Survey .. .. .	543 4 5	.. .. .	543 4 5	.. .. .	543 4 5
Parliament Buildings .. .. .	21,469 5 1	20,635 16 3	42,105 1 4	8,119 0 0	50,224 1 4
Government House, Auckland .. .. .	306 15 10	2,286 12 9	2,593 8 7	1,108 0 0	3,701 8 7
Wellington .. .. .	2,517 12 1	1,928 18 7	4,446 10 8	.. .. .	4,446 10 8
Agricultural .. .. .	4,271 3 8	519 18 5	4,791 2 1	37 0 0	4,828 2 1
Miscellaneous .. .. .	9,838 14 10	.. .. .	9,838 14 10	.. .. .	9,838 14 10
Totals .. .. .	2,165,592 11 9	107,266 14 5	2,272,859 6 2	28,030 0 0	2,300,889 6 2

TABLE No. 8.

STATEMENT showing the EXPENDITURE on LIGHTHOUSES, HARBOUR WORKS, and HARBOUR DEFENCES, out of Public Works Fund, to 31st March, 1899, and the LIABILITIES on that Date.

	Total Expenditure to 31st March, 1898.	Net Expenditure during 12 Months ended 31st March, 1899.	Total Expenditure to 31st March, 1899.	Liabilities on Authorities, Contracts, &c., to 31st March, 1899.	Total Expenditure and Liabilities.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>LIGHTHOUSES.</b>					
Akaroa .. .. .	7,148 16 5	..	7,148 16 5	..	7,148 16 5
Brothers .. .. .	6,241 0 0	..	6,241 0 0	..	6,241 0 0
Cape Egmont .. .. .	3,354 6 4	..	3,354 6 4	..	3,354 6 4
Cape Foulwind .. .. .	6,955 9 1	..	6,955 9 1	..	6,955 9 1
Cape Kidnappers .. .. .	2,109 11 7	..	2,109 11 7	..	2,109 11 7
Cape Maria van Diemen .. .. .	7,028 14 8	..	7,028 14 8	..	7,028 14 8
Cape Palliser .. .. .	6,243 16 1	249 6 5	6,493 2 6	8 0 0	6,501 2 6
Cape Saunders .. .. .	6,066 6 3	..	6,066 6 3	..	6,066 6 3
Centre Island .. .. .	5,785 19 0	..	5,785 19 0	..	5,785 19 0
Cuvier Island .. .. .	7,405 9 11	..	7,405 9 11	..	7,405 9 11
French Pass Beacon .. .. .	668 15 8	..	668 15 8	..	668 15 8
French Pass .. .. .	1,427 17 5	..	1,427 17 5	..	1,427 17 5
Hokitika .. .. .	801 9 7	..	801 9 7	..	801 9 7
Jackson's Reef Beacon .. .. .	3,180 0 5	..	3,180 0 5	..	3,180 0 5
Kaipara .. .. .	5,571 8 0	..	5,571 8 0	..	5,571 8 0
Manukau Heads .. .. .	600 13 11	..	600 13 11	..	600 13 11
Marine Store .. .. .	499 11 3	..	499 11 3	..	499 11 3
Moeraki .. .. .	2,943 1 11	..	2,943 1 11	..	2,943 1 11
Mokohinau .. .. .	8,185 11 0	..	8,185 11 0	..	8,185 11 0
Portland Island .. .. .	6,554 14 5	..	6,554 14 5	..	6,554 14 5
Puysegur Point .. .. .	9,958 19 5	..	9,958 19 5	..	9,958 19 5
Stephens Island .. .. .	9,452 12 11	..	9,452 12 11	15 0 0	9,467 12 11
Timaru .. .. .	1,116 17 3	..	1,116 17 3	..	1,116 17 3
Tiritiri Cable .. .. .	1,085 19 6	..	1,085 19 6	..	1,085 19 6
Tory Channel .. .. .	353 7 7	..	353 7 7	..	353 7 7
Waipapapa Point .. .. .	5,969 18 11	..	5,969 18 11	..	5,969 18 11
East Cape .. .. .	..	3,477 6 7	3,477 6 7	139 0 0	3,616 6 7
Miscellaneous, including expenditure on s.s. "Hinemoa" and "Stella" ..	20,590 5 9	..	20,590 5 9	..	20,590 5 9
<b>Total Lighthouses</b> ..	<b>137,300 14 3</b>	<b>3,726 13 0</b>	<b>141,027 7 3</b>	<b>162 0 0</b>	<b>141,189 7 3</b>
<b>HARBOUR WORKS.</b>					
Wharf at Howick .. .. .	1,087 18 2	..	1,087 18 2	..	1,087 18 2
Pollock Wharf, Manukau .. .. .	150 0 0	..	150 0 0	..	150 0 0
Whangarei Heads Wharf .. .. .	600 0 0	..	600 0 0	..	600 0 0
Matakana Wharf .. .. .	556 10 3	..	556 10 3	..	556 10 3
Waiuku Channel .. .. .	357 11 6	..	357 11 6	..	357 11 6
Coromandel Wharf .. .. .	Cr. 0 10 0	..	Cr. 0 10 0	..	Cr. 0 10 0
Waitara Harbour .. .. .	2,000 0 0	..	2,000 0 0	..	2,000 0 0
Removing eel-weirs, Patea River .. .. .	50 0 0	..	50 0 0	..	50 0 0
Napier Harbour .. .. .	328 0 0	..	328 0 0	..	328 0 0
Castlepoint Jetty .. .. .	51 14 1	..	51 14 1	..	51 14 1
Kaikoura Jetty and Harbour .. .. .	2,912 16 10	..	2,912 16 10	..	2,912 16 10
Pictou, removal of old wharf .. .. .	94 0 0	..	94 0 0	..	94 0 0
Nelson, dredging harbour .. .. .	2,806 15 8	..	2,806 15 8	..	2,806 15 8
Collingwood Harbour .. .. .	745 18 8	..	745 18 8	..	745 18 8
Karamea Wharf .. .. .	75 0 0	..	75 0 0	..	75 0 0
Westport Harbour .. .. .	14,110 18 7	..	14,110 18 7	..	14,110 18 7
Greymouth Harbour .. .. .	127,233 19 6	..	127,233 19 6	..	127,233 19 6
Hokitika Harbour .. .. .	58,905 10 2	1,690 9 11	58,596 0 1	23 0 0	58,619 0 1
Lyttelton, reclamation works, Sticking Point .. .. .	1,414 18 4	86 17 11	1,501 16 3	127 0 0	1,628 16 3
Timaru Harbour .. .. .	100,000 0 0	..	100,000 0 0	..	100,000 0 0
Martin's Bay, removal of rock .. .. .	5 0 0	..	5 0 0	..	5 0 0
Port Levy Jetty .. .. .	250 0 0	..	250 0 0	..	250 0 0
Toitoito Jetty .. .. .	1,000 0 0	..	1,000 0 0	..	1,000 0 0
Balclutha Jetty .. .. .	250 0 0	..	250 0 0	..	250 0 0
Catlin's River, removal of rocks .. .. .	277 19 0	..	277 19 0	..	277 19 0
Catlin's River Jetty .. .. .	1,015 7 7	..	1,015 7 7	..	1,015 7 7
Queenstown Beacon .. .. .	35 0 0	..	35 0 0	..	35 0 0
Queenstown Jetty .. .. .	297 8 0	..	297 8 0	..	297 8 0
Jackson's Bay Jetty .. .. .	32 6 4	..	32 6 4	..	32 6 4
Raising dredge "Hapuka" .. .. .	777 7 9	..	777 7 9	..	777 7 9
Miscellaneous .. .. .	400 0 0	..	400 0 0	..	400 0 0
Stewart Island Wharf, Horseshoe Bay .. .. .	230 0 0	..	230 0 0	..	230 0 0
<b>Total Harbour Works</b> ..	<b>316,051 10 5</b>	<b>1,777 7 10</b>	<b>317,828 18 3</b>	<b>150 0 0</b>	<b>317,978 18 3</b>
<b>HARBOUR DEFENCES.</b>					
Guns .. .. .	147,768 18 10	..	147,768 18 10	..	147,768 18 10
Ammunition .. .. .	24,531 6 7	..	24,531 6 7	..	24,531 6 7
War Office stores .. .. .	9,933 10 9	..	9,933 10 9	..	9,933 10 9
Torpedo-boats and torpedoes .. .. .	20,203 13 7	..	20,203 13 7	..	20,203 13 7
Submarine mining stores .. .. .	17,665 2 2	..	17,665 2 2	..	17,665 2 2
Miscellaneous .. .. .	18,009 5 10	..	18,009 5 10	..	18,009 5 10
Works in colony .. .. .	206,342 5 1	8,432 10 2	214,774 15 3	3,514 0 0	218,288 15 3
Land for depots and batteries .. .. .	36,601 15 5	1,725 19 1	38,327 14 6	..	38,327 14 6
<b>Total Harbour Defences</b> ..	<b>481,055 18 3</b>	<b>10,158 9 3</b>	<b>491,214 7 6</b>	<b>3,514 0 0</b>	<b>494,728 7 6</b>
<b>Grand total</b> .. .. .	<b>934,408 2 11</b>	<b>15,662 10 1</b>	<b>950,070 18 0</b>	<b>3,826 0 0</b>	<b>953,896 13 0</b>

## APPENDICES TO THE PUBLIC WORKS STATEMENT, 1899.

## APPENDIX A.

AUDITED STATEMENT OF EXPENDITURE ON PUBLIC WORKS  
OUT OF THE PUBLIC WORKS FUND FOR THE YEAR  
1898-99.*Prepared in compliance with Section 8 of "The Public Works Act, 1894."*

SIR,—

Public Works Department, Wellington, 31st May, 1899.

In compliance with the 8th section of "The Public Works Act, 1894," I enclose a statement of the expenditure during the preceding financial year on all works and services chargeable to the Public Works Fund.

I have, &amp;c.,

WM. HALL-JONES,

Minister for Public Works.

The Controller and Auditor-General, Wellington.

STATEMENT of NET EXPENDITURE on all WORKS and SERVICES chargeable to the PUBLIC WORKS  
FUND for the Year 1898-99.

Class.	Votes.	Summary.	Appropriation.	Expenditure.	Credits.	Net Expenditure.
		PUBLIC WORKS FUND.	£	£ s. d.	£ s. d.	£ s. d.
I.	74	Immigration .. .. .	150	508 11 4	403 14 6	104 16 10
II.	75	Public Works, Departmental .. .. .	9,500	10,466 14 3	376 13 0	10,090 1 3
III.	76-90	Railways .. .. .	459,100	423,631 3 11	49,490 1 8	374,141 2 3
IV.	91-92	Roads .. .. .	404,086	298,746 9 7	3,263 2 5	295,483 7 2
V.	93	Development of Goldfields .. .. .	45,000	17,354 10 2	..	17,354 10 2
VI.	94	Purchase of Native Lands .. .. .	51,600	53,336 0 6	153 3 8	53,182 16 10
VII.	95	Telegraph Extension .. .. .	33,250	35,841 9 3	7,290 15 3	28,550 14 0
VIII.	96-104	Public Buildings .. .. .	132,380	107,395 14 10	129 0 5	107,266 14 5
IX.	105-107	Lighthouses, Harbour-works, and Harbour Defences	16,570	15,743 5 8	80 15 7	15,662 10 1
X.	108	Rates on Native Lands .. .. .	900	347 11 10	..	347 11 10
XI.	109	Contingent Defence .. .. .	35,000	13,866 15 3	0 2 4	13,866 12 11
		Unauthorised .. .. .	..	4,008 9 6	3,957 12 0	50 17 6
		Total Public Works Fund .. .. .	1,187,536	981,246 16 1	65,145 0 10	916,101 15 3

Public Works Department,

G. J. CLAPHAM,  
Accountant.H. J. H. BLOW,  
Under-Secretary.

Examined and found correct.

J. K. WARBURTON,  
Controller and Auditor-General.

(Details on next page.)

Vote No.	Name of Vote.	Appropriation.	Expenditure.	Credits.	Net Expenditure.
		£	£ s. d.	£ s. d.	£ s. d.
<b>PUBLIC WORKS FUND.</b>					
74	Immigration— Immigration .. .. .	150	508 11 4	403 14 6	104 16 10
75	Public Works, Departmental— Public Works, Departmental .. .. .	9,500	10,466 14 3	376 13 0	10,090 1 3
<b>Railways—</b>					
76	Whangarei-Kamo Extension .. .. .	7,000	3,932 2 6	0 8 9	3,931 13 9
77	Helensville Northwards .. .. .	9,000	10,178 9 10	86 10 9	10,091 19 1
78	Grahamstown-Te Aroha .. .. .	25,000	24,485 17 9	95 1 6	24,390 16 3
79	Marton-Te Awamutu .. .. .	50,000	42,915 18 2	101 1 6	42,814 16 8
80	Eketahuna-Woodville .. .. .	1,500	779 17 8	974 0 7	Cr. 194 2 11
81	Blenheim-Awatere .. .. .	8,000	4,742 13 7	1 0 0	4,741 13 7
82	Midland Railway .. .. .	50,000	66,678 13 7	12,184 8 11	54,494 4 8
83	Otago Central .. .. .	40,000	17,691 13 9	82 6 8	17,609 7 1
84	Heriot Extension .. .. .	2,000	.. .. .	.. .. .	.. .. .
85	Seaward Bush .. .. .	10,000	7,215 12 7	.. .. .	7,215 12 7
86	Forest Hill .. .. .	5,000	3,775 2 11	664 14 7	3,110 8 4
87	Land-claims, &c. .. .. .	2,500	737 19 7	59 10 0	678 9 7
88	Surveys, New Lines of Railway .. .. .	3,600	4,054 17 2	2,126 9 5	1,928 7 9
89	Permanent-way and other Materials .. .. .	45,500	38,916 5 4	15,520 6 6	23,395 18 10
90	Additions to Open Lines .. .. .	200,000	197,525 19 6	17,594 2 6	179,931 17 0
		459,100	423,631 3 11	49,490 1 8	374,141 2 3
<b>Roads—</b>					
91	Settlement Roads, Bridges, and other Works .. .. .	341,461	252,176 13 4	3,243 2 5	248,933 10 11
92	Roads on Goldfields .. .. .	62,625	46,569 16 3	20 0 0	46,549 16 3
		404,086	298,746 9 7	3,263 2 5	295,483 7 2
93	Development of Goldfields— Development of Goldfields .. .. .	45,000	17,354 10 2	.. .. .	17,354 10 2
94	Purchase of Native Lands— Purchase of Native Lands .. .. .	51,600	53,336 0 6	153 3 8	53,182 16 10
95	Telegraph Extension— Telegraph Extension .. .. .	33,250	35,841 9 3	7,290 15 3	28,550 14 0
<b>Public Buildings—</b>					
96	General .. .. .	30,150	29,508 7 1	108 4 7	29,400 2 6
97	Judicial .. .. .	18,230	11,109 2 0	.. .. .	11,109 2 0
98	Postal and Telegraph .. .. .	9,925	5,188 5 7	20 2 6	5,168 3 1
99	Customs .. .. .	150	.. .. .	.. .. .	.. .. .
100	Lunatic Asylums .. .. .	20,640	17,667 6 10	0 13 4	17,666 13 6
101	School-buildings .. .. .	25,400	21,706 9 1	.. .. .	21,706 9 1
102	School-buildings (special) .. .. .	25,000	21,696 5 10	.. .. .	21,696 5 10
103	Agricultural .. .. .	1,855	519 18 5	.. .. .	519 18 5
104	Hospitals, &c. .. .. .	1,000	.. .. .	.. .. .	.. .. .
		132,380	107,395 14 10	129 0 5	107,266 14 5
<b>Lighthouses, Harbour Works, and Harbour Defences—</b>					
105	Lighthouses .. .. .	4,220	3,726 13 0	.. .. .	3,726 13 0
106	Harbour Works .. .. .	2,350	1,778 17 10	1 10 0	1,777 7 10
107	Harbour Defences .. .. .	10,000	10,237 14 10	79 5 7	10,158 9 3
		16,570	15,743 5 8	80 15 7	15,662 10 1
108	Rates on Native Lands— Rates on Native Lands .. .. .	900	347 11 10	.. .. .	347 11 10
109	Contingent Defence— Contingent Defence .. .. .	35,000	13,866 15 3	0 2 4	13,866 12 11
	Unauthorised— Services not provided for .. .. .	..	4,008 9 6	3,957 12 0	50 17 6
	<b>Total Public Works Fund .. .. .</b>	<b>1,187,586</b>	<b>981,246 16 1</b>	<b>65,145 0 10</b>	<b>916,101 15 3</b>

## APPENDIX B.

STATEMENT of all LIABILITIES in respect of the Services of the Public Works Department outstanding at the Close of the Financial Period ended 31st March, 1899, prepared in terms of Section 38, Part IV., of "The Public Revenues Act, 1891," and forwarded, as therein provided, to the Audit Office.

Class.	Votes.	Summary.	Total.
PUBLIC WORKS FUND.			£
III.	76-89	Railways .. .. .	71,055
VIII.	96-104	Public Buildings .. .. .	28,030
IX.	105-107	Lighthouses, Harbour Works, and Harbour Defences .. .. .	3,826
			102,911

Vote No.	Name of Vote.	Total.	
PUBLIC WORKS FUND.			£
76	Railways—Whangarei-Kamo Extension .. .. .	458	
77	Helensville Northwards .. .. .	799	
78	Grahamstown-Te Aroha .. .. .	3,941	
79	Marton-Te Awamutu (north end) .. .. .	727	
	(south end) .. .. .	5,967	
80	Eketahuna-Woodville .. .. .	137	
81	Blenheim-Awatere .. .. .	800	
82	Midland Railway, Otira Section .. .. .	16,868	
	Belgrove Section .. .. .	378	
	Springfield End .. .. .	3,369	
83	Otago Central .. .. .	12,733	
84	Heriot Extension .. .. .		
85	Seaward Bush.. .. .	4,786	
86	Forest Hill .. .. .	1,789	
87	Land-claims and other Old Liabilities, &c. .. .. .	416	
88	Surveys of New Lines of Railway .. .. .	591	
89	Permanent-way Materials .. .. .	17,296	
		71,055	
Public Buildings—			
96	General .. .. .	9,902	
97	Judicial .. .. .	10,878	
98	Postal and Telegraph .. .. .	1,848	
99	Customs .. .. .		
100	Lunatic Asylums .. .. .	5,067	
101	School-buildings (part of vote only) .. .. .	298	
103	Agricultural .. .. .	37	
104	Hospitals and other Charitable Institutions .. .. .		
		28,030	
Lighthouses, Harbour Works, and Harbour Defences—			
105	Lighthouses .. .. .	162	
106	Harbour Works .. .. .	150	
107	Harbour Defences .. .. .	3,514	
		3,826	
Total, Public Works Fund.. .. .		102,911	

G. J. CLAPHAM,  
Accountant.

H. J. H. BLOW,  
Under-Secretary.

Public Works Department, 30th April, 1899.

## APPENDIX C.

SCHEDULE of CONTRACTS CURRENT on the 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department during the Year ended 31st March, 1899.

Date of Contract.	Lines of Railway and Branches.	Name of Contract.	Name of Contractor.	Contract to be completed.	Date Contract was completed.	Amount of Contract.	Remarks.
RAILWAYS.							
Aug. 26, 1896	Whangarei-Kamo	Ironbark Timber	Murray, Arnold, and Co.	Nov. 26, 1896	May 15, 1898	£ 352 9 9	
Feb. 28, 1899	Helensville Northwards	Ironbark Timber	James McLellan	May 31, 1899	..	260 18 2	
Feb. 27, "	"	Totara and Kauri Timber	Cosgrove and Rapson	May 22, "	..	213 12 10	
Aug. 26, 1896	Grahamstown-TeAroha	Ironbark Timber for Puriri-Paeroa Section	Murray, Arnold, and Co.	Nov. 26, 1896	May 15, 1898	363 15 3	
Jan. 8, 1898	"	Ironbark Timber	Murray, Arnold, and Co.	March 24, 1898	May 31, "	786 0 0	
Oct. 5, "	"	Totara and Kauri Timber for Station-buildings	Waiemata Sawmill Co.	Nov. 30, "	Dec. 12, "	825 8 10	
Oct. 10, "	"	Rimu Framing for Station-buildings	Mountain Rimu Co.	Oct. 30, "	Oct. 30, "	221 9 0	
Aug. 26, 1896	Eketahuna-Woodville	Ironbark Timber	Murray, Arnold, and Co.	Nov. 26, 1896	May 15, "	1,084 4 9	
Jan. 8, 1898	Midland, Otira Section	Ironbark Timber	Murray, Arnold, and Co.	March 24, 1898	Nov. 19, "	1,045 14 1	
Jan. 16, "	"	Steel-plate Girders	Dispatch Foundry Co.	Feb. 4, 1899	..	1,493 0 0	
Jan. 21, 1896	Otago Central	Bridge over Taieri River	Fraser and Morley	July 21, 1897	July 16, 1898	7,716 10 0	
June 14, 1898	"	Timber and Joinery for Station-buildings	Thomson, Bridger, and Co.	July 1, 1898	June 30, "	209 6 0	
Oct. 15, "	"	Ironbark Piles and Timber	W. Flannery	Dec. 23, "	Jan. 6, 1899	105 10 8	
Nov. 3, "	"	Steel-plate Girders, Eweburn Bridge	James Fowler	Aug. 1, 1899	..	508 17 9	
Sept. 2, "	Seaward Bush	Ironbark Timber and Piles	W. B. Sharp	Oct. 8, 1898	Feb. 1, 1899	175 15 0	
Feb. 6, 1899	"	Timber and Joinery, Waimahaka Station-buildings	Thomson, Bridger, and Co.	As per specification	..	660 5 10	
May 21, 1898	Forest Hill	Timber for Station-buildings	Robert Jamieson	June 9, 1898	Sept. 30, 1898	204 8 2	
Oct. 18, "	Permanent-way	Twenty-five sets Points and Crossings	John Anderson	Feb. 18, 1899	..	250 0 0	

# APPENDIX C—continued.

SCHEDULE of CONTRACTS CURRENT on the 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department during the Year ended 31st March, 1899.

Date of Contract.	Name of Contract.	Name of Contractor.	Contract to be completed.	Date Contract was completed.	Amount of Contract.	Remarks.
					£ s. d.	
AUCKLAND.						
Feb. 16, 1898	Native School, Whirinaki	W. Cook and Son, Waimate North	June 10, 1898	Aug. 5, 1898	638 0 0	
April 1, "	" " " " " " " "	Colin Fraser, Coromandel	July 22, "	Aug. 8, "	535 5 0	
April 13, "	" " " " " " " "	W. Cook and Son, Whirinaki	July 2, "	Aug. 24, "	298 0 0	
Sept. 21, "	Police-station, Te Kuiti	T. E. Doyle, Kihikihi	Dec. 13, "	Jan. 21, 189	387 14 9	
Sept. 30, "	Native School, Waimana	W. F. Moody, Whakatane	Jan. 20, 1899	Mar. 20, "	797 5 0	
Sept. 9, "	Post-office, Otahuhu	James Muir, Otahuhu	Jan. 5, "	Feb. 28, "	458 18 8	
Nov. 28, "	Removal of Maungatapu Native School	Daines and Manuix, Tauranga	Feb. 23, "	April 21, 1899	181 0 0	
Dec. 22, "	Police-station, Auckland	Ferguson and Malcolm, Auckland	Aug. 19, "	" "	5,785 12 6	
Dec. 23, "	Native School, Rakauanga	D. Henderson, Ngaruawahia	April 20, "	May 30, 1899	645 0 0	
Dec. 23, "	Removal of Residence, Rangahua to Utikura	C. H. Olive and Son, Kohukohu	Feb. 28, "	Mar. 15, "	151 0 0	
Jan. 25, 1899	Native School, Waitapu	D. Forsyth, Auckland	May 23, "	" "	609 0 0	
March 25, "	Repairs, Gisborne Gaol	W. O. Steet, Gisborne	June 25, "	" "	339 0 0	
TARANAKI.						
Sept. 2, 1898	Alterations and additions, Waitara Post-office	Elliott and King	Dec. 2, 1898	Dec. 2, 1898	421 0 0	
Sept. 22, "	Police-station, Opunake	Christie and Hoskin	Dec. 12, "	Feb. 28, 1899	416 14 10	
Sept. 22, "	" " " " " " " "	J. Ryan, Eltham	Dec. 12, "	Feb. 14, "	367 0 0	
April 16, 1898	Native School, Nuhaka	A. R. Gardiner, Wairoa	July 15, 1898	Dec. 16, 1898	636 12 8	
WELLINGTON.						
April 14, 1897	Timber, Additions to south wing, Departmental Buildings	Stewart and Co., Wellington	May 26, 1897	Dec. 15, 1897	262 7 10	
Oct. 18, "	Native School, Karori	Riggs and Fraser, Mangaweka	April 13, 1898	April 21, 1898	635 9 9	
Feb. 3, 1898	Electric-light installation, Government House, Wellington	Josiah Dawson, Wellington	March 14, "	April 26, "	188 0 0	
Jan. 20, "	" " " " " " " "	E. B. Toomath, Wellington	Feb. 15, "	Feb. 14, "	126 0 0	
Feb. 17, "	Construction and erection of Hydraulic-lift, Government Printing Office	S. Luke and Co., Wellington	April 16, "	July 1, "	124 10 0	
April 7, 1898	Cast-iron Columns, New Library, Parliamentary Buildings	W. Cable and Co., Wellington	June 18, 1898	May 31, 1898	764 17 1	
April 16, "	Shafting, &c., Government Printing-office	W. Cable and Co., Wellington	May 22, "	May 24, "	195 7 6	
May 3, "	Terra-cotta Blocks, New Library, Parliamentary Buildings	P. Hutson and Co., Wellington	As per specification	April 15, 1899	1,315 0 0	
June 16, 1898	Timber and Joinery, Porirua Asylum	Stewart and Co., Wellington	Oct. 14, 1898	Nov. 18, 1898	850 8 6	
Oct. 4, "	Supply of Flooring, New Library, Parliamentary Buildings	Prouse Brothers, Wellington	Nov. 11, "	Nov. 1, "	155 15 0	
Oct. 9, "	New Additions Completion, Parliament Buildings	J. and A. Wilson, Wellington	April 30, 1899	" "	12,989 0 0	
March 3, 1899	Timber and Joinery, Porirua Asylum	Stewart Timber, Glass, and Hardware Company, Wellington	April 28, "	" "	1,030 15 11	
May 4, 1898	Courthouse, Palmerston North	Adams and Elwood, Feilding	Oct. 21, 1898	Dec. 31, 1898	2,235 0 0	
Feb. 24, 1899	Post-office, Mangaweka	W. T. Peacock, Mangaweka	May 15, 1899	" "	383 0 0	
NELSON.						
Mar. 28, 1898	New Brick Dormitories, Nelson Asylum	W. Miller and Sons, Nelson	Aug. 15, 1898	April 15, 1899	1,056 0 0	
Nov. 12, "	Strong-room, Lands Registry Office, Nelson	H. Machin, Nelson	Dec. 23, "	Jan. 21, "	172 0 0	
Feb. 17, 1899	Painting, Departmental Buildings, Nelson	T. A. Louissou, Nelson	April 13, 1899	May 11, "	206 0 0	

**APPENDIX C—continued.**  
**SCHEDULE of CONTRACTS CURRENT on the 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department during the Year ended 31st March, 1899—continued.**

Date of Contract.	Name of Contract.	Name of Contractor.	Contract to be completed.	Date Contract was completed.	Amount of Contract.	Remarks.
					£ s. d.	
July 4, 1898	Painting and Repairs, Picton Post- and Telegraph-office	G. A. Smith and Co., Picton	Aug. 2, 1898	Aug. 1, 1898	162 7 10	
May 6, 1898	Courthouse, Leeston	J. C. Green, Christchurch	July 12, 1898	Oct. 10, 1898	338 0 0	
Mar. 2, 1899	Additions and Repairs, Southbridge Police-station	William Bennet, Leeston	April 21, 1899	May 27, 1899	178 0 0	
Oct. 30, 1897	Timber for House, Seaciff Asylum	Murdoch and Co., Dunedin	Nov. 12, 1897	July 14, 1898	294 4 9	
Aug. 24, 1898	Courthouse, Macraes	McKechnie and Fleming	Nov. 26, 1898	Dec. 9, "	329 0 0	
Sept. 28, "	Timber and Joinery, Seaciff Asylum	Thomson, Bridger, and Co., Dunedin	As per specification	Jan. 24, 1899	413 12 4	
Oct. 11, "	Gaoler's House, Clyde	L. Arthur, Cromwell	Jan. 28, 1899	Mar. 4, "	538 8 6	
Jan. 14, 1899	Post-office, Miller's Flat	Kynaston and Bowden, Roxburgh	Mar. 15, "	Mar. 30, "	269 0 0	
MISCELLANEOUS.						
AUCKLAND.						
Dec. 22, 1896	Coal and Firewood, Public Buildings, Auckland	J. J. Craig, Auckland	Dec. 31, 1899	May 31, 1898	Schedule rates 966 14 7	
Oct. 21, 1897	Repairs to Panmure Bridge	R. B. Martin, Ponsonby	March 19, 1898	Dec. 31, "	25 9 0	
Jan. 12, 1898	Chimney-sweeping, Public Buildings, Auckland	M. Cockroft, Auckland	Dec. 31, 1899	Mar. 31, 1899	Schedule rates	
March 2, "	Stores Supply, Classes 1 (part), 2, 3, and 4, Auckland	T. and S. Morrin, Auckland	March 31, 1899	Mar. 31, "	"	
March 2, "	"	Southern Cross Galvanised-iron Company, Auckland	March 31, "	"	"	
March 2, "	"	J. J. Craig, Auckland	Sept. 30, "	"	"	
March 9, "	Classes 7 and 8, Class 6, "	J. Wilson and Co., Auckland	Sept. 30, "	"	"	
April 25, "	Panmure Wharf	Orlando Wells, Auckland	Aug. 19, 1898	Aug. 26, 1898	196 17 0	
Aug. 8, "	Iron Tower, East Cape Lighthouse	C. Judd, Thames	Feb. 3, 1899	Feb. 21, 1899	988 19 6	
Sept. 23, "	Timber and Joinery, East Cape Lighthouse	Stewart Timber, Glass, and Hardware Company, Wellington	As per specification	Feb. 21, "	481 12 10	
Dec. 29, "	Chimney-sweeping, Public Buildings, Auckland	M. Cockroft, Auckland	Dec. 31, 1899	"	26 13 0	
Mar. 7, 1899	6-ton Wharf-crane, Harbour Defences, "	S. Luke and Co., Wellington	May 16, "	"	215 0 0	
WELLINGTON.						
Sept. 22, 1897	Engine and Boiler, Harbour Defences, Wellington	W. Cable and Co., Wellington	Dec. 31, 1897	July 8, 1898	789 10 0	
Jan. 21, 1898	Window-cleaning, Public Buildings, "	C. Gawler and Co., Wellington	Dec. 31, 1898	Dec. 31, "	155 0 0	
Jan. 17, "	Removal of Rubbish, "	T. Costello, Wellington	Dec. 31, "	Dec. 31, "	63 14 0	
Jan. 18, "	Chimney-sweeping, "	Harry Smith, Wellington	Dec. 31, "	Dec. 31, "	90 0 0	
Jan. 12, "	Coal Supply, "	Westport Coal Co., Wellington	Dec. 31, "	Dec. 31, "	Schedule rates	
Mar. 1, "	Stores Supply, Classes 1 (part), 3, 4, and 9, Wellington	Briscoe, McNeil, & Co., Wellington	Sept. 30, 1899	"	"	
Mar. 2, "	"	Cameron and Christie, Wellington	Sept. 30, "	"	"	
Mar. 8, "	"	Smith and Smith, Dunedin	March 31, "	Mar. 31, 1899	"	
Mar. 8, "	"	P. Hutson and Co., Wellington	March 31, "	Mar. 31, "	"	
Mar. 22, "	"	J. J. Craig, Auckland	Sept. 30, "	"	"	

**APPENDIX C—continued.**  
**SCHEDULE of CONTRACTS CURRENT on the 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department during the Year ended 31st March, 1899—continued.**

Date of Contract.	Name of Contract.	Name of Contractor.	Contract to be completed.	Date Contract was completed.	Amount of Contract.	Remarks.
<b>MISCELLANEOUS—continued.</b>						
Nov. 2, 1898	Ironwork for Cradle for Slipway, Shelly Bay	S. Luke and Co., Wellington	Nov. 16, 1898	Nov. 16, 1898	£ 97 10 0	
Nov. 28, "	2 Whip-crane, Harbour Defences, Wellington and Auckland	S. Luke and Co., Wellington	Jan. 2, 1899	Feb. 23, 1899	207 10 0	
Jan. 4, 1899	Chimney-sweeping, Public Buildings, Wellington	Harry Smith, Wellington	Dec. 31, 1899	..	90 0 0	
Jan. 9, "	Removal of Rubbish, "	T. Costello, Wellington	Dec. 31, "	..	68 10 0	
Dec. 31, 1898	Cartage, "	M. Fitzgerald, Wellington	Dec. 31, "	..	Schedule rates	
Jan. 4, 1899	Window-cleaning, "	Gawler and Attewell, Wellington	Dec. 31, "	..	192 0 0	
Jan. 20, "	Coal Supply, "	Westport Coal Co., Wellington	Dec. 31, "	..	Schedule rates	
<b>CANTERBURY.</b>						
Oct. 1, 1897	Cleaning Offices, Public Buildings, Christchurch	E. V. Worthington, Christchurch	Sept. 30, 1898	Sept. 30, 1898	67 0 0	
Feb. 23, 1898	Coal Supply, Public Buildings, "	W. White and Co., Christchurch	Dec. 31, 1898	Dec. 31, 1898	Schedule rates	
March 21, "	Stores Supply, Classes 1, 2, 3, 4, 5, 6, 8, 9, "	Asby, Bergh, and Co., Christchurch	Sept. 30, 1899	..	"	
March 22, "	" " " " " " " " " " " "	J. J. Craig, Auckland	Sept. 30, "	..	67 0 0	
Oct. 1, "	Cleaning Offices, Public Buildings, "	E. V. Worthington, Christchurch	Sept. 30, "	..	Schedule rates	
Feb. 15, 1899	Coal Supply, "	W. White and Co., Christchurch	Dec. 31, "	..	Schedule rates	
<b>WESTLAND.</b>						
Jan. 18, 1898	Cartage, Jackson's	Charles Mayo, Jackson's	March 31, 1899	Mar. 31, 1899	Schedule rates	
March 7, "	Stores Supply, Class 9, "	Charles Hansen, Greymouth	Sept. 30, "	..	"	
March 9, "	" " " " " " " " " " " "	James Holmes, Greymouth	Sept. 30, "	..	"	
March 26, "	Class 5, "	D. McKay, Greymouth	March 31, 1898	Mar. 31, 1898	"	
March 22, "	Class 8, "	J. J. Craig, Auckland	Sept. 30, 1899	..	"	
April 18, "	Class 7, "	Duncan McLean, Greymouth	Sept. 30, "	..	"	
	Classes 1, 2, 3, 4, 6, "		Sept. 30, "	..	"	
<b>ORAGO.</b>						
Feb. 17, 1898	Coal Supply, Public Buildings, Dunedin	Westport Coal Company, Dunedin	Dec. 31, 1898	Dec. 31, 1898	Schedule rates	
March 14, "	Stores Supply, Classes 1, 2, 5, "	Thomson, Bridger, & Co., Dunedin	Sept. 30, 1899	..	"	
April 1, "	Classes 3, 4, "	N.Z. Hardware Co., Ltd., Dunedin	March 31, "	Mar. 31, 1899	"	
March 19, "	Class 6, "	Milburn Lime and Cement Company, Dunedin	Sept. 30, "	..	"	
March 22, "	Class 7, "	J. J. Craig, Auckland	Sept. 30, "	..	"	
March 12, "	Classes 8, 9, "	A. Briscoe and Co., Dunedin	March 31, "	Mar. 31, 1899	227 2 3	
March 16, 1899	Erection of Lime-kiln, Inch Valley	Steel and Clarke, Palmerston S.	May 15, 1899	..	206 17 9	
Feb. 27, "	Renewing and Repairing Quarantine Island Jetty	John Drake, Ravensbourne	May 20, "	May 20, 1899	Schedule rates	
Jan. 20, "	Coal Supply, Public Buildings, Dunedin and Otago Central Railway	Westport Coal Company, Dunedin	Dec. 31, "	..	"	
<b>SOUTHLAND.</b>						
March 12, 1898	Stores Supply, Classes 1, 2, 3, 4, 5, 8, 9, Invercargill	A. Briscoe and Co., Dunedin	Sept. 30, 1899	..	Schedule rates	
March 19, "	" " " " " " " " " " " "	Milburn Lime and Cement Company, Dunedin	Sept. 30, "	..	"	
March 22, "	Class 7, "	J. J. Craig, Auckland	Sept. 30, "	..	"	

APPENDIX D.

SCHEDULE of SLEEPER CONTRACTS CURRENT on 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department during the Year ended 31st March, 1899, showing Deliveries to the latter Date.

Date of Contract or Agreement.	Contractor's Name.	Address.	No. of Sleepers contracted for, and Class of Timber.	Rate per Sleeper.	Place of Delivery.	Rate per Month.	Date for Completion.	Total delivered to Date.	Date of Completion.
NORTH ISLAND.									
AUCKLAND DISTRICT.									
2 Oct., 1897	C. G. Arnold...	Wellington ..	930 ironbark	s. d. 4 0	Auckland..	..	31 May, 1898..	930	31 May, 1898.
30 Mar., 1898	D. Cleary ..	Whakapara..	965 totara	3 0	Whakapara	..	30 April, " ..	965	30 April, "
20 May, "	W. H. Woolley ..	" ..	1,000 "	3 0	" ..	..	20 Aug., " ..	1,000	20 Aug., "
27 May, "	W. H. Blott ..	" ..	900 "	3 0	Thames ..	..	27 Aug., " ..	313	31 Aug., "
12 July, "	Tutahanga ..	Pororo-tarao	319 "	3 0	Pororo-tarao	..	18 Nov., " ..	319	18 Nov., "
12 July, "	W. Fell ..	" ..	145 "	3 0	" ..	..	7 Nov., " ..	145	7 Nov., "
12 July, "	D. Bruce ..	" ..	150 "	3 0	" ..	..	8 Nov., " ..	150	8 Nov., "
12 July, "	G. Boulter ..	" ..	141 "	3 0	" ..	..	7 Nov., " ..	141	7 Nov., "
12 July, "	W. Campbell ..	" ..	172 "	3 0	" ..	..	17 Dec., " ..	172	17 Dec., "
23 July, "	D. Cleary ..	Whakapara..	1,000 puriri	3 9	Thames ..	..	23 Sept., " ..	1,000	23 Sept., "
1 Aug., "	H. Whimp ..	" ..	1,000 totara	3 0	Whakapara	..	1 Nov., " ..	1,000	1 Nov., "
5 Aug., "	Tahi ..	Pororo-tarao	109 "	3 0	Pororo-tarao	..	19 Dec., " ..	109	19 Dec., "
10 Aug., "	A. Campbell ..	" ..	608 "	3 0	Thames ..	..	14 Oct., " ..	608	14 Oct., "
18 Aug., "	T. Aspden ..	Whakapara..	167 puriri	3 9	" ..	..	14 Oct., " ..	167	14 Oct., "
17 Sept., "	J. Dobbs ..	Hukerenui ..	472 totara	3 0	Whakapara	..	1 Oct., " ..	472	1 Oct., "
Various ..	Sundry small contractors	Pororo-tarao	214 "	3 0	Pororo-tarao	..	Various	214	..
SOUTH ISLAND.									
NELSON DISTRICT.									
26 Feb., 1898	Thomas and Holland ..	Belgrove ..	2,000 black-birch	s. d. 2 0	Belgrove ..	No fixed rate	26 June, 1898 ..	1,921	8 Dec., 1898.
26 Feb., "	T. A. Price ..	" ..	500 ditto	2 0	" ..	"	26 Mar., " ..	532	25 May, "
28 Feb., "	P. Higgins ..	" ..	1,000 "	2 0	" ..	"	28 April, " ..	1,254	31 Aug., "
28 Feb., "	Anglesey and Blanchett ..	" ..	500 "	2 0	" ..	"	28 April, " ..	500	25 May, "
2 Mar., "	J. A. Brewerton ..	" ..	500 "	2 0	" ..	"	10 Aug., " ..	572	19 Feb., 1899.
9 Dec., "	T. Price ..	" ..	500 "	2 0	" ..	"	31 Jan., 1899 ..	500	19 Feb., "

# APPENDIX D—continued.

SCHEDULE of SLEEPER CONTRACTS CURRENT on 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department, &c.—continued.

Date of Contract or Agreement.	Contractor's Name.	Address.	No. of Sleepers contracted for, and Class of Timber.	Rate per Sleeper.	Place of Delivery.	Rate per Month.	Date for Completion.	Total delivered to Date.	Date of Completion.
SOUTH ISLAND—continued.									
WESTPORT DISTRICT.									
14 Feb., 1898	D. Jones	Cape Foulwind	700 silver-pine	s. d. 2 6	Westport Wharf	No fixed rate	Various	692	7 Oct., 1898
15 Feb., "	James Jamieson	"	ditto	2 6	"	"	"	1,014	1 Aug. "
4 Mar., "	McLean and Erskine	"	1,000 "	2 6	"	"	"	3,000	31 Dec., "
4 Mar., "	W. Gibson	Addison's	1,000 "	2 6	"	"	"	1,000	4 Nov., "
4 Mar., "	R. Richardson	"	500 "	2 6	"	"	"	500	9 Dec., "
7 April, "	McKay and Creed	Cape Foulwind	2,000 "	2 6	"	"	"	1,796	"
7 April, "	Charles Low	"	1,000 "	2 6	"	"	"	656	"
7 April, "	Charles Bruning	"	1,000 "	2 6	"	"	"	977	16 Nov., 1898.
26 Sept., "	Williams and Gammon	"	400 "	2 6	"	"	"	400	9 Dec., "
28 Aug., "	McKay and Creed	"	3,000 "	2 6	"	"	"	3,000	27 Nov., "
WESTLAND DISTRICT.									
16 Dec., 1896	E. Olsen	Blackball	1,000 silver-pine	s. d. 2 6	Greymouth	No fixed rate	16 May, 1897	1,000	9 May, 1898.
22 Dec., "	J. Walsh	Ngahere	ditto	2 6	"	"	22 May, "	1,000	21 Dec., "
22 Dec., "	A. Foord	Stillwater	1,000 "	2 6	"	"	22 May, "	1,000	16 Nov., "
22 Dec., "	J. J. Cunningham	Moana	1,000 "	2 6	"	"	22 May, "	1,000	"
17 Feb., 1897	W. Cansell	Blue Spur	1,000 "	2 6	Hokitika	"	17 Aug., "	1,000	14 Nov., "
17 Feb., "	W. Martin	"	1,000 "	2 6	"	"	17 Aug., "	1,000	22 Dec., "
17 Feb., "	A. Martin	Humphrey's Gully	1,000 "	2 6	"	"	17 Aug., "	1,000	"
8 Mar., "	J. Sullivan	Piper's Flat	1,000 "	2 6	Greymouth	"	8 Sept., "	997	"
22 April, "	J. Costigan, junior	Kokiri	1,000 "	2 6	"	"	22 Oct., "	1,000	8 Dec., 1898.
22 April, "	J. Hahn	"	1,000 "	2 6	"	"	22 Oct., "	1,000	7 July, "
24 April, "	H. Lundquist	Stillwater	2,000 "	2 6	"	"	24 Jan., 1898	2,000	27 May, "
12 July, "	J. H. Morris	Kanieri	1,000 "	2 6	"	"	31 Dec., 1897	749	"
12 July, "	G. E. Morris	"	1,000 "	2 6	Hokitika	"	31 Dec., "	1,000	23 Dec., 1898.
12 July, "	J. McGuigan	"	1,000 "	2 6	"	"	31 Dec., "	1,000	"
2 Aug., "	J. Martin	Kumara	1,317 "	2 6	Kumara	"	31 Dec., "	1,317	18 Oct., "
10 Aug., "	E. Cain	Greymouth	1,689 "	2 6	Greymouth	"	31 Mar., 1898	1,635	19 Sept., "
31 Aug., "	G. H. Lawson	"	1,000 "	2 6	Kumara	"	No fixed rate	1,000	15 Nov., 1898.
31 Aug., "	A. B. Lawson	"	1,000 "	2 6	"	"	"	1,000	1 Aug., "
31 Aug., "	J. Brown	Stafford	1,422 "	2 6	Hokitika	"	"	1,422	15 Nov., "
27 Sept., "	T. Morgan	Kumara	2,000 "	2 6	"	"	"	2,000	23 Dec., "
1 Nov., "	R. Watson	Dillmanstown	2,000 "	2 6	"	"	"	1,891	"
12 Nov., "	J. Baxter	Kokiri	7,000 "	2 4	Greymouth	One-tenth first three months, one-tenth each succeeding month	23 April, 1898	7,000	18 July, 1898.

## APPENDIX D—continued.

SCHEDULE of SLEEPER CONTRACTS CURRENT on 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department, &amp;c.—continued.

Date of Contract or Agreement.	Contractor's Name.	Address.	No. of Sleepers contracted for, and Class of Timber.	Rate per Sleeper.	Place of Delivery.	Rate per Month.	Date for Completion.	Total delivered to Date.	Date of Completion.
SOUTH ISLAND—continued.									
WESTLAND DISTRICT—continued.									
7 Dec., 1897	J. Adamson ..	Ross ..	2,000 silver-pine	s. d. 2 6	Hokitika ..	No fixed rate ..	No fixed rate ..	2,000	20 Feb., 1899.
7 Dec., "	W. A. Lawson ..	Kumara ..	1,000 ditto	2 6	"	"	"	1,000	14 June, 1898.
9 Dec., "	G. H. and A. B. Lawson ..	"	1,000 "	2 6	"	"	"	1,000	1 Aug., "
29 Dec., "	C. Murtha ..	"	1,000 "	2 6	"	"	"	750	"
29 Dec., "	J. Anderson ..	Lamplough ..	1,000 "	2 6	"	"	"	790	"
21 Jan., 1898	J. Sutherland and party ..	Okarito ..	2,000 "	2 6	"	"	"	1,374	"
29 Jan., "	W. A. Saddler ..	Nelson Creek ..	1,000 "	2 6	"	"	"	1,000	11 Mar., 1899.
29 Jan., "	W. H. Hunt ..	"	1,000 "	2 6	"	"	"	1,000	15 Aug., 1898.
29 Jan., "	W. Stephens and party ..	Rimu ..	1,000 "	2 6	"	"	"	908	"
1 Feb., "	T. Joyce ..	Greymouth ..	1,000 "	2 6	"	"	"	1,000	1 April, 1898.
1 Feb., "	W. L. Stewart ..	"	1,000 "	2 6	"	"	"	1,000	11 Aug., 1898.
7 Feb., "	P. Nicholas ..	Greenstone ..	1,000 "	2 6	"	"	"	1,000	24 Feb., 1899.
10 Feb., "	J. Patterson ..	Kotuku ..	1,000 "	2 6	"	"	"	1,000	27 July, 1898.
10 Feb., "	Punch and Denia ..	Ross ..	1,000 "	2 6	"	"	"	1,000	8 Dec., "
4 Mar., "	J. Taylor ..	Cobden ..	1,000 "	2 6	"	"	"	1,000	"
7 Mar., "	T. and R. Stephen ..	Rimu ..	1,000 "	2 6	"	"	"	508	"
7 Mar., "	J. Newton ..	Kawhaka ..	1,000 "	2 6	"	"	"	1,000	26 Aug., 1898.
7 Mar., "	Stratford, Blair, and Co. ..	Greymouth ..	2,000 "	2 6	"	"	"	2,000	16 Sept., "
9 Mar., "	J. Coyle ..	Hokitika ..	1,000 "	2 6	"	"	"	1,000	25 May, "
10 Mar., "	McGuire, Gilpin, and Anderson ..	Kokiri ..	1,500 "	2 6	"	"	"	1,500	10 May, "
11 Mar., "	Ruthven, Hogan, and Kennedy ..	Maori Gully ..	1,500 "	2 6	"	"	"	1,500	7 June, "
14 Mar., "	J. Dixon ..	Kawhaka ..	1,000 "	2 6	"	"	"	1,000	26 Aug., "
4 April, "	T. S. Taylor ..	Cobden ..	1,000 "	2 6	"	"	"	1,000	22 Dec., "
4 April, "	Butler Brothers ..	Kokiri ..	1,500 "	2 6	"	"	"	1,163	"
4 April, "	C. Murtha ..	Kumara ..	1,000 "	2 6	"	"	"	"	"
11 April, "	D. Watson ..	Kokiri ..	1,000 "	2 6	"	"	"	"	"
27 April, "	Baxter Brothers and Foord ..	"	2,000 "	2 6	"	"	"	1,000	3 Dec., 1898.
27 April, "	J. McLay ..	Brunner ..	1,500 "	2 6	"	"	"	1,877	"
6 June, "	E. J. Gale ..	Arahura ..	1,000 "	2 6	"	"	"	1,500	6 Oct., 1898.
7 June, "	C. Dobson ..	Kotuku ..	1,000 "	2 6	"	"	"	1,000	8 Dec., "
7 June, "	Saunders and party ..	Kokiri ..	1,500 "	2 6	"	"	"	1,000	31 Oct., "
9 June, "	D. Watson ..	"	1,000 "	2 6	"	"	"	1,000	31 Oct., "
29 Aug., "	W. Hunt ..	Kumara ..	1,000 "	2 6	"	"	"	1,000	30 Sept., 1899.
3 Sept., "	L. Zala ..	Okarito ..	1,000 "	2 6	"	"	"	1,000	24 Feb., 1899.
21 Nov., "	J. Stephens ..	Marsden ..	1,000 "	2 6	"	"	"	1,000	17 Jan., "
28 Nov., "	C. E. Fellows ..	Ross ..	1,000 "	2 6	"	"	"	1,000	27 Mar., "
21 Dec., "	S. Dixon ..	Kawhaka ..	1,000 "	2 6	"	"	"	794	"
Various*	Sundry small contractors ..	Various ..	42,912 "	2 6	"	"	"	93,366	"

\* Contracts entered into for supply of sleepers in lots of less than 1,000.

# APPENDIX D—continued.

## SCHEDULE of SLEEPER CONTRACTS CURRENT on 1st April, 1898, and CONTRACTS ENTERED INTO by the Public Works Department, &c.—continued

Date of Contract or Agreement.	Contractor's Name.	Address.	No. of Sleepers contracted for, and Class of Timber.	Rate per Sleeper.	Place of Delivery.	Rate per Month.	Date for Completion.	Total delivered to Date.	Date of Completion.
SOUTH ISLAND—continued.									
OTAGO DISTRICT.									
1 April, 1898	Ferrier Brothers	Invercargill...	500 black-pine	s. d. 2 6	Forest Hill Railway	No fixed rate	Various	525	30 April, 1898.
1 April, "	F. Jack	Winton	3,000 ditto	2 6	"	"	"	3,135	31 Oct., "
1 May, "	J. Gardiner	"	1,200 black-pine and totara	2s. 6d. and 3s.	"	"	"	1,277	31 Dec., "
1 Aug., "	Latta Brothers	Owaka	500 kamai	2 0	Otago Central Railway	"	"	500	31 Aug., "
1 Oct., "	Egerton Brothers	Winton	1,000 black-pine	2 6	Forest Hill Railway	"	"	1,000	30 Nov., "
1 Oct., "	Jack Brothers	"	4,000 ditto	2 6	"	"	"	3,057	31 Mar., 1899.
1 Nov., "	T. J. Dixon	"	500 "	2 6	"	"	"	500	31 Mar., "
1 Nov., "	W. St. George	"	500 "	2 6	"	"	"	510	30 Nov., 1898.
1 Nov., "	R. Jamieson and Co.	"	800 "	2 6	"	"	"	803	30 Nov., "
1 Nov., "	J. Kilkelly	"	700 "	2 6	"	"	"	750	30 Nov., "
1 Nov., "	T. Kilkelly	"	500 "	2 6	"	"	"	500	30 Nov., "
16 Nov., "	G. A. Whealler	Bluff	1,350 ironbark	19s. per 100 b.m.	"	The lot within two months..	15 Jan., 1899 ..	694	"
1 Dec., "	J. Clerk	Winton	500 black-pine	2 6	Forest Hill Railway	No fixed rate	Various	500	31 Dec., 1898.
1 Jan., 1899	C. Lake	"	500 black-pine and totara	2s. 6d. and 3s.	"	"	"	500	31 Jan., 1899.
1 Jan., "	Cox and Fryer	"	700 black-pine	2 6	"	"	"	750	31 Jan., "
1 Jan., "	A. W. Pettigrew	"	500 ditto	2 6	"	"	"	500	31 Jan., "
1 Jan., "	P. Kilkelly	"	1,000 black-pine and totara	2s. 6d. and 3s.	"	"	"	1,000	28 Feb., "
1 Feb., "	T. Amos	"	600 black-pine	2 6	"	"	"	600	28 Feb., "
1 Mar., "	D. King	"	1,000 ditto	2 6	"	"	"	1,000	31 Mar., "

## APPENDIX E.

## ANNUAL REPORT ON PUBLIC WORKS BY THE ENGINEER-IN-CHIEF.

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

SIR,—

Public Works Office, Wellington, 1st July, 1899.

I have the honour to submit the following report on the various works completed and in progress throughout the colony during the past year.

## RAILWAYS.

## ABSTRACT.

The following table shows the expenditure and liabilities on Government railways in New Zealand up to the 31st March, 1899:—

Name of Railway.	Total Length of Railway or Section.	Open for Traffic.	Expenditure to 31st March, 1899.	Liabilities on 31st March, 1899.
	M. ch.	M. ch.	£ s. d.	£ s. d.
Kaihu Valley .. .. .	19 40	17 21	54,858 19 2	66 0 0
Kawakawa .. .. .	7 41	7 41	79,367 17 7	..
Whangarei-Kamo and Extension .. .. .	46 74	21 26	135,970 8 2	458 0 0
Helensville Northwards .. .. .	110 0	10 48	83,763 6 0	799 0 0
Kaipara-Waikato, with Branches .. .. .	151 1	151 1	1,219,493 6 10	..
Waikato-Thames .. .. .	62 58	62 58	315,554 16 6	3,941 0 0
Thames Valley-Rotorua .. .. .	69 33	69 33	353,321 18 7	113 0 0
Wellington-Napier and Palmerston North (including Te Aro Extension and Greytown Branch) .. .. .	233 12	233 12	1,926,870 2 9	137 0 0
Wellington-Foxton .. .. .	..	..	42,116 3 4	..
Foxton-New Plymouth, with Branches .. .. .	195 49	195 49	1,298,302 13 8	..
North Island Main Trunk .. .. .	213 0	69 40	646,122 17 2	6,695 0 0
Nelson-Roundell .. .. .	52 0	22 73	162,541 12 2	..
Midland Railway* .. .. .	..	..	82,050 5 6	20,615 0 0
Greymouth-Nelson Creek .. .. .	7 51	7 51	166,471 11 11	..
Greymouth-Hokitika .. .. .	24 37	24 37	187,542 0 3	..
Westport-Ngakawau .. .. .	19 56	19 56	187,512 15 7	..
Westport-Ngakawau Extension to Mokihiuit	7 12	7 12	..	..
Mokihiuit Colliery Line† .. .. .	3 69	3 69	..	..
Picton-Hurunui—				
Picton-Blind River Section .. .. .	37 5	20 42	254,308 7 8	800 0 0
Hurunui-Red Post Section .. .. .	9 50	9 50	39,093 6 1	..
Hurunui-Waitaki, with Branches .. .. .	474 41	433 38	2,135,046 7 6	56 0 0
Canterbury Interior Main Line—Oxford-Temuka .. .. .	83 0	11 44	59,343 9 2	..
Waitaki-Bluff, with Branches .. .. .	503 50	459 33	3,312,251 0 7	4,946 0 0
Otago Central .. .. .	182 56	77 45	765,625 14 4	12,753 0 0
Invercargill-Kingston, with Mararoa Branch .. .. .	117 4	97 44	279,214 13 2	..
Forest Hill Railway—Winton-Hedgehope§ .. .. .	12 40	..	15,275 15 1	1,789 0 0
Western Railways .. .. .	57 56	57 56	214,413 12 3	..
Preliminary surveys .. .. .	..	..	57,824 18 7	591 0 0
Miscellaneous .. .. .	..	..	10,336 19 11	..
Stock of permanent-way on hand .. .. .	..	..	33,262 3 5	17,296 0 0
Value of permanent-way in hands of Railway Department .. .. .	..	..	25,000 0 0	..
Rolling-stock .. .. .	..	..	1,884,533 14 0	6,816 0 0
Total .. .. .	2,701 35	2,091 19	16,027,390 16 11	77,871 0 0
PROVINCIAL GOVERNMENT LINES, ETC.				
Canterbury (lengths included above) .. .. .	..	..	731,759 0 0	..
Otago .. .. .	..	..	372,522 2 5	..
Gisborne to Ormond Tramway .. .. .	..	..	4,975 1 7	..
Grand total .. .. .	2,701 35	2,091 19	17,136,647 0 11	77,871 0 0

\* The amount shown as expenditure represents the proportionate amount unrecovered from the Midland Railway Company.

† The funds for this extension—namely, £35,501 2s. 11d.—were provided by the Westport Harbour Board.

‡ The funds for purchase of this line, £15,745, were provided by the Westport Harbour Board.

§ The expenditure on this line as a tramway was made by the Lands Department.

During the year a total length of 33 miles 74 chains of railway was opened for traffic. The following table contains particulars of the sections :—

Railway.	Section.	Length.	Date opened for Traffic.
Whangarei-Kamo Extension ...	Whakapara-Waiotu ...	M. ch. 3 29	21st December, 1898.
Waikato-Thames ...	Paeroa-Thames ...	19 20	19th December, 1898.
Otago Central ...	Kokonga-Ranfurly ...	11 25	14th December, 1898.
	Total ...	33 74	

Appended hereto is a coloured diagram showing the length of railway opened each year since the commencement of the public works.

#### WHANGAREI-KAMO RAILWAY EXTENSION.

*Hukerenui Section (11 m. 25 ch. to 14 m. 57 ch.; length, 3 miles 32 chains).*—This section was completed for traffic and handed over to the Working-Railway Department on the 21st of December last. The further extension of this line has not yet been authorised by Parliament, and, therefore, though plans, &c., are ready, the proposed extension to 16 m. cannot be put in hand.

#### HELENSVILLE-NORTHWARD RAILWAY.

*Tahekerua Section (46 m. 36 ch. to 49 m. 54 ch.; length, 3 miles 18 chains).*—This section has been resurveyed, and formation works for the first two miles have been well advanced towards completion. Contracts for ironbark and native timber have been let, and the latter has been delivered, and the necessary ironwork for the bridges is being procured. The land-plan survey is in progress and about half done.

*Komokoriki Section (49 m. 54 ch. to 56 m.; length, 6 miles 26 chains).*—A start is being made with falling and clearing the bush on the first two miles.

#### GRAHAMSTOWN-TE AROHA RAILWAY.

*Thames-Paeroa Section (0 mile to 19 m. 20 ch.; length, 19 miles 20 chains).*—The reconstruction and completion of this section was sufficiently well advanced to enable it to be opened for traffic on the 19th of December last. Since then the several works on the section have been for the most part finished, and it is expected that the whole section will be completed by the end of this month. A telegraph-line has been constructed from the Thames to Paeroa.

#### NORTH ISLAND MAIN TRUNK RAILWAY.

##### North End.

*Mokau-Poro-o-tarao Section (34 m. 43 ch. to 49 m. 7 ch.; length, 12 miles 43 chains).*—This section has been maintained during the year, and is in fair order.

*Ohinemoa Section (49 m. 18·79 ch. to 53 m. 53 ch.; length, 4 miles 34·21 chains).*—Very considerable progress has been made with the earth-work on the first three miles of this section. The country is very treacherous, and requires a considerable amount of draining to insure the stability of the works. The draining done so far appears to be fairly successful.

##### South End.

*Makohine Section (22 m. 40 ch. to 33 m. 40 ch.; length, 11 miles).*—The tunnel at 33 m. has been completed. The only work now being done on this section is the flattening of the slopes of the papa cuttings between 33 m. 5 ch. and 33 m. 20 ch.

*Makohine Viaduct.*—The concrete foundations were completed in September last. The work of manufacturing the piers was begun in August last; an electric light installation was fitted up in December last, and work has since been carried on night and day. The drilling of the component plates and angle-sections of the piers and the fitting of them together is now well advanced, the bases, anchor-girders, and bolts, the columns and main-face diagonal braces being all well advanced, and a start will shortly be made with the erection of the pier D. A considerable amount of work has been done in drilling the plates, angles, &c., for the centre-span and cantilever girders.

*Mangaweka Section (33 m. 40 ch. to 40 m. 40 ch.; length, 7 miles).*—Nearly all the heavy works on this section are in hand, and considerable progress has been made with many of the cuttings, culverts, &c. Three out of the four tunnels on the section are in hand, and, in addition to the approach cuttings, about 23 chains of 8 ft. by 8 ft. headings have been driven in the three tunnels, the sheds and plant for making concrete blocks for tunnel-lining have been removed from Powhakarua to 35 m. 56 ch., and the work of making blocks for the tunnel-arching is begun. A service-road from the Rangitikei River to the sheds has been cut. It is proposed to deviate the line from about 36 m. 51 ch. to 36 m. 70 ch., and substitute a tunnel for a bridge, some heavy cuttings and other works. The overhanging cliffs and the steep slope to the river below the line would make the works at first proposed somewhat insecure.

*Paengaroa Section (40 m. 40 ch. to 50 m. 40 ch.; length, 10 miles).*—The felling and clearing of the bush on this section was finished early in the year, and the earthworks and culvert construction have been put in hand up to 44 m. 50 ch., and most of the lighter work has been finished. Deviation surveys to improve the alignment, &c., have been made at Taihape Township. The works have been reduced, and a better station-site for the township obtained.

## MIDLAND RAILWAY.

*Belgrove Section* (21 m. 35 ch. to 26 m. 71 ch. ; length, 5 miles 36 chains).—This section was maintained for part of the year until the line was opened for traffic.

*Motupiko Section* (26 m. 71 ch. to 29 m. 20 ch. ; length, 2 miles 29 chains).—The platelaying and other works on this section were completed during the year.

*Motueka Section* (29 m. 20 ch. to 30 m. 58 ch. ; length, 1 mile 38 chains).—The bridge and other works, including the station yard and station buildings, were finished during the year.

The above three sections were opened for regular traffic on the 1st of March last, though passenger trains had been run over the sections previous to this date, and goods trains for a longer time.

*Springfield Section* (0 m. to 6 m. ; length, 6 miles).—The platelaying and ballasting has been done from 4 m. 59 ch. to 5 m. 47 ch., and a temporary siding laid at 5 m. 43 ch. An office, &c., has been built at 5 m. 33 ch., and it has been connected to Springfield by a telephone line.

*Mount Torlesse Section* (6 m. to 18 m. ; length, 12 miles).—The cuttings, banks, culverts, &c., are in hand up to 9 m. 63 ch. at Staircase Gully, and considerable progress has been made. Two tunnels have been started, and some progress has been made with the driving, and lining has been begun. One tunnel-front has been completed. The lining is of brick and rubble masonry. A contract for the supply of 100,000 bricks has been let, and over half the quantity has been delivered. A service-road has been made up to 9 m. 60 ch. ; and a branch-road has been made to the Waimakariri River, to get a supply of shingle. All this work has been satisfactorily carried out by co-operative labour.

*Otira Section* (32 m. 11 ch. to 37 m. 75 ch. from Stillwater, and 12 m. 21 ch. to 6 m. 8 ch. from Arthur's Pass ; length, about 12 miles 7 chains, including deviation).—A large amount of work has been done on this section during the year, and very good progress has been made. The line is nearly completed for about eight miles beyond Jackson's Railway-station, and a locomotive ran from Jackson's to Aicken's for the first time on the 29th ultimo. There are now only a few gaps in the banks between Aicken's and Otira Stations, and two small bridges have to be finished. The permanent-way has been laid for seven miles and a quarter, nearly two miles of ballasting has been finished, and about a mile and a half more is partly done.

Three locomotives are in use for hauling ballast and stone for the protective-works. Two steam-cranes are in use for loading stone, and a third is being erected. A flood, said to be the highest during the last twenty-five years, occurred in the end of January last. This flood showed that the bank was too low in some places. Some damage to the unfinished works was caused by the flood ; but some relief was got by an advantageous change in the river-bed at one of the worst places. Similar changes might at other times cause considerable trouble in the future. It will take a considerable time for the protective stone-work to sink sufficiently far into the shingle to be beyond the influence of scour, and until this takes place there will always be some danger of damage by floods where the railway-bank runs along the river-bed. Every effort is being made to push on with the work of protecting the bank.

The weather during the year has been very favourable for the prosecution of the works on this section.

The location of the line beyond the Otira Station, over Arthur's Pass, is still under consideration. A special report by a committee of engineers, dealing with the general question, was submitted in October last.

## BLENHEIM-AWATERE RAILWAY.

The formation on this line was completed under contracts up to 28 m. 38.5 ch. some years ago, and the line was opened to 20 m. 42 ch. on the 18th April, 1893. A start was made to complete the line in September last. The small bridges between 20 m. 54 ch. and 23 m. 60 ch. have been put in hand, and the earthworks on the line up to 28 m. 38 ch. have been, for the most part, made good.

*Awatere Section* (28 m. 38 ch. to 33 m. 60 ch. ; length, 5 miles 22 chains).—The earthworks and culverts on this section were begun, and were well in hand early in the present year. The works are generally of a light nature, except at the approaches to the Awatere Bridge. All the cuttings and banks up to the Awatere River are in hand, and some of them are almost completed ; the culverts, pipes, &c., are completed. The approach cuttings to the Awatere Bridge have been begun.

A contract was let to Messrs. Scott Brothers, of Christchurch, in April last, for the construction of a combined road and railway-bridge over the Awatere River. This bridge will be 1,065 ft. long. The superstructure is to be of steel, supported on cast-iron cylinder and concrete piers and abutments. The contract price is £22,001 18s. 6d., and the contract date for completion is the 8th April, 1901.

## INCH VALLEY LIME-QUARRY RAILWAY.

This line is a branch of the Palmerston-Dunback line, and branches off at the Inch Valley Station, about six miles from Palmerston South. Its length is about two miles and a quarter. The work of construction was begun in August last, and is now well advanced towards completion. Two timber bridges have been built—one over the Shag River is 388 ft. long ; the fencing, cattle-stops, &c., are finished. The earthworks were somewhat heavy. A lime-kiln is being built under contract, and the plate-laying will be begun shortly. A cooler and hauling-engine have yet to be provided to complete the works. Land-plan surveys for a mile and three-quarters have been done.

## OTAGO CENTRAL RAILWAY.

*Hyde-Kyeburn Section* (56 m. 20 ch. to 77 m. 35 ch. ; length, 21 miles 15 chains).—The works on this section from Kokonga to Ranfurly Station, including the bridge over the Taieri River, were finished during the year, and the section was opened for traffic on the 14th December last.

*Wedderburn Section (77 m. 35 ch. to 85 m. 60 ch.; length, 8 miles 25 chains).*—Work was begun on this section in July of last year, and, as the works are for the most part of an easy character, very good progress has been made, the earthworks being completed on nearly five miles and well advanced on the remainder of the section. The Eweburn Bridge (a small structure) and the Wedderburn Station are the principal works yet to be done. It is expected that the line can be opened for traffic to Wedderburn Station (85 m. 60 ch.) by next winter.

*Ida Valley Section (85 m. 60 ch. to 93 m. 20 ch.; length, 7 miles 40 chains).*—Work was begun on this section in March last. A number of culverts has been put in. Land-plan surveys for a mile and three-quarters have been done, and several of the cuttings have been started.

#### SEAWARD BUSH RAILWAY.

*Waituna and Titiroa Sections (18 m. to 24 m. 52 ch.; length 6 miles 52 chains).*—All the formation-works, bridges, and flood openings are finished, the rails laid, and the ballasting done up to 24 m. 52 ch. The Waimahaka Station buildings are not yet complete. Up to the date of opening, on the 9th of June last, traffic was worked by the ballast-engine on these sections. The works were very heavy, high banks and numerous flood-openings being required across the swamps on each side of the Maitura River, in addition to the bridge over the river itself.

#### FOREST HILL RAILWAY.

During the year the reduction of the 1 in 40 grades, widening of earthworks, relaying the first ten miles of the line with 40 lb. rails have been finished, and re-ballasting the line has been nearly completed. A considerable amount of station accommodation has been provided.

### SURVEYS.

#### SURVEYS OF NEW LINES.

*Hukerenui-Kawakawa.*—An examination of the country has again been made, and a start with locating the line has been made at the Hukerenui end.

*Paeroa-Waihi Branch Line.*—The survey of this line was completed last year, and since then the plans, &c., have been finished. The estimated cost of the branch line is £82,000 for a length of 12 miles and 30 chains.

*North Island Main Trunk Railway (north end).*—The permanent survey has been extended to 83 m. to a point four miles south of the crossing of the Wanganui River. The plans have been finished for ten miles up to 68 m.

*South End.*—The trial line has been run to the junction with the north end survey at 83 m. on the chainage from Te Awamutu. This point is 129 m. 40 ch. on the chainage from Marton junction. The permanent line has been pegged up to 109 m. 60 ch. All the viaducts between Waimarino and the Wanganui River have been avoided.

#### GISBORNE-ROTORUA SURVEY.

A reconnaissance survey, to determine the best route for a line of railway between Gisborne and Rotorua, is nearly completed, and also a similar survey between Gisborne and Opotiki; the complete reports are, however, not yet to hand.

#### NAPIER-GISBORNE RAILWAY.

Three lines are explored and aneroid heights of the principal points determined between Napier and Wairoa, one being the route proposed by Mr. Knorpp along the sea coast, another an inland route *via* the Esk Valley and across country to Mohaka, thence it follows the Te Kiwi and Ohinepaka Valleys to the Wairoa River. A third line *via* the Tutaekuri and Mohaka Valleys was found to be exceedingly rough. Between Wairoa and Gisborne, two routes were explored. The line follows the Wairoa River to Opoiti, then two routes are available—one *via* the Mangapoika and Te Arai Valleys, and the other following the Hangarou River and the Mangaweka and Te Aroha Streams to the Gisborne Plains. After the exploration was finished, extending over three hundred miles, the trial line survey was begun, the route finally selected for this being that along the Esk Valley. About forty-two miles have been finished from Napier, and about six miles additional have been graded. The ruling gradient obtained is 1 in 40, with 6-chain curves.

#### WELLINGTON-WOODVILLE RAILWAY.

A trial line has been surveyed from near Kaitoke Station to Featherston *via* the road saddle, and a line has been chained and aneroid levels taken between Kaitoke Station and Woodside Station *via* the Tauherinikau River; also, trial lines have been run between the Upper Hutt and Kaitoke Stations. An exploration was again made of the suggested route *via* the Wainui-o-mata, Orongo-rongo, and Wairongomai Valleys, and also of two other suggested routes. The surveys show that much better grades are obtainable at reasonable cost between the Upper Hutt and Woodside Stations than exist on the opened line.

#### MIDLAND RAILWAY.

A deviation trial-survey *via* the Tadmor Valley was begun in June of last year, and had been completed from 36 m. 10 ch. up to 52 m. 40 ch. by the end of May of this year. It is expected that the field-work of this survey will be finished this month, and the plans in about six weeks time. Much easier grades are obtainable, and the works will be lighter by this route than by the route originally proposed. More country will be opened up.

## BLENHEIM-WAIPARA RAILWAY SURVEY.

The working-survey has been extended 33 m. 47 ch. to 38 m. 40 ch. This carries the permanent location through the Starborough Estate. A trial survey has been finished up to 51 m. 5 ch., and is still in progress, the explorations to determine the route being advanced some distance beyond the above-mentioned point.

In May last a trial line survey was started at the Waipara end to determine the best route and the character of the works required to connect the main line with the section of this line permanently located through the Cheviot Estate.

## SLEEPERS.

A large number of contracts and agreements for the supply of sleepers were current during the year ended 31st March last, and the deliveries made in the districts from which they were obtained were as follows, viz.:—

Auckland District: 930 ironbark, 1,167 puriri, 5,717 totara.

Nelson District: 5,279 black-birch.

Westport District: 13,035 silver-pine.

Westland District: 104,536 silver-pine.

Otago District: 694 ironbark, 16,907 black-pine and totara, 500 kamai.

Details of contracts current during the year ended 31st March last will be found in Appendix D.

## ROADS, BRIDGES, ETC.

## AUCKLAND DISTRICT.

A contract for repairs to Mangere Bridge was completed during the year, also contracts for repairs to the Panmure and Orakei Bridges.

The District Engineer has supervised the construction of a further portion of Whangaparapara to Blind Bay Road for the Mines Department. This is being done by co-operative labour.

## WESTLAND DISTRICTS.

The road from Waimangaroa to Denniston has been completed to 3 m. 40 ch.; the width is 7 ft. The survey has been completed to Denniston. The following works were inspected and reported on: Karamea Bridge; road from Lyell Bridge to Ryan's; road, Costello's Hill to Charleston; road, Granity Creek southwards; road from Westport to Waimangaroa; road from Reefton to Black's Point.

The deviation of the Great South Road round Mount Hercules is nearly completed. The length is 5 m. 45.61 ch.

Estimates have been prepared showing the cost of the completion of the Mapourika Lake Road. The work requiring to be done is the widening of the existing track.

Repairs to the Okarito Forks-Waiho Road have been carried out during the past summer. These consisted of putting metal on some of the worst parts of the road, cleaning out drains, renewing culverts, and repairs to a bridge. Only partial repairs were possible with the money available.

The following works were reported on for the Mines Department: Road, Grey River to Moonlight; track, Moonlight to Paparoa; track to Ceresus Battery; Ten-mile Bridge, Barrytown Road; Twelve-mile Road Bridge, Grey; Kumara Road; Denniston Track; No Town Bridge; Blackball-Paparoa Track; Moonlight-Paparoa Track; Ahaura Bridge repairs; Paroa-Teremakau Road; Cape Terrace Road; Donnelly's Creek foot-bridge, Ross; Brandy Jack's Creek Bridge, Totara Flat; Grey River; Moonlight Road; Ceresus Track; track, Ten-mile Creek, Barrytown Road; track, Lake Brunner to Maori Creek; road-bridge, Maori Creek; bridge over Little Grey at Squaretown. Reports were furnished on Stillwater Road Bridge; Taipo Seven-mile-track; flood-damage, Hokitika Wharf; roads and bridges between Okarito, the Forks, Mapourika, and Waiho.

## MISCELLANEOUS.

Head Office plans and specifications for a steel cantilever road-bridge over the Rangitikei River at Mangaweka were prepared. Designs for the restoration of the Vinegar Hill Bridge were reported on for the Rangitikei County Council, and on a suspension-bridge over the Mangawhero River for the Wanganui County Council. A report on a suitable design for a bridge over the Taueru River was furnished to the Carterton-Taratahi Road Board.

A report on the Shoal Bay Rifle-range was furnished to the Defence Department.

A considerable amount of work has been done in improving the Mount Eden Rifle-range, and a small house has been built to hold apparatus, &c.

## PUBLIC BUILDINGS.

## AUCKLAND DISTRICT.

*Te Aroha Sanatorium.*—The new bath-house was completed, and an outside swimming-bath has been concreted and plastered, and other works done.

*Government House, Auckland.*—The repairing and renovating of the interior of the building was continued and finished during the year, and by the end of April everything was put in fair order.

A new guard-house has been built at the Princes Street entrance. The grounds have been kept in their usual order; a part was occupied by the Auckland Industrial and Mining Exhibition from May, 1898, to February, 1899, but the buildings, &c., have not yet all been removed.

An exhibit of timber, &c., was made at the Auckland Industrial and Mining Exhibition.

*Departmental Buildings, Auckland.*—The usual repairs were done. Considerable trouble has been experienced with the warping of window-sashes to such an extent as to break the glass. It has been found necessary to remove some of the worst sashes.

*Departmental Buildings, Thames.*—Repairs have been done to the main building. A strong-room has been built for the Courthouse, and the Post-office outbuildings have been rebuilt or repaired.

*Departmental Buildings, Tauranga.*—A chimney struck by lightning has been repaired, and a new tank fixed.

*New Gaol, Mount Eden.*—The front walls of the central block are now up to the level of the ground floor, and the back walls nearly.

*Prison Gaol, Shortland.*—Repairs and painting to residence have been done.

*Auckland University College.*—Plans for a large addition have been prepared and a contract let. Good progress is being made with the work. The contract sum is £1,116 11s.

*Avondale Asylum.*—The airing-courts were tarred. Plans for twenty additional single rooms were prepared, and a contract for their construction has been let.

*Supreme Court, Auckland.*—Repairs, &c., have been done during the year.

*District Court, Auckland.*—The strong-room additions were finished, and plans and estimates for some additions to the building prepared.

*Coromandel Courthouse.*—A new strong-room has been built.

*Paeroa Courthouse.*—Two additional rooms have been built, and some alterations were made to give additional accommodation. Gas has been laid on the building. Plans and estimate of further alterations have been prepared.

*Hamilton Courthouse.*—Some gravelling to the paths has been done, and some necessary repairs.

*Mercer Courthouse.*—Some repairs and gravelling have been done.

*Te Aroha Courthouse.*—Venetian and other blinds have been put up.

*Dargaville Courthouse.*—A new iron roof has been put on, the outside painted, and repairs done.

*Police-station, Auckland (Chancery Lane).*—Various repairs to gas and water mains have been done.

*Police-station and Barracks, O'Rorke Street.*—The old stone barracks have been pulled down, and a contract let for a new building. Work was started at the end of December last, and good progress has been made, the contract being nearly half finished.

*Police-station, Coromandel.*—The maintenance period for the new building expired in July last. An extra room for an office has been built, and some fencing done.

*Police-station, Thames.*—Plans for a residence were prepared last year; a contract has been let, and the work is about half done.

*Police-station, Karangahake.*—A lock-up started last year has been finished.

*Police-station, Te Aroha.*—Two additional rooms have been built; some painting and repairs done, also some fencing.

*Te Kuiti Police-station.*—A new building has been erected, and the lock-up has been removed to the back of the new building.

*Cambridge Police-station.*—Plans have been prepared for a new building, and a tender has been accepted for its erection.

*Mercer Police-station.*—Additional rooms and a store-house have been built, and some fencing and repairs done.

*Ngauvawahia Police-station.*—A report and estimate of the cost of building two additional rooms have been furnished.

*Post-office, Auckland.*—Several rooms have been combined into one large room, forming a room for the telephone multiple-switch room. The inside of the telegraph office has been renovated, a new stairway has been built, and the old telephone room has been made into a mechanics' room. All ordinary repairs have been attended to.

*Post-office, Mongonui.*—A contract to build three additional rooms has been finished, a fence has been erected, and some repairs done.

*Post-office, Otahuhu.*—A new brick building has been finished.

*Whangarei Post-office.*—A contract to build a new room for a money-order office has been completed.

*Waitekauri Post-office.*—Two additional living-rooms have been built, and some fencing done.

*Newton Post-office.*—Some repairs and some painting and paperhanging have been done.

*Warkworth Post-office.*—Some painting and paperhanging were done, and a new stove fixed.

*Te Aroha Post-office.*—Some repairs have been done; the building of an additional room and painting are now being done.

*Raglan Post-office.*—Repairs to this building have been done.

*Parnell Post-office.*—Two suggested sites for the proposed building were reported on.

*Coromandel Post-office Residence.*—Some repairs and fencing are to be gone on with at once.

*Industrial Home, Parnell.*—The persistent endeavours made to remedy the bad drainage around the building have so far not been successful, but there seems some hope of a general drainage scheme being undertaken.

*Ponsonby Hall.*—This building has been let at various times during last winter.

*Admiralty House.*—The lease to Mr. Taylor is still in force.

*Wairangi Bark-shed.*—A lean-to to shelter a portable engine for bark-crushing has been built.

*Whirinaki Native School.*—The contract for building the school and residence has been completed during the year.

*Utakura.*—A contract for building a school was completed in November last, and a contract to build a residence was completed in March.

*Maniaia*.—A contract for combined school and residence was completed in August last, and two additional rooms were added in September.

*Rakaumanga*.—A contract for a Native school and residence has just been completed. The maintenance period has not yet expired.

*Whakatane-Waimana Native School*.—A contract for this building has just been completed after considerable difficulty was experienced by the contractor. The maintenance is still going on.

A report, with estimates of necessary repairs and alterations required at Auckland Drillshed, has been furnished to the Defence Department.

#### NEW PLYMOUTH-WANGANUI-NAPIER DISTRICTS.

*Mokau*.—A one-cell lock-up has been built. A contract is now advertised for the erection of a police-station.

*New Plymouth*.—It is proposed to add three or more rooms to the police-station.

*Inglewood Police-station* is to be added to, and painting and repairs done.

*Opunake Police-station*.—A new residence has been constructed by contract.

*Maniaia Police-station*.—A new residence has been built.

*Rahotu*.—A contract to erect a building to form a cell and office is about to be advertised.

*Normanby*.—A contract for additions, repairs, and painting is in progress.

*Eltham Police-station*.—It is proposed to erect an office as an addition to the residence.

*Waverley*.—A contract for additions, repairs, and painting to the police-station is in hand.

*Marton*.—A contract is being prepared for repairs and painting.

*Feilding*.—The proposed new station has not yet been put in hand.

*Ashhurst*.—A one-cell lock-up has been built.

*Dannevirke*.—Additions, repairs, and painting at the police-station are being done by contract.

*Ormondville*.—Small repairs have been done to the police-station.

*Waiparwa*.—A report on the condition of the constables' quarters has been furnished. New buildings are required.

*Hastings*.—Additions, repairs, and painting to the police-station have been done by contract.

*Napier Police-station*.—A report has been made on trapping and ventilation required for the drains.

*Waitara*.—A post- and telegraph-office has been built by contract.

*Hawera*.—The damage caused to the floors of the upper story by dry-rot has been made good.

*Sanson*.—The post- and telegraph-office has been repaired and painted, and the drains trapped and ventilated.

*Mangaweka*.—A contract for the erection of a post- and telegraph-office is now in progress.

*Napier Post- and Telegraph-office*.—The trapping and ventilation required for the drains has been reported on.

*Palmerston North Courthouse*.—The contract for the erection of this building has been carried out satisfactorily.

*Woodville*.—A new shed and conveniences have been supplied for the Courthouse.

*Wanganui*.—A contract for repairs and painting is being prepared.

*Napier Courthouse*.—The drainage has been finished, and a report with further recommendations made.

*Eketahuna*.—Tenders have been accepted for the erection of a Courthouse.

*New Plymouth Departmental Buildings*.—A contract has been prepared for some small additions, drainage repairs, and painting, but is held over pending a decision regarding the erection of a clock-tower.

*Napier Departmental Buildings*.—The drainage has been inspected, and a report and recommendation made.

*Pipiriki*.—The Native Schoolroom has been scrimmed and papered, and linoleum laid on the floors.

*Palmerston North*.—Plans were prepared for the transformation of the old public-works buildings into a residence for the Stock Inspector, but have not been approved.

*Wanganui*.—It is proposed to make additions to the Customhouse, to provide offices for the Lands and Stock Departments.

#### WELLINGTON-MARLBOROUGH DISTRICT.

*General Post-office*.—A new goods- and passenger-elevator has been provided; additional fittings have been supplied; and general repairs have been carried out as required.

*Masterton*.—Tenders have been invited for the erection of a large building for post- and telegraph-office.

*Renwicktown*.—A new post- and telegraph-office has been built.

*Picton*.—Post- and telegraph-office has been repaired and painted.

Plans have been prepared for a post-office at Petone.

*Parliament Buildings*.—A contract for the completion of the new portion of the building is practically finished. Portions of the buildings have been repainted.

*Government House* has had the drainage system altered to conform to the new sanitary by-laws of the Wellington Corporation. A new conservatory has been built, and additions made to the gardener's cottage. Numerous repairs have been attended to.

The Government Printing Office has been heated throughout with steam-radiators, and the drainage system altered to be in accordance with the new sanitary by-laws. A large amount of work was done in connection with alterations in internal arrangements.

New 6-in. water-mains have been laid from the reservoir, Ministerial residence, Tinakori Road West, to supply water for garden purposes at the Parliament Buildings grounds, Government House grounds, and the engine-room, Printing Office.

The telephone exchange has been provided with hot-water heating pipes.

The drainage of Mount View Asylum has been reconstructed to be in accordance with the new sanitary regulations of the city, and additional fire-escape staircases have been constructed in the female wing.

*Porirua Asylum.*—A new wing has been added to the female division, capable of accommodating seventy-eight patients; and works are now in progress to give accommodation for fifty-seven patients, in single rooms, for acute cases; also, a block containing a dining-room, sewing-room, and sleeping-accommodation for twenty female patients is in progress. An isolated morgue and dissecting-room has been built.

*Central Police-station.*—Additional cells have been erected, and a new kitchen-room built for the constables. The drainage of the building has been altered to conform to the new sanitary by-laws, and at the same time the drainage of the adjacent Supreme Court building was altered. The whole of the offices, corridors, barrack-rooms, &c., have been renovated and repainted. The upper floor plan has been remodelled and eight bedrooms provided. A brick stable has been built.

Electric lighting has been supplied to the Terrace Gaol.

A retaining-wall has been built along Banks's Terrace, Mount Cook Gaol.

A stable and shed have been built for the Stock Department.

The whole of the Molesworth Street Ministerial residence has been repainted outside, and all necessary repairs done.

The Museum House has been repainted on the outside, and all necessary repapering and repairing done.

*Ministerial Residence, Tinakori Road East.*—This house has been put in a good state of repair.

The offices rented for the Labour Bureau were renovated and decorated, &c.; also the office rented for the Official Assignee.

The amount of work done during the year in ordinary repairs and maintenance of the various public buildings, and in supplying additional fittings and conveniences, has been very large.

#### NELSON DISTRICT.

*Nelson Departmental Buildings.*—An additional strong-room has been built for the Lands and Deeds Department. The whole of the interior of the building has been repainted. The slates on the roof are now, however, giving considerable trouble, as the roof-timbers are rotting and unable to hold the nails. The stables, outbuildings, and fences have been repainted. The Provincial Hall is now being renovated under petty contract.

*Motueka.*—A new iron roof has been put on the Courthouse, and the building repaired and painted. Some new fencing has been erected, also new outbuildings, for the post- and telegraph-office.

*Takaka.*—A new porch has been built to the Courthouse, and outbuildings put up. The Courthouse has also been repaired and painted. An acre of land has been bought for the site of a new post- and telegraph-office, and plans for the new building are in course of preparation.

*Port Nelson.*—Some additional land acquired has been fenced with a 6 ft. corrugated-iron fence.

*Nelson Customhouse.*—The slate roof has been put in a thorough state of repair, a new lobby has been built, the exterior of the building has been repainted, and some renovating of the interior done.

*Nelson Post- and Telegraph-office.*—The buildings have been put in thorough repair, a new floor has been laid in the public room, and the exterior of the building has been repainted.

*Wakapuaka Cable-station.*—Fairly good progress has been made with the contract for the erection of new offices.

*Nelson Asylum.*—The new two-storied auxiliary asylum in brick has been finished. The alteration to the laundry to enable it to be fitted up with the newest appliances is in progress. The main building has been furnished throughout with electric alarms, and it has been connected by telephone with the new building and the Superintendent's residence. A water-service has been laid to the Superintendent's residence.

A considerable amount of work has been done to the various buildings in the district in minor repairs, and, considering the age of many of the buildings, much work of this kind may be expected in the future.

#### WESTLAND DISTRICTS.

*Westport.*—The police-station has been repainted and repaired. There have been some minor repairs done to the Courthouse, and it has been repainted.

*Denniston.*—The police-station has been repaired and painted.

Minor repairs have been done to the Courthouse and lock-up, Lyell, and to the residence of the Clerk of Court, Westport.

*Greymouth Courthouse.*—The piles and roof have been renewed. The painting of the interior and exterior of the building will be finished shortly.

*Greymouth Police-station.*—The old quarters have been taken down and a store, shed, and outbuildings have been erected on their site. The station-building has been repaired and painted. The sergeant's house has been raised above flood-level and repaired and painted, and a new range fitted in the constable's house.

*Hokitika Post- and Telegraph-office.*—The repairs and painting begun last year have been finished, two new grates have been put in, and work in connection with additional safes is in hand.

*Hokitika Asylum.*—Supplies of materials were furnished to Asylum for work to be done by the inmates.

*Hokitika Gaol.*—Material for repairs has been supplied for work to be done by the prisoners, and the building is now getting into a fair state of repair.

*Stafford Police-quarters.*—The repairs and painting have been finished.

*Stafford Courthouse.*—Repairs and painting in hand last year have been finished.

*Goldsborough Courthouse.*—The repairs and painting in hand last year have been finished.

*Ahaura Post and Telegraph.*—Some repairs and painting have been done.

*Okarito.*—General repairs of an extensive character were carried out in the Courthouse, police-station, constable's quarters, stables, lock-up, fencing, &c.

*Ross.*—Extensive repairs were done during the year to the Courthouse, police-station, stables, lock-up, and constable's quarters.

*Greenstone.*—The Warden's Courthouse was put in a state of repair, and made safe.

#### CANTERBURY DISTRICT.

##### *Courthouses.*

*Ashburton.*—The roof of the Courthouse has been repaired, and some improvements made in the outbuildings.

*Christchurch Supreme Court.*—The usual necessary repairs have been carried out; asphalt footpaths have been laid, new shelving put up, water laid on to the lavatory, and new snow-boards fixed to the gutters. A new cottage for the custodian is being built.

*Christchurch Stipendiary Magistrate's Court.*—The roof has been kept in a state of repair. The offices and strong-room have been ventilated. More shelving has been provided.

*Leeston.*—A new Courthouse has been built and furnished.

*Lyttelton.*—The Courtroom and offices have been repaired and renovated, more seating accommodation provided, and the floors laid with linoleum.

*Timaru Courthouse.*—Repairs to the roof and gutters have been done, new door-fastenings and sash-cords fixed, and a new gate has been provided.

##### *Departmental Buildings.*

*Christchurch Provincial Buildings.*—Many repairs have been required to keep these buildings in an efficient state. Alterations have been made in various rooms to meet the wants of the Lands and Survey, Labour, and Stock Departments. Sundry fittings have also been provided.

*Christchurch.*—The District Survey Office has been thoroughly repaired and renovated and painted.

A new building has been put up for offices for the Defence Department, and the necessary out-buildings in the drillshed grounds.

##### *Post and Telegraph Offices.*

*Annat.*—The building occupied by the telegraph lineman has been renovated and painted.

*Ashburton.*—The mail-room has been enlarged; a verandah built along the whole front of the building. A substantial galvanised-iron fence, 6 ft. high, has been erected round the grounds. The Postmaster's private rooms have been renovated, and the exterior of the whole building painted.

*Bealey.*—The mail-room has been enlarged.

*Christchurch.*—The stone entrance steps have been re-dressed, a bicycle-shed has been built, and many small repairs done. The asphalt in the cart-road and yards has been repaired.

*Geraldine.*—The Postmaster's residence has been painted.

*Lyttelton.*—The stair-steps have been re-covered, and minor repairs done.

*Timaru.*—A new picket-fence has been erected round the section. The chimneys in the lower portion of the building have been heightened. A galvanised-iron fence has been built round the caretaker's yard, and round the out-buildings. All the window-sashes have been re-hung and overhauled, as found necessary, and some repairs done.

##### *Police-stations.*

*Addington.*—The roof of the building has been repaired, and some internal repairs, &c., done.

*Ashburton.*—A new kitchen has been built to the sergeant's house.

*Bingsland.*—The lock-up has been removed to the new station and repainted; an office has been put up, and open drains have been formed. The ground-surface in front has been raised and the footpath asphalted.

*Christchurch.*—Necessary repairs have been done to the buildings. The roof of the Inspector's house has been partly re-covered with iron. Some new floors have been laid and kitchen requisites provided. The rooms used as offices have been renovated and fittings supplied. Alterations have been made in the room for the Inspector of Weights and Measures, and four temporary cells are being built.

*Coalgate.*—Repairs have been done to the roofs of the constable's house and the lock-up.

*Fairlie Creek.*—Tenders have been received for building an additional room, renovating the house, roofing the stable, and sundry repairs.

*Kaipoi.*—An office, an additional living-room, and a scullery have been added to the constable's house, which has been renovated and additional fittings provided. The exterior of the building has been painted, the fencing repaired, footpath asphalted, and the downpipes connected to the main drain.

*Kaikoura.*—The stable and lock-up have been repaired and painted. A contract has been let to build a new house, and for alterations and renovation of the old portion of the buildings.

*Lyttelton*.—The fencing has been repaired and painted. The lock-up has been repaired and painted. The offices, bathroom, kitchen, and bedrooms have been renovated. The exterior wood-work has been painted.

*Phillipstown*.—Some minor repairs have been done to the constable's house and to the lock-up.

*Southbridge*.—An office and additional room and a scullery have been added to the constable's house, which has also been repaired and painted. An out-building, with washhouse, has been built.

*Temuka*.—Two rooms have been added to the sergeant's house, which has been put in repair and painted. A proper system of drainage has been provided, and the down-pipes from the sergeant's and constables' houses connected to it. The fencing has been extended and improved.

*Timaru*.—Various minor repairs have been done. The police-station will benefit by the drainage-works done in the adjacent grounds of the courthouse.

*Waimate*.—Extensive additions, alterations, and renovations have been done to the constable's quarters during the year.

*Burnham Industrial School*.—A high-pressure boiler and range have been fitted in the main building. Two new windows have been put in the schoolroom. The windmill well and the school-master's well have been cleaned out, and the pumps repaired.

*Sunnyside Lunatic Asylum*.—The electric-alarm system has been completed, sixty keys have been fitted to the gas-taps, and the baker's ovens repaired.

*Quail Island Quarantine Station*.—A large retaining-wall has been built at the back of the hospital and outbuildings, the dam enlarged, and general repairs to the roads and buildings have been done, all chiefly by prison labour.

#### OTAGO AND SOUTHLAND DISTRICTS.

##### *Courthouses.*

*Macraes*.—A contract for the erection of a new Courthouse was completed during the year.

*Clyde*.—A contract for additions to the Courthouse has been completed, and also a petty contract for renovations.

*Dunedin*.—The renovation of the ushers' quarters at the Supreme Court was done by petty contract.

*Cromwell*.—A petty contract for renovations was carried out during the year.

*Alexandra*.—A petty contract for renovating the Courthouse was done during the year.

*Balclutha*.—Repairs and renovation of the Courthouse were done by petty contract.

##### *Post and Telegraph Offices.*

*Dunedin*.—The Chief Post-office had new posting-boxes put in; alterations were done to the money-order office; also other alterations and some renovations were done.

*Arrowtown*.—A contract for additions to the post-office has been completed.

*Queenstown*.—The renovation and painting of the post-office was done by petty contract.

*Owaka Post-office*.—A contract for removing, re-erecting, and renovating this building has been carried out.

*Palmerston South*.—A petty contract for repairs and renovation of the post-office has been completed.

*Port Chalmers*.—The repairing and renovating of the post-office has been done by petty contract.

*Mataura*.—Additions and renovations to the Postmaster's quarters have been done by petty contract.

*Miller's Flat*.—A contract for the erection of a new post-office has been completed.

*Milton*.—Repairs and renovations to the post-office have been done by petty contract.

*Mosgiel*.—A contract for the erection of a new post- and telegraph-office is well advanced.

##### *Police-stations.*

*Dunedin*.—The work of forming dormitories and store-room in the attic of the central police-station was completed in April last, and a petty contract for certain renovations was completed in February.

*Clyde*.—Repairs to the sergeant's quarters have been done by petty contract. A contract for the erection of a gaoler's residence was completed in March last.

*Mataura*.—A petty contract for renovating the police-quarters was completed in January last.

*Caversham*.—The police-buildings were repaired and renovated by day-labour. The work was completed in March last.

*Cromwell*.—The police-station has been put in repair by petty contract.

*Otautau*.—A petty contract for repairs and renovations to the police-station was completed in April.

*Bluff*.—A petty contract for repairs and renovations to the police-station was completed in May.

*Alexandra*.—The police-station was repaired and renovated by petty contract.

*Caversham Industrial School*.—The main building (girls' portion) with the necessary store-rooms, bathrooms, lavatories, &c., has been rebuilt in brick. It was completed in August last. The erection of a dining-room and kitchen was begun in April, and the brickwork is now completed and ready to receive the roof. An office has been erected for the manager.

*Caversham Barracks*.—A new fence has been erected on the new boundary in front of the building.

*Seacliff Asylum.*—Contracts have been let for the supply of timber and joinery required for the patients' cottage and for the auxiliary building.

*Quarantine Buildings, Port Chalmers.*—Some repairs have been done and the buildings have been repainted.

*Stock Inspector's House, Lawrence.*—A contract for additions and repairs to this building was completed in March.

In addition to the works detailed above a considerable amount of work has been done in general repairs; also, a number of fittings have been supplied to various departments.

#### MARINE.

*Panmure Wharf.*—The Panmure Wharf contract was completed in August; this is a high structure, intended principally for landing passengers from excursion-steamers, &c.

A contract for seven buoys, let to Messrs. Massey Bros., Auckland, is in progress.

*East Cape Lighthouse.*—A contract for the ironwork for the tower has been completed by Mr. C. Judd, Thames. A considerable amount of material has been landed for the construction of the lighthouse and buildings, some of the houses required for the permanent staff have been built, a tramway has been laid, and excavations for the foundations for the tower are in progress.

At Sticking-point Reclamation, Lyttelton Harbour, a large amount of rock-excavation and levelling has been done by prison-labour.

A contract for repairs to the Quarantine Wharf, Port Chalmers, has been completed.

Plans for the new lighthouse on Somes Island have been prepared.

Some repairs to Hokitika Wharf have been carried out, to make good damages caused by flood.

#### HARBOUR DEFENCES, ETC.

##### AUCKLAND.

A considerable amount of work in connection with the mine-fields has been done, sheds removed and re-erected, additional buildings put up, a tramway laid, testing-rooms removed and re-erected, an office provided for the clerk, a wharf 300 ft. long with a tee 60 ft. by 30 ft. built; also a solid approach to the wharf 100 ft. long, and other works done.

At other forts: A blacksmith's shop has been built, and a small barracks. The walls of an observing station have been lined, and a survey made for an additional gun-emplacement. Officers' quarters have been renovated and the drainage improved. Some works in connection with search-light emplacements and plant have been finished, others well advanced. Alterations to the walls of one of the forts are in hand. An additional big-gun emplacement is nearly finished. A resurvey of the mine-field has been made.

##### WELLINGTON.

The slipway and shed at Shelly Bay were finished. The electric plant and emplacements have been finished. The Mahanga Bay Wharf has been strengthened by ironbark piles, and a number of minor works have been done, for the most part by prison-labour. Some alterations and improvements to the Gardens Battery have been carried out.

##### LYTTELTON.

The roof of the residence of one of the magazine-keepers has been repaired. An engine and boiler for electric light are in course of erection. A new range-finder station has been built. Extensive additions have been made to the Armed Constabulary barracks to provide stores and workshop, the roof put in a good state of repair, and the whole building painted; a new parade-ground has been formed, and the drainage completed. An observing-station and covered way have been built and a barbed-wire fence erected at one of the forts, and repairs to the drains, walls, and buildings carried out.

##### DUNEDIN.

An iron fence has been built in front of one of the batteries and a fighting-station built. At another fort a magazine and a new gun emplacement have been built. Pipes have been laid for telephone-wires between the guns, &c., of some of the batteries.

#### STORES AND SERVICES.

Tenders were invited for the supply and delivery of general ironmongery, builders' and furnishing ironmongery, and other stores for the Public Works and other departments for the year. Contracts were also entered into for the supply of coal, firewood, &c., in the several districts, and in Wellington the usual contracts were let for cartage, window-cleaning, chimney-sweeping, and the removal of rubbish, &c.

I have, &c.,

WILLIAM H. HALES,  
Engineer-in-Chief.

The Hon. the Minister for Public Works.

NORTH ISLAND.

\* In this case the date given is the date on which the railway was taken over by the Government.  
 † Reconsolidation only.  
 ‡ This comprises 12m. 70ch. of railway constructed by Government, and 30m. 60ch. of line constructed by private company under the District Railways Act and afterwards purchased by the Government.  
 § This comprises 48m. of railway constructed by Government, and 11m. of line constructed by private company under the District Railways Act and afterwards purchased by the Government.

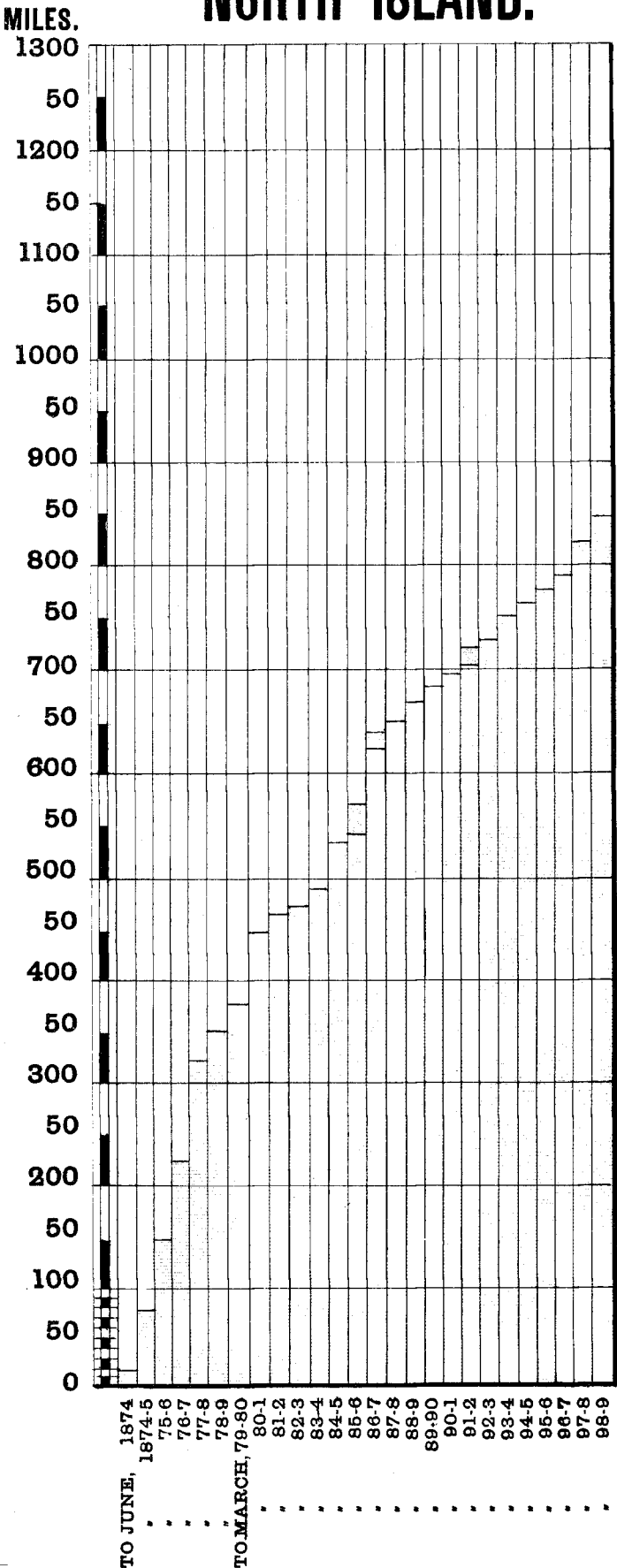
NOTE.—Taonui and Lichfield Branches not mentioned above, as the rails have been taken up.

MIDDLE ISLAND

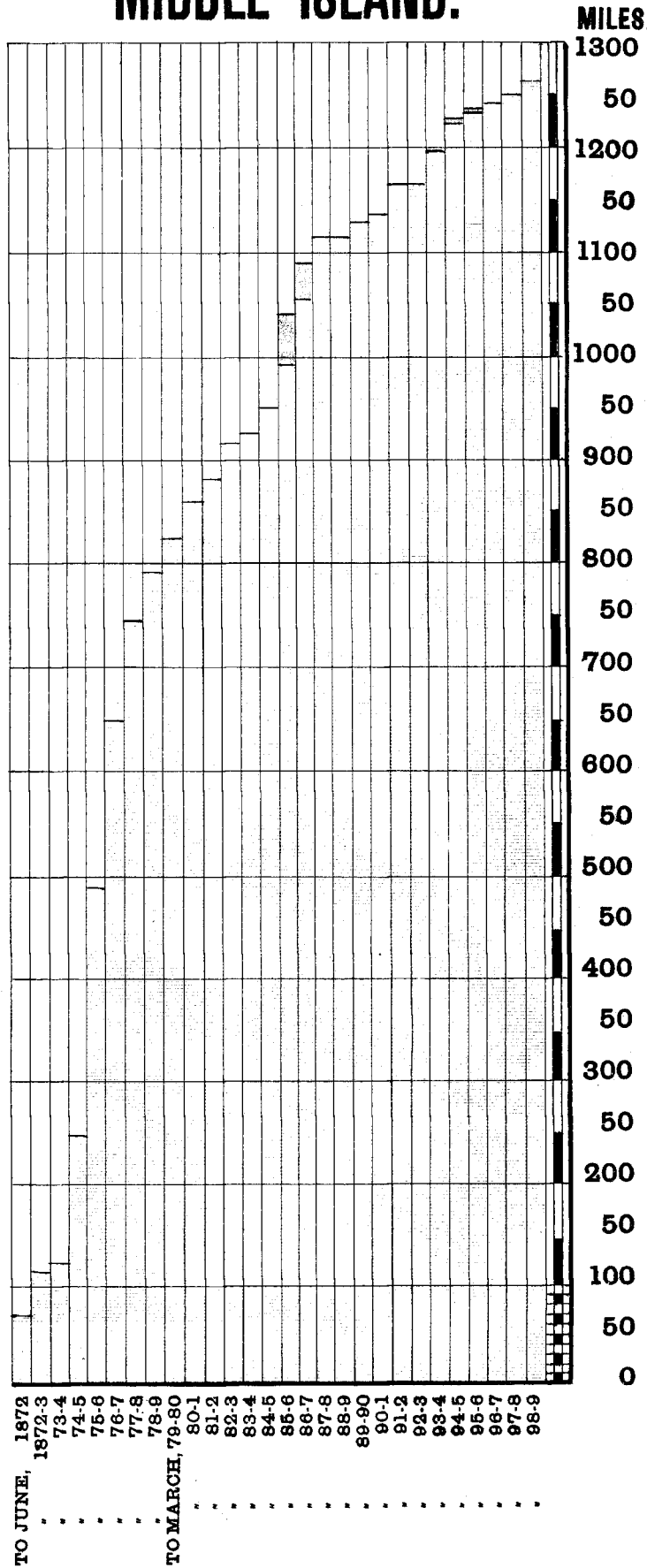
\* In these cases the dates given are the dates on which the railways became the property of the Government.  
† This comprises 3m. 48cb. of railways constructed by the Government, and 1m. 60cb. of lines constructed by private company and afterwards purchased by the Government.  
‡ This comprises 45m. 55cb. of railways constructed by the Government, and 45m. 79cb. of lines constructed by private companies under the District Railways Act and afterwards purchased by the Government.  
§ This comprises 3m. 48cb. of railways constructed by the Government, and 36m. 39cb. of lines constructed by private companies under the District Railways Act and afterwards purchased by the Government.  
|| This comprises 23m. 40cb. of railways constructed by the Government, and 3m. 65cb. of lines constructed by private company and afterwards purchased by the Government.  
¶ 8 miles 76 chains formerly returned as opened tramway.

# Number of Miles open of Government Lines.

## NORTH ISLAND.



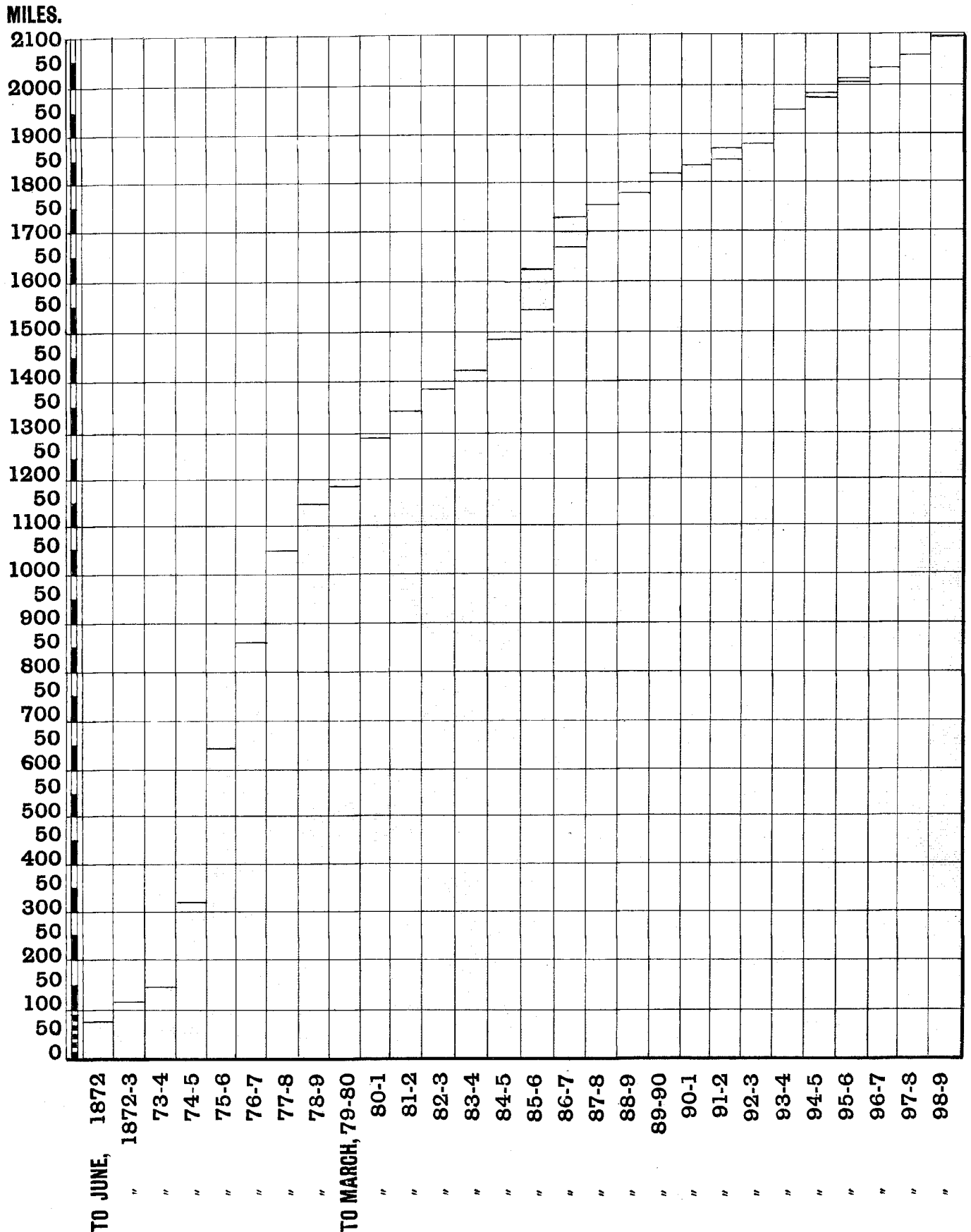
## MIDDLE ISLAND.





# Number of Miles open of Government Lines.

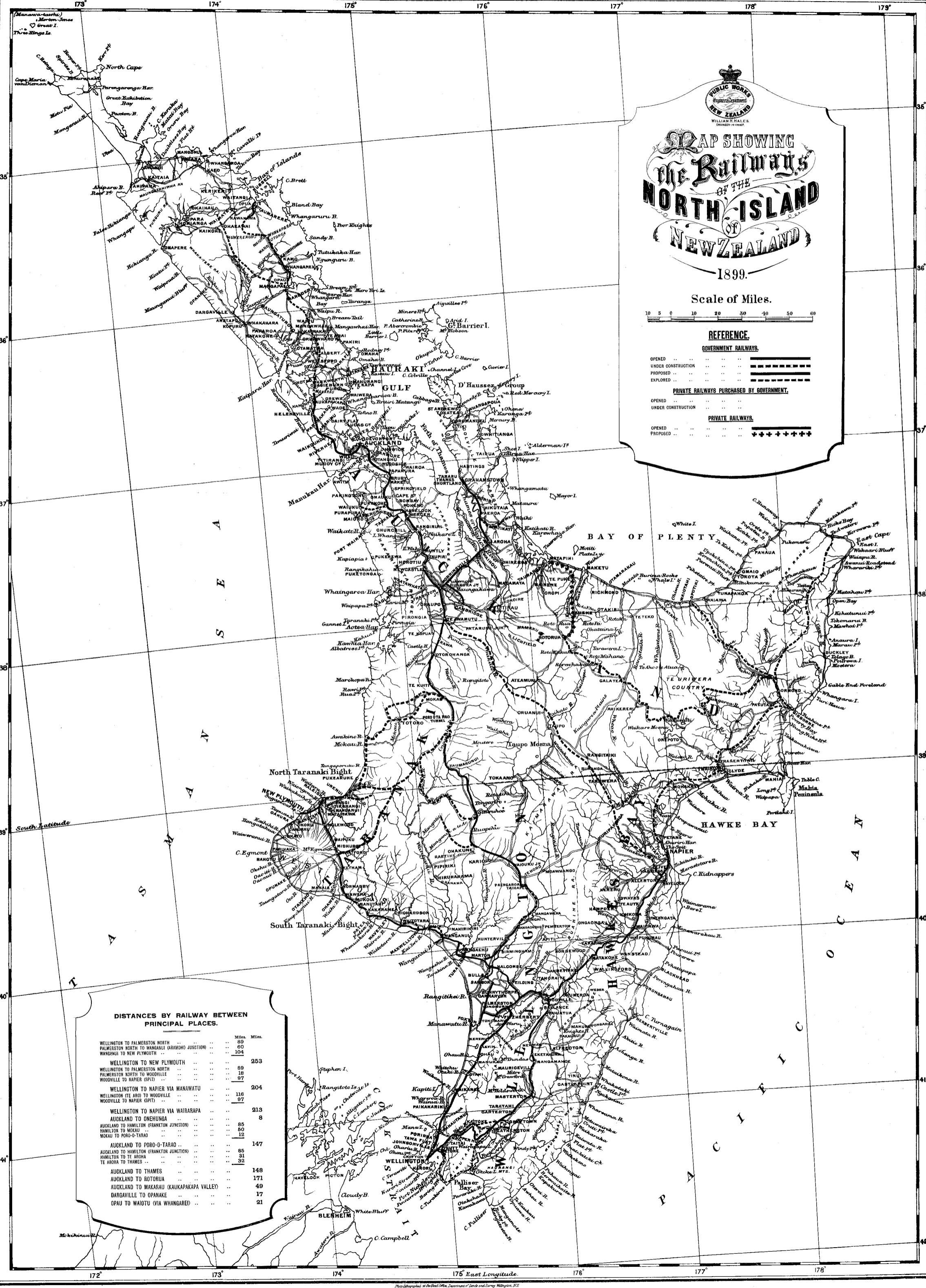
North and Middle Islands combined.



PRIVATE RAILWAYS PURCHASED BY THE GOVERNMENT SHOWN







MAP SHOWING  
the Railways  
of the  
NORTH ISLAND  
of  
NEW ZEALAND

1899.

Scale of Miles.



REFERENCE.

GOVERNMENT RAILWAYS.

OPENED	.....
UNDER CONSTRUCTION	.....
PROPOSED	.....
EXPLORED	.....

PRIVATE RAILWAYS PURCHASED BY GOVERNMENT.

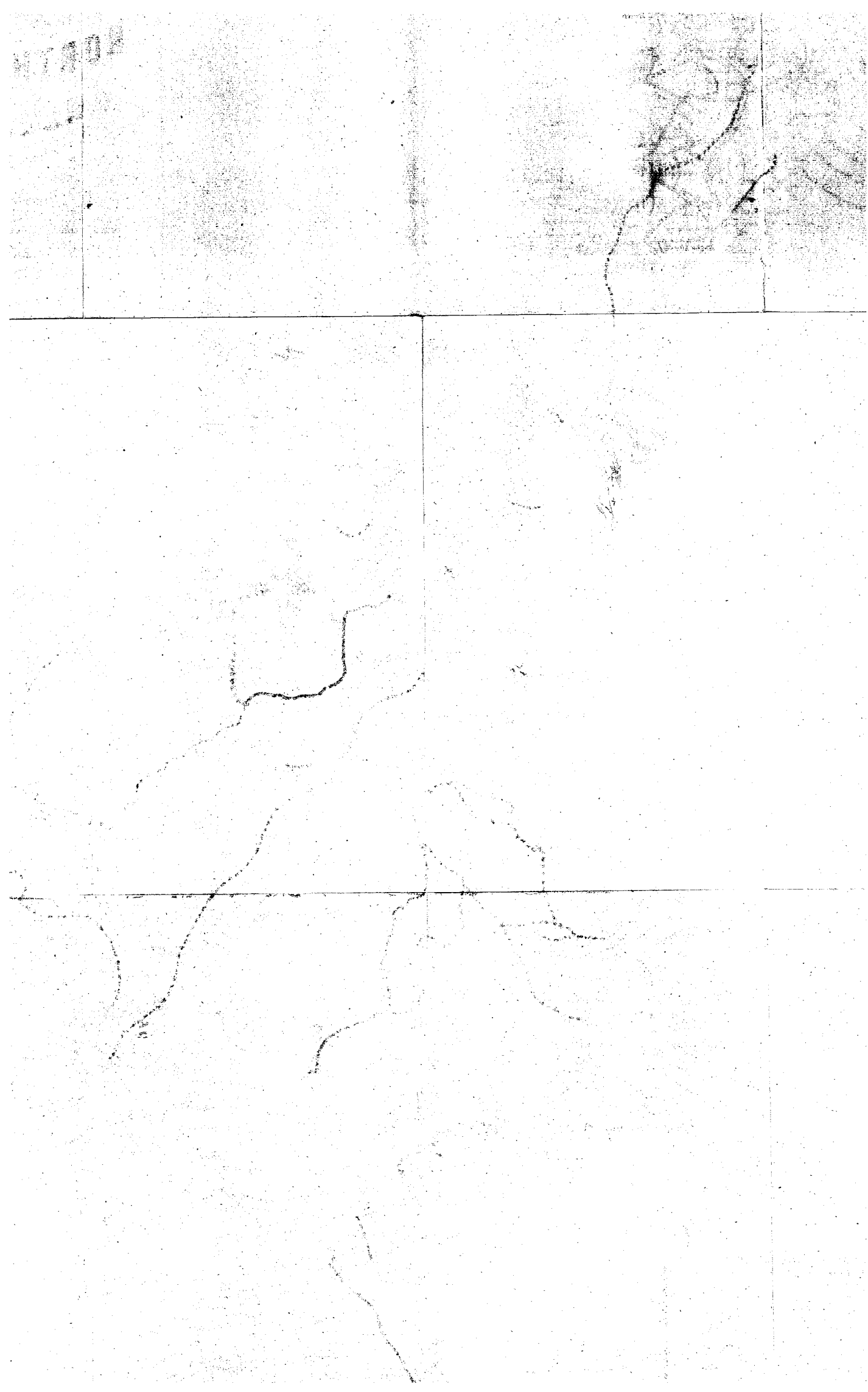
OPENED	.....
UNDER CONSTRUCTION	.....

PRIVATE RAILWAYS.

OPENED	.....
PROPOSED	.....

DISTANCES BY RAILWAY BETWEEN  
PRINCIPAL PLACES.

	Miles.	Miles.
WELLINGTON TO PALMERSTON NORTH	89	
PALMERSTON NORTH TO WANGANUI (ARAMOHO JUNCTION)	89	
WANGANUI TO NEW PLYMOUTH	104	
WELLINGTON TO NEW PLYMOUTH	253	
WELLINGTON TO PALMERSTON NORTH	89	
PALMERSTON NORTH TO WOODVILLE	18	
WOODVILLE TO NAPIER (SPT)	97	
WELLINGTON TO NAPIER VIA MANAWATU	204	
WELLINGTON (TE ARO) TO WOODVILLE	116	
WOODVILLE TO NAPIER (SPT)	97	
WELLINGTON TO NAPIER VIA WAIRARAPA	213	
AUCKLAND TO ONEHUNGA	8	
AUCKLAND TO HAMILTON (FRANKTON JUNCTION)	85	
HAMILTON TO MOKAU	80	
MOKAU TO PORO-O-TARAO	12	
AUCKLAND TO PORO-O-TARAO	147	
AUCKLAND TO HAMILTON (FRANKTON JUNCTION)	85	
HAMILTON TO TE AROHA	31	
TE AROHA TO THAMES	32	
AUCKLAND TO THAMES	148	
AUCKLAND TO ROTORUA	171	
AUCKLAND TO MAKARAU (KAUKAPAKA VALLEY)	49	
DARGAVILLE TO OPANAKE	17	
OPAU TO WAIOTU (VIA WHANGAREI)	21	



MAP SHOWING  
the Railways  
of the  
SOUTH ISLAND  
of  
NEW ZEALAND

1899.

Scale of Miles.

10 5 0 10 20 30 40 50 60

REFERENCE.

GOVERNMENT RAILWAYS.

OPENED .. .. .  
UNDER CONSTRUCTION .. .. .  
PROPOSED .. .. .  
EXPLORED .. .. .

PRIVATE RAILWAYS PURCHASED BY GOVERNMENT.

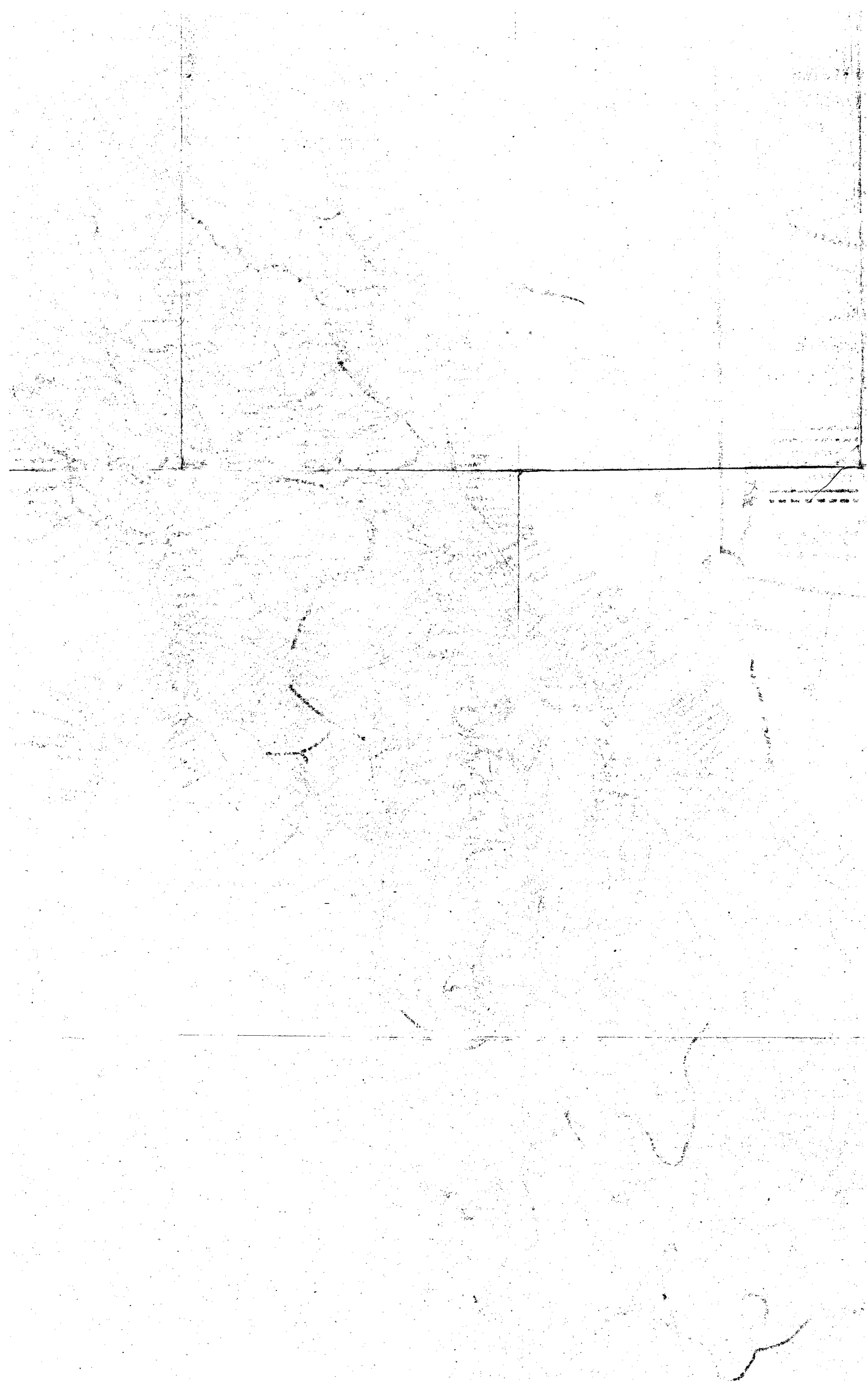
OPENED .. .. .  
PROPOSED .. .. .

PRIVATE RAILWAYS.

OPENED .. .. .  
UNDER CONSTRUCTION .. .. .  
PROPOSED .. .. .

DISTANCES BY RAILWAY BETWEEN  
PRINCIPAL PLACES.

	Miles.	Miles.
BLUFF TO INVERCARGILL .. .. .	17	
INVERCARGILL TO LUMSDEN .. .. .	50	
LUMSDEN TO KINGSTON .. .. .	37	
BLUFF TO KINGSTON .. .. .	104	
INVERCARGILL TO DUNEDIN .. .. .	39	
DUNEDIN TO OREPIKI .. .. .	47	
OREPIKI TO BALLOUTHA .. .. .	17	
BALLOUTHA TO MILTON .. .. .	36	
MILTON TO DUNEDIN .. .. .	139	
INVERCARGILL TO OREPIKI .. .. .	43	
INVERCARGILL TO WAIMAHAKA .. .. .	26	
BALLOUTHA TO OWAKA .. .. .	19	
DUNEDIN TO RANFURLY .. .. .	85	
DUNEDIN TO PORT CHALMERS .. .. .	8	
GORE TO LUMSDEN .. .. .	37	
MILTON TO LAWRENCE .. .. .	24	
DUNEDIN TO OAMARU .. .. .	78	
OAMARU TO TIMARU .. .. .	53	
TIMARU TO ASHBURTON .. .. .	47	
ASHBURTON TO ROLLESTON .. .. .	39	
ROLLESTON TO CHRISTCHURCH .. .. .	14	
DUNEDIN TO CHRISTCHURCH .. .. .	230	
CHRISTCHURCH TO LYTTELTON .. .. .	7	
OAMARU TO HAKATARAMEA .. .. .	43	
TIMARU TO FAIRLIE CREEK .. .. .	39	
ROLLESTON TO SPRINGFIELD .. .. .	30	
CHRISTCHURCH TO LITTLE RIVER .. .. .	36	
CHRISTCHURCH TO CULVERDEN .. .. .	69	
PICTON TO BLenheim .. .. .	18	
NELSON TO MOTUPIKO .. .. .	33	
GREYMOUTH TO REEFTON .. .. .	47	
GREYMOUTH TO HOKITIKA .. .. .	24	
GREYMOUTH TO JACKSON'S .. .. .	40	
WESTPORT TO MOKIHINI COLLIERY .. .. .	31	



## APPENDIX F.

## NORTH ISLAND MAIN TRUNK RAILWAY.

REPORT ON THE PROPOSED NGAIRE, WAITARA, AND AWAKINO ROUTES  
BY MR. R. W. HOLMES, M.Inst.C.E.

Mr. R. W. HOLMES to the ENGINEER-IN-CHIEF, Wellington.

SIR,—

Public Works Office, Wellington, 31st July, 1899.

I have the honour to forward herewith my report on the Taranaki-Auckland Railway, together with the drawings as enumerated below:—

*Enclosures herewith.*

- |                                     |   |
|-------------------------------------|---|
| 1. Report.                          | 5. Longitudinal sections of routes.                         |
| 2. Appendix.                        | 6. Plan and sections part Awakino route, by Mr. A. C. Koch. |
| 3. Report by Mr. A. C. Koch.        |   |
| 4. Map of Taranaki, showing routes. |   |

*Index to Report, &c.*

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I have, &amp;c.,

The Engineer-in-Chief, Wellington.

R. W. HOLMES, Resident Engineer.

SIR,—

Wellington, 31st July, 1899.

I have the honour to report that, in accordance with instructions received during May, an inspection and exploration of the country along the Ngaire, Awakino, and part of the Waitara routes for a line of railway to connect Taranaki with the Central line between Wellington and Auckland have been made, and the following remarks thereon are submitted for your information:—

## EXTENT OF EACH ROUTE.

*Ngaire Route.*

This route connects with the opened line between Wanganui and New Plymouth near Eltham Station, and with the Auckland-Wellington Central line at Kawakawa, in the Ongarue Valley.

	M.	ch.
Distance between Eltham and Kawakawa Junctions .. .. .	103	5
Distance from Wellington to Auckland <i>via</i> this route .. .. .	477	5
Distance from New Plymouth to Auckland <i>via</i> this route .. .. .	295	75

*Waitara Route.*

This route connects with the Wanganui-New Plymouth opened line in the vicinity of Waitara Station, on the Sentry Hill-Waitara branch line, and with the Ngaire route at 54 m. 21 ch., in the Waingarara Valley.

	M.	ch.
Distance between Waitara and Waingarara Junctions .. .. .	46	75
Distance between Waitara and Kawakawa Junctions .. .. .	95	60
Distance from Wellington to Auckland <i>via</i> this route .. .. .	499	52
Distance from New Plymouth to Auckland <i>via</i> this route .. .. .	264	22

*Awakino Route.*

This route connects with the Wanganui-New Plymouth opened line at the same point near Waitara Station as the Waitara route, the routes following a common line to 21 m. 70 ch., in the Mimi Valley; it connects with the Auckland-Wellington central line at Mokau Station, in the upper part of the Mokau Valley.

	M.	ch.
Distance between Waitara and Mokau Junctions ...	94	0
Distance between Wellington and Auckland <i>via</i> this route ...	474	27
Distance from New Plymouth to Auckland <i>via</i> this route ...	238	77

## GENERAL DESCRIPTION OF LOCATION OF EACH ROUTE.

*Ngaire Route.*

The line on leaving Eltham Junction runs nearly straight to near the confluence of the Toko and Patea Rivers, passing over *en route* a corner of the dry Ngaire Swamp and the Patea River; thence it passes into the Makuri Valley, which it follows up to 16½ miles; a tunnel then carries the line into the Mangaotuku Valley, which is followed up to 30½ miles; thence by a tunnel it passes into the Makahu Valley. The line proceeds down this valley for three miles and a half to the confluence of the Pohokura Stream, which is followed up to 37 miles; a tunnel then carries line through the divide of the Patea-Wanganui watersheds into the Mangare Valley, which is followed down to the Wangamomona Valley. It proceeds up this valley to the head; thence it passes the head of the Mauku Valley, and proceeds down and up tributaries of the Raekohua Stream; thence it passes into and down the Waingarara Valley to the Tangarakau Gorge, up which it proceeds to the Paparata Stream; thence up this stream to the saddle in the Waiaraia Range. It then descends into the Heao Valley, crosses it, and enters the Paorae Valley, a tributary, which is followed to its source; thence it passes down the Huhatahi Creek to the Mangaroa River, which is followed up to 78 miles, where it passes through a gap into the Ohura Valley. The Ohura Valley is then followed up to 100½ miles, where a low saddle admits of the line passing into the Ongaruhe Valley to the Kawakawa Junction at 103 m. 5 ch.

*Waitara Route.*

The line on leaving Waitara keeps within about a mile and a quarter of the sea-coast as far as the Mimi Valley, crossing the Waitara, Waiau, Onairo, and Urenui Rivers; it then follows up the Mimi Valley to the Uruti Stream, which is in turn followed up to the tunnel which carries the line into the Moki Valley, which is followed down to the Waitara Valley; thence the line follows up the Waitara Valley to 32½ miles, where it enters a small valley, which is followed up to the head, where a tunnel carries the line into the Makarakia Valley, which is followed up to 37½ miles, where another tunnel carries the line back into the Waitara Valley, down which it proceeds to 43½ miles, where it passes over a low saddle and down the Waingarara Valley to the point of junction with the Ngaire route.

A saving in the cost and length of this route may possibly be effected by following up the Waitara River all the way from the Moki Stream to the Waingarara Saddle, instead of proceeding *via* the Makarakia Valley.

*Awakino Route.*

This route leaves the Waitara route at 21 m. 70 ch., in the Mimi Valley. It follows up the Mimi Valley to a little beyond Mount Messenger, where a tunnel carries line through the ridge into the Mangaongaonga Valley, which is followed down to the Tongaporutu River; thence to the sea-coast at 35 miles. From this point to Awakino Heads at 46½ miles the line follows the coast within half a mile, crossing the Tongaporutu, Mohakatino, and Mokau Rivers; it then follows up the Awakino River to 64 miles, a little above Mahoenui, where it passes into the Mokau Valley at Totoro by following down the Waipari Creek; thence it proceeds to the Mokau-iti Valley, either *via* the Waikohatu Valley and a low-level bridge over the Mokau River, or *via* the Teotao Native Village and a high-level bridge over the Mokau River. From the Mokau-iti Valley the line passes back into the Mokau Valley, which is followed up to the Mokau Station, where it joins the central line.

This is apparently the best route for this railway in this direction, as nearly as can be determined by a reconnaissance survey. There are several alternative lines along portions of the route, but whether their merits would justify their adoption can only be determined by trial-line surveys; for instance, by carrying the line along the coast between the Mimi and Tongaporutu Rivers—a perfectly feasible route—a considerable length of line can be saved, but the cost, and avoidance of revenue-producing country up the Mimi Valley, will most likely condemn it; likewise between the Mokau and Awakino Rivers, near the sea, there are three possible routes, while between Totoro and Wairere Falls there are two good routes, indicated by red, full, and dotted lines, and an indifferent route, indicated by green line; there is also an alternative route between Mahoenui at 62 miles, and the Mokau Valley at 86 miles. The two latter routes are difficult of access from the country to the south.

## SURVEYS.

*Ngaire Route.*

This route has been surveyed by means of a trial line, with sufficient detail and accuracy to show exactly the maximum extent of engineering-works to construct it, and their cost within very narrow limits.

*Waitara Route.*

This route has also been surveyed in a similar manner.

*Awakino Route.*

From 21 m. 70 ch., where it leaves the Waitara route, to Mokau Station, on the central line, only exploration-work has been done.

## GRADES AND CURVES.

*Ngairi Route.*

The steepest grade is 1 in 50, the sharpest curve  $7\frac{1}{2}$  chains (495 ft.) radius, which are the limits now adopted for main lines in New Zealand.

*Waitara Route.*

Grades and curves similar to Ngairi route.

*Awakino Route.*

Maximum grade to Mahoenui (62 miles) 1 in 70, possibly 1 in 80; thence 1 in 50 or 1 in 70, according to route adopted. Maximum curvature,  $7\frac{1}{2}$  chains radius.

## ENGINEERING-WORKS.

*Ngairi Route.*

The following shows in a tabulated form the comparative degrees of extent and cost of works required to construct the line, with all equipment :—

From	To	Cost under £6,000 per Mile.	Cost under £8,000 per Mile.	Cost under £11,000 per Mile.	Cost under £18,000 per Mile.	Cost under £24,000 per Mile.	Cost under £30,000 per Mile.
M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.
0 0	5 26	...	5 25	...	...	...	...
5 26	10 0	...	4 48	...	...	...	...
10 0	16 0	5 74	...	...	...	...	...
16 0	22 77	...	...	6 76	...	...	...
22 77	29 77	7 0	...	...	...	...	...
29 77	31 0	...	...	1 3	...	...	...
31 0	37 0	6 0	...	...	...	...	...
37 0	38 73	...	...	...	1 73	...	...
38 73	47 73	...	9 0	...	...	...	...
47 73	49 5	...	...	...	...	1 10	...
49 5	52 48	...	3 40	...	...	...	...
52 48	55 32	...	...	2 62	...	...	...
55 32	60 59	...	...	5 24	...	...	...
60 59	64 73	...	...	...	3 77	...	...
64 73	68 73	...	...	...	3 74	...	...
68 73	75 63	...	...	6 66	...	...	...
75 63	83 56	7 73	...	...	...	...	...
83 56	88 56	...	5 0	...	...	...	...
88 56	93 54	...	...	4 78	...	...	...
93 54	98 56	...	5 2	...	...	...	...
98 56	103 56	...	...	5 0	...	...	...
		26 67	32 35	32 69	9 64	1 10	...

Numerous watershed-divides are crossed along the route, which, owing to the general character of the country, consist of narrow ridges. Advantage is taken of this feature to provide for tunnelling through them, and so avoid the more expensive grading on the hillsides, and the useless rise and fall thereby occasioned. This accounts for the apparently large number (thirty-one, with an aggregate length of  $187\frac{3}{4}$  chains) of tunnels. There are no viaducts, and only two bridges of any magnitude—viz., those over the Tangarakau River, which are estimated to cost an average of £7,400 each.

Briefly the works of construction may be divided into three zones, thus: First zone, moderate works—From Eltham at 0 m. 0 ch. to head of Wangamomona Valley at 47 m. 73 ch., average cost per mile = £6,992. Second zone, heavy works—From 47 m. 73 ch. to Mangaroa Valley at 75 m. 63 ch., average cost per mile = £11,840. Third zone, moderate works—From 75 m. 63 ch. to Kawakawa Junction, average cost per mile = £7,757.

*Waitara Route.*

The following shows in a tabulated form the comparative degrees of extent and cost of works required to construct the line, with all equipment :—

From	To	Cost under £6,000 per Mile.	Cost under £8,000 per Mile.	Cost under £11,000 per Mile.	Cost under £18,000 per Mile.	Cost under £24,000 per Mile.	Cost under £30,000 per Mile.
M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.
0 0	8 0	...	8 0	...	...	...	...
8 0	16 0	...	8 0	...	...	...	...
16 0	23 0	7 0	...	...	...	...	...
23 0	29 0	...	...	...	...	...	6 0
29 0	35 0	...	...	...	6 0	...	...
35 0	42 0	...	...	7 0	...	...	...
42 0	46 75	...	...	4 75	...	...	...
46 75	55 32	...	...	0 70	...	...	...
54 42	60 59	...	...	5 24	...	...	...
60 59	64 73	...	...	...	3 77	...	...
64 73	68 73	...	...	...	3 74	...	...
68 73	75 63	...	...	6 66	...	...	...
75 63	83 56	7 73	...	...	...	...	...
83 56	88 56	...	5 0	...	...	...	...
88 56	93 54	...	...	4 78	...	...	...
93 54	98 56	...	5 2	...	...	...	...
98 56	103 56	...	...	5 0	...	...	...
		14 73	26 2	34 73	13 71	...	6 0

This route may also be divided into three zones as regards works of construction, viz.: First zone, moderate works—From Waitara at 0 m. 0 ch. to Uruti at 23 m. 0 ch., average cost per mile = £6,543. Second zone, heavy works—From 23 m. 0 ch. to Mangaroa Valley at 75 m. 63 ch., average cost per mile = £14,321. Third zone, moderate works—From 75 m. 63 ch. to Kawakawa Junction, average cost per mile = £7,757.

The remarks *re* tunnels under Ngaire route apply equally to this route, there being thirty-eight, with a total length of 318½ chains. There are four viaducts, averaging £8,300 each.

*Awakino Route.*

The following table shows in a tabulated form the comparative degrees of extent and cost of works required to construct the line, with all equipment:—

From	To	Cost under £6,000 per Mile.	Cost under £8,000 per Mile.	Cost under £11,000 per Mile.	Cost under £18,000 per Mile.	Cost under £24,000 per Mile.	Cost under £30,000 per Mile.
M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.	M. ch.
0 0	8 0	...	8 0	...	...	...	...
8 0	16 0	...	...	8 0	...	...	...
16 0	27 0	11 0	...	...	...	...	...
27 0	28 0	...	...	...	...	1 0	...
28 0	52 0	...	...	24 0	...	...	...
52 0	57 0	...	...	...	5 0	...	...
57 0	62 0	5 0	...	...	...	...	...
62 0	65 0	3 0	...	...	...	...	...
65 0	76 0	...	...	11 0	...	...	...
76 0	90 0	14 0	...	...	...	...	...
90 0	94 0	4 0	...	...	...	...	...
		37 0	8 0	43 0	5 0	1 0	...

This route cannot be divided into zones for comparing extent of construction-works, as the works on the whole are moderate, with only short lengths of heavy work unevenly distributed throughout.

From Waitara to 21 m. 70 ch., in the Mimi Valley, the line coincides with the Waitara route, the construction-works being moderate. The crossings of the Waiau, Onairo, and Urenui Rivers cause a good deal of rise and fall.

From 21 m. 70 ch. the line continues up the bottom of the Mimi Valley, with easy formation-work to 27 miles where it passes by means of a tunnel about 40 chains in length through the ridge near Mount Messenger into the Mangaonga Creek Valley, a tributary of the Tongaporutu River. From this point to 52 miles, in the Awakino Valley, the formation-works will be moderate and similar in character to the part up to 16 miles. The only difficulty will be the bridging of the Mokau River, which is complicated through having to make provision for the passage of shipping. If the line proceeds up Mokau Valley for a short distance, thence by a tunnel through ridge into the Awakino Valley, the bridge would most probably have to be a low-

level one with an opening span; but if the line was run along the coast to Awakino Heads the bridge would be a high-level one, crossing the river at the mouth nearly on the line of the telegraph-wire. The necessary divergence up-river to obtain a low-level bridge would be very awkward and expensive to construct owing to the cliffs on each side of valley. The top of cliff at south side of river at the heads is a little over 90 ft. above high-water mark. The last sailing-vessel to enter the river (a scow) had masts reaching a height of 95 ft. above water. An opening span at the heads would not be admissible, as presenting at a critical point an obstruction to the free navigation of the entrance to the port.

The alternative line between the Mimi and Tongaporutu Rivers would continue along the coast instead of turning inland up the Mimi Valley. The great obstacles in the way of this piece of line are the White Cliffs, and the crossings of the Mimi, Wai-iti, and Tongaporutu Rivers at right angles to their courses. The White Cliffs rise abruptly from the sea-beach for some 800 ft.; they consist entirely of papa rock. Two tunnels, one 80 chains and one 27 chains in length, would be required, and about 50 chains of the line would be on steep papa-rock sideling.

From 52 miles to 57 miles the Awakino Valley becomes very narrow and crooked, with cliffs along the sides and high spurs running out into the bends. The construction-works will therefore be heavy. Several river-crossings and tunnels may be required to keep curvature within the limits.

At 57 miles the valley opens out so that the formation-works will be much easier up to 65 miles, where the tunnel is that carries the line into the Waipari Creek Valley. This tunnel will be about 13 chains long.

The line follows down the Waipari Creek to the Mokau River, the construction-works being moderate. The line will either descend about 200 ft. to a low-level crossing of the Mokau River, and then grade up the Waikohatu Creek to a saddle leading into the Mokau-iti Valley, or cross the Mokau River by a high-level bridge at the mouth of the Waipari Creek, and proceed up the Mokau and Mokau-iti Valleys. The best route can only be determined by trial survey, as, whichever way the line is taken between Awakino Valley at 65 miles and the Mokau Valley at 76 miles, near Wairere Falls, the formation-works will, on the whole, be heavy. The latter of the above routes is the best, as avoiding most of the fall to the Mokau River, thus allowing very much better grades. There are two other routes—one *via* the north bank of the Mokau River from the Waipari Creek, the other *via* the Mangaotaki Valley, the latter being, I am convinced, impracticable, owing to the precipitous nature of the country and the great rise to saddle at Paemako.

Between Mokau-iti River at 74 miles and Mokau River at 76 miles there will be a tunnel about 20 chains in length to avoid grading over top of saddle.

From 76 miles to Mokau Station, at 94 miles, the end of this route, the line follows up the Mokau River, with occasional divergences to save distance. The formation-works will be easy, except for a mile and a half between 88 miles and 90 miles, where a waterfall in the river occurs, the sudden drop necessitating a short grade to carry line up.

From 0 m. 0 ch. (Waitara) to 57 miles, in the Awakino Valley, the height of line above sea-level will vary from 10 ft. to 150 ft.; thence the highest point will be at the junction with central line, which is 690 ft. above sea-level, the greatest rise in any one place on a steep grade being 300 ft., and this may be reduced to half the amount.

The only advantage gained by a low-level crossing of the Mokau River at Totoro is to make the line more accessible from the good country to the south. On the whole, I must say that from an engineering point of view this route is an excellent one, and by far the easiest to construct.

#### ESTIMATED COSTS.

##### *Ngairu Route.*

Total cost, £865,997; length, 103 miles 5 chains. Average cost per mile, £8,403.

##### *Waitara Route.*

Total cost, £1,008,921; length, 95 miles 59 chains. Average cost per mile, £10,538.

##### *Awakino Route.*

Total cost, £751,400; length, 94 miles. Average cost per mile, £7,994.

#### *New Zealand Railways opened for Traffic to 31st March, 1898.*

Total cost, £15,994,000; length, 2,061 miles. Average cost per mile, £7,750.

Tables are attached giving the estimated cost with some detail.

#### COUNTRY.

##### *Ngairu Route.*

The country along this route, with the exception of the Tangarakau Gorge and the upper part of the Ohura Valley, is all good pastoral land, besides being suitable for agricultural purposes for the first ten miles from Eltham, and in numerous other smaller areas along the route.

Although the Tangarakau Gorge is almost useless immediately adjacent to the line, there are considerable areas of fair country within a short distance.

The country as far as 8 miles, near Toko, is situated on the tail of the slope from Mount Egmont. It is fairly flat; the soil is volcanic; thence to about 90 miles, in the Ohura Valley, the country is all clay and papa rock, overlaid by good soil, principally in the form of ridges. Beyond 90 miles the flat country is covered with pumice, only the hillsides being free, and at 100 miles the papa rock is overlaid with the volcanic rock rhyolite.

Up to 55 miles the country is all suitable for close settlement, and also from 65 miles to 90 miles, while the balance is only fit for close settlement in isolated places.

#### *Waitara Route.*

The country along this route up to 23 miles, in Mimi Valley, is good, being for fifteen miles suitable for agricultural purposes. It is described more particularly under Awakino route.

From 23 miles to junction with Nagire route it is rough, only occasional pieces being suitable for close settlement.

This route, in addition to passing through all the rough country on the Ngaire route, passes through the rough country between the Ngaire route and the sea-coast, and then has the sea on one side for the remaining distance, which is sufficient to condemn it without considering its excessive cost per mile.

#### *Awakino Route.*

From the Waitara River to Pukearuhe, near the White Cliffs, the country is undulating, forming in plan a roughly shaped triangle, with its base, about four miles and a half long, between Waitara and Tikorangi, and its apex at Pukearuhe. This is bounded on the north and west by the sea, and on the south and east by rough ridgy country. The line crosses this undulating country—which is of good quality, and suitable for agricultural purposes—as far as the Mimi River, where it turns and follows up the valley. With the exception of the short length on the coast, the Mimi Valley, like the valleys of all the rivers along the coast, is formed of steep papa ridges and spurs, with a small extent of flat ground in the bottom.

From the Tongaporutu River to Awakino Heads there is a small extent of undulating country immediately adjoining the beach, which is succeeded by papa-rock ridgy hills.

From Awakino Heads to a few miles below Mahoenui the country is very broken. Thence to the Central line the country is generally good, and suitable for close settlement. The hills are less steep, and the valleys more open. Limestone shows freely throughout this last part.

#### FORMER REPORTS.

The country and engineering features of the Ngaire route have been reported upon before—namely, in 1884 and 1889, the former on completion of exploration, the latter on completion of detail survey. My recent inspection of the country has given me no cause to modify the views expressed therein, the gist of which are included in this report.

#### LAND-TENURE.

This has not been considered, because, no matter who the land belongs to, it must bring revenue to the line, and the Government has the power of compelling proper cultivation through the Land for Settlements Act.

#### SETTLEMENT.

##### *Ngaire Route.*

The opening-up of the country along this route by means of roads has advanced settlement very much, large areas of bush land having been cleared and brought into cultivation. Settlers are now living along the line as far as the 50th mile, and some settlement has taken place in the Mangaroa Valley.

##### *Waitara Route.*

Very little settlement has taken place on this route beyond that in the Mimi Valley.

##### *Awakino Route.*

The undulating country along the coast for some distance beyond Tongaporutu River is now settled, and settlement is now extending up the Tongaporutu Valley.

From Awakino Heads to a little beyond Mahoenui settlement has taken place, a large area of bush along the road between these places having been cleared.

A special settlement has been made at Paemako, and a considerable area has been improved at Puketiti.

#### MINERALS.

##### *Ngaire Route.*

Coal-seams have been seen in the Tangarakau Valley at 61 m. 40 ch., and in the Paparata Valley at 63 m. 60 ch.

Limestone in the form of shell rock has been found in the hills near 15 miles, and in the Tangarakau Gorge.

Gravel has been found up to 8 miles, and also in Tangarakau Gorge, Mangaroa, and Ongaruhe Rivers.

Building-stone, suitable for chimneys, small culverts, &c., occurs in the form of shell-rock limestone in the Tangarakau Gorge, and in the form of rhyolite in the vicinity of Central line.

##### *Waitara Route.*

Coal as on Ngaire route.

Limestone in form of shell rock in the Tangarakau Gorge.

Gravel occurs up to Uruti, 22 miles, and in Tangarakau Gorge, Mangaroa, and Ongaruhe Rivers.

Building-stone as on Ngaire route.

*Awakino Route.*

Coal.—The Mokau coal-measures crop out in the Awakino Valley, close to Mahoenui.

Limestone occurs a short distance up the Mokau River from the heads, and also abundantly from a few miles below Mahoenui to the central line. There are numerous varieties, one being of an amorphous description, which can be quarried in large blocks; another is commonly described as shell rock; another is crystallized and is built up of laminations; while another consists of very small fragments of other varieties cemented together—this also occurs in the form of laminations. This variety is very suitable for constructing various articles in building-work, such as pilasters, friezes, &c., and also for such articles of furniture as billiard-table and washstand tops, and also for tombstones; it is very handsome, and takes a good polish. The laminations of the last two varieties are easily separated, and, as they vary very much in thickness and area, large slabs can be obtained, with only the trouble of separating them, suitable for any class of work.

Gravel occurs in the Mimi Valley, and upper part of the Awakino River.

Building-stone, in the form of shell rock and rhyolite, suitable for culvert-construction can be obtained, the former near Mokau Heads, the latter near Central line; while limestone, as described above, can be obtained from 57 miles to Central line, suitable for the highest classes of building- and bridge-construction.

## TIMBERS.

*Ngaire Route.*

Ordinary building timbers, comprising rimu, kahikatea, and matai, can be obtained in abundance throughout the route, and also such timbers as maire, hinau, and rewarewa to a limited extent. In the Tangarakau Gorge a little birch and tanekaha can be obtained. Totara is very scarce.

*Waitara Route.*

Similar to Ngaire route.

*Awakino Route.*

Very similar to Ngaire route. A better description of birch can be obtained. Puriri in limited quantities can be obtained along the coast from Tongaporutu River northwards. Totara is scarce.

## AREAS OF COUNTRY SERVED.

*Ngaire Route.*

On the attached plan of the Taranaki Province the country already served for ten miles on each side of the New Plymouth-Wanganui and Central lines is coloured brown. The country that would be served for ten miles on each side of the Ngaire route is coloured red.

*Mokau Port.*

The area of country that will be served by this port is coloured blue.

*Awakino Route.*

The area of country that will be served for ten miles on each side of this route, exclusive of that served by Mokau Port, is coloured yellow. This shows that a minimum of benefit is derived from the Awakino route.

The country along the Ngaire route changes a few miles above Nihoniho-o-te-kioire, on the Ohura River, and within the influence of the Central line, to a very inferior class, while to the westward it continues good; so that if the line as explored by myself in 1884 was adopted from either Mangaroa or Ohura Valleys across to Mokau-iti Valley, thence to and up the Mokau Valley to Mokau Station, the country coloured yellow along the northern part of Awakino route would be served by the Ngaire route, leaving a very small area which would not derive material benefit from a railway-line or seaport. This deviation would make the Ngaire route longer than continuing up the Ohura Valley, but less of it would be within the influence of the Central line.

## RAILWAY REVENUE.

*General.*

A railway connecting Taranaki with Auckland by whatever route will not derive any revenue from through goods traffic, as it could not compete against sea-carriage any more than the Wellington-New Plymouth line can compete against the steamers trading into the Ports of Wanganui, Patea, New Plymouth, and Waitara. Consequently it must depend for revenue upon the traffic with the nearest seaport, and so much through passenger traffic as may be gained through dread of a sea-passage.

According to present rates, the cost of a single first-class ticket by railway from New Plymouth to Auckland will be, according to route, from £2 12s. to £3 6s., without meals, while the present steamer-fare is £1 11s., including meals, and 1s. from Onehunga to Auckland, a very considerable difference in favour of the sea-passage, which many passengers will no doubt avail themselves of, as is done at present between New Plymouth and Wellington.

The route therefore which will bring the most traffic to a seaport must be the best. This will be that which opens up the greatest extent of good land beyond the reach of payable road-carriage.

*Ngaire Route.*

A glance at the map already referred to shows that the Ngaire route strikes well inland, and runs through good country situated inland of the belt of rough country which extends from middle

part of course of Waitara River right up the coast. This belt of rough country makes road-communication with the sea-coast very difficult and long, a feature which is all in favour of this route.

In order to shorten the distance to seaport at New Plymouth or Waitara, the line should connect with present line at Stratford. The necessity of Eltham as the junction has ceased since the adoption of the Central line as the means of communication between Wellington and Auckland.

#### *Awakino Route.*

The great drawbacks to this route are its being along the sea-coast for half its length, that it connects two shipping ports, that for fifty miles it must depend upon a belt of very rough country for traffic from which a minimum quantity can only be derived, and that the Port of Mokau will deprive it of a large percentage of its revenue.

#### PORT OF MOKAU.

The Mokau River at its embouchure has excellent natural advantages for the formation, at a small outlay, of a good port, suitable for moderate-sized vessels drawing up to, say, 12 ft. of water.

There is a bold headland on the south side, skirted by a reef visible at low water, which forms a natural training-wall in a good position for and does maintain the channel across the bar in a permanent position. There is an extensive tidal basin extending some twenty miles up river, giving great scouring force, which only requires to be confined by short sea-walls to give a permanently deep channel through the sand-bar. A short length of half-tide walls are also required to maintain the channel inside the bar in a permanent position, and with somewhat flatter curves than exist at the present time. There is a sand-drift along the coast from south to north, which, however, would cause little trouble, as the tidal scour and river-floods will be quite sufficient to maintain a deep channel when controlled by suitable walls.

With the port thus improved and served by good metalled roads, the country surrounding will be in a better position than if it had a railway-line along the sea-coast.

The country for a considerable distance from the coast is suited principally for sheep-grazing, so that in a few years a large export of wool and meat will arise from the Tongaporutu, Mohakaitino, Mokau, and Awakino River Valleys, which can be most economically dealt with by way of this port, either by lightering to foreign trade-vessels, as is done at present at Waitara, or by coastal steamers transshipping at the larger ports. The harbour improvements mentioned would enable lightering to be carried on at any state of the tide.

In addition to the products of the soil, there will in the near future be a considerable export trade in coal from the mines up the river, and possibly also in time from the limestone deposits, which will demand some harbour improvements, which cannot be avoided by constructing a railway.

The roads for serving the port should be located at the bottoms of the valleys, and, wherever possible, with an even grade throughout, the higher country having a lighter description of road always falling towards the main valley roads, so that all export traffic may naturally gravitate towards the shipping port. The useless rises and falls so often seen, particularly when attaining the extent of that over Taumata-maire Ridge, in Awakino Valley, should be avoided as causing useless expense for haulage, which can only detract from the prosperity of the district.

The country towards the upper part of the Awakino Valley, and upon which the Awakino route would have to depend for the bulk of its revenue, can be admirably served, and the necessity for a railway avoided, by locating the main road from Taranaki to the Waikato (which is now in course of construction) down the bottom of the Awakino Valley to the Heads, thence to the Port of Mokau, and metalling it with the laminated limestone before mentioned, it being admirably adapted for breaking with stone-crushers at very little expense.

#### DISTANCES.

Attached hereto is a table of distances from Auckland and Wellington of important points along the various routes, and also along the Central line.

#### PLANS AND REPORT.

Forwarded herewith is a plan of Taranaki showing the several routes, also a drawing showing the longitudinal sections of each route, and also a report, with plan, by Mr. A. C. Koch, Assistant Engineer, who was instructed to assist me with the exploration.

#### RESPECTIVE MERITS.

##### *Ngairi Route.*

(1.) Can draw traffic from the largest area. (2.) No formidable engineering-works. (3.) Good country suited for close settlement extends on both sides of the line for 76 per cent. of its length.

##### *Waitara Route.*

(1.) Formidable engineering-works. (2.) High cost per mile. (3.) Good country suited for close settlement extends on both sides of line for only 49 per cent. of its length.

##### *Awakino Route.*

(1.) Easily constructed. (2.) Best grades. (3.) Good country suited for close settlement extends on both sides of line for only 40 per cent. of its length. (4.) Runs too near the sea-coast. (5.) Has to compete against sea-carriage.

# TARANAKI-AUCKLAND RAILWAY.

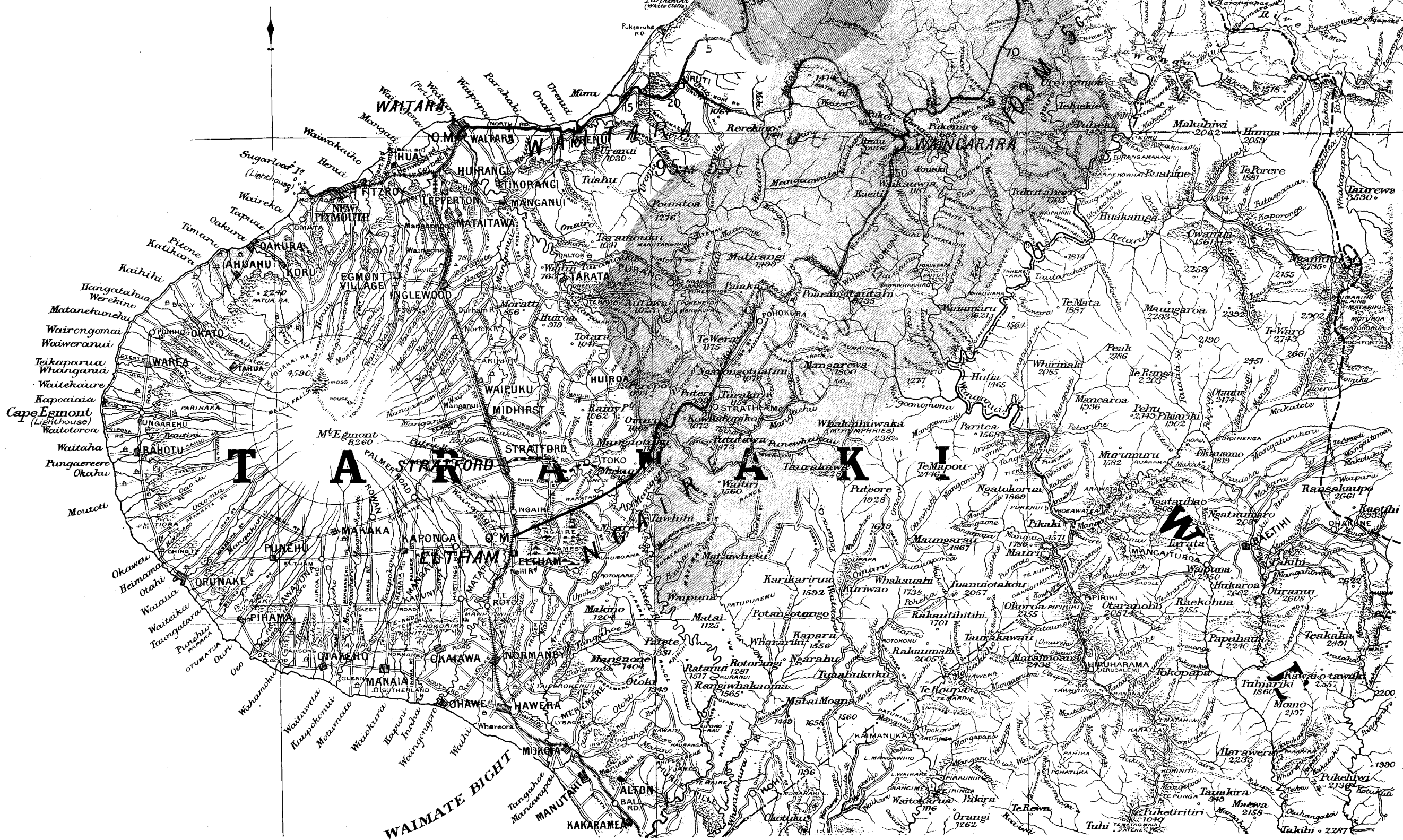
## ALTERNATIVE CONNECTIONS WITH CENTRE LINE.

Plan accompanying Mr. Holmes' Report, 31st July, 1899.

### REFERENCE.

LAND SERVED BY CENTRAL AND OPENED ROUTES COLOURED	
" NGAIRE ROUTE COLOURED	
" MOKAU HARBOUR	
" AWAKINO ROUTE	

SCALE 4 MILES = 1 INCH.



MOKAU PORT

KAWAKAWA

MOKAU

PORO-ARARO

TE KAIHIA

TE KAIHIA

TE KAIHIA

TE KAIHIA

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A W A K I N O ----- R O U T E

21m. 70c. Junction with Waitara Route

Mini Saddle

Tongaporutu Valley

Mohakatino River

Mokau River

Awakino Valley

Mokau River

Mokau-ti River

Mokau Valley

94m. 0c. Junction with Central Line.

MILES. 0 5 10 5 20 5 30 5 40 5 50 5 60 5 70 5 80 5 90

77 140 120 170 200 25 190 20 405 175 520 520 425 350 690

1 IN 70 1 IN 50 1 IN 70 1 IN 50

[illegible]

### Alternative Connections with Central Line

Datum Line is Sea Level.

Scales { Horizontal 4 Miles  
 { Vertical 400 Feet } to an Inch.

100 0 500 1000 feet

1 0 5 10 miles



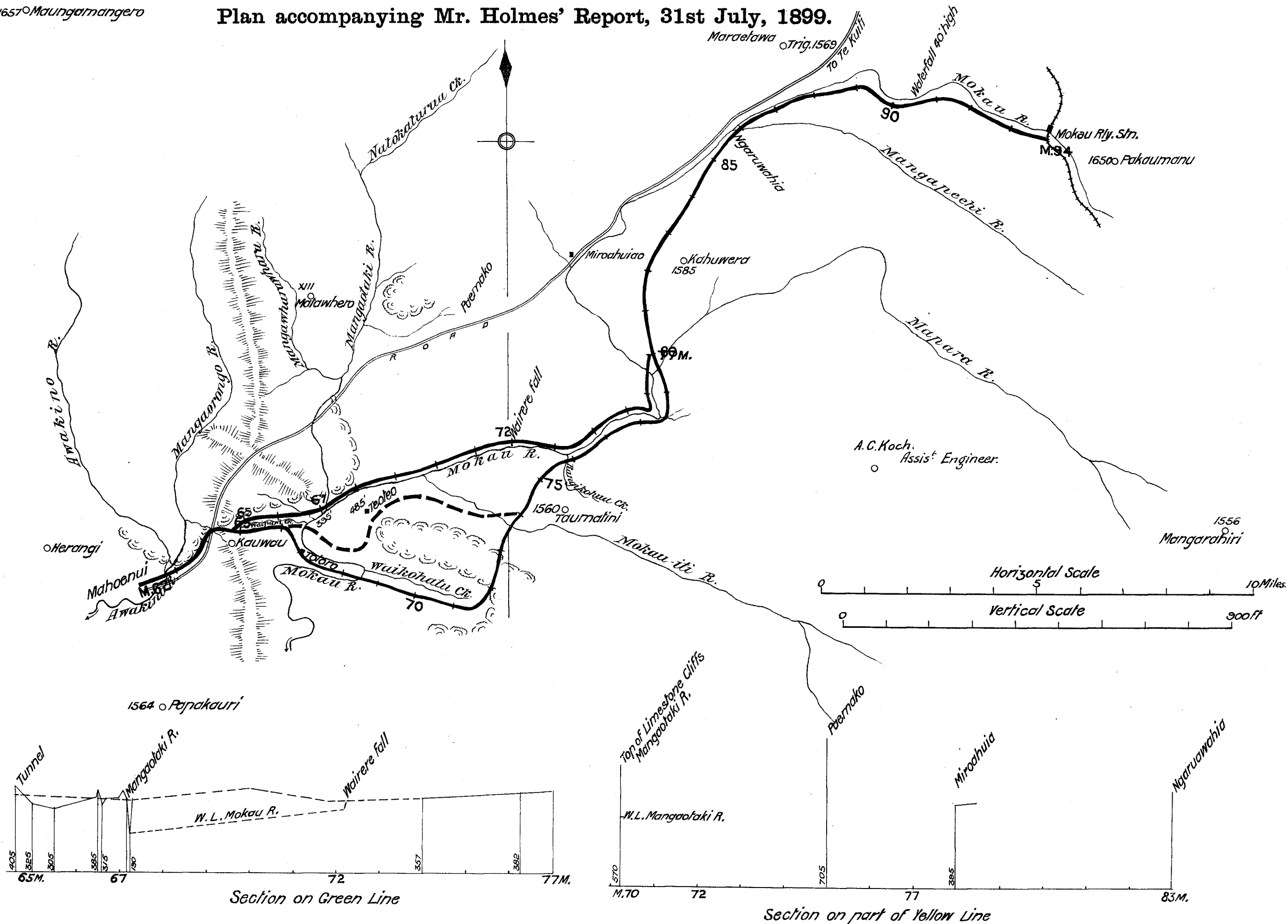
# TARANAKI-AUCKLAND RAILWAY.

PLAN No 2

## ALTERNATIVE CONNECTIONS WITH CENTRE LINE.

1657° Maungamangero

Plan accompanying Mr. Holmes' Report, 31st July, 1899.





## BEST ROUTE.

Taking into consideration the merits as enumerated above, I have no hesitation in stating that the Ngairu route is the best, and, further, that the country passed through is good enough to support a line, especially with the deviations mentioned at each end, without taking into consideration the question of its being a means of communication between Auckland and Wellington and Taranaki; in fact, a railway-line will be almost a necessity for the future prosperity of the country, owing to the long distances which most of it is from a market, and the difficulty of maintaining roads in proper condition to allow of carting all the year round, due to the lack of suitable materials for metalling them.

## ROADWORKS.

In conclusion, I wish to draw attention, as was done in 1889, to the necessity of locating the main road through the Tangarakau Gorge and approaches, so as not to interfere with the railway-line, as in places where the road is completed no attention seems to have been paid to the necessity of avoiding the railway-line, which will cause useless expenditure on road-deviations when railway-construction is undertaken.

## APPENDIX.

An appendix is attached hereto giving some remarks on the length and cost of the Central line, with reasons for its adoption, as the means of communication between Auckland and Wellington.

I have, &c.,

R. W. HOLMES,  
Resident Engineer.

The Engineer-in-Chief, Wellington.

## APPENDIX.

SIR,—

Public Works Office, Wellington, 31st July, 1899.

I have the honour to draw your attention to the following remarks on the

## CENTRAL LINE.

*Distances.*

Distance between termini of parts opened for traffic is  $140\frac{1}{2}$  miles.

Distance between termini of parts under construction is  $113\frac{1}{4}$  miles.

Length under construction at present time is twenty-seven miles. Of this distance eleven miles of formation at southern end are completed, with exception of Makohine Viaduct.

The distance between Marton and Te Awamutu is 210 miles. These places are the termini of what is generally known as the Central route. Of this distance  $69\frac{1}{2}$  miles have been completed for traffic and opened.

Distance between Auckland and Wellington is  $426\frac{1}{2}$  miles.

*Cost.*

An estimated expenditure of £1,211,665 is required to complete this line, an average of £8,610 per mile. This estimate, as per details attached, is based upon actual quantities for eighty-seven miles of the  $140\frac{1}{2}$  miles; the balance of  $53\frac{1}{2}$  miles is based upon comparisons with the former part, so that it is correct within narrow limits.

*Reasons for Adoption.*

The following are the chief reasons for constructing this line as the means of communication between Wellington and Auckland instead of *via* Taranaki:—

1. It is the shortest distance by fifty-one miles.
2. It avoids the heavy grades of opened line from Turakina to Waitotara, and the lesser grades between the latter place and Hawera.
3. There are less rises and falls by 1,128 ft.
4. The journey between Wellington and Auckland can be performed in a very much shorter time, because: (a) The distance is shorter; (b) there are fewer rises to haul trains up; (c) the line is a better running one, as the grades and curves are easier, thus allowing of greater speed.
5. The grades are flatter over the greater part of the distance.
6. It passes nearly through centre of North Island, thus opening up the interior, which can only be effectively accomplished by a railway.
7. That the country is excellent on both sides of line up to the 61st mile from Marton, and is capable of supporting a line without regard to through traffic. That the country is good to the westward of line for remainder of distance. That the country to the eastward, although inferior, is capable of providing considerable freight, such as wool, stock, &c.
8. That it is the only means of tapping the large forests in the Waimarino Block.
9. That the royalty derivable from these forests, if properly conserved, will pay for the line.
10. That these forests will be a perpetual source of revenue.
11. That it will enable the country between these forests and the Wanganui River to be suitably settled, which will otherwise remain to a great extent unproductive.
12. That it will enable the San Francisco mails to reach Wellington and the South Island in the shortest possible time.

*Forest-conservation.*

As the forest in the Waimarino and other blocks lying between the Murimutu Plains and the Wanganui River near Taumaranui occupies country that is adapted to forest growth more than to ordinary settlement, owing to inferior quality of soil and rigorous climate, and as this forest is extensive enough to afford a permanent revenue for the railway, steps should be taken to insure its being worked on systematic lines, and provision made for perpetuating the forest by compelling the replanting of all areas cut out with suitable quick-growing trees.

I have, &c.,

R. W. HOLMES,

Resident Engineer.

The Engineer-in-Chief, Wellington.

## TABLES OF DISTANCES BETWEEN WELLINGTON AND AUCKLAND.

*Via CENTRAL LINE.*

From	To Wellington.	To Auckland.	Intermediate Distances.
	M. ch.	M. ch.	M. ch.
Wellington ... ..	...	426 39	...
Marton Junction ... ..	116 34	310 5	116 34
Mangaonoho (end opened line) ... ..	138 74	287 45	22 40
Mangaweka (end completed formation) ... ..	149 74	276 45	11 0
Taihape (end works in progress, south end) ... ..	161 14	265 25	11 20
Waiouru (summit, Murimutu Plains) ... ..	185 34	241 5	24 20
Waione (lowest point between summits) ... ..	195 34	231 5	10 0
Waimarino (summit of long grade from Wanganui River) ... ..	220 14	206 27	24 60
Taumaranui (bottom of long grade from Wanganui River) ... ..	252 71	173 48	32 57
Kawakawa (point of junction, Ngaire route) ... ..	268 39	158 0	15 48
Waimeha (end works in progress, north end) ... ..	274 79	151 40	6 40
Pororo-tarao (end opened line) ... ..	279 51	146 68	4 52
Mokau (point of junction, Awakino route) ... ..	292 4	134 35	12 33
Te Awamutu ... ..	326 39	100 0	34 35
Auckland ... ..	426 39	...	100 0
New Plymouth ... ..	252 0	445 0	...

*Via NGAIRE ROUTE.*

From	To Wellington.	To Auckland.	Intermediate Distances.
	M. ch.	M. ch.	M. ch.
Wellington ... ..	...	477 5	...
Marton Junction, central line ... ..	116 34	360 51	116 34
Eltham Junction ... ..	216 0	261 5	99 46
Strathmore Township ... ..	238 15	238 70	22 15
Wangamomona Township ... ..	257 13	219 72	18 78
Head Wangamomona Valley (heavy work begins) ... ..	264 0	213 5	6 67
Waingarara Junction, Waitara route, and commence- ment rough country	270 20	206 65	6 20
Coal-seams, Tangarakau ... ..	278 0	199 5	7 60
Heao (end rough country) ... ..	288 0	194 5	5 0
Mangaroa (end heavy work) ... ..	290 0	187 5	7 0
Nihoniho, on Ohura River ... ..	299 20	177 65	9 20
Kawakawa, junction with central line ... ..	319 5	158 0	19 65
Waimeha (end works in progress) ... ..	325 45	151 40	6 40
Pororo-tarao (end opened line) ... ..	330 17	146 68	4 52
Mokau Junction, Awakino route ... ..	342 50	134 35	12 33
Te Awamutu ... ..	377 5	100 0	34 35
Auckland ... ..	477 5	...	100 0
New Plymouth ... ..	252 0	296 0	...

## Vid WAITARA ROUTE.

From	To Wellington.	To Auckland.	Intermediate Distances.
	M. ch.	M. ch.	M. ch.
Wellington ... ..	...	499 52	...
Marton Junction, central line ... ..	116 34	383 18	116 34
Eltham Junction, Ngairu route ... ..	216 0	283 52	99 46
Stratford ... ..	221 22	278 30	5 22
Sentry Hill Junction (10½ miles to New Plymouth Harbour) ... ..	243 10	256 42	21 68
Waitara, junction with opened line ... ..	245 72	253 60	2 62
Urenui ... ..	256 62	242 60	11 0
Mimi (rough country begins) ... ..	261 72	237 60	5 0
Uruti (heavy work begins) ... ..	270 0	229 52	8 8
Waingarara, junction with Ngairu route ... ..	292 67	206 65	22 67
Coal-seams, Tangarakau ... ..	300 47	199 5	7 60
Heao (end rough country) ... ..	305 47	194 5	5 0
Mangaroa (heavy work ends) ... ..	312 47	187 5	7 0
Kawakawa, junction with central line ... ..	341 52	158 0	29 5
Waimeha (end works in progress) ... ..	348 12	151 40	6 40
Poru-o-tarao (end opened line) ... ..	352 64	146 68	4 52
Mokau, junction with Awakino route ... ..	365 17	134 35	12 33
Te Awamutu ... ..	399 52	100 0	34 35
Auckland ... ..	499 52	...	100 0
New Plymouth ... ..	252 0	264 0	...

## Vid AWAKINO ROUTE.

From	To Wellington.	To Auckland.	Intermediate Distances.
	M. ch.	M. ch.	M. ch.
Wellington .. ..	...	474 27	...
Marton Junction, central line ... ..	116 34	357 73	116 34
Eltham Junction, Ngairu route ... ..	216 0	258 27	99 46
Stratford ... ..	221 22	253 5	5 22
Sentry Hill Junction (10½ miles to New Plymouth Harbour) ... ..	243 10	231 17	21 68
Waitara, junction with opened line ... ..	245 72	228 35	2 62
Urenui ... ..	256 72	217 35	11 0
Mimi Valley, junction with Waitara route ... ..	267 62	206 45	10 70
Tongaporutu Heads' ... ..	281 0	193 27	13 18
Mokau Heads ... ..	288 40	185 67	7 40
Awakino Heads ... ..	292 40	181 67	4 0
Mahoenui ... ..	308 0	166 27	15 40
Wairere Falls, Mokau River ... ..	322 0	152 27	14 0
Mokau, junction with Central line ... ..	339 72	134 35	17 72
Te Awamutu ... ..	374 27	100 0	34 35
Auckland ... ..	474 27	...	100 0
New Plymouth ... ..	252 0	239 0	...

## ESTIMATES OF COST.

## CENTRAL LINE.

## Estimate of Cost of Completion.

From	To	Section.	Length.	Rate per Mile.	Amount.
M. ch.	M. ch.		M. ch.	£	£
22 40	33 40	Makohine ... ..	11 0	3,933	43,263
33 40	40 40	Mangaweka ... ..	10 0	12,684	126,836
40 40	50 45	Paengaroa ... ..	10 5	10,000	100,625
50 45	61 40	Hautapu Falls ... ..	10 75	8,575	93,790
61 40	69 0	Waiouru ... ..	7 40	6,998	52,485
69 0	84 32	Murimutu ... ..	13 67	6,640	91,638
84 32	91 62	Raetihi ... ..	8 75	13,500	120,656
91 62	103 40	Waimarino ... ..	11 58	9,000	105,525
103 40	111 40	Makaretu ... ..	8 0	12,000	96,000
111 40	121 40	Ohongo ... ..	10 0	8,000	80,000
121 40	129 37	Whakapapa ... ..	7 77	10,000	79,625
65 0	83 0	Ongaruhe ... ..	18 0	5,777	104,000
49 0	65 0	Ohinemoa ... ..	16 0	7,326	117,222
					1,211,665

## NGAIRE ROUTE.

*Estimate of Cost.—Based upon Actual Survey.*

Section.	Subdivision No.	From	To	Length, Net.	Rate per Mile.	Amount.
		M. ch.	M. ch.	M. ch.	£	£
Ngaire...	1	...	5 26	5 25	6,446	34,244
" ...	2	5 26	10 0	4 48	7,639	35,138
" ...	3	10 0	16 0	5 74	5,538	32,951
" ...	4	16 0	22 77	6 76	8,731	60,678
" ...	5	22 77	29 77	7 0	5,112	35,782
" ...	6	29 77	31 0	1 3	10,404	10,794
" ...	7	31 0	37 0	6 0	5,188	31,126
" ...	8	37 0	38 73	1 73	17,460	33,392
Tangarakau ...	6	38 73	47 73	9 0	6,631	59,679
" ...	5	47 73	49 5	1 10	23,353	26,272
" ...	4	49 5	52 48	3 40	6,676	23,367
" ...	3	52 48	55 32	2 62	10,141	28,143
" ...	2	55 32	60 59	5 24	8,064	42,737
" ...	1	60 59	64 73	3 77	16,300	64,586
Heao ...	1	64 73	68 73	3 74	15,498	60,830
" ...	2	68 73	75 63	6 66	10,221	69,762
Ohura ...	5	75 63	83 56	7 73	5,032	39,820
" ...	4	83 56	88 56	5 0	7,348	36,740
" ...	3	88 56	93 54	4 78	10,281	51,150
" ...	2	93 54	98 56	5 2	6,873	34,540
" ...	1	98 56	103 56	5 0	10,853	54,266
				103 5	8,403	865,997

## WAITARA ROUTE.

*Estimate of Cost.—Based upon Actual Survey.*

Section.	Subdivision No.	From	To	Length, Net.	Rate per Mile.	Amount.
		M. ch.	M. ch.	M. ch.	£	£
Waitara ...	1	...	8 0	8 0	6,050	48,400
" ...	2	8 0	16 0	8 0	7,810	62,480
" ...	3	16 0	23 0	7 0	5,657	39,600
" ...	4	23 0	29 0	6 0	28,826	172,960
" ...	5	29 0	35 0	6 0	16,901	101,409
" ...	6	35 0	42 0	7 0	10,739	75,174
" ...	7	42 0	46 75	4 75	9,200	45,427
Tangarakau ...	3	{ 46 75 54 42 }	55 32	0 70	10,331	9,040
" ...	2	55 32	60 59	5 24	8,064	42,737
" ...	1	60 59	64 73	3 77	16,300	64,586
Heao ...	1	64 73	68 73	3 74	15,498	60,830
" ...	2	68 73	75 63	6 66	10,221	69,762
Ohura ...	5	75 63	83 56	7 73	5,032	39,820
" ...	4	83 56	88 56	5 0	7,348	36,740
" ...	3	88 56	93 54	4 78	10,281	51,150
" ...	2	93 54	98 56	5 2	6,873	34,540
" ...	1	98 56	103 56	5 0	10,853	54,266
				95 59	10,538	1,008,921

## AWAKINO ROUTE.

*Estimate of Cost.—Based upon Exploration Survey.*

Section.	Subdivision No.	From	To	Length.	Rate per Mile.	Amount.
		M. ch.	M. ch.	M. ch.	£	£
Awakino	1	...	8 0	8 0	7,000	56,000
"	2	8 0	16 0	8 0	8,800	70,400
"	3	16 0	27 0	11 0	5,000	55,000
"	4	27 0	28 0	1 0	24,000	24,000
"	5	28 0	52 0	24 0	9,000	216,000
"	6	52 0	57 0	5 0	12,000	60,000
"	7	57 0	62 0	5 0	6,000	30,000
"	8	62 0	65 0	3 0	5,000	15,000
"	9	65 0	76 0	11 0	11,000	121,000
"	10	76 0	90 0	14 0	6,000	84,000
"	11	90 0	94 0	4 0	5,000	20,000
				94 0	7,994	751,400

## AWAKINO RAILWAY ROUTE.—MAHOENUI TO MOKAU RAILWAY-STATION.

SIR,—

Public Works Department, Auckland, 5th July, 1899.

I have the honour to report as follows on that part of the proposed Awakino Railway route between Mahoenui and the Mokau Railway-station.

Referring to the accompanying sketch-plan and sections, I have examined the country along the line shown in red, and also partly the country along the deviations shown in yellow and green.

*Yellow Deviation, from 63½ Miles to 86 Miles.*—It might be worth while running a trial over this line when the trial surveys are being made, but the necessary rises and falls are against it, and the work would be very heavy along the Mangaotaki; besides, a line following the Mokau River would be more serviceable in opening up the country.

*Green Deviation, from 64½ Miles to 80 Miles.*—I am of opinion that if the line is made along this deviation, instead of by Totoro, the grades would be easier, the total distance would be about two miles and a half shorter, and the total cost would not be more than that of the red line.

The Mokau River from Waipari Creek to the Wairere Falls runs between limestone cliffs which rise to a height of 200 ft., in places, above water-level of river. The Mangaotaki River, which is about 100 ft. wide at water-level, runs also between similar cliffs. It has a papa-rock bottom, and would have to be bridged at an economical height above water-level, and the line on to Wairere Falls would have to be carefully located, with rising and falling grades of, say, 1 in 70, so as to ease the work and adapt the line to the country.

*Red Line, from 62 Miles (Mahoenui) to 94 Miles (Mokau Railway-station).*—Starting from 62 miles, the line follows up the Awakino Valley to 64½ miles; grades easy, and cross-section flat. It crosses the Awakino River about 62½ miles.

At 64½ miles the dividing-ridge of papa rock is passed through by a 13-chain tunnel.

From 64½ miles to 67½ miles the line falls with 1 in 70 grade, running down valleys of Waipari Creek and Mokau River; work moderate.

From 67½ miles to 68½ miles the line runs along Mokau River, crossing it at about 68½ miles. The formation-work here would be moderate, and the bridge about 200 ft. in length. The grades would be easy.

From 68½ miles to 72 miles the line follows up the Waikohatu Creek Valley, rising with 1 in 50 grade, and passes over saddle at 10 miles, with a 50 ft. cutting. Formation-work would be heavy here, as cross-gullies would have to be crossed on the siding.

From 72 miles to 73½ miles the line falls with 1 in 50 grade to Mokau-iti River; work moderate.

From 73½ miles to 74½ miles the line rises with 1 in 55 grade; work moderate.

At 74½ miles the line passes through limestone ridge with tunnel about 20 chains long.

From 74½ miles to 75½ miles the line falls with 1 in 55 grade; work moderate.

From 75½ miles to 88½ miles the line follows up the Mokau Valley with flat grades and easy work, the large bends of the river being cut off by passing over saddles in the low hills.

From 88½ miles to 90 miles the line rises with 1 in 70 grade to rise over waterfall in Mokau River; work would be moderately heavy here.

From 90 miles to 94 miles (Mokau Railway-station) the line would follow up Mokau Valley, cutting off bends where possible; grades and work easy.

As the Waikohatu is much lower than the valley leading to the saddle, at 10 miles from Mokau-iti, I think it would be advisable to run a trial, as shown in dotted red line, from 66 miles to 74 miles. The maximum length of bridge required to cross any of the rivers—except Mokau and Mangaotaki—on the square will be about 60 ft., with usual end spans. Ballast shows in Mokau River, at Totoro, and also in Awakino River.

An approximate estimate of this part of the line of railway, including formation, rails, stations, and rolling-stock, amounts to £240,000.

R. W. Holmes, Esq., Resident Engineer.

I have, &c.,

A. C. KOCH, A.E.

## APPENDIX G.

## NORTH ISLAND MAIN TRUNK RAILWAY.

REPORT ON THE CHARACTER OF THE LANDS AFFECTED VIA CENTRAL ROUTE, BY MR. H. J. LOWE.

Department of Lands and Survey,  
District Office, Wellington, 4th September, 1899.

REFERRING to your memorandum of the 22nd ultimo (S.G. 39554), I have the honour to forward herewith a report by Mr. District Surveyor Lowe on the value of the lands adjacent to the line of railway between Taihape and the northern boundary of the Wellington District.

I regret that time has not permitted the work being done more fully. Mr. Lowe and a couple of draughtsmen have done their best; and the information and plans, so far as I can find, are as asked for.

The Surveyor-General, Wellington.

J. MACKENZIE,

For Chief Surveyor.

Wellington, 4th September, 1899.

TABLE showing Lands along the Central Route of the North Island Main Trunk Railway, starting from an East-and-West Line through Taihape, and extending for Ten Miles on either Side of the Line to the Boundary of the Wellington Land District at Taumaranui, showing the Crown, Native, and Alienated Lands, their Approximate Areas, and Present and Past Selling-values; also some Notes of Timber, Soil, &c.

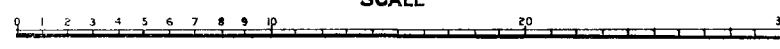
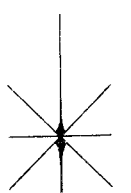
Name of Block.	Area within Ten-mile Limit.	Tenure.						General Remarks.
		Crown.	Value.	Native.	Value.	Alienated.	Value.	
Awarua ..	55,048	Acres. 900	£ 1,350	Acres. ..	£ ..	Acres. ..	£ ..	680 acres open fern and grass country, 220 acres undulating bush country, medium-size mixed. Average price, £1 10s. per acre.
Awarua ..	..	..	..	31,300	62,600	..	..	Mostly open fern and grass country, hilly, undulating, with areas of agricultural land all suitable for small farms. Average price, £2. Contains about 3,000 acres of good milling timber.
Awarua ..	..	..	..	..	..	22,848	33,000	Occupied in farms under 640 acres. Sold at £1 10s.
Motukawa ..	32,935	10,278	8,300	..	..	..	..	900 acres low country on river, partly open, partly good bush; 1,300 acres high open country, light soil, on limestone; 8,000 acres high bush and open country, on limestone, containing rimu, matai, and some totara, also a great quantity of good kaiwaka (or pihautea): 12s. 6d. to £1 2s. 6d.
Motukawa ..	..	..	..	22,657	30,000	..	..	Open fern and grass country, some up to 2,000 ft. above sea, some up to 3,000 ft.; also undulating and flat bush, of which at least 2,000 acres could be milled. Flat and undulating land around Turangarere could be cropped.
Te Kapua ..	8,200	300	375	..	..	7,900	9,875	Practically all sold in farms of 200 acres, with some small improved farms under 50 acres; also contains site of proposed township of Mataroa, 300 acres. Average selling-price of whole block, 17s. 6d. to £1 10s.
Ponuiotane ..	6,600	2,200	2,750	..	..	..	..	Bush country; hilly; cut into farms of 200 acres, but forfeited, and now open for selection.
Ponuiotane ..	..	..	..	..	..	4,400	5,500	Hilly bush country; sold in areas of 200 acres each, and now being felled and cleared for sheep.
Ngaurukehu ..	9,251	1,120	1,400	..	..	..	..	Hilly, mixed-bush country, good soil; can cut into small areas; not much for milling purposes. Average price, £1 5s.
Ngaurukehu ..	..	..	..	8,131	10,164	..	..	Hilly bush and open country, good soil; could cut into small farms. Average price, £1 5s. Some good flax-swamps.
Ruanui ..	11,166	1,610	3,220	..	..	..	..	Hilly mixed-bush and open country, improved; let to Europeans by the Natives.
Ruanui ..	..	..	..	9,536	27,668	..	..	Hilly, undulating, and flat bush and open country; improved, and carrying about three sheep to the acre. Leased by Natives to Europeans.
Raketapauma ..	19,689	7,976	6,640	11,713	10,400	..	..	High land, 2,000 ft. to 3,000 ft.; open tussock, bush, and swamp; some suitable for farms under 640 acres, and balance under 2,000 acres. Bush contains good rimu, and matai, and kaiwaka, also some good totara, but somewhat difficult of access for milling purposes, more especially the eastern portion.
Maungakaretu ..	9,744	535	535	1,509	1,509	7,700	5,775	Sold over ten years ago, in areas under 2,000 acres, at 15s. per acre; mostly cleared and under sheep.
Rangipo-Waiiau	43,000	34,598	21,625	8,402	5,274	..	..	High, open tussock country, 2,000 ft. to 3,000 ft.; pumice-sand on limestone. Partly bought by the Crown; leased until 1903 to Europeans; could be greatly improved if cut into areas up to 5,000 acres.
Carried forward	195,633	59,517	46,195	93,248	147,615	42,848	54,150	

# WELLINGTON-AUCKLAND RAILWAY.

Map to accompany Mr. H. J. Lowe's, Report re Land-tenure,  
4th September, 1899.

## REFERENCE.

CROWN LANDS SHOWN THUS  
NATIVE LANDS "  
SOLD LAND "  
LAND LEASED TO EUROPEANS SHOWN THUS



Reference  
Roads made or in course of formation shown thus  
Main tracks  
Railways  
Proposed Railways



TABLE showing Lands along the Central Route of the North Island Main Trunk Railway, &c.—*continued.*

Name of Block.	Area within Ten-mile Limit.	Tenure.						General Remarks.
		Crown.	Value.	Native.	Value.	Alien-ated.	Value.	
Brought forward	195,633	Acres.	£	Acres.	£	Acres.	£	
Rangipo - Waiau Nos. 1 and 2	23,000	17,000	46,195 8,500	93,248 6,000	147,615 3,000	42,848 ..	54,150 ..	High, open tussock country; pumice-sand on limestone, papa, and sandstone; partly spoilt by volcanic deposit. Mostly bought by Crown, but leased to Europeans until 1903.
Oruamatua ..	15,700	..	..	15,700	7,950	..	..	Open tussock country; pumice-sand on papa and sandstone. Leased.
Muremutu 1 ..	500	112	56	388	194	..	..	High, cold country, on slopes of Ruapehu. Leased till 1902.
Muremutu 2 ..	8,822	7,462	4,664	1,360	850	..	..	Flat and undulating open tussock country; pumice soil on papa, limestone, and sandstone. Mostly bought by Crown; leased to Europeans until 1902; could cut into small runs over 2,000 acres.
Muremutu 3 ..	13,000	5,602	3,501	7,398	4,624	..	..	Ditto.
Muremutu 4 ..	11,000	6,286	2,368	4,714	2,946	..	..	Ditto.
Muremutu 5 ..	12,081	8,562	5,351	4,519	2,824	..	..	Ditto.
Rangiwaia 2 ..	11,315	4,223	4,000	..	..	7,092	7,500	Flat, undulating, and hilly forest land; cut into areas of under 640 acres.
Rangiwaia 4 ..	32,188	17,844	7,500	..	..	..	..	Some flat and undulating mixed-forest land; some hilly and mountainous, covered with birch forest.
Rangiwaia 4 ..	..	..	..	14,344	10,000	..	..	Some flat and undulating mixed-forest land, some open grass country, and some hilly birch country.
Parikauau ..	559	..	..	559	559	..	..	Some small Native blocks of good bush land.
Tarere ..	285	..	..	285	285	..	..	
Otaroro ..	100	..	..	100	100	..	..	
Okehu ..	1,370	..	..	1,370	1,370	..	..	
Whataroa ..	492	..	..	492	492	..	..	
Paungataua ..	500	..	..	..	..	500	500	Good bush land. Sold many years ago.
Otiranui and Ohutu	31,000	..	..	31,000	34,500	..	..	Hilly and undulating forest country; could be cut into areas of less than 640 acres (£1 2s. 6d); parts fit for milling.
Tupapanui ..	1,280	..	..	1,280	1,600	..	..	Undulating bush country.
Marekura ..	3,000	..	..	3,000	3,750	..	..	Hilly, undulating, and flat mixed-bush country; suitable for small farms under 640 acres; contains good milling timber.
Waiakaka ..	4,514	..	..	..	..	4,514	2,250	Lower part good heavy rimu forest; upper part poor birch country, on the slopes of Ruapehu.
Ngapakihī ..	2,480	..	..	2,480	3,720	..	..	Flat and undulating heavy forest country; suitable for milling.
Rangitaua ..	22,965	13,324	10,000	..	..	..	..	Southern portion flat and undulating, heavily timbered (mixed) forest country; suitable for areas under 640 acres; contains some very good milling timber.
Rangitaua ..	..	..	..	341	170	..	..	Northern portion, on slopes of Ruapehu, mostly poor birch forest.
Rangitaua ..	..	..	..	..	..	9,300	10,462	Mostly heavily timbered flat and undulating forest country; cut into areas of about 200 acres; partly felled and grassed, settlers having cows and a creamery; many thousands of feet of milling timber close to railway route.
Raetihi ..	17,310	5,895	7,370	9,915	12,400	1,500	2,000	Heavily timbered flat and undulating forest country; suitable for small farms under 640 acres; contains quantities of good milling timber.
Uriwera ..	12,429	..	..	12,429	3,750	..	..	Partly high limestone table-land, with mixed forest, rest slopes of Ruapehu, birch forest and scrub, &c.
Waimarino ..	278,035	236,000	200,000	..	..	..	..	Flat, undulating, and hilly bush country, also flat, open plains; hills papa and sandstone, with sprinkling of pumice. Flats north of Manganui-o-te-ao mostly spoilt by deposits of pumice. Hills good sheep country; some good milling timber also. The totara forest, 5,000 acres at north end, not yet properly tested. Parts could be sold under 640 acres, parts under 2,000 acres, parts in larger areas; while a large area could best be kept as a permanent forest reserve.
Waimarino ..	..	..	..	..	..	22,780	12,000	Flat and undulating heavy bush country; cut into small farms under 640 acres; contains thousands of feet of good milling timber.
Okahukura ..	33,000	33,000	8,250	..	..	..	..	Open tussock plains of pumice-sand; good merino-sheep country.
Taurewa 1 ..	17,600	17,600	8,800	..	..	..	..	High bush country; unsuitable for small farms; flat, hilly, mountainous.
Taurewa 4 ..	21,000	..	..	21,000	11,500	..	..	High bush country; flat, hilly, mountainous.
Taurewa 2 ..	1,160	..	..	660	330	500	250	Ditto.
Tawhai ..	5,000	2,000	500	..	..	..	..	Partly poor birch country, and partly open tussock plain.
Tawhai ..	..	..	..	3,000	750	..	..	Mostly poor birch forest.
Total ..	778,318	434,427	317,055	235,582	255,279	89,034	89,112	

An extract from Mr. G. T. Murray's report on the milling timber in the Waimarino, Raetihi, Rangitaua, Otiranui, and adjacent blocks, as shown by green line on tracing No. 2, is added to these schedules. In addition to this there are totara forests in the north end of the Waimarino probably covering some 5,000 acres, but not yet properly vested. 91,800 acres at 7,000 ft. per acre, and an expenditure in working-expenses of 3s. 6d. per 100 ft., would alone represent the circulation of £1,123,550.

J. W. A. Marchant, Esq., Chief Surveyor, Wellington.

H. J. Lowe,  
District Surveyor.

[EXTRACT.]

Wanganui, 20th August, 1897.

IN the Waimarino country the quantity of valuable timber is enormous. The labour of preparing this land for grazing purposes is very great, and, as a rule, the soil and climate do not allow of sufficient grass to make this labour remunerative. The cost of felling the bush is from £1 15s. to £2 5s. per acre. The timber is so large and so durable, and there is such a quantity of it, that the ground is littered with logs, and it takes many years to make a good clearing.

A very large area of this fine forest has been already taken up by settlers—in the great majority of cases in areas of 200 acres. Most of the settlers are working-men, and can barely contrive to comply with the clauses of their leases, which compel them to improve so much a year—*i.e.*, to destroy so much timber every season. After it is destroyed the settlers have not the means to stock or fence their clearings; still, hundreds of acres are being felled and burnt every year.

The timber is acknowledged to be the most valuable crop the land will ever produce. On an attached sheet I show results of measurements actually taken to ascertain the number of trees per acre, their size, and variety. In its natural state, on Crown and Native lands combined, I reckon there were approximately as follows (*vide* attached tracing):—

				Acres.
Good milling timber, on flat and easy land	...	...	...	62,700
Good milling timber, on undulating land...	...	...	...	11,600
Fair milling timber, on easy ground	...	...	...	17,500
				<u>91,800</u>

This block extends along the line of the proposed railway for about twenty miles, and no part of it is more than six miles off the line, with almost level access to it. The greater part of this area has been allotted to settlers, but a very large portion of the allotted land has not been occupied at all, or thrown up after a short occupation. Some is Crown land yet unallotted, and the remainder is Native land not yet acquired. The Native land is the Raetihi Block and Pakihi (17,450 acres), of which 13,640 acres contain good milling timber.

What I would suggest is that all sections containing good milling timber which are unallotted or forfeited should be reserved, as well as all Crown land of similar value; also, that all Native land suitable for milling should be reserved as soon as it is obtained. On all these lands the timber should be put up to tender only when the line reaches them; after being cut out they should be disposed of for grazing purposes.

There is plenty of rough land unsuitable for milling, but even more fitted for settlement than the heavy flat bush that may be opened by pushing on the Raetihi-Ohura Road. This country, though rough, is covered with light, good-burning bush, and is much warmer than the flats. The timber on the coastal districts is being rapidly exhausted. The most important assets to the trunk railway are the Waimarino forests; and, if the bush is allowed to be destroyed in the present manner, by the time the railway reaches them much of the best timber will have disappeared.

I may mention that Mr. Penrin, of the Victorian Forest Department, was much struck by these facts.

The Surveyor-General, Wellington.

G. T. MURRAY, Road Surveyor.

## APPENDIX H.

### NORTH ISLAND MAIN TRUNK RAILWAY.

REPORT ON THE CHARACTER OF THE LANDS AFFECTED VIA NGAIRE, WAITARA, AND AWAKINO ROUTES, BY MR. H. M. SKEET.

Department of Lands and Survey, District Office, New Plymouth,  
3rd August, 1899.

SIR,—

In compliance with the instructions contained in your telegram of the 17th May, 1899, and that of the 22nd idem, Mr. H. M. Skeet, District Surveyor, has examined the land on the probable routes of railway-lines—(a) Ngairé to junction with Central route at Kawakawa; (b) Waitara to junction with Ngairé route at Waingarara; (c) Waitara *via* Awakino to junction with Central route at Mokau Railway-station—and I now enclose his report, with a lithograph map illustrating it.

Although written on the 30th June last, the report was delayed at Mr. Skeet's request, for the reason that the Native Land Court was then defining the interests of the Crown in lands affected by the proposed routes, the particulars of which (on the Ngairé route) have only just reached me.

In addition, some 21,618 acres in this Land District, and certain areas in the Auckland Land District that would be opened up by the Awakino route, have recently been purchased by the Crown from the Native owners, but, as no definite information is available, I am unable to locate the purchases on the map accompanying the report, the Native Land Court maps being still in the custody of the Auckland Survey Office.

The Surveyor-General, Wellington.

JOHN STRAUCHON, Chief Surveyor.

# TARANAKI-AUCKLAND RAILWAY.

Map to accompany Mr. Street's Report on Land-tenure,  
30th June, 1899.

## REFERENCE

LANDS BOUGHT FROM NATIVES AND  
NOW IN HANDS OF EUROPEANS.

NATIVE LAND SHOWN THUS

CROWN LANDS AVAILABLE FOR SETTLEMENT SHOWN THUS

LANDS DISPOSED OF SHOWN THUS

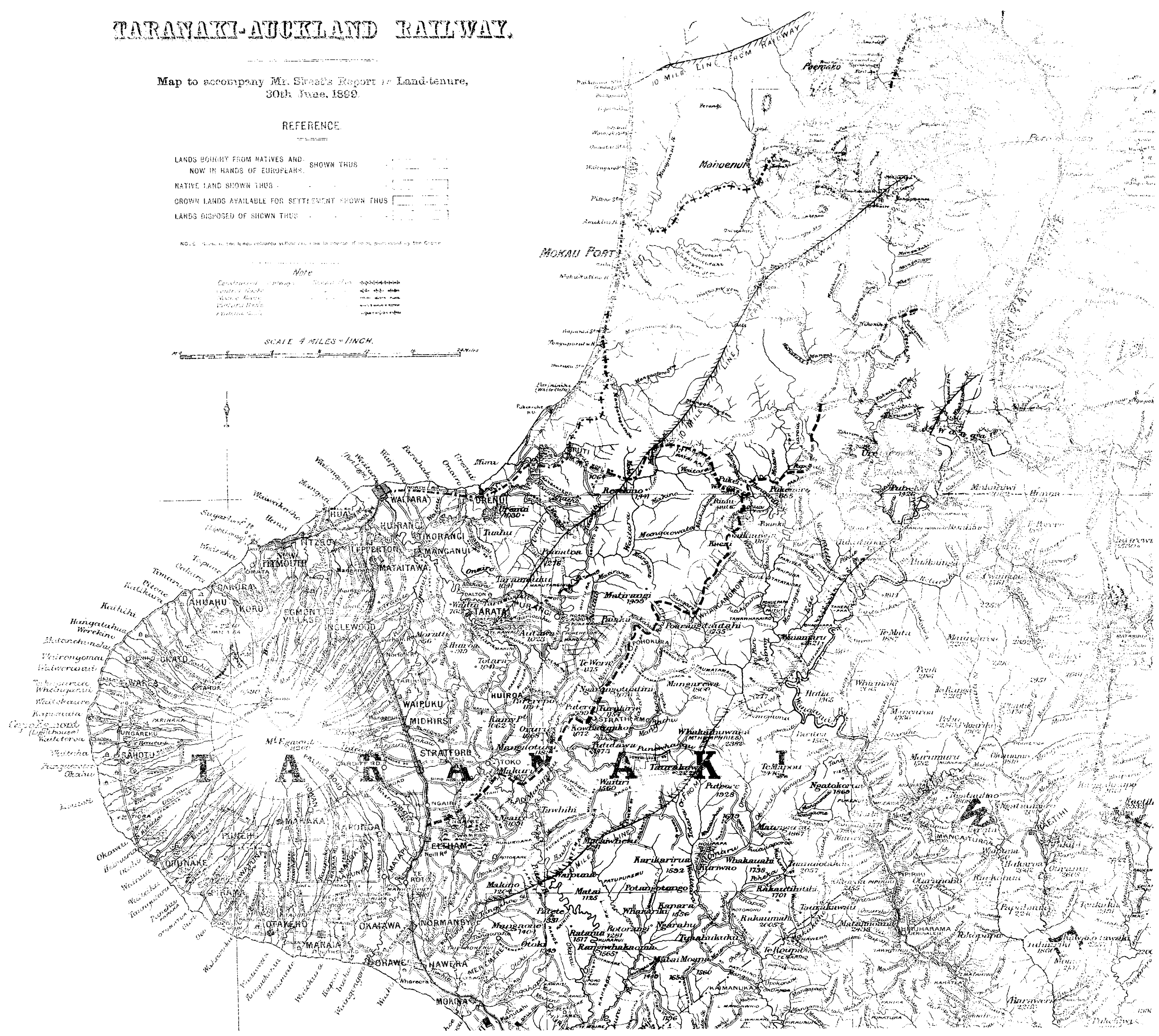
NOTE: Lands to be sold are indicated by yellow color, and are in course of being purchased by the Crown.

## Note

Constructed railways shown thus: ————  
Native land shown thus: ————  
Crown lands available for settlement shown thus: ————  
Lands disposed of shown thus: ————

SCALE 4 MILES = 1 INCH.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100





SIR,—

New Plymouth, 30th June, 1899.

I have the honour to report that, according to your instructions, I have examined the land along the several suggested lines of connection between Taranaki and the Main Trunk Railway (North Island), and report as follows:—

*Ngairi Line.*

First mile, starting from the railway near Eltham, is through land in a high state of cultivation; then two miles through damp ground near the Ngairi Swamp; the next two miles through first-class land, newly brought into use; three miles and a half more (to the Patea River), through the Pukengahu Block, first-class agricultural land. The Toko blocks continue on to the 15th mile, all rich agricultural land, greatly improved and occupied; Huikama Block, from the 15th to the 23rd mile; the holdings here are larger, well improved, and stocked. Contiguous to this block the country is generally settled in areas, from 100 to 800 acres, now being improved. 23 miles to 26 miles is through Mangaere Block, part of which is divided into a small-farm improved settlement, and other parts held under ordinary systems of tenure; all the sections are improved. 26 miles to 31 miles, through the Pohokura Block, which is divided into large holdings made into sheep- and cattle-farms; areas, from 600 to 3,000 acres, well improved and stocked. In most cases the land would be classed as agricultural and first-class pastoral. 31 miles to 34 miles, down the Makahu; the Ross Special Settlement is on one side and general settlement on the other. 34 miles to 38 miles is through land divided into sections from 200 to 700 acres, pastoral land. From the 38th mile to the 50th mile is through the improved small-farm settlement of the Wangamomona Valley, with the land on both sides of the settlement cut up into larger sections held on the general tenure system; first-class pastoral. 50 miles to 54 miles, from Raekohua over the ridge to Waingarara, and on to Tangarakau; this portion takes in some broken country, pastoral, fit for larger holdings. 54 miles to 62 miles is up the Tangarakau Gully, where the land on both sides for two miles is much broken, with black-birch spurs, not suitable for agricultural purposes. The timber and coal on this portion would be a large source of revenue. Up the Paparata, over the saddle, on to Heao to the 67th mile is good pastoral land. 67 miles (Heao) to 71 miles (Parae), along the valley, is good land fit for general agricultural purposes. On the eastward the Ohura Valley, a valley of good general settlement land, would drain into line. About Parae, the head of the Heao Stream, there is about 1,000 acres of light bush and scrub. From Parae to Huhatahi the line runs over a ridge; good first-class pastoral land. 75 miles (Huhatahi) to 80 miles (Mangaroa) is through first-class agricultural land, soil good, all forest. Mangaroa to Ohura, two miles heavy bush land, first-class quality. On the north side is Ellis's fine clearing of 500 acres; on the south side standing bush; easy sloping hills. The line from the Ohura Crossing to Nihoniho, for a distance of six miles, is through patches of bush, fern flats, and poor fern hills. On the north side of Ohura it is all forest land of good quality; a portion of this has been set apart for an improved-farm settlement. From Nihoniho, 85 miles, to 88 miles, Taupirikura, the line is near the Ohura Stream; the land on north side is bush, of good soil; on the south side fern slopes, spurs, and hills of moderate quality. The land continues the same to Otahu; on the south side the ridges and spurs are more broken, with the bush-line lower down; fair pastoral. The next length, from Otahu to Kawakawa, 12 miles, is through pumice-flats, poor fern slopes and ridges, inferior country; on the north side the land is forest, soil of better quality, good pastoral. From Kawakawa to within three miles of Poro-o-tarao Tunnel the country consists of small flats near the streams, terraces, and good-looking rolling hills, with patches of bush on the higher land. The soil is not good, there being too much pumice, and fires have burnt the first soil; the land is only fit to be cut up into large sections. The last three miles to Poro-o-tarao is a mixture of bush more suitable for settlement.

Regarding the quality and quantity of land available for settlement or occupied along the Ngairi line: Starting from Eltham to Pohokura, with a ten-mile belt on each side, for the first fifteen miles it would give 128,000 acres of first-class agricultural land, occupied and well improved. Timber would be a large source of revenue. In this length I have cut off the area of the first five miles for the present constructed railway. The next sixteen miles would give 210,000 acres of land, 100,000 of which would be agricultural, 110,000 first-class pastoral. With the exception of portions eastward, this land is occupied, and in a state of great improvement. Timber, again, would be a considerable source of revenue. From the 31st mile, Pohokura, to Wangamomona, a distance of eight miles, would give 80,000 acres of first-class pastoral land, suitable for sections of 200 acres to 1,000 acres. This portion has not a great number of settlers as yet; they reside along the main road. From Wangamomona to Raekohua, a distance of sixteen miles, is partly up the Wangamomona Valley, where the improved-farm settlement is situated. This is nearly all occupied in small holdings. The back portions are more suitable for larger holdings—300 to 1,000 acres. This is about 150,000 acres of mixed country, 130,000 of which is Crown land, the remainder Native land. From Raekohua to Tangarakau, some 10,000 acres of fair pastoral country, with a good patch of general agricultural country on the Upper Waitara and head of Waingarara (that the Moki Road would tap)—say, 10,000 more. The Tangarakau portion of eight miles, for two miles on each side of line, is much too broken for successful agricultural purposes. The timber is mostly black-birch, that, with the other timbers, would be fit for cutting, as the means of access allowed. Coal outcrops in many parts on this portion. From Paparata to Heao, 12,000 acres of agricultural and pastoral land would be available. Heao to Parae, good agricultural land. This portion would drain all the fine land of the Lower Ohura Valley, some 30,000 acres; westward the Waiaria Range would prevent much beyond 8,000 acres being utilised. The roading of the Ohura country would not be an expensive matter. From Huhatahi to Ohura there is an area of 50,000 acres of pastoral and agricultural land, 10,000 of which would be agricultural, which would be tapped by the roads that would come in from Mangakara, and Waitohena

from the westward. In this portion is included the 2,000 acres freehold and leasehold of Mr. Ellis, 500 of which is in grass, with several hundreds more being felled for next season. On the east side of line there are about 10,000 acres of good general country. From Ohura to Nihoniho, on the south side of the road the land is what would be classed as second-class pastoral, fern ridges, slopes, bush gullies, and hill-tops; 20,000 acres on the north side is bush land, of good soil, of which 10,000 acres is pastoral and agricultural, suitable for areas from 200 to 1,000 acres. The Waikaka Road would open up the land to Mokau-iti. From Nihoniho to Otahu, a distance of ten miles, the land on the north side would be pastoral, with patches of agricultural. The streams that run into Waikaka have valleys with considerable areas of open fern and scrub land, the hill-tops being all forest—some 60,000 acres in all; the south side of the line is second-class pastoral, requiring to be divided into large sections. There are 60,000 acres in this portion. From Otahu, where the pumice-covered land commences, to the Central line near Kawakawa, twelve miles: On the north side the land is bush and pastoral, and 40,000 acres would be available; on the south side 9,000 acres would drain to the line, but there is so much pumice on the land that it would require to be divided into large holdings to be of use. From Kawakawa to Poro-o-tarao the country would be classed as inferior pastoral.

*Crown Lands.*—On the Ngairi line the Crown has acquired from the Natives—Taumatamahoe Block, 114,597 acres; Maraekowhai Block, 22,529 acres; Ohura South Block, 72,665 acres; West Taurangi Blocks, &c., 104,639 acres; part of Mohakatino Block, 15,000 acres; Whitianga Block, 14,808 acres: total, 344,238 acres. The nature of the timber in the heaviest forest land about the Wangamomona, Waingarara, Upper Waitara, Tangarakau, Heao, Mangaroa, and north side of Ohura is rimu, kahikatea, black-birch, matai, and patches of totara, and would be available.

#### *Waitara Line.*

Starts from the railway-station, Waitara. To Mimi, fourteen miles, is close to the coast through a closely settled district of first-class agricultural land, divided into small holdings. Mimi to Uruti is up the Mimi Valley for seven miles and a half through what was forest country, but now well improved. This portion is held in larger holdings. Up Uruti to Moki Road, two miles and a half, rich alluvial flats and good hills. Moki Road to Moki Stream, a distance of five miles, the line passes over a rough piece of country; pastoral land. Down the Moki for two miles to the Waitara there is a good piece of mixed agricultural and pastoral land. Up Waitara the line should keep to the valley as far as the Waingarara saddle, instead of over two ridges with long tunnels *via* Makarakia and back to Waitara. A saving of several miles would be effected. There is now a road located up the Waitara Valley, which shows its suitability for a railway-line. From Moki to Waitara, below the Waingarara saddle, a distance of eleven miles, it is good pastoral land. From Waitara to junction with the Ngairi line in the Waingarara there is a good patch of mixed agricultural and pastoral country, a length of five miles.

The amount of available land that the line would open up is as follows: The open part from Waitara Station to Mimi, 22,000 acres, with another 78,000 that the inland roads bring in. From Mimi to Moki, 80,000 acres of mixed agricultural and good pastoral country would be rendered accessible. This portion is capable of being subdivided into moderate-sized sections. From Moki to Waingarara, the railway would affect 75,000 acres. The piece at the head of the Waitara, about 10,000 acres, is general agricultural country; the balance good pastoral, requiring to be in larger sections. Timber in the Waitara and its tributaries would be a considerable source of revenue. On the hillsides there is some very fine rimu and kahikatea; totara is not plentiful. The roading about the Waitara country would be heavy in many places.

#### *Awakino Line.*

Starting from Waitara, this line will follow the Waitara line to Uruti, twenty-four miles. From Uruti the line follows up Mimi to the ridge dividing the Tongaporutu waters, a distance of five miles. Through the Lepperton Special Settlement it is bush land in course of improvement; generally agricultural and pastoral. From the saddle to Tongaporutu the line would be through broken country for two miles, then down the Tongaporutu Valley for four miles to the heads. This is through improved-farm-settlement blocks, agricultural and pastoral land. From Tongaporutu Village to Mokau, a distance of eight miles, the line would run through a narrow strip of land that lies between the hills and the coast, not more than half a mile wide; all good land, and occupied by settlers and Natives. From Mokau it is a question whether the line should follow the coast further to the Awakino River or take up the Mokau Valley for seven miles, then cross a narrow ridge to the upper part of Awakino. It would pass through good pastoral land, with occasional flats on the bends, and good timber and limestone. From Mokau over the narrow ridge to Awakino for several miles the land would be broken, good pastoral. Mokau to Awakino by the coast, four miles along a narrow strip between hills and coast. The first two miles of Awakino is good land, then the valley narrows in, and for five miles the land available would be little. Onwards to Mahoenui the valley widens out with good flats and terraces, distance about seven miles through good rich land, mostly limestone on north side of line. The land is occupied in holdings of 700 to 2,000 acres, greatly improved, some of the settlers having 1,200 acres cleared and in grass. From Mahoenui the line crosses over a long ridge to Totoro, on the Mokau River. The country is fern, scrub, and light bush land, distance five miles, pastoral and agricultural land. From Totoro the line follows down a bend of the Mokau, then up a good valley and over a low saddle to the Mokau-iti, length some seven miles, through open land, with a strip of bush at the main ridge, streams swampy, good general country, agricultural and pastoral, limestone formation. From Mokau-iti the line continues through open country to Mokau, length two miles; rich flats near streams,

and fair slopes; follows up Mokau to Mapiu, three miles and a half through open land, pastoral. From Mapiu, for another five miles the line continues up the Mokau Valley through pastoral country; small patches of bush, with swamps, on the lower ground. For another eight miles to the Mokau Station, on main trunk line, it is still near Mokau Stream, through pastoral country of not good quality, swamps near streams, and pumice in soil. The land back from river, where there is forest, is of much better quality.

Amount of land that line would open up (being a coast-line to Awakino, the land would be all on one side): Taking from Uruti, as the Waitara line is common to both there, there will be—Uruti to Tongaporutu, 96,000 acres would be tapped by the roads coming down the Mimi and Tongaporutu Valleys; one-fifth would be agricultural, remainder pastoral of good quality, excepting narrow strips of black-birch land. From Tongaporutu to Mokau there are 60,000 acres, available by the roads coming down Mohakatino and Mokau. With the exception of a few thousand acres near Tongaporutu, Rattenbury's 3,000 acres at Kawau, and Jones's lease at Mokau, the land is in the hands of Natives; 10,000 acres in this length would be agricultural, the remainder good and fair pastoral. From Mokau to Awakino, 7,000 acres would be tapped. From Awakino to Mahoenui, on the north side are 22,000 acres of small grazing-runs, in a high state of improvement, which would be tapped by the railway, and also the 36,000 acres of the balance of the Awakino Block, occupied and also well improved; all first-class pastoral country. On the south side extending to the Mokau River are 22,000 acres first-class pastoral, with occasional patches of agricultural land, which would also drain into the railway; 4,000 acres only of this portion is in the hands of the Crown. From Mahoenui to Mokau, 20,000 acres on north side, first-class pastoral, with patches of agricultural. The Crown have Mahoenui Block of 6,624 acres, and in the Puketiti Block the Natives have parted with many of their interests, the land being occupied and improved by the new holders; limestone formation. South side, about 10,000 acres of good pastoral land would come into railway. From Mokau over the ridge past Mokau-iti on to Mokau again, on the north side 45,000 acres would be made accessible to the railway-line; possibly more of the Kinohaku Block would diverge the same way; good pastoral country, with agricultural in places. On south side 45,000 acres would be opened; pastoral, with some agricultural. The Umukaimata and other blocks of Crown land make 38,000 acres within this area. The next length up to within seven miles of the Mokau Station, on Main Trunk Railway: On north side there are 25,000 acres of pastoral country, 9,000 acres of which is Crown land, the remainder is still in the hands of the Natives; on the south side of the line, together with the valleys of Mokau-iti and Mapui, 50,000 acres would be opened up by the railway; good pastoral country. The Crown has one small block (Kahuwera) in this portion. The remainder of the land to the Main Trunk Line, I think would be opened out by that line, so I have not considered it. As regards timber on this line: On Mimi, the Tongaporutu, Mohakatino, Mokau, and Awakino Valleys, considerable quantities of good pine would be available. In the Mokau country coal and limestone would be a great source of revenue. The roading of the country on the whole route could be done at a moderate cost. With the exception of the part with pumice, where it would require a large area to get sufficient good patches for a sheep-farm, the pastoral land is all good sheep country, capable of carrying large numbers of sheep. An average of one and a half sheep to the acre would be well within the mark; in places three or four could easily be managed. Everywhere good homestead-sites can be found that would enable any part of the land to be occupied. The agricultural portions could be available for general settlement in smaller areas where dairying, &c., would be carried on. Large pieces of Native land have been acquired, but there appears to be a tendency on the Natives' part not to dispose of the frontage on the likely main roads. Judging from previous experience, this is likely to retard settlement later on.

I have, &c.,

H. M. SKEET, District Surveyor.

J. Strauchon, Esq., Chief Surveyor, New Plymouth.

P.S.—Since writing the above there has been 21,618 acres more land acquired from Natives on the Awakino line.—H. M. S. 2/8/99.

## APPENDIX I.

## RECONNAISSANCE SURVEYS FOR GISBORNE-ROTORUA AND GISBORNE-OPOTIKI RAILWAYS.

REPORT ON, BY MR. J. STEWART, M.INST.C.E.

## WHAREKOPAE-RUATAHUNA ROUTE.

SIR,—

Auckland, 21st July, 1899.

In pursuance of instructions embodied in your memorandum, P.W. 98/3337, of date 15th November last, I have the honour to report, for the information of the Hon. the Minister for Public Works, that I proceeded to Rotorua, and thence to the Urewera country, "to ascertain, in the first instance, if it is possible, at reasonable cost, to construct a line of railway *vid* Wharekopae, Ruatahuna, Galatea, and Kaingaroa Plains, with grades not steeper than 1 in 40 on the straight, and curves of not less radius than  $7\frac{1}{2}$  chains, &c."

My interim reports during the progress of the work referred in some detail to the route I took, and some conclusions arrived at, but it will be well to embody the whole in this report.

Having some knowledge of the country for the first twenty miles from Rotorua, I spent very little time on that part, but pushed on to Galatea and the Tuhoe-land, where it was very evident that the key to the position lay.

The only valley leading from the Rangitaiki Plains, near Galatea, right up to the main divide, or backbone of the country, is that of the Whirinaki and its continuation of the Okahu. But to commence at the entrance of this valley on the plains, and work upwards through dense bush, without having first determined the most favourable point to make for in the main range, would lead to great loss of time. I therefore determined to first explore the main range and find the most favourable place for crossing, which, being accomplished, I could then work outwards towards each end.

At Ngaputahi, on the Waikaremoana Road, I met Mr. Elsdon Best, the officer then in charge of the works there, and from that gentleman I received most valuable assistance in making my way inland with my camp equipage. Mr. Best was also fortunately able to accompany me to Toreatai, the extreme eastern kainga on the route, and explain to the Ngatipotiki Natives the nature of my mission, and so establish me on a good footing with the somewhat suspicious and hitherto rather exclusive Natives of the Urewera. At Toreatai, also, I met Mr. Reilly, overseer on the stock-track works, and from him received information which proved of use in determining my course of procedure eastward of the main divide.

This main range of mountains, for the purposes of reconnaissance, may be considered as extending from Otawhau in a very irregular but generally north-east direction towards the East Cape, and including the mountains Huiarau, Maungapohatu, Te Wana, Maungatapere, and Wharekopae. From the latter point the range takes a northerly bend, and embraces the head-waters of the Waikohu, resuming its north-east direction and dropping, probably, to its lowest level at the Opotiki-Gisborne Road, beyond which it does not concern this inquiry.

Several passes, or saddles, give more or less favourable crossing-places in this line of country; all, with the exception of that at the Gisborne-Opotiki Road, are about 3,000 ft. above the sea. In the examination of the country my principal difficulty lay in the absence of any trustworthy topographical maps. No detail survey-work has ever been executed, with the exception of a little at each end, and I found the sketches of river-courses and other topographical features on the published maps nearly always positively misleading.

Having in view all circumstances, I determined on beginning the exploration in the vicinity of Maungapohatu. Toreatai was then the extreme point to which pack-horses could be taken, and I established my first working camp at Ohaeia, close to that kainga. Beyond, the stock-track through to Hangaroa and Wharekopae had been roughly cut, but was impassable for horses. This track, however, proved to be of very great service to me, as it was the means of making rapid examinations of the country in its vicinity, and I soon determined that the most favourable point at which to cross the watershed was about two miles east of Maungapohatu. The crossing-place is broad and flat, but I afterwards found that a higher ridge must be encountered between the Owahakarotu and an upper affluent of the Anini, two streams of the Hawke's Bay river system.

I decided to open out the stock-track for pack-horses as far as the Anini, and establish a fixed camp there, working onwards by a flying camp to Wharekopae. The crossing of the Anini, and getting into the head-waters of the Waimana, as the upper part of the Hangaroa is called, required much and serious consideration. About a mile and a quarter above the crossing of the Anini by the stock-track, that river is formed by the junction of the Pukukaho on the west and the Okauia on the east, both rising in very deep gorges in Te Wana. I finally decided on the following plan as the least objectionable, but it proved to be one of the most difficult problems to solve in the whole work. After crossing the Owahakarotu-Pukukaho saddle, grade down the right of the Pukukaho into the Anini, grade down that river, still on the right, until a crossing-level is reached,

cross and grade up the left bank, to the Anini-Waimaha saddle, the lowest point of which I explored and observed.

From Anini main camp I took a flying-camp and seven carriers, using the stock-track, and observing the country in various directions from the several camping-places. Two days' march beyond Anini we struck the works of the stock-track, and shortly afterwards reached the open country. From Mr. Skeates, overseer of the stock-track works, I received much information relative to routes and tracks, and we were otherwise much assisted by the kindness of that gentleman. From the stock-track clearing the route to Wharekopae lay through heavy scrub of various kinds, and fern. We had now the great advantage of open country, and could view and observe the levels of the several master-points of the railway route without actually going on them.

From the Hangaroa River the route takes up the valley between the Mokonui-Aorangi Range on the left and the Kupenga-ataramainuku Range on the right. After getting into the Wharekopae drainage this route leads down a minor branch of that river, but the descent is so great that I determined to explore a route *via* the main Wharekopae Stream and the Ngutuwera Valley to the west of Mokonui-Aorangi. This I did later on, but found the difficulties much greater, and I believe the first-named route is the better one.

From Wharekopae I rode into Gisborne and procured further data from the Survey Office there, and I have to express my thanks to the officers of that department for their assistance and courtesy towards me.

I made no attempt to examine in detail the route between Wharekopae and Gisborne, further than to observe that the route would be of very gradual descent down the Rivers Wharekopae, Waikohu, and Waipaoa, all through settled country, much of it closely settled.

On returning to the Anini main camp *via* Maungatapere and the Ngutuwera Valley above mentioned, I received your instructions of date 21st February, to explore the Gisborne-Opotiki route, and not to go into too much detail in connection with the work then in hand. I therefore decided not to take any absolute levels of the several ridges through which it was possible that a detail survey might show tunnels to be required, but to be content with a close observation of these places.

I made all haste to the observation of the western half of the route. Here I was much assisted by the Waikaremoana road-tracks and works, and the numerous Native tracks, some of which are available for horses. I examined the main range from Maungapohatu to Huiarau, and the ridge dividing the Whakatane drainage from that of the Okahu, which leads into the Whirinaki. I believe I have noted all the important and salient features there, but I should have liked to have spent another two weeks on this part. As it was, I hurried over it, in order to have time to examine the Opotiki route. The want of accurate topographical features on the maps was particularly against me here. For instance, the old Native settlement of Te Mimi is, as shown on sheet No. 5 of the Auckland four-miles-to-the-inch maps, just four miles too much north of its real place, according to the District Surveyor of Gisborne. This explains much of my perplexity in trying to locate various features in that direction from Maungapohatu.

I camped at the point where the Waikaremoana Road crosses the Huiarau Range, and examined the country backward towards Maungapohatu and westward towards the Ruatahuna hills and rivers. I then moved to Heipipi, on the Whakatane, and examined the Mangakirikiri branch from Papuera to the ridge, and the Mimiha, a day's march up the valley. I then made all haste back to Rotorua and Auckland, to take up the exploration of the Gisborne-Opotiki route.

Having thus described my movements in making this reconnaissance survey, I now beg to give a short, and I hope a clear, description of the line between Gisborne and Rotorua.

Referring to that part of your instructions, as quoted above, which relates to the curves being not less than  $7\frac{1}{2}$  chains radius, I must premise that, under such a condition, the line could not be made at reasonable cost, but would be of a most expensive character. In grading along many of the mountain-sides, scored as they are with deep ravines set as close together as the sharp, precipitous ridges will allow, and with cross-section slopes running up to 1 to 1, a limit of  $7\frac{1}{2}$  chain curves would mean that in such parts one-half of the line would be in tunnel and the other half on viaduct. If a grade-line were set out in surface contour on such places, it would be at once seen that the curve-limits and speed at present in vogue on the colonial railways cannot be adopted on the mountainous parts of this line without very far exceeding the limits of cost generally kept in view; but by the adoption of curves and speeds used on what are commonly known as light railways—viz., curves of a minimum of  $1\frac{1}{2}$  chains radius, and speeds of a maximum on these curves of fifteen miles per hour—this line may be made at a very small cost. My reconnaissance is equally applicable to both these systems, as the route would be the same whatever scale of construction may be adopted. I have kept in view gradients of 1 in 50 to allow of compensation in curvature, and on this basis the line is quite feasible.

I wish to make it clear at this point that I do not, in using the term "light railway," mean any reduction of the standard gauge, as I hold it to be an ascertained fact that, down to the limit of  $1\frac{1}{2}$  chains radius of curvature, the colonial gauge will admit of suitable rolling-stock travelling at the rate of fifteen miles per hour. The configuration of these ravines and dividing-spurs, while they demand the minimum radius mentioned, is particularly well suited for the use of parabolic or transition curves, which are so conducive to the comfort and safety of traffic on such railways.

#### DESCRIPTION OF THE LINE.

The line may, consequent on the configuration of the country, be divided into three sections.

1. Gisborne to Wharekopae, or to a point a short distance below the Ngatapa wool-shed. About thirty-five miles of easy grades and curves. This section calls for very little remark. It will be best located in the river-valleys of the Waipaoa, Waikohu, and Wharekopae. It would

require careful study in location to keep in-view safety from floods and river encroachments. The route would touch Ormond and Karaka. About twenty-five miles of this section are common to the Gisborne-Opotiki route. A minimum of 10 chains radius may be used here, and the grades would be very easy, the level of Wharekopae being about 455 ft. above the sea, and the intermediate risings and fallings short and of no account in limiting the haulage.

2. Wharekopae to Galatea, about a hundred miles of mountainous country, extreme limits of curves and grades. The section commences where the maximum grades and curvature must be used to ascend and traverse the mountainous country of Tuhoe-land. The first ascent is long and continuous, being about 1,230 ft. rise, and requiring a length of about twelve miles, which can just be obtained by grading up the hills and valleys, whence arise the southern tributaries of the river, to a saddle near the north end of Kupenga-ataramainuku. From this summit the line would grade along the north-west side of the valley, keeping on the lower spurs of the Mokonui-Aorangi Range to the Ngutuwa Gorge. This gorge is narrow and deep, and offers no serious obstruction. The rise to this place from Wharekopae saddle would not be more than 260 ft. in nine miles. From Ngutuwa the line would pass over a flat under Trig. R. 111, and thence grade round the numerous spurs and ravines of the head-waters of the Hangaroa, which above the Ngutuwa is called Waimana. An average grade of 1 in 116 for twenty-two miles would reach the Waimana-Anini saddle, 2,900 ft. This would be crossed with a moderate cutting, and the line graded down the Anini Valley to a distance sufficient to admit of grading up on the other side to the next saddle, that between the Pukukaho and Owahakaroto. This is one of the most difficult parts of the country to surmount. I had hoped to avoid a tunnel here, and left the examination of it until after my return from Gisborne, but I cannot place its elevation at less than 3,460 ft. The grade-level at Anini Viaduct would be about 2,500 ft., and the rise in six miles 620 ft., making grade-level at the saddle 3,120 ft., or 340 ft. under the saddle. The eastern face of the ridge is very steep and precipitous; the western is less so. I did not make, for reasons before stated, any detail measurements of this ridge, but the length of tunnel may be taken as 30 chains. From this tunnel the line would descend easily to the Owahakarotu, and on to the main divide, at 88½ miles, crossing on the surface at an elevation of about 3,100 ft.

The line is now in the drainage of the Whakatane, and the course is, with generally level formation, along the middle slopes of Maungapohatu to the saddle at the head of the Waiawa and Hopuruahine Valleys. This saddle is on the main divide, which is here recrossed at nearly the same elevation, and the line, with a nearly level formation, keeps along the slopes of Te Peke, rounding into the Orangitutaetutu and out again on to the eastern slope of the Huiairau range. It could now finally recross on the level at the place crossed by the Waikaremoana Road, elevation 3,165 ft. But this would entail, in rounding into the Okahutara, and the spurs stretching from the main range into that valley, a length of about three miles and a half, which may be saved by passing on to a point about two miles and a half south-west of the road-crossing, and, at a narrow part, tunnel about 200 ft. under the ridge. The length of tunnel would be about 22 chains, but, besides saving the length as above, it would avoid much interference with the Waikaremoana Road, along the Tuakura Range, which would otherwise result.

From this point the line would wind around the spurs of the Kopainui and the Ruatahuna Streams, in the Whakatane drainage, grading down into the Mimiha to a point in that valley high enough to allow of grading out of it and into the Okahu, at 114 miles. There is a low saddle in the ridge between the valleys, estimated, by comparison with other known points, at 2,800 ft. high; but I did not move the camp up the Mimiha, and I am not so clear on this point as on the other parts of the line. This saddle is the last one on this section, and a tunnel of about 22 chains in length, and 200 ft. under the ridge, must be reckoned on. From this point the line would grade down the Okahu and Whirinaki Valleys to the entrance of the Rangitaiki Plains at about 135 miles.

There is more difficulty to be encountered in the western half of this section than in the eastern. Between Maungapohatu and Galatea the ravines are deeper, closer together, and the mountain-sides more precipitous than in the country drained by the Anini and the Hangaroa to the eastward, and the grade down the Okahu and Whirinaki is equal to the worst of it in the number and narrowness of the ravines and the sharpness of the dividing spurs.

3. Galatea to Rotorua, forty-five miles: This section includes the plains between the Urewera Hills and the Rangitaiki, and is wholly in open country. There will be a heavy grade up to the Kaingaroa Plains of the maximum rate. There are several convenient gorges, which would allow of a surface-line being laid out with easy curves. The maximum grade will be required, to a shorter extent, in descending to the Mangakokonoku Creek, near Kakaramaea, but thence into Rotorua the line will be comparatively easy, following the road route, excepting near Pakaraka, where a location more to the westward would be desirable. I have shown the route, as correctly as the circumstances will allow, on sheets Nos. 4 and 5 herewith, of the four-miles-to-the-inch maps of the Survey Department; but, from the paucity of topographical features, and the inaccurate condition of river sketches shown thereon, this must be taken as an approximation merely. I have made what I consider due allowance in length for the sinuosities of location, in grading in and out of ravines. Without actually running contours in position, this cannot be more accurately determined. Appended also is a diagrammatic-section of the line, showing at a glance the conditions of grades and elevations as above described.

#### DESCRIPTION OF THE COUNTRY.

From Gisborne to Wharekopae the country is the alluvial of the papa and limestone of the Poverty Bay district. Papa formation is also to be traced close up to the Ngutuwa; westward of that, however, no trace of calcareous formation was observed. The rocks along the Waimana, Anini, Pukukaho, and Owahakarotu are all clay-slate of a very loose structure near the surface,

and the ultimate fragments small. Maungapohatu is of a close and rather fine-grained sandstone, with horizontal stratification. This is the only building-stone observed in the route, and it is of fair quality. There are, on the slopes below the north-east end of the mountain, masses of loose, angular stone, from the size of a house downwards, and which, from the smooth and often perpendicular sides and sharp arrises, show the material to be fit to stand the very severe frosts and humid weather of that district. After leaving Maungapohatu, and all the way to the Galatea Plains, no rocks but those of clay-slate were seen. These are of the very loosest structure, as a rule. Some harder bands are to be found, but, from the polyhedral nature of the ultimate fragments, this rock is all easily excavated. From Galatea to Rotorua the country is of the pumice and rhyolite-rock formation, too well known to need any description. Nothing in the shape of river-gravel or sand was to be seen in any part of the route, and, for ballast, dependence would have to be placed on the clay-slate rock, abundance of which would arise out of the cuttings and on deposits of pumice-gravel on the Kaingaroa Plains. Machine-broken limestone would probably have to be used on Section 1. All over the forest country, underneath the surface soil, is to be found either the common small yellow pumice-gravel or a few inches of fine clean grey sand, both evidently subaerial deposits. Very little of the pumice is to be observed east of Maungapohatu, and generally it is only in patches, but the grey sand is almost universal.

The timbers on the line are, from Ngutuwhera to Maungapohatu, a distance of nearly thirty miles, principally black birch (*Fagus fusca*), very suitable for sleepers and bridges. From Maungapohatu to Galatea Plains the forests are of mixed tawa bush, and of little value for railway-work. Near Te Whaiti there is a valuable totara forest, which is Government property.

As regards formation, Section 1 calls for very little remark. It is the ordinary work required in alluvial plains, but much care would have to be given to guard against slips. Almost the whole of Section 2 would be in side-cutting along the slopes of hills and mountains, many of which are as steep as  $1\frac{1}{2}$  to 1. The full width of formation must be in the solid, and in many places the rock will not stand steeper than 1 to 1, although, excepting in the upper strata of sand and soil,  $\frac{1}{2}$  to 1 may be taken as the rock-batter over three-fourths of the length. In many places the spurs are so narrow between the ravines that, even with  $1\frac{1}{2}$  chains minimum of curvature, short tunnels of 30 to 40 yards in length must be put in, but, without setting out the line, the number of these cannot be determined. On Section 3 little need be said, excepting that much care and judgment would be necessary in locating the line, and forming through the hot springs and pools of Kakarama and near Whakarewarewa.

*Bridges.*—As a whole, the route is particularly light in bridge-work; there are no extensive viaducts, anything worthy of the name being almost confined to Section 1. I append a tabulated list of bridges, which, I believe, will include all waterways above 10 ft. span, and from which a sufficiently close estimate may be made.

#### GISBORNE-OPOTIKI ROUTE.

On the completion of the reconnaissance as above described, and in pursuance of instructions in your memorandum of the 21st February, I left for Opotiki to take up the work of exploration for a line of railway from Gisborne to that place.

This route has, from an exploration point of view, great advantages over that through the Urewera forests. There is a road right through, about half of which is bridle-track, and the rest fit for wheel traffic. There are places of public accommodation at Poututu (twenty-seven miles) and Motu (fifty-seven miles). Thence northwards to Opotiki, 112 miles from Gisborne, I was greatly indebted to the hospitality and great kindness of the only two settlers in the bush for accommodation, and breaking what would otherwise and in the circumstances have been a very long journey. From near the Motu Bridge, fifty-two miles from Opotiki southwards, the country is settled, and the original bush may be said to be cleared. The main ridge of the country is about ten miles south of the Motu Township, and is there low and flat compared with the Huiarau saddles. It is very little higher than the Mamaku summit, on the Auckland and Rotorua Railway, and from this point southwards the country is clear, and I was enabled to do more in four days than I could accomplish in a month at Maungapohatu. In traversing the bridle-track north of Motu, one is enabled to closely see and get familiar with ravines and spurs, in all respects similar to those through which the railway would have to pass. And, to any one experienced in laying out railways in broken country, it is conclusively evident that a limit of  $7\frac{1}{2}$  or even 5 chains radius would be prohibitory.

#### DESCRIPTION OF THE LINE.

As mentioned in the first part of this report, a length of about twenty-five miles out from Gisborne is common to both routes. Starting, then, from the point of divergence, about three miles below the confluence of the Wharekopae and the Waikohu, the line would keep up the north-east bank of the Waikohu to Poututu. At or near that place the rise to the summit would commence, and preferably a regular and continuous grade, equivalent to an average of 1 in 50, excepting where necessarily broken for stations, would be continued round the spurs and slopes of the Waikohu into the valley of the Rangiriri to a crossing-place on that stream, thence back along the dividing ridge between the Rangiriri and the Kokokupara round the southern end of this ridge, and on to the saddle of the main range, which is here only about 2,000 ft. high. The line might cross the divide on the surface, but it would be more convenient to make a 20 ft. cutting and pass the road over the railway.

On crossing the saddle the line is in the Motu drainage, and descends to the Motu Township with a grade of 1 in 102; but, although the Motu is a Bay of Plenty river, there is no possibility of a suitable route being found down its valley. It is nearly seventy miles to the sea, and twenty-five more along the beach to Opotiki. On the other hand, the road route from Motu to Opotiki is, for our purposes, also impracticable, passing over three high ridges, with long and tortuous ravines between.

Careful consideration convinced me that the valley of the Otara, which leads from near Motu to Opotiki in a comparatively direct course, offered the fewest objections and certainly the shortest distance, and I determined to explore and examine in some detail a route leading from Motu to the nearest head of the Pakihi, which, by its junction with the Waiti, forms the Otara. I therefore moved my camp to Motu, and explored the ridge to the west of the valley, eventually fixing on the Hiwi Marie saddle as the most suitable crossing-place.

This saddle is about 2,180 ft. above the sea, and it would be quite possible to grade upwards from the Motu and top this ridge without a tunnel; but, as that would entail two miles more of length of line, I do not advise it. The tunnel, of which I append a section, is only 14·2 chains long, and it saves a height of 210 ft. The grade from the Motu to this saddle is 1 in 56.

The down-grade towards Opotiki is of very much the same character as Section 2 of the Wharekopae—Ruatahuna route; some parts are very precipitous, and the branch ravines close and narrow, as before described. This down-grade is equivalent to an average of 1 in 60 for a length of twenty miles from Hiwi Marie to Parekowhai. The total length of the line I estimate at ninety-eight miles, being fourteen miles shorter than the Gisborne—Opotiki Road. For comparison with the other route, the length from Opotiki to Rotorua may be taken as eighty-five miles, making 183 miles *via* Opotiki as against 180 by the Urewera country.

The route is shown on the accompanying sheet No. 5 of the published maps, along with the Urewera route. The same conditions as to curvature exist on this line as described for the other, and apply particularly to the length between Poututu to the entrance on the Opotiki flats, a distance of about sixty miles.

A diagrammatic section appended shows a most favourable comparison, from an engineering point of view, with the other route. The summit height is 1,000 ft. lower, and there are only 14 chains of tunnelling through main ridges, as against 74 chains in the other case.

The country from Gisborne right up to the summit, at forty-eight miles, is of papa and limestone formation. The papa slopes seem here to be, in a degree more than usual, given to slipping. This extends as far up as the crossing of the Rangiriri; above that, and to the summit, the ground is more stable, and the harder limestone is found. Although no calcareous formation was observed north of the main summit, the country there seems to be as rich in grass as on the southern side. At Motu the valley attains a width of several miles, and there is scope for large settlement west of the river and up its valley to the southward. The bush is of the ordinary mixed character, principally tawa. The soil is chocolate-coloured, heavy, and moist. The rocks of Hiwi Marie ridge and down the Pakihi and Otara are clay-slate, loose on the surface, and in all respects similar to those in the Okahu and Whirinaki Valleys on the other route.

Comparing the amount of settled country traversed by the two routes, the existing traffic, and the possibilities of future settlement, there seems to be as great a preponderance in favour of the Opotiki route on commercial and social grounds as there is in engineering.

Appended is a tabulated list of bridges on this route, including, so far as I know, all waterways requiring more than 10 ft. span.

Trusting the above particulars, as the result of my investigations, will meet the present requirements of the Government.

The Under-Secretary, Public Works.

I have, &c.,

JAMES STEWART, M.Inst.C.E.

#### ABSTRACT OF BRIDGES ABOVE 10 FT. OF WATERWAY.—WHAREKOPAE—RUATAHUNA ROUTE.

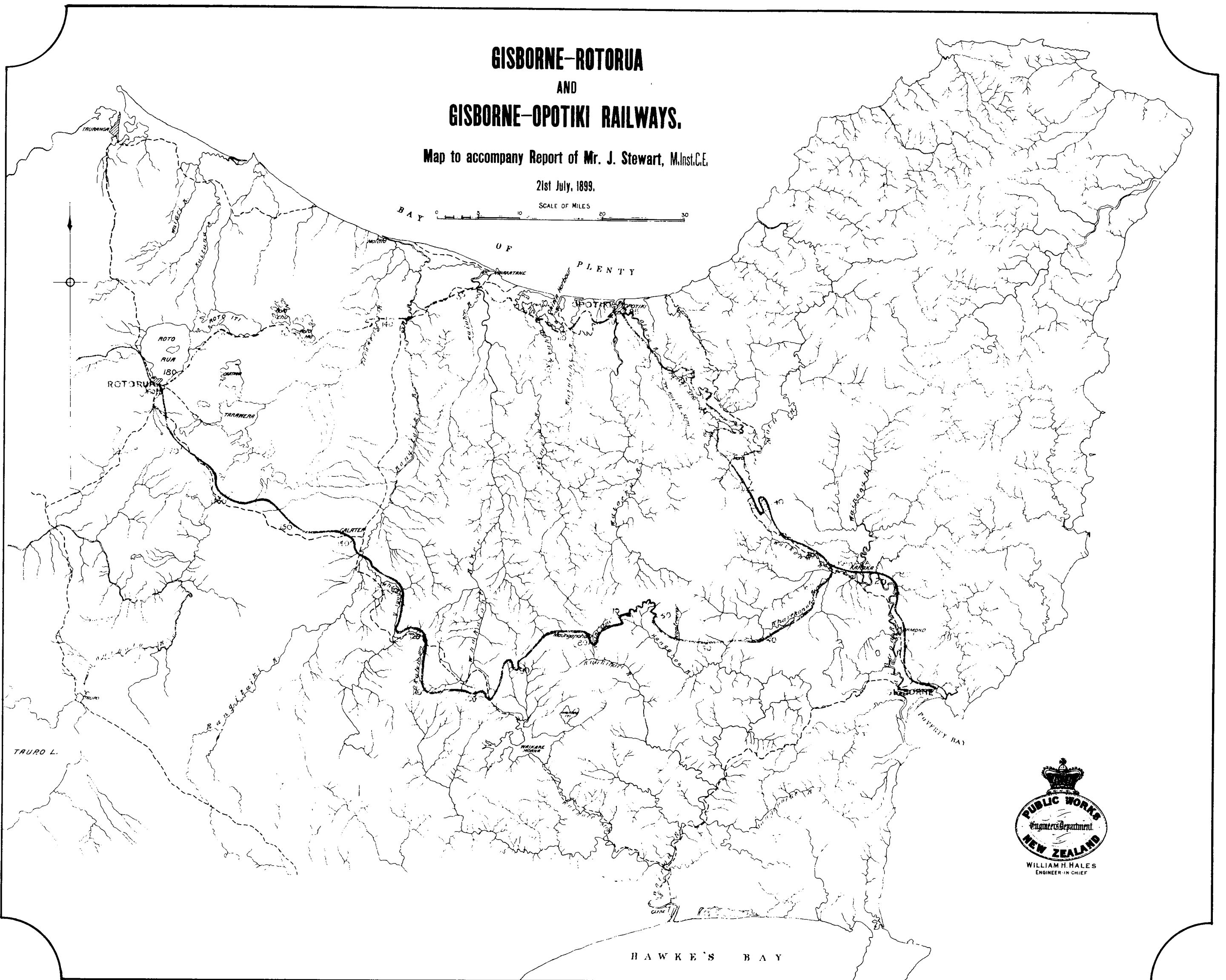
Bridges.	Spans.		Total Length.	
	No.	Length.	Beam.	Truss.
		Ft.	Ft.	Ft.
Sundry, eight ... ..	24	20	480	...
" four ... ..	24	20	480	...
Waipaoa ... ..	6	80	...	480
" ... ..	6	20	120	...
Waikohu ... ..	4	60	...	240
" ... ..	4	20	80	...
Totangi ... ..	1	40	...	40
" ... ..	2	20	40	...
Ngutuwera ... ..	3	80	...	240
" ... ..	2	60	...	120
" ... ..	4	40	...	160
Anini ... ..	1	80	...	80
" ... ..	6	20	120	...
Owhakarotu ... ..	1	40	...	40
" ... ..	4	20	80	...
Mimiha ... ..	3	20	60	...
Rangitaiki ... ..	1	80	...	80
" ... ..	2	60	...	120
" ... ..	2	40	...	80
Mangakokonoku ... ..	3	20	60	...
In Waipa Valley ... ..	9	20	180	...
Puarenga ... ..	6	20	120	...
Totals ... ..			1,820	1,680

# GISBORNE-ROTORUA AND GISBORNE-OPOTIKI RAILWAYS.

Map to accompany Report of Mr. J. Stewart, M.Inst.C.E.

21st July, 1899.

SCALE OF MILES  
0 10 20 30

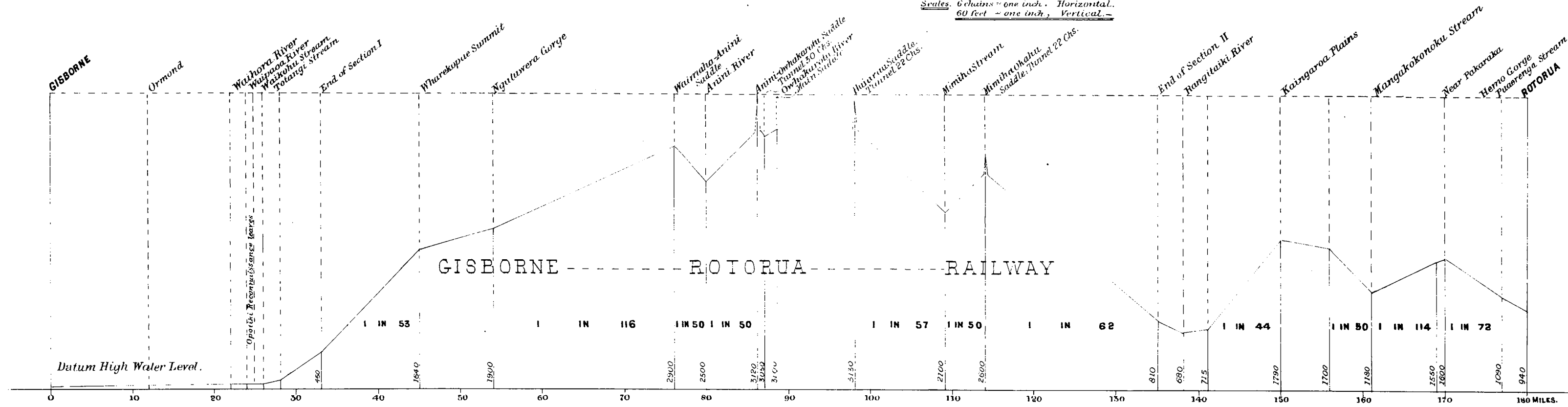
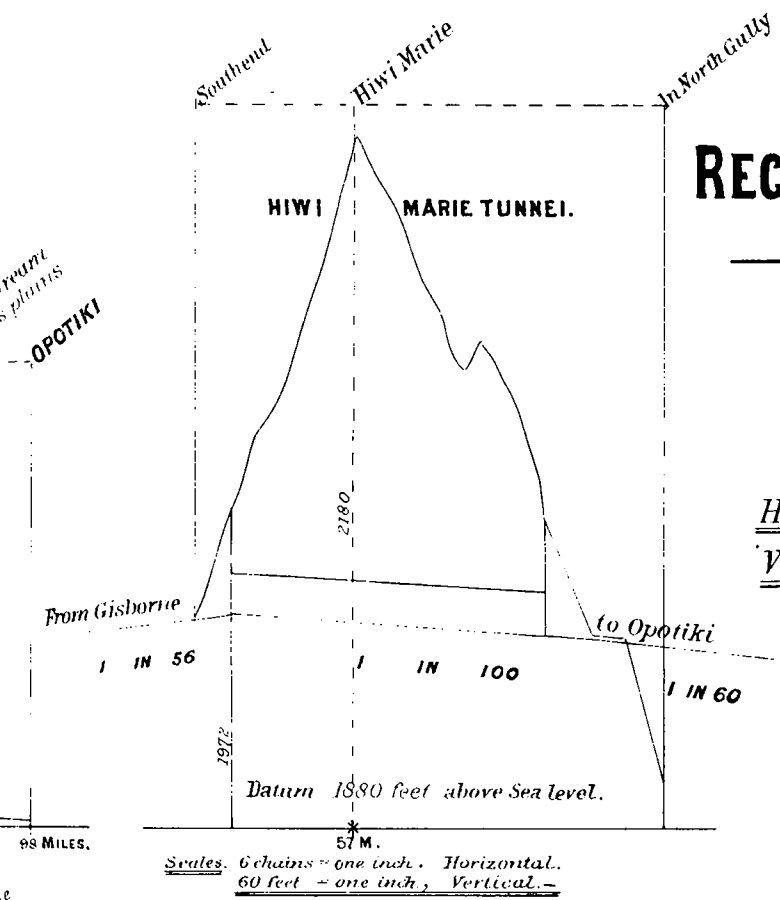
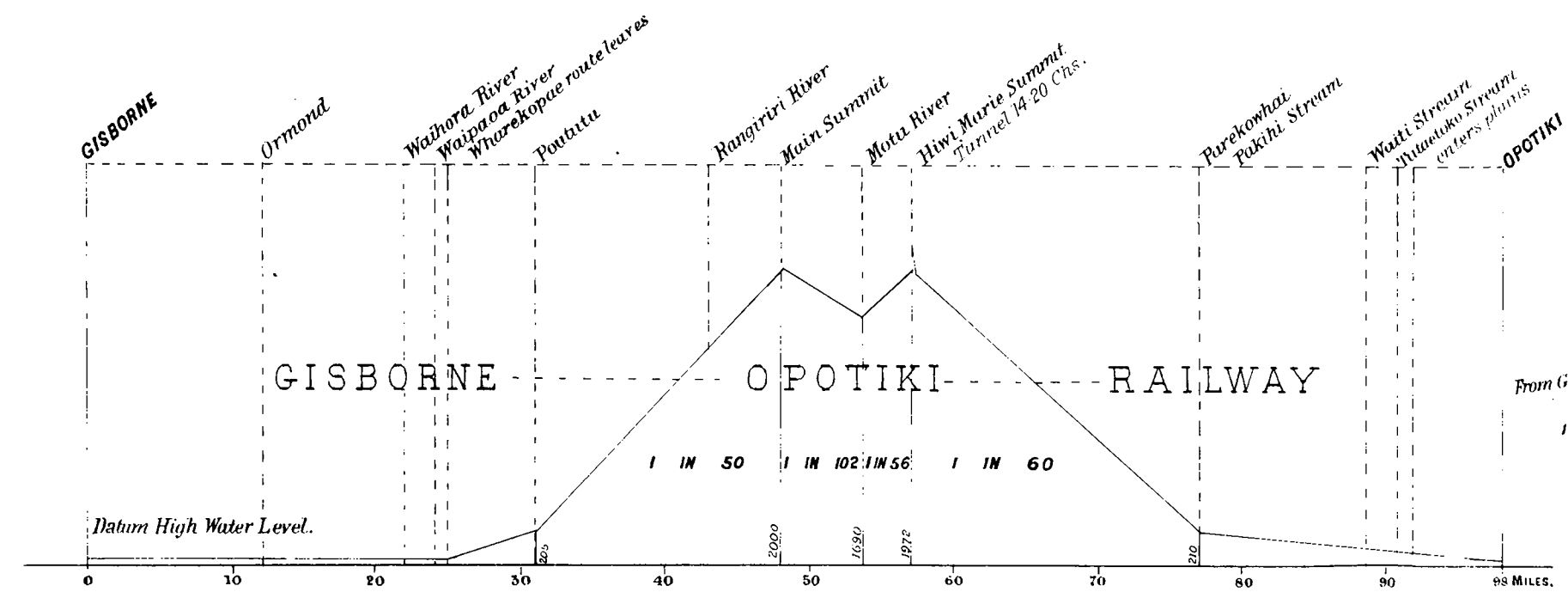




# **GISBORNE- ROTORUA** **AND** **GISBORNE-OPOTIKI RAILWAYS** **RECONNAISSANCE SURVEYS**

## **Longitudinal Sections**

*Scales,*  
Horizontal, 8 Miles to an Inch.  
Vertical, 80 Feet to an Inch.





## ABSTRACT OF BRIDGES ABOVE 10 FT. OF WATERWAY.—GISBORNE-OPOTIKI ROUTE.

Bridges.	Spans.		Total Length.	
	No.	Length.	Beam.	Truss.
		Ft.	Ft.	Ft.
Sundry, eight ... ..	24	20	480	...
" four ... ..	24	20	480	...
Waipaoa ... ..	6	80	...	480
" ... ..	6	20	120	...
Sundry, eight ... ..	24	20	480	...
Rangiriri ... ..	1	40	...	40
" ... ..	4	20	80	...
Motu ... ..	1	80	...	80
" ... ..	10	20	200	...
Pakihi ... ..	1	60	...	60
" ... ..	4	20	80	...
Waiti ... ..	1	60	...	60
" ... ..	4	20	80	...
Tutaetoko ... ..	1	60	...	60
" ... ..	4	20	80	...
Totals ... ..			2,080	780

The UNDER-SECRETARY for PUBLIC WORKS to Mr. JAMES STEWART.

(Telegram.)

Wellington, 23rd August, 1899.

COULD you kindly wire rough approximate estimate of total cost of Gisborne-Rotorua and Gisborne-Opotiki Railways respectively, including rails, sleepers, stations, rolling-stock, and everything complete. Also wire separately approximate cost per mile of same railways in sections, the character of line to be estimated for being that recommended in your recent report. Also, have you any knowledge of country between Opotiki and Rotorua? If so, could you send brief description by mail, and wire in meantime rough approximate estimate of cost of line between those points? Mark your reply "Collect."

James Stewart, Esq., C.E., Auckland.

H. J. H. BLOW.

Mr. JAMES STEWART to the UNDER-SECRETARY for PUBLIC WORKS.

(Telegram.)

Auckland, 23rd August, 1899.

TELEGRAM *re* Gisborne Railways received. Will compile and wire rough estimates within a day or two; further report on country between Opotiki and Rotorua by mail.

The Under-Secretary, Public Works, Wellington.

JAMES STEWART.

Mr. JAMES STEWART to the UNDER-SECRETARY for PUBLIC WORKS.

(Telegram.)

Auckland, 26th August, 1899.

ROUGH approximate estimate of cost of Gisborne-Rotorua and Gisborne-Opotiki Railways. Firstly, Gisborne-Rotorua—Earth and rock formation, £296,500; tunnels, £40,700; bridges and culverts, £26,290; fencing, gates, and level crossings, £30,090; permanent way, £207,000; stations, platelayers' cottages, and water supplies, £46,310; rolling-stock, £57,400; total, £704,290. Cost per mile in sections (exclusive of rolling-stock). Section 1, 35 miles (curve, minimum 10 chains), £3,171. Section 2 (curve, minimum 1½ chains), 100 miles, £4,163. Section 3 (curve, minimum 10 chains), £2,657. Secondly, Gisborne-Opotiki Railway—Earth and rock formation, £176,055; tunnel, £7,800; bridges and culverts, £17,750; fencing, gates, and level crossings, £17,003; permanent way, £112,700; stations, platelayers' cottages, and water supplies, £34,800; rolling-stock, £57,400; total, £423,508. Cost per mile in sections, exclusive of rolling-stock; Section 1, Gisborne to Poututu, 31 miles, minimum curves 10 chains, £3,223. Section 2, Poututu to Opotiki, 67 miles, minimum curves 1½ chains, £3,973. In above estimate rails are taken as 40 lb. steel; fastenings, standard; gauge, standard; sleepers, ten per rail throughout, but somewhat lighter than standard; rolling-stock, bogie throughout; stations, standard, and include workshops for light repairs; speed on Section 2, 15 miles per hour.

The Under-Secretary, Public Works, Wellington.

JAMES STEWART.

## MEMORANDUM for the UNDER-SECRETARY for PUBLIC WORKS.

Auckland, 28th August, 1899.

*Opotiki-Rotorua Country.*

REGARDING the continuation of the Gisborne-Opotiki reconnaissance survey towards Rotorua, my information does not enable me to speak with much certainty on two very important heads—viz., the amount and character of maximum grading, and the extent and class of the necessary bridging.

A ridge of hills of moderate height divides the valley of the Waioeka, the main river of the Opotiki Plains, from that of the Waiotahi. This ridge would probably not offer much difficulty. From the Waiotahi, passing inland of the Ohiwa Harbour, and to the Nukuhou Valley, the country is rather broken, and I am unable to say what minimum of curvature might be necessary. From Nukuhou to Whakatane the same broken character of the country continues, the hills stretching down from the *tuhoe*-land at Waimana to the sea at Whakatane being about 400 ft. in height. I am not aware what facilities may exist for grading down into the extensive plains which extend between the Whakatane and the Tarawera Rivers, but no doubt the matter is practicable enough, and very probably easy compared with some parts of the route between Opotiki and Gisborne.

The Whakatane-Rangitaiki Plains extend crosswise a distance of about fourteen miles, and end on the west bank of the Tarawera River. There the country rises up like a wall, as seen from a distance, and forms the broken forest table-land which extends inland from Matata, and is continuous through the lake-country to the Kaingaroa Plains. Here the grading will require much exploration, as the total rise from the plains to the forest saddle above Rotoma is over 1,000 ft., requiring a length of ten miles to overcome it. From Rotoma and Rotoehu to Rotorua the country is not difficult, and some of it particularly easy. The total distance, Opotiki to Rotorua, may be put at eighty-five miles, the distance as the crow flies being fifty-seven miles.

The bridging on the eastern half of this route would be rather extensive. The rivers are the Waioeka, Waiotahi, Nukuhou, Whakatane, Waioho, Rangitaiki, and Tarawera. Three of these, the Waioeka, Whakatane, and Rangitaiki, drain an immense extent of very mountainous country, and are subject to very heavy floods, and carefully considered flood-openings would be necessary in addition to the bridges, in a line crossing these valleys. From Tarawera to Rotorua the bridge-work will be of a very slight and easy character.

It will be seen that a large extent of the route from Opotiki to the Tarawera is across rich alluvial plains, about half of which are closely settled, and form important agricultural districts. Of the ridges and hills between these valleys I can only speak of the Whakatane Range, and, so far as my observation extends, these are of clay-slate, but of considerably closer and harder nature than those I observed in the interior explorations. The country from Tarawera to Rotorua is wholly of soft rhyolitic rocks and gravels.

There is not a large extent of bush on this route. It exists in rounding the Ohiwa Harbour to the Whakatane Hills, and from the rise west of the Tarawera to Tapuwaeharuru on Rotoiti. About three or four miles more extend between Rotoiti and Tikitere. With these exceptions the country is open.

Considering the great extent of easy work on this line of country, amounting probably to three-fourths of the whole length, I am inclined to think the large amount of bridging may be balanced in cost by the easier formation in earthworks, and that the average cost per mile may be no more than that I have estimated for Gisborne-Opotiki. Of course, no more rolling-stock would be required than what I have estimated for that other part of the route—which is a very full estimate, and, you will observe, is the same as for the Urewera route of nearly twice the length, but which would not have half the traffic.

The Under-Secretary for Public Works.

JAMES STEWART, M.Inst.C.E.

The UNDER-SECRETARY for PUBLIC WORKS to Mr. JAMES STEWART.

(Telegram.)

Wellington, 31st August, 1899.

PLEASE send by first post lithograph map, scale four miles to an inch if possible, showing possible route Opotiki to Rotorua, to illustrate your report of the 28th instant.

James Stewart, Esq., M.I.C.E., Auckland.

H. J. H. BLOW.

The UNDER-SECRETARY for PUBLIC WORKS to Mr. JAMES STEWART.

(Telegram.)

Wellington, 31st August, 1899.

COULD you wire rough approximate estimate of probable cost of line between Opotiki and Rotorua, so as to enable comparison to be made as regards total cost of both routes?

James Stewart, Esq., C.E., Auckland.

H. J. H. BLOW.

Mr. JAMES STEWART to the UNDER-SECRETARY for PUBLIC WORKS.

(Telegram.)

Auckland, 1st September, 1899.

ROUGH approximate cost of formation and permanent-way, Opotiki-Rotorua, may be taken as that of Section 1, Gisborne-Opotiki—say, £3,220 per mile, or for eighty-five miles £273,700; no rolling-stock to be added. Have posted maps showing approximate route as near as I can make it out in absence of detail examination of salient points.

The Under-Secretary, Public Works, Wellington.

JAMES STEWART.

## MEMORANDUM for the UNDER-SECRETARY for PUBLIC WORKS.

Auckland, 1st September, 1899.

*Opotiki-Rotorua Reconnaissance.*

HEREWITH I send you (under separate cover) sheets Nos. 4 and 5 of the published four-mile-scale maps. On these I have shown, as requested in your telegram of yesterday's date, a possible route, in so far as my present knowledge extends, of the extension of my late Gisborne-Opotiki exploration to Rotorua.

I would have accompanied my report of 28th ultimo with this delineation had I had sufficient detail knowledge of the hills and broken country to be traversed to satisfy myself as regards even an approximation; but, as you deem it necessary, I have done my best to pick out a feasible route.

It will be gathered from my report that the location of the line between the Waioeka and Waiotahi, the rounding of the Ohiwa Harbour, the crossing of the Tarawera to the plateau of the lake-country, are the points on which I had no detail knowledge. I have drawn the line after a close study of the one-mile-to-the-inch section maps, but it is quite possible that considerable variations, even in the general location, may be necessary to get the proper grades and avoid expense.

JAMES STEWART.

## APPENDIX J.

## WELLINGTON-NAPIER RAILWAY.

REPORT ON ALTERNATIVE ROUTES FOR DEVIATION OF LINE IN ORDER TO AVOID THE FELL INCLINE OVER THE RIMUTAKA, BY MR. P. S. HAY, M.A., M.INST.C.E.

Mr. P. S. HAY to the ENGINEER-IN-CHIEF.

SIR,—

Public Works Office, Wellington, 19th August, 1899.

I have the honour to make the following report on the various possible routes for the proposed deviation of the railway-line over the Rimutaka, to avoid the steep gradients and sharp curvature between the Upper Hutt and the Summit Station and the Fell Incline. This report is based on the results of Mr. J. H. Dobson's surveys and explorations, and on my own inspections of the country through which the proposed deviations *via* the Coach-road Saddle and the Tauherenikau would pass.

To avoid the Fell Incline a trial line was surveyed by Mr. Dobson, starting from a point about three-quarters of a mile beyond Kaitoke Station and ending at Featherston. This line follows the coach-road gullies; it has been levelled and cross-sections have been taken, so that the quantities and estimates may be taken as correct, except in so far as they might be altered by minor deviations of the finally located line. From about the two-mile peg on the above line a traverse has been run *via* the Tauherenikau River to Woodside Station, but only aneroid levels have as yet been taken along this route to determine the heights of the principal points.

To avoid the 1-in-35 grades and numerous 5-chain curves on the existing line from the Upper Hutt to Kaitoke, a trial traverse with aneroid levels has been run from the Upper Hutt Station along the slopes of the Hutt Valley and through a low saddle near Kaitoke into the Pukaratahi Valley, to join the Road Saddle and Tauherenikau routes near the Pukaratahi River; this is No. 1 line on the plan. A variation of this line, No. 2 on plan, has been run to get flatter grades and a crossing of Mungaroa Valley without a viaduct. These lines do not utilise any portion of the existing line. To ascertain if any portions of the existing line could be advantageously used, No. 3 trial line was run, and a variation of it, No. 4. The ruling gradient adopted in running all these lines was 1 in 60, and the sharpest curve allowed for was 10-chains radius. The gorge of the Hutt River was also examined to ascertain if it was possible to take the line *via* the Hutt River and Pukaratahi River to join the Tauherenikau or Road Saddle routes.

In addition to the above, Mr. Dobson examined a suggested route starting from the existing line at Ladle Bend and crossing the Rimutaka by Lucena's Pass. This he reports impracticable. He also examined a suggested route starting from the Mungaroa flats, and thence through the lowest country to Cross Creek and Pigeon Bush; this he reports impracticable, except with a five-miles tunnel. He also examined the proposed route *via* the Wainui-o-mata, Orongaronga, and Wairongomai, and confirmed Mr. Rochfort's condemnation of it. The length of line to be constructed by this route would not be less than thirty-four miles, of which over twenty miles would be on 1-in-40 gradient. It is evidently not a promising route, though it is urged in its favour that it would be better for settlement than any of the other routes, and would not cut off any of the country now served by the railway.

The trial line from Kaitoke to Featherston *via* the Road Saddle shows that a line can be got of the following general character: Grades—Kaitoke to the Summit Tunnel, 1 in 55; sharpest curve on this gradient, 10-chains radius; Summit level, 995 ft. above datum (present Summit 1,244 ft. above datum); length of Summit tunnel, 143 chains; grade in tunnel, 1 in 60, falling towards Featherston (in the final location this grade would be put all on the straight, a flatter grade being put where the curve occurs); grade tunnel to Featherston, 1 in 40; sharpest curve on this grade, 10-chains radius. In addition to the tunnel 143 chains long, the other works of any note are a bridge across the Pakuratahi River, also bridges over the Rimutaka, Tidswell's, Beal's,

and Cave's Creeks. There are no particularly heavy earthworks. The line joins the existing railway about 23 chains south of the Featherston Station. Its length is about 9 miles 66 chains, and the estimated cost is £181,200.

To get a grade of 1 in 55, with perhaps somewhat sharper curves than 10-chains radius, it would be necessary to lengthen the deviation and join the existing railway about three-quarters of a mile beyond the Featherston Station. This would increase the cost of this deviation to about £194,000 as estimated by Mr. Dobson, but I think this amount is rather little.

The grades obtainable on either of the above lines do not compare favourably with those obtainable by the Tauherenikau route, and I have examined the country between Abbott's Creek and Fernside and Woodside Stations to ascertain approximately what grades could be got by running the line either to Fernside Station or to Woodside Station—in this latter case crossing the Tauherenikau River at as high a level as possible in order to get the flattest possible grade.

If a line were constructed from the Road Saddle Tunnel down the left side of Abbott's Creek, and along the hillsides beyond Featherston to Fernside Station, the continuous grade obtainable, assuming the grade through the tunnel was 1 in 70 on the straight, would be about 1 in 75; with the grades where on curves flattened proportionately to the curvature, this line would probably give a working gradient no worse than 1 in 66 on the straight, depending on the relative amount of straight to curved line in the section. The works would be much heavier than for the 1-in-55 line; in addition to larger bridges or viaducts being required for the tributaries of Abbott's Creek, a viaduct of about 150 ft. in height and of considerable length would be required over Boar Bush Creek behind Featherston. On the hillsides to the south of this creek there is a large slip, or, rather, dislocation of the ground, reaching up to about the grade-level; but I do not know that this would be an important factor, as probably a moderate cutting would take the line back into solid ground. The cost of this alternative deviation, Kaitoke to Fernside, may be taken as £260,000. Better grades than those on the trial line would be required between Kaitoke and the Summit Tunnel to get approximately balanced grades for the probable up- and down-country traffic. Though not quite so good, this route approaches very nearly the Tauherenikau route as regards grades.

If, as another alternative, a line were constructed like the preceding from the Road Summit Tunnel, down the hillsides on the left bank of Abbott's Creek, then along the hillsides between Featherston and the Tauherenikau River, crossing the river at a level of 70 ft. to 80 ft. above the level of Woodside Station, and then running along the terraces and flats to Woodside, the continuous grade obtainable, assuming that the grade in the Summit Tunnel is 1 in 90 on the straight, would be about 1 in 95. With the grades on the curves suitably and proportionately flattened, according to the sharpness of the curve, it is probable that a working gradient of 1 in 82, or perhaps better, could be obtained by careful location of the line, depending on the relative lengths of curved and straight line on the section between the Summit Tunnel and the Tauherenikau River crossing. The bridges over Tidswell's Creek, Beal's Creek, Cave's Creek would become viaducts of some size, and the viaduct required to cross Boar Bush Creek would be 250 ft. high, though the line could, I think, be run up the gully to avoid the viaduct; also there would be either a smaller viaduct or a high bank required for a gully about halfway between Featherston and the Tauherenikau. There would likely be some short tunnels required at some of the gullies; the bridges or viaducts might be considerably reduced by these tunnels, but I have not assumed that this would be so in the approximate estimate given below. The worst part of the country along which this alternative route runs is, I think, that around the sides of Cave's Creek. The hillsides are much more favourable, I think, for railway-construction than those along which it is proposed to construct some portions of the Midland Railway, and more so than some other places where railways have been already constructed in New Zealand. The best grades from Woodside to Kaitoke are obtainable by this route, and the worst parts of the line would be safer than the worst parts along the Tauherenikau route. The cost of construction from Pakuratahi to Woodside would be very heavy—say, £350,000. In this I have included a sum of £25,000 for short tunnels in addition to the cost of the Summit Tunnel, and £93,000 for bridges and viaducts. There would be some difficulty in getting grades from the Upper Hutt to the Summit sufficiently flat to avoid the use of assistant engines with the present ratio of up- to down-country traffic on a line with so flat a gradient as this one between Woodside and the Summit Tunnel. A possible variation of this route would be to run up Boar Bush Gully and tunnel through to Cave's Creek watershed; this would make the grade steeper, perhaps not much better than the grade *via* the Tauherenikau; but I have no reliable data for determining the grades or the amount of tunnelling required.

The line *via* the Tauherenikau would branch off from the Abbott's Creek route at a point about two miles and three-quarters beyond Kaitoke. After crossing the Rimutaka Creek by a small bridge this line runs for a little over two miles along the spurs and intervening flats, until the tunnel through the main range is reached. This length of line is fairly easy, and should only require moderate banks and cuttings, and a number of culverts. If put on the grade suggested by Mr. Dobson, the tunnel would be about 70 chains long. It will probably be through slate rock, and will require to be lined throughout. If, however, the tunnel grade is made to fall instead of rise to the south end, the saving in rise and fall, curvature, and length of line between the Pakuratahi and the tunnel will be likely to justify the lengthening of the tunnel sufficiently to give an easy up-grade from the south to the north end; this will also be of considerable advantage in constructing the tunnel. At the north end there is a large creek, which will be likely to give trouble similar to that experienced at the ends of the Spooner's Range Tunnel. The approach cutting at this end will be long, through a piece of comparatively flat ground; the upper end of this flat forms the virtual summit for this route. Beyond the tunnel the line will run down the right bank of a tributary of the Tauherenikau to its junction with the river. At the end of the first mile the grade is not very high above the creek, but for the last three-quarters of a mile or so the creek falls

rapidly, and at its junction with the river the grade-line is about 180 ft. above the river-bed. Along this last section the creek is cutting into its banks, and there are a number of slips, one or two of some size: in one case what appears to be an old slip, overgrown with small scrub, reaches above the grade-line; in all the other cases the upper edges of the creek-banks where cut away and fallen in are well below the grade-line. Judging from the slopes of the hillsides, the works required along the tributary to form a railway-line would not be very heavy for the first mile, but would be somewhat heavy for the last three-quarters of a mile or so. Cuttings, banks, and culverts, with perhaps one or two small bridges, would be the works required.

After leaving the tributary creek the line would follow the right bank of the Tauherenikau for about four miles and a half. There will be some heavy work on this section, especially on the first three miles. The cuttings will be heavy; some short tunnels at bluffs and bridges over tributary creeks will be required. The works would be lighter on the last mile and a half as the gorge opens out more, and generally the slopes of the hillsides seem not to be so steep. About three miles from Woodside Station the line would cross the Tauherenikau River either on a bridge or on a viaduct, according to the grade adopted, and would then run on the terraces or on the hillsides, as the grade may require.

The continuous grade obtainable from Woodside to the tunnel will vary from 1 in 60 to about 1 in 81, according as the grade begins near the crossing of the river or near Woodside Station. When the grades are suitably flattened on the curves in proportion to their radius, I think it is probable that a ruling grade not worse than 1 in 70 on the straight can be got from Woodside to the tunnel. The corresponding ruling grade for the proposed 1-in-60 line would be about 1 in 56. The volume of the present traffic fully justifies the adoption of the 1-in-70 grade, and if a new line is worth making the best obtainable grade should be adopted. The 1-in-70 grade would, of course, be a little more costly, owing to the line having to run for some distance on the hillsides after crossing the river instead of on the flats; the viaduct across the river should not cost much more, if anything more, than the tunnel, cuttings, and bridge that would be required for the line with the steeper grade. Against this extra cost it will be a distinct advantage to have the grade-line as high above the river as it can be got in the lower length of the tributary creek and the upper two miles or so of the gorge. The additional height gained by the 1-in-70 grade on these sections will be from 30 ft. to 70 ft., and will give a safer if not a cheaper line.

The hills are of slate along the tributary creek and the Tauherenikau, and where it is exposed to the atmosphere it does not seem to be of a very stable character. I only saw some small slips on the banks of the Tauherenikau, along which the proposed line would run. These at present are not of any great moment. The line will avoid the large slip just above Buck's house, which I take to be the one Mr. Rochfort refers to in his report. The occurrence of a slip as large as this on the line after it was made would necessitate a heavy expenditure in making a tunnel to avoid it. The cuttings in this slate rock will, I think, weather considerably, and all tunnels will have to be lined throughout. Until, however, the grade-line is defined along the hillside, and the character of the works approximately determined, it will not be possible to make any very definite statements as to the probable stability of the works that will be required to form a railway-line down the Tauherenikau for the first three miles, or as to their probable extent and cost.

Woodside, being the highest point on the existing line between the Waiohine and Tauherenikau Rivers, is the proper ending-point for the deviation. Better grades than the 1 in 70 on the straight could only be got by keeping the line on the hillsides and crossing the Waiohine at a higher level than at present. The Tauherenikau Valley does not afford facilities for doing this except at great cost.

The above-described deviations do not cut out the steep gradients and numerous curves of only 5-chains radius between the Upper Hutt and Kaitoke. This will best be accomplished, I think, by a combination of No. 1 and No. 3 trial lines, described below.

No. 1 trial line starts from the Upper Hutt Station, and runs for about a mile over the flats; then it rises for about six miles on a 1-in-60 gradient, broken by a short length of 1-in-550 grade. The Mungaroa Stream and Valley would be crossed by a long viaduct, from 50 ft. to 140 ft. high. The line is on steep sideling ground for a short distance south of the Mungaroa Stream, and also on steep sideling ground from Mungaroa to a point opposite Kaitoke, seven miles from the Upper Hutt, where it passes over a low saddle requiring a tunnel at least 20 chains long. From the saddle the line runs through easy country to join the Kaitoke-Featherston trial line near the Pakuratahi, the length from the Upper Hutt to the Pakuratahi crossing being about nine miles. The estimated cost of this line is, say, £111,000, in round figures, for the nine miles. No. 2 line is an alternative to the lower portion of No. 1 line, but it increases the length by a mile and a quarter, while it is estimated that the cost of construction would only be lessened by £5,000 to £6,000; this is too small a saving to justify the increased length, except the extra length were required for the purpose of getting a flatter ruling grade to meet possible traffic requirements.

No. 1 trial line is quite independent of the existing line; but No. 3 line was run to determine how much of the existing line between the Upper Hutt to Kaitoke could be made use of. This line begins to rise on the hillside immediately after leaving the Upper Hutt Station, and joins the existing line just south of the Mungaroa Railway-station. A short length of the line and the station would be utilised. The line leaves the existing railway about 15 chains beyond the Mungaroa Station, and joins it again about a quarter of a mile south of the Kaitoke Station. The length of new line required is eight miles and a quarter, the estimated cost of which is £105,000. No. 4 line is an alternative of part of No. 3 line; it uses a portion of No. 2 line; it lengthens No. 3 line by about one mile, at an estimated saving in cost of £5,000, which is too little to justify the additional length.

The levels taken and the examination made show that the Hutt Gorge below the junction of the Pakuratahi is very rough, and it is only possible to take a railway-line up the gorge at great cost.

The extra length puts this route out of the question for any line going through the Road Saddle. For the Tauherenikau route a good grade could be got from the Upper Hutt to the Summit Tunnel. There would be about two miles and a half of very rough heavy work required in the Hutt and Pakuratahi Gorges, and a high viaduct over the Pakuratahi River; the line would run at a considerable distance from the trial line run from the Pakuratahi to the Tauherenikau River, and pass through the range by a tunnel most likely at some distance from the tunnel-site as surveyed. The only advantage offered by this route is a uniform grade from the Upper Hutt to the Summit; but the cost to get a safe line up the Hutt Gorge would be so great that it would be better to get whatever improvements in grades that may be deemed necessary by lengthening the tunnel through the saddle opposite Kaitoke.

The working gradients stated in each case make sufficient allowance for lengths of level required for passing-places. In the case of the up-grade on the Tauherenikau route—Woodside to the tunnel—two passing-places are allowed for. These will very considerably increase the traffic-capacity of the line; they will hardly ever be likely to be required as stations, as the settlement in the valley must always be small or nil under existing conditions. The passing-places cause a considerable steepening of the ruling working grade, which will spoil the line if ever a double line is required to be made, as a double line would probably be made with continuous grades from Woodside to the Summit Tunnel. A continuous working grade of 1 in 73 from Woodside to the tunnel would be sufficient for a much greater traffic than the present; and it is a question to be settled whether it would not be the better course to omit these passing-places if the line is made by this route. The passing-places are shown at approximately equal distances apart between Woodside and Kaitoke, and making the Mungaroa Station equidistant between Upper Hutt and Kaitoke put it on perhaps a bad site. Two passing-places are shown on the Road Saddle—Woodside route; one would serve as a station for the Featherston traffic, the other would be merely a passing-station.

It would be necessary, in order to avoid, if possible, any necessity to use assistant engines, to get sufficiently flat grades from the Upper Hutt to the Summit Tunnel on the deviation line adopted. For the ratio of up- to down-country traffic given in the General Manager's memorandum (attached) the grades required for the Tauherenikau route would be 1 in 64 on the straight; for the Road Saddle—Woodside route, 1 in 74 on the straight; and for the route ending at Fernside Station, 1 in 60 on the straight. Purely passenger traffic would require equal grades both ways, so would heavy excursion traffic to the Wairarapa. There will be some difficulty experienced in getting the 1-in-64 grade from the Upper Hutt to the Kaitoke Tunnel, and still more in getting the 1-in-74 grade without unduly lengthening the line or lengthening the Kaitoke Tunnel.

I think the choice of routes for the deviation will be found to lie between (1) a line from the Upper Hutt through Kaitoke Saddle, following somewhat closely the first two miles of No. 3 line and the last seven miles of No. 1 line so as to get a uniform working grade, combined with the Tauherenikau route, with 1-in-70 grades on the straight; and (2) a line with suitable grades between the Upper Hutt and Kaitoke Saddle, combined with the Road Saddle—Woodside route, with 1-in-82 grades on the straight. The only objection to this latter route is its much greater probable cost.

It would be possible to adopt either of these alternatives, and for the present, if it is thought advisable, only construct a section of the permanent deviation from about the Pakuratahi River crossing to Woodside, and form a temporary connection to the existing line between Kaitoke and the Pakuratahi, leaving the Upper Hutt—Pakuratahi section of the deviation to be done at some future time. This would involve the loss of some £8,000 or £9,000 required to form the temporary connection.

The advantages to be expected to be got from the construction of the deviation with 1-in-70 grades or 1-in-82 grades on the straight against the down-country traffic, with properly balanced grades against the up-country traffic, would be: A much quicker service between Wellington and Woodside; a saving of seven miles in length of journey, and of over 1,100 ft. of rise and fall to be surmounted by each train; a greatly diminished number of goods-trains required to haul a given amount of traffic; a considerable saving in rolling-stock maintenance by the cutting-out of the 5 miles 8 chains of curves of 5-chains radius, and 1 mile 46 chains of curves of  $5\frac{1}{2}$ - to 7-chains radius, on the existing line between the Upper Hutt and Cross Creek Stations (the limits of curvature on the new line being, say, 10-chains radius Upper Hutt to the Summit, and  $7\frac{1}{2}$  or 8 chains Summit to Woodside); the saving of the expenditure required to keep up the Cross Creek Station; the saving of the useless haulage of Fell brake-vans, weighing 12 to 18 tons, for each train up or down the Fell Incline; the saving of expense of running assistant engines between the Upper Hutt and the Summit, and between Cross Creek and Pigeon Bush, and some saving in maintaining the permanent-way on the Fell Incline. The grade of 1 in 70 on the straight will enable fully loaded engines to be run through from Woodville to Wellington (this grade offering about the same resistance to traction as the 1 in 76, with curves of 15-chains radius, between Woodville and Woodside), or the grade of 1 in 82 on the straight would enable an engine to take up some additional loading between Eketahuna and Woodside, in addition to its full load from Woodville to Eketahuna, and take this additional load through to Wellington without assistance.

The probable saving in working-expenses on the present annual traffic should be at least £12,000 to £13,000, but against this there would be, in the case of the Tauherenikau route, the cost of working a branch line to Featherston or Pigeon Bush; with the Road Saddle—Woodside route, this, perhaps, might be avoided, though it must be admitted that the station on the hills about 370 ft. or so above Featherston would be somewhat inconvenient. There would also, for some time at least, be an increased cost in earthwork maintenance. With increasing traffic, such as may reasonably be expected, there would be correspondingly greater saving in working-expenses.

The deviation *via* the Tauherenikau will reduce the distance from Woodville to Wellington to about  $107\frac{1}{2}$  miles, as against 105 miles by the Manawatu line; but in view of the slower speeds

through the Manawatu Gorge, and the slow rate of travelling from Tawa Flat to Wellington, the time from Woodville to Wellington *via* the Tauherenikau deviation would, I think, be a little shorter, as it also should be by the Woodside-Road Saddle route—in both cases for passenger-trains. The ruling gradient *via* the Manawatu line against traffic to Wellington is 1 in 56, with 42-chain curves, as against 1 in 70 on the straight by the Tauherenikau deviation.

I have endeavoured to condense into the attached table all the information available as to the costs as estimated and the salient features of the several routes. The costs given for hauling 100,000 tons of gross loads of goods-trains (*i.e.*, the weight of wagons and their loads only, exclusive of the weights of the engines) from Woodside to the Upper Hutt, over the several routes, are computed on the supposition that engines of about the power of the new B engines will be run on the deviation, also that the gross weight of the trains up the 1 in 15, exclusive of the weights of the Fell engines and Fell brake-vans, is 110 tons. The average weight of the trains up the incline is, for the last year, just under 100 tons, so the comparison should not be unfair to the existing line. It would, however, be possible to get Fell engines capable of taking up greater loads; but, on the other hand, it would also be possible to get more powerful engines than the B engines, and I have no doubt by the time the deviation is made that such engines will be in use.

The volume of the present traffic over the Rimutaka Incline is given in the attached memorandum from the General Manager of Railways.

The information regarding the Wainui-o-mata-Wairongomai route is hardly complete enough to enable any very definite comparisons being drawn between it and the other possible deviations between the Upper Hutt and Woodside. The estimated cost of this deviation is given by Mr. Dobson at £378,000, and is so high that the route will not at all compare with the Road Saddle-Featherston route, with equal grades 1 in 40, but for which the ascertained cost is only £181,200. In addition to this the distance would be ten miles longer. The great cost, the steep ruling grade, and the great extra length are, I think, quite sufficient to condemn this route.

A considerable time will be required to make the permanent survey of the whole deviation from the Upper Hutt to Woodside—say, eighteen months to two years for a party as ordinarily constituted; therefore, if anything is intended to be done in the near future, the survey should be put in hand soon. The first work to be done should, I think, be the running of a grade-line from the north end of the tunnel down the Tauherenikau to Woodside on the 1-in-70 grade. This, with a sufficient number of cross-sections at suitable points, would enable the general character and amount of the works required to be approximately ascertained. Then a similar survey should be made from the east end of the Road Saddle Tunnel to Woodside. The limits of curvature should be 10-chains radius, except for the worst parts of the Tauherenikau, when  $7\frac{1}{2}$ -chain as well as 10-chain curves should be tried. In the final location of the adopted line all grades on curves should be reduced to make the probable traction on each curve no worse than on the steepest grade on the straight. I think also that provision should be made for putting transition curves at the ends of all curves. As there is no very reliable information available for curve-resistance on 3 ft. 6 in. gaugelines, I would recommend that some measurements of curve-resistance be made sufficiently numerous and accurate to enable the results to be used with confidence in all future railway locations.

P. S. HAY.

#### PROPOSED DEVIATION, WELLINGTON-NAPIER RAILWAY, OVER RIMUTAKA.

#### SUMMARY of LEADING FEATURES of the SEVERAL ROUTES between UPPER HUTT and WOODSIDE STATIONS.

Route.	Ruling Gradients.		Ruling Grade to Wairarapa required for Existing Ratio of Traffic for Grade in (1).	Length: Upper Hutt to Woodside.	Rise and Fall: Upper Hutt to Woodside.	Estimated Cost.	Estimated Number of Trains required for Haulage of 100,000 Tons of Gross Engine-load from Woodside to Upper Hutt, and Cost of Haulage.				Lengths of Tunnels.		Height of Summit above Sea-level.
	Wairarapa to Wellington.	Wellington to Wairarapa.					B Engines.	Two Fell Engines.	Number of Trains in Miles.	Cost.	Summit Tunnel.	Other Tunnels.	
	(1)	(2)		Miles.	Ft.	£	Trains	Trains		£	Yd.	Yd.	Ft.
Upper Hutt to Featherston, <i>via</i> No. 1 line and Road Saddle	1 in 40+ 10-chain curves	1 in 55	1 in 34 on straight	22 $\frac{1}{2}$	1,585	285,000	538	..	12,235	1,835	3,146	440	897
	1 in 50 on straight		1 in 45 on straight			298,000	380	..	8,645	1,297	3,146	440	
Upper Hutt to Fernside, <i>via</i> No. 1 line and Road Saddle	1 in 66 on straight	1 in 55	1 in 60 on straight	23	1,419	370,000	287	..	6,601	990	3,120	440 + 500*	897
Upper Hutt to Woodside, <i>via</i> No. 1 line and Road Saddle	1 in 82 on straight	1 in 55	1 in 74 on straight	23 $\frac{1}{2}$	1,279	460,000	235	..	5,464	820	3,100	440 + 800*	897
Upper Hutt to Woodside, <i>via</i> No. 1 line and Tauherenikau	1 in 70 on straight	1 in 60 on str.	1 in 64 on straight	22 $\frac{1}{2}$	1,347	325,000	272	..	6,120	918	1,540 to 1,650	440 + 800*	979 to 927
	1 in 56 on straight		1 in 53 on straight				338	..	7,605	1,041			
Existing line ..	1 in 15+ 5-chain curves	1 in 35 + 5-chain curves	..	29 $\frac{1}{2}$	2,485	..	..	910	..	5,200	..	..	1,144

\* Assumed aggregate length of short tunnels.

## MEMORANDUM for the GENERAL MANAGER, New Zealand Railways.

Public Works Office, Wellington, 9th June, 1899.

## RIMUTAKA DEVIATION.

COULD you please give me information on the following points:—

- Passenger-trains each way per day.  
 Goods-trains each way per day.  
 Total number of trains Cross Creek to Featherston in a year.  
 Total number of trains in a year, Featherston to Cross Creek, to be sent up incline.  
 Gross tonnage of same, exclusive of engine-weights.  
 Total number of trains down incline in a year.  
 Total number of trains up incline in a year.  
 Gross tonnage of same, exclusive of engine-weights, and exclusive of incline brake-van. Is this van always used, and what is its weight?  
 Total number of trains in a year Summit to Upper Hutt.  
 Total number of trains in a year Upper Hutt to Summit.  
 Gross tonnage of the same exclusive of engines.  
 Assistant-engine mileage, Upper Hutt to Summit.  
 Assistant-engine mileage, Pigeon Bush to Cross Creek.  
 Is there any marked increase in cost of rolling-stock maintenance on Wellington-Woodville Section due to sharp curvature Upper Hutt to Cross Creek?  
 1899 returns, wool, sheep, cattle, timber, firewood, general merchandise (Wellington-Wairarapa).

P. S. HAY,  
Superintending Engineer.

New Zealand Government Railways, Head Office, Wellington, N.Z.,  
22nd June, 1899.

MEMORANDUM for Mr. P. S. HAY, Superintending Engineer, Public Works Department, Wellington.

THE following information is forwarded in response to your memorandum of the 9th instant:—

Average number of passenger-trains each way per day, Cross Creek and Summit	...	...	...	...	...	...	2
Ditto goods-trains	...	...	...	...	...	...	6
Total number of trains from Cross Creek to Featherston in a year	...	...	...	...	...	...	1,792
Tonnage of ditto (approximate)	...	...	...	...	...	...	174,323
Number of trains in a year from Featherston to Cross Creek to be sent up incline	...	...	...	...	...	...	1,756
Tonnage of ditto	...	...	...	...	...	...	197,348
Number of trains down incline in a year	...	...	...	...	...	...	2,303
Tonnage of ditto	...	...	...	...	...	...	180,653
Number of trains up incline in a year	...	...	...	...	...	...	1,982
Tonnage of ditto	...	...	...	...	...	...	197,348
Number of trains from Summit to Upper Hutt in a year	...	...	...	...	...	...	1,939
Tonnage of ditto	...	...	...	...	...	...	197,348
Number of trains from Upper Hutt to Summit in a year	...	...	...	...	...	...	1,938
Tonnage of ditto	...	...	...	...	...	...	180,653
Assistant-engine mileage from Upper Hutt to Summit, including return	...	...	...	...	...	...	5,863
Assistant-engine mileage from Pigeon Bush to Cross Creek, including light running to Pigeon Bush	...	...	...	...	...	...	7,785

Traffic over Rimutaka for year ended 31st March, 1899:—

—	Cattle.	Sheep, &c.	Wool.	Firewood.	Timber.	Grain.	Merchandise.	Minerals.
	No.	No.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
North	222	1,873	3	48	130	4,978	11,367	2,640
South	1,792	421,197	5,947	5,298	25,852	691	4,516	405
Total	2,014	423,070	5,950	5,346	25,982	5,669	15,883	3,045

Tonnages are exclusive of weights of engines and Fell brake-vans. The weight of Fell brake-van is 6 tons; and one, two, or more, according to train-load, are put on all trains either ascending or descending the incline. With the exception of that for Cross Creek-Summit, the tonnages are approximate.

In addition to traffic given under heading of "Traffic over Rimutaka," a large quantity of coal for locomotives, timber, ironwork, cement, &c., for maintenance works, is conveyed over the incline. The tonnage of this departmental traffic is, however, included in that for trains given on first page of this memorandum.

An answer to your inquiry in regard to increase in cost of rolling-stock maintenance will be sent in a few days.

T. RONAYNE,  
General Manager  
(per T. W. W.).

CITY  
OF  
WELLINGTON

WELLINGTON  
HARBOUR



# WELLINGTON-NAPIER RAILWAY

Plan showing  
SURVEYS AND EXPLORATIONS  
for proposed  
RIMUTAKA DEVIATION



## REFERENCE.

EXISTING RAILWAYS shown thus .....

### TAUHERENIKAU ROUTE.

Mr. Dobson's explored Line, Kaitoke-Woodside, shown thus .....  
Possible improvement on above .....

### OLD COACH-ROAD ROUTE.

Surveyed Line, via Abbot's Creek, to Featherston, shown thus .....  
Possible " " Fernside, " .....  
" " Woodside, " .....

### EXPLORATIONS, UPPER HUTT TO PAKURATAHI.

Mr. Dobson's No. 1 Line, shown thus .....  
" No. 2 " " .....  
" No. 3 " " .....  
" No. 4 " " .....  
" No. 5 " " .....

### WAINUI-O-MATA ROUTE.

Belmont-Pigeon-bush, shown thus .....

### COAST ROUTE.

Petone (Korokoro Creek)-Pigeon-bush, shown thus .....

PALLISER BAY

WAI R A R A P A L A K E

A K A T A R A W A D.

ERITONGA D.

W A I R A R A P A D.

W A L O H I N E D.

Waiohine River



WELLINGTON \* NAPIER RAILWAY  
RIMUTAKA DEVIATION SURVEYS

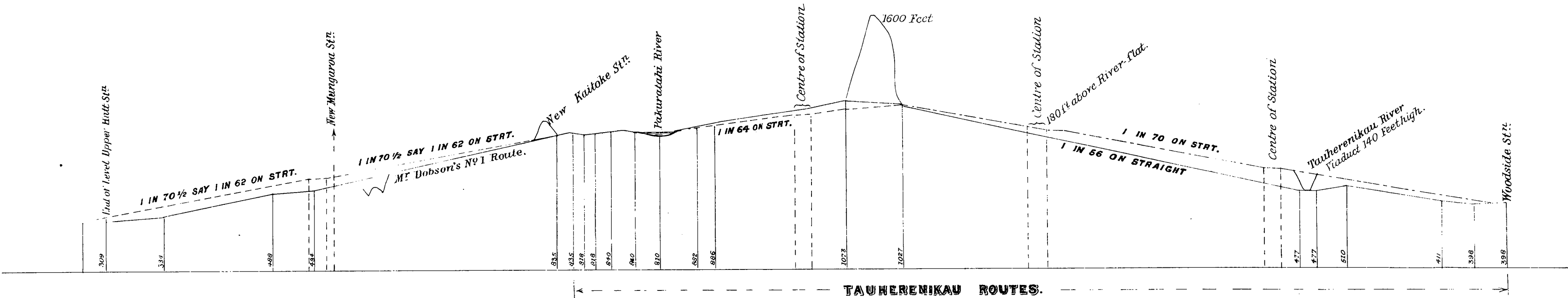
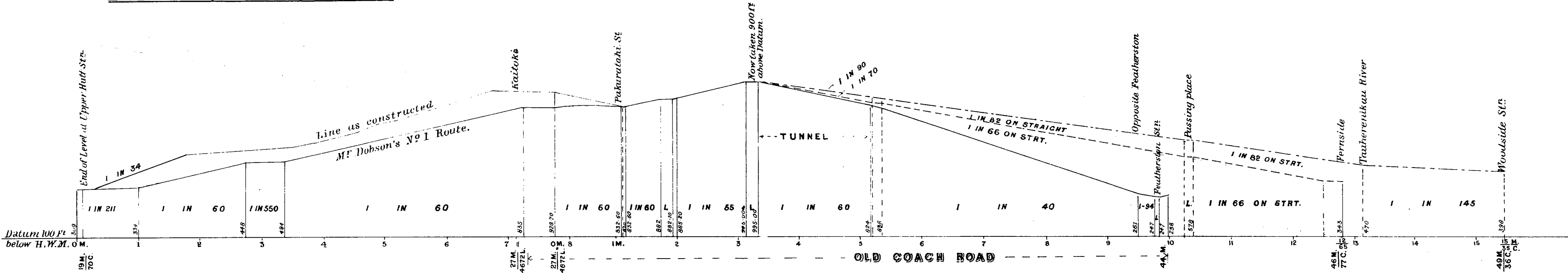
Scale of Longitudinal Sections

Horizontal. One inch to one mile.

Vertical. Four hundred feet to one inch.

REFERENCE

- Surveyed Route Abbots Creek to Featherston
- Possible Fernside
- Possible Woodside
- M<sup>r</sup>. Dobson's explored Route from Upper Hutt to Woodside
- Alternative possible improvements on M<sup>r</sup>. Dobson's Route





New Zealand Government Railways, Head Office, Wellington, N.Z.,  
15th July, 1899.

MEMORANDUM for Mr. P. S. HAY, Superintending Engineer, Public Works Department,  
Wellington.

RIMUTAKA DEVIATION.—With further reference to your memorandum of the 9th ultimo, the Locomotive Superintendent of this department states that wagon-tires and brasses will run about four times as long on a fairly straight road, in comparison with such a road as between Upper Hutt and Cross Creek.

T. RONAYNE,  
General Manager  
(per T. W. W.).

## APPENDIX K.

### WELLINGTON-NAPIER RAILWAY.

REPORT ON PROPOSED ROUTE FOR DEVIATION OF LINE IN ORDER TO AVOID THE FELL INCLINE OVER THE RIMUTAKA, BY MR. R. W. HOLMES, M.Inst.C.E.

Public Works Office, Wellington, 11th September, 1899.

Hon. Minister for Public Works.

MR. R. W. HOLMES, Resident Engineer, having made an examination of the country from Petone to Pigeon Bush, in the Wairarapa Valley, with a view of ascertaining if a practicable route for a railway is obtainable by way of the Wainuiomata, Orongorongo, and Wairongomai Valleys, his report and plans are submitted for your information.

It will be seen by the report and plans that the country between the Lower Hutt Valley and the Wairarapa Lake is of a very rough character, being intersected by high ridges, through which, in order to obtain a line with moderately easy grades, it will be necessary to construct two large tunnels, one through the Wainuiomata Ridge being one mile in length, and the other through the Orongorongo, between the head of the Wainuiomata and the Wairongomai Valley, will require to be 3 miles 50 chains long, the latter on a grade of 1 in 100. This latter tunnel, on account of its great length, will be costly to construct, and will take a long time to excavate, besides the difficulty of working such a length of tunnel with heavy trains on a grade of 1 in 100, unless very efficient means of ventilation are provided.

Mr. Holmes estimates the cost of constructing the 30 miles 60 chains of new railway at £463,547, but has probably underestimated the value of the work in the long tunnels, for which I consider £35,000 should be added. The construction of the railway along the Wainui-o-mata Valley is likely to interfere considerably with the source and head-works of the Wellington City water-supply, consequently some objection to the work may be expected from the Corporation.

WILLIAM H. HALES.  
Engineer-in-Chief.

MEMORANDUM for the ENGINEER-IN-CHIEF, Public Works Department.

### WELLINGTON-NAPIER RAILWAY.

PROPOSED DEVIATION BETWEEN PETONE AND PIGEON BUSH VIA WAINUI-O-MATA—LOW-LEVEL LINE.

SIR,—

Public Works Department, Wellington, 9th September, 1899.

I HAVE the honour to inform you that I have examined the country between the Petone Station and Pigeon Bush Station, *via* the Wainui-o-mata and Wairongomai Valleys, with the object of seeing whether or not a practicable route exists for a deviation of present line of railway and now report upon the same as follows:—

The obstacles to the construction of a line are three watershed-divides—namely, Hutt-Wainui-o-mata, Wainui-o-mata-Orongorongo, and Orongorongo-Wairongomai.

The saddles in these divides cannot be made use of because the mountain-sides are too precipitous, too broken by branch valleys, and too liable to slip to permit of the construction of a railway-line in the position that would be necessary to allow of grading over them; also, there is not sufficient distance to grade down in from the Orongorongo River to the Wainui-o-mata River with a 1-in-60 grade, while a Fell incline on a very unstable foundation would be required on the Wairongomai side. The summit-level of a graded line would be about 1,400 ft. above the sea, and situated at the head of the Wainui-o-mata River.

The difficulties presented by these divides can be surmounted by the construction of two tunnels, one 80 chains (one mile) long between Lowry Bay and Wainui-o-mata, the other 3 miles 50 chains long between Wainui-o-mata and Wairongomai Rivers, passing under the Orongorongo River at a depth of 800 ft. below the bed.

There will be two miles of heavy work grading up to the first tunnel from the Hutt Valley, and three miles of heavy work grading down the Wairongomai Valley from end of second tunnel, the rest of the formation-works will be very easy, and situated on flat ground.

With the exception of three miles in the Wairongomai Valley the formation-works will be very stable, neither liable to slip nor suffer damage by flood, consequently the maintenance of line will be very light.

21—D. 1.

The position of line is indicated on the accompanying plan.

The distance from Petone to Pigeon Bush is  $30\frac{1}{4}$  miles, which is the length of deviation or new line to construct.

The distance from Wellington to end of deviation at Pigeon Bush *via* constructed line is 41 miles, and *via* deviation is 37 miles 33 chains, a saving of 3 miles 47 chains being effected on the actual distance, and  $10\frac{1}{4}$  miles on the present paying distance.

The highest point or summit of the line is at the Wellington end of the long tunnel, its height above sea-level being 560 ft., and 584 ft. below summit of constructed line.

The maximum grade required is 1 in 70 against the traffic to the Wairarapa, and 1 in 80 against the traffic from the Wairarapa, which is the larger quantity: they are therefore situated in the most advantageous position. The accompanying section indicates the extent and rates of the grades.

The maximum curvature required is  $7\frac{1}{2}$  chains radius, which may possibly be reduced to 10 chains radius. The sharp curvature is confined to two parts of the line, situated between the 3rd and 6th mile pegs, and between the 16th and 20th mile pegs, which aggregate a length of seven miles; the rest of the line consists of long straights with flat curves: the line will therefore be an extremely favourable one for fast travelling, both as regards grades and curvature.

The estimated cost of deviation, complete with all equipment, is £463,547, made up as follows:—

From		To	Distance.		Item.	Rate.	Amount.	
M.	CH.	M.	CH.	M.	CH.	£	£	
0	0	3	0	3	0	Mile	7,000	21,000
3	0	6	40	3	40	"	30,000	105,000
6	40	12	50	6	10	"	5,000	30,625
12	50	16	20	3	50	"	59,840	216,922
16	20	19	60	3	40	"	10,000	35,000
19	60	30	60	11	00	"	5,000	55,000
								<u>£463,547</u>

Average rate, £15,075 per mile.

The long tunnel must be on a grade of 1 in 100, descending towards the Wairarapa. Should the products of combustion emitted by the locomotives prove troublesome, ventilation may be effected by sinking a shaft from the Orongorongo Valley, and driving a current of air down it into the tunnel by means of a small stream of falling water derived from the river, and delivered near bottom of shaft at a high pressure by means of piping, a pressure derived from a head of 800 ft. being available; or the water may be led to the lower adit of tunnel from the point marked X on plan, and there, with an available head of 700 ft., be used to either drive air through tunnel by means of fans, or to generate electricity and work the up-traffic by means of electrical locomotives.

The country between the reservoir in the Wainui-o-mata Valley and the narrow belt of flat country along the Wairarapa Lake is quite unfit for settlement; it is only fit for a forest reserve, or to act as a catchment-basin for supplying Wellington with water and power as far as the Orongorongo Valley is concerned. The Wairongomai Valley is merely a precipitous mountain-gorge.

The chief points in favour of this route are: (1) Shorter by 3 miles 47 chains than constructed line; (2) low summit-level—viz., 560 ft. above sea-level; (3) only one bridge of any magnitude—viz., that over the Hutt River; (4) easily maintained; (5) very easy grades; (6) does not interfere with present line through Featherston.

R. W. HOLMES, Resident Engineer.

# WELLINGTON-NAPIER RAILWAY.

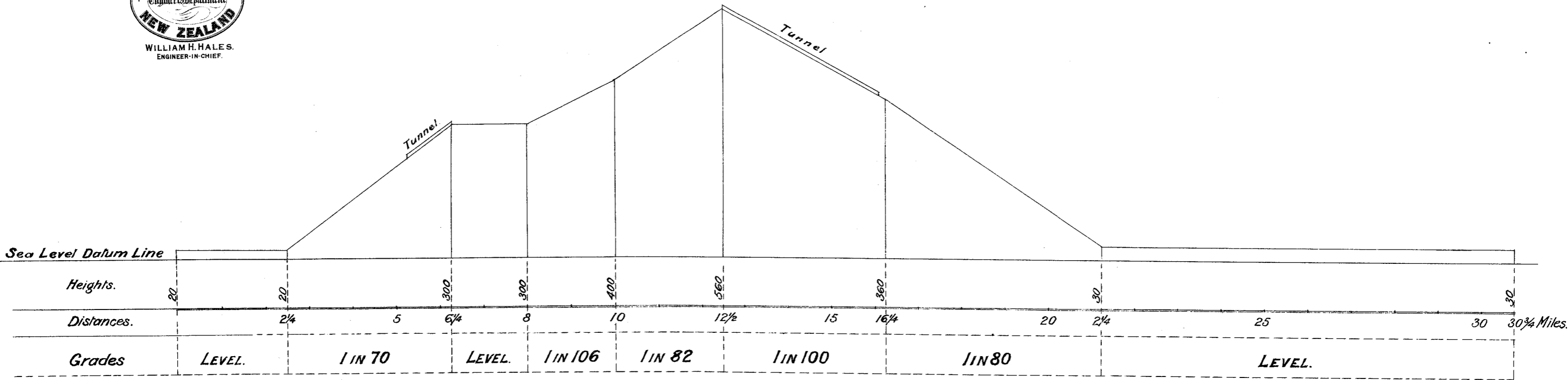
RIMUTAKA DEVIATION.

## WAINUI-O-MATA ROUTE.

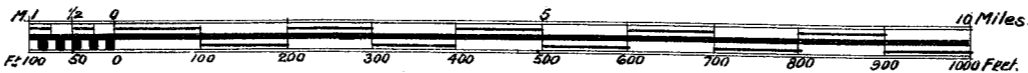
LOW-LEVEL LINE, PETONE-PIGEON BUSH.

Longitudinal Section accompanying Mr. R. W. Holmes's Report, 9th Sept., 1899.

*Note! This Section refers to dotted Yellow Line on Plan accompanying Mr. HAY'S Report.*



SCALES { HORIZONTAL, 2 MILES } = 1 INCH.  
          { VERTICAL, 200 FEET }





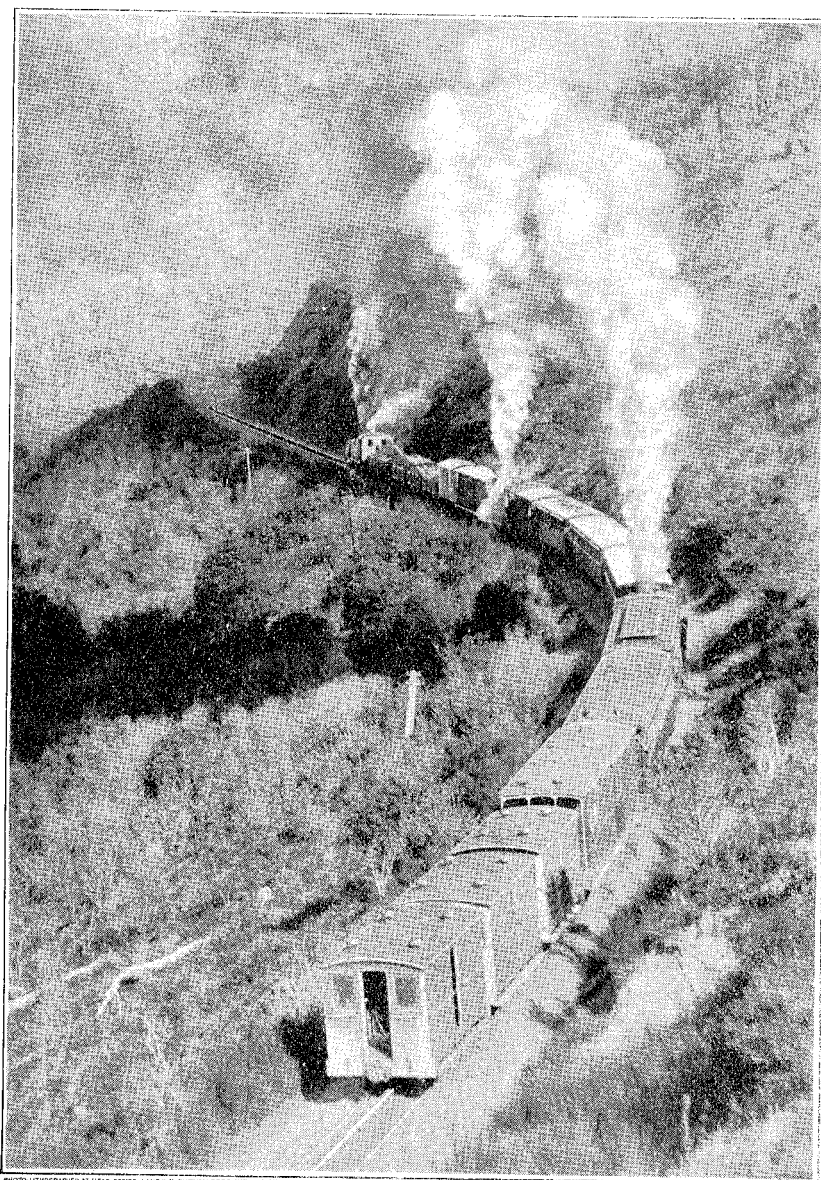


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z. 1895.

Rimutaka Incline, Wellington-Napier Railway.



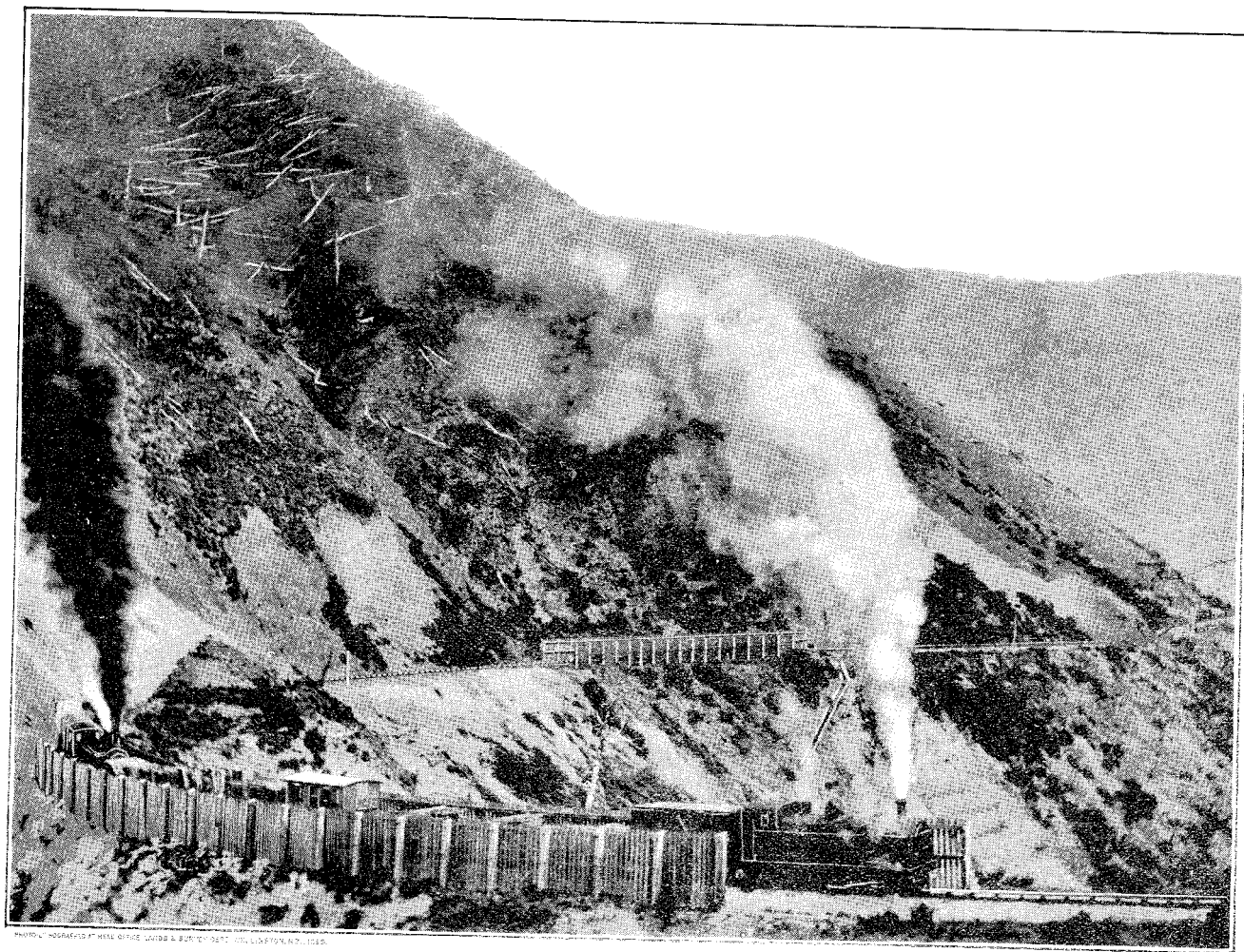


PHOTO. "HOSKING" HILL OF THE "HILL" & "HILL" HILL, N.Z. 1910.

Rimutaka Incline, Wellington-Napier Railway.



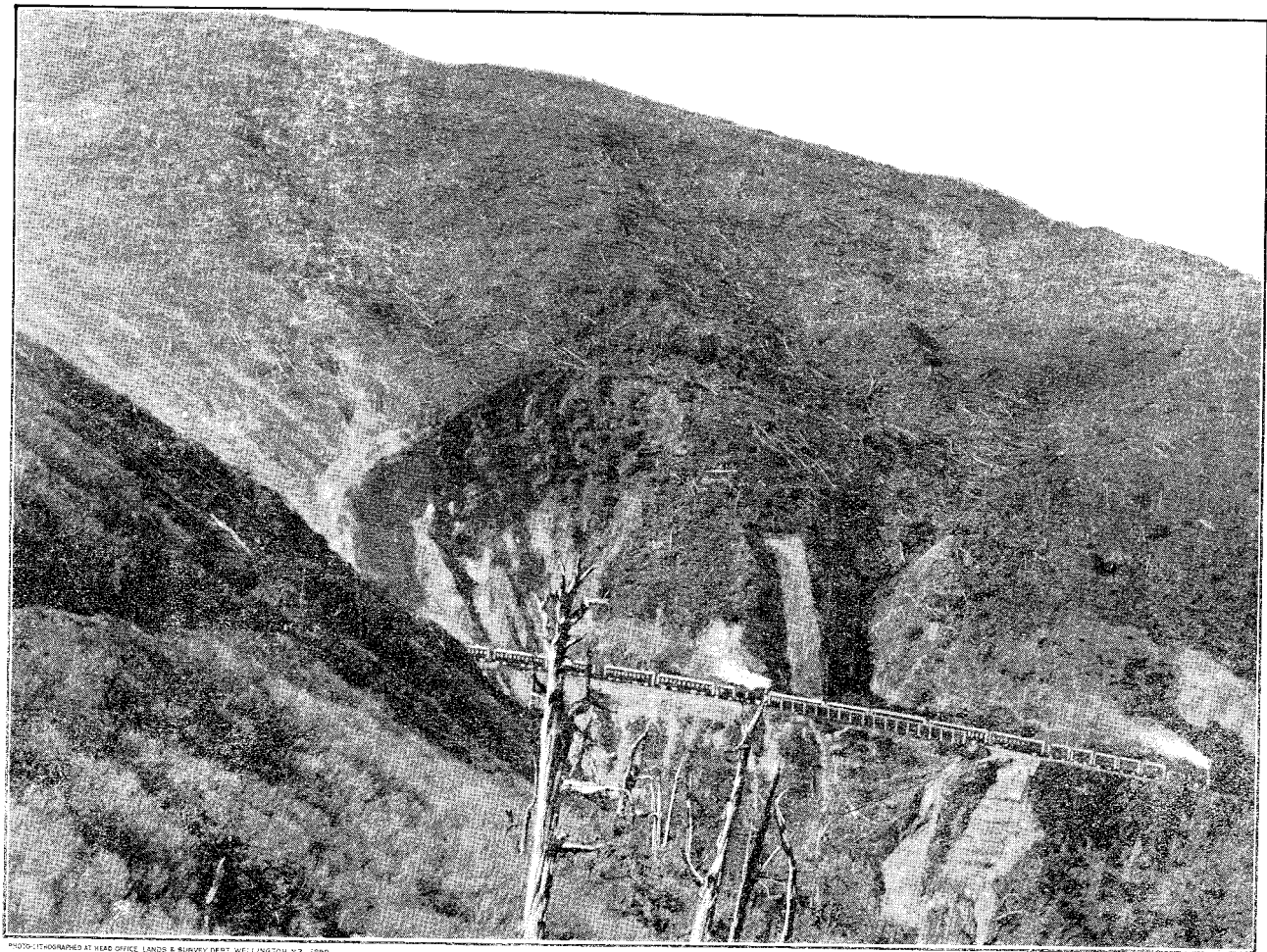


PHOTO: ITAOKI TAKAHASHI AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1999.

Wellington-Napier Railway,  
Rimutaka Incline.



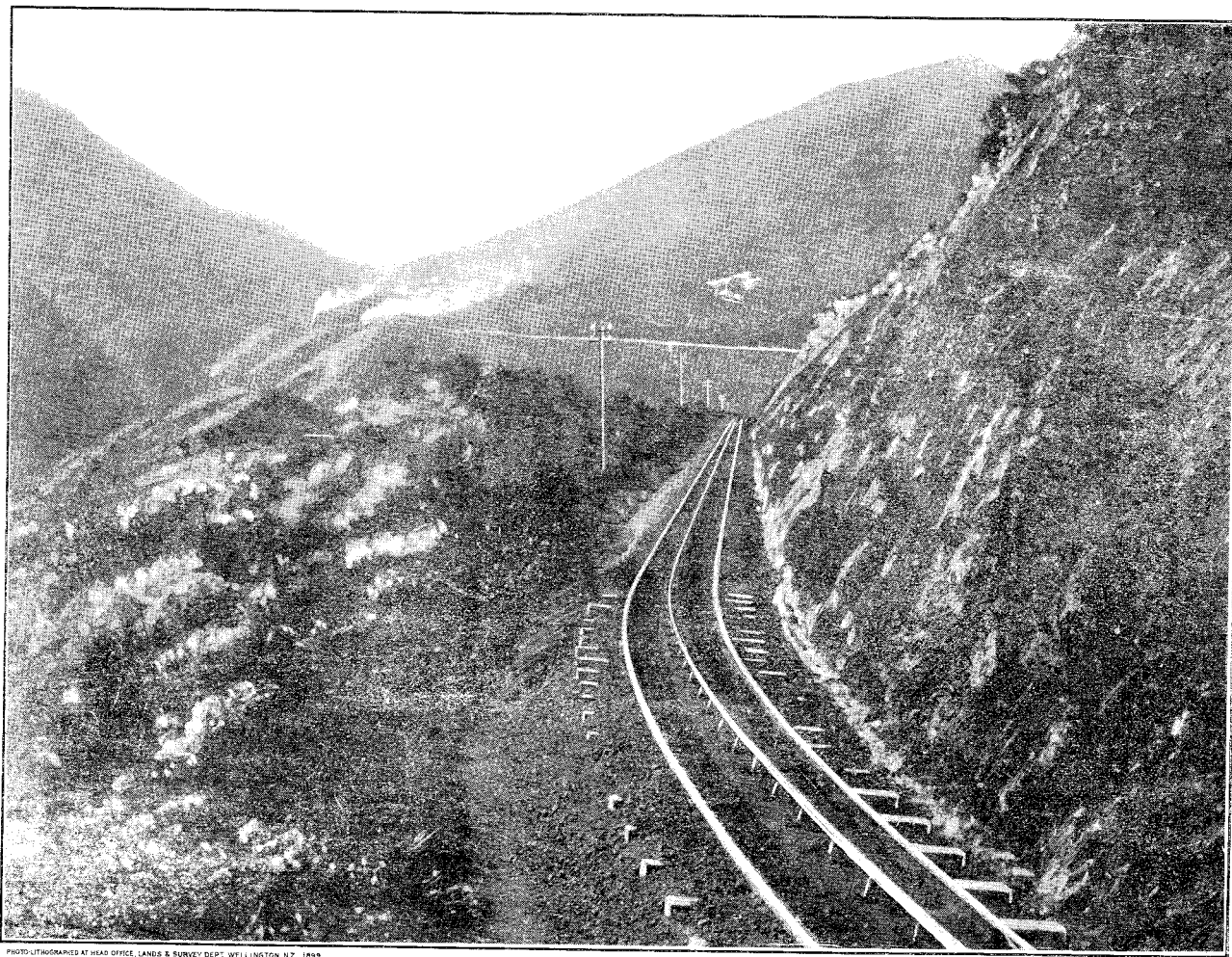


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1899.

Wellington-Napier Railway,  
Rimutaka Incline.





PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1895.

Rimutaka Incline, Wellington-Napier Railway.



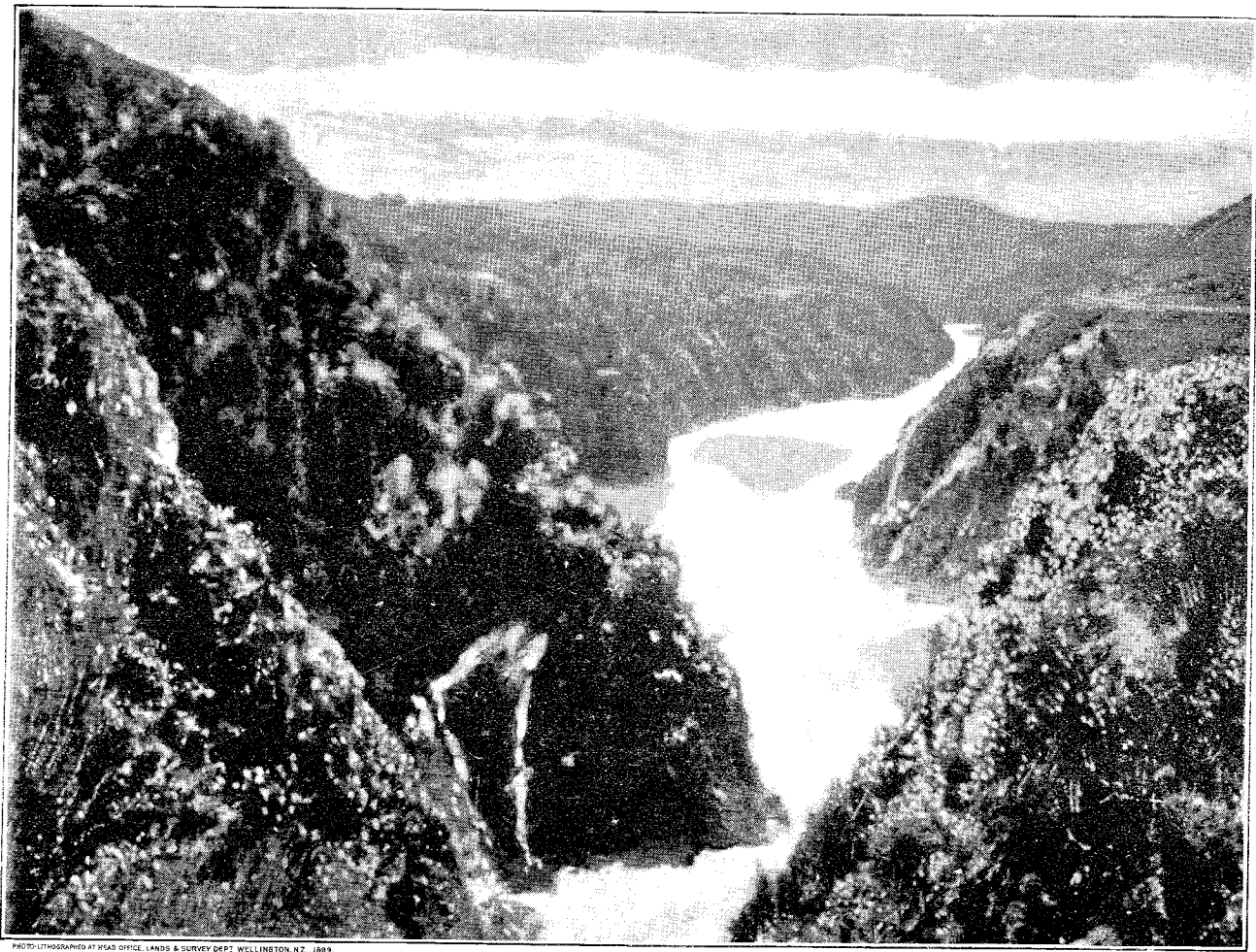


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT WELLINGTON, N.Z., 1889.

### Midland Railway.

View looking up Waimakariri River from Staircase Gully, about Ten Miles from Springfield.



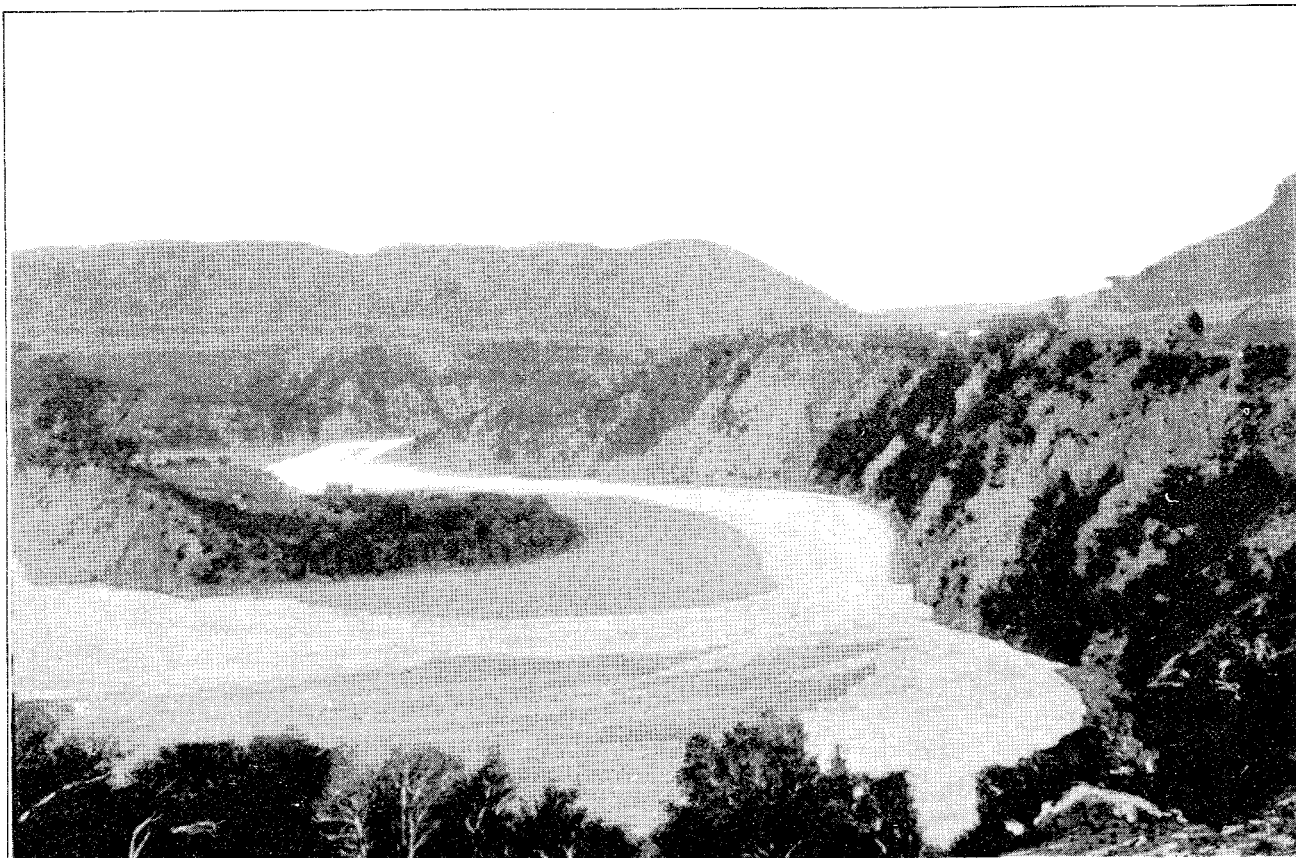


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z. 1899.

### Midland Railway.

View of Waimakariri River, about Seven Miles and a Half from Springfield.



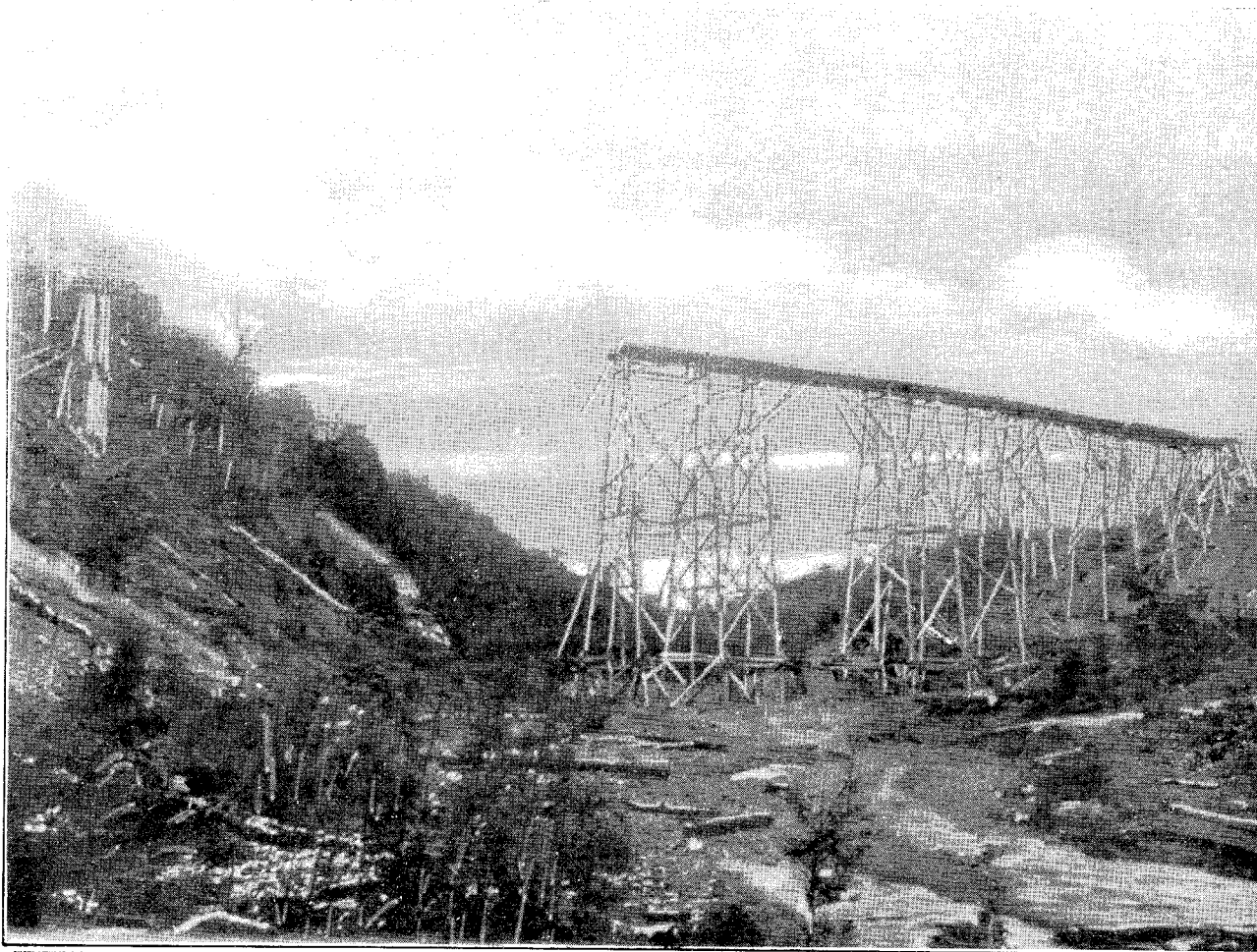
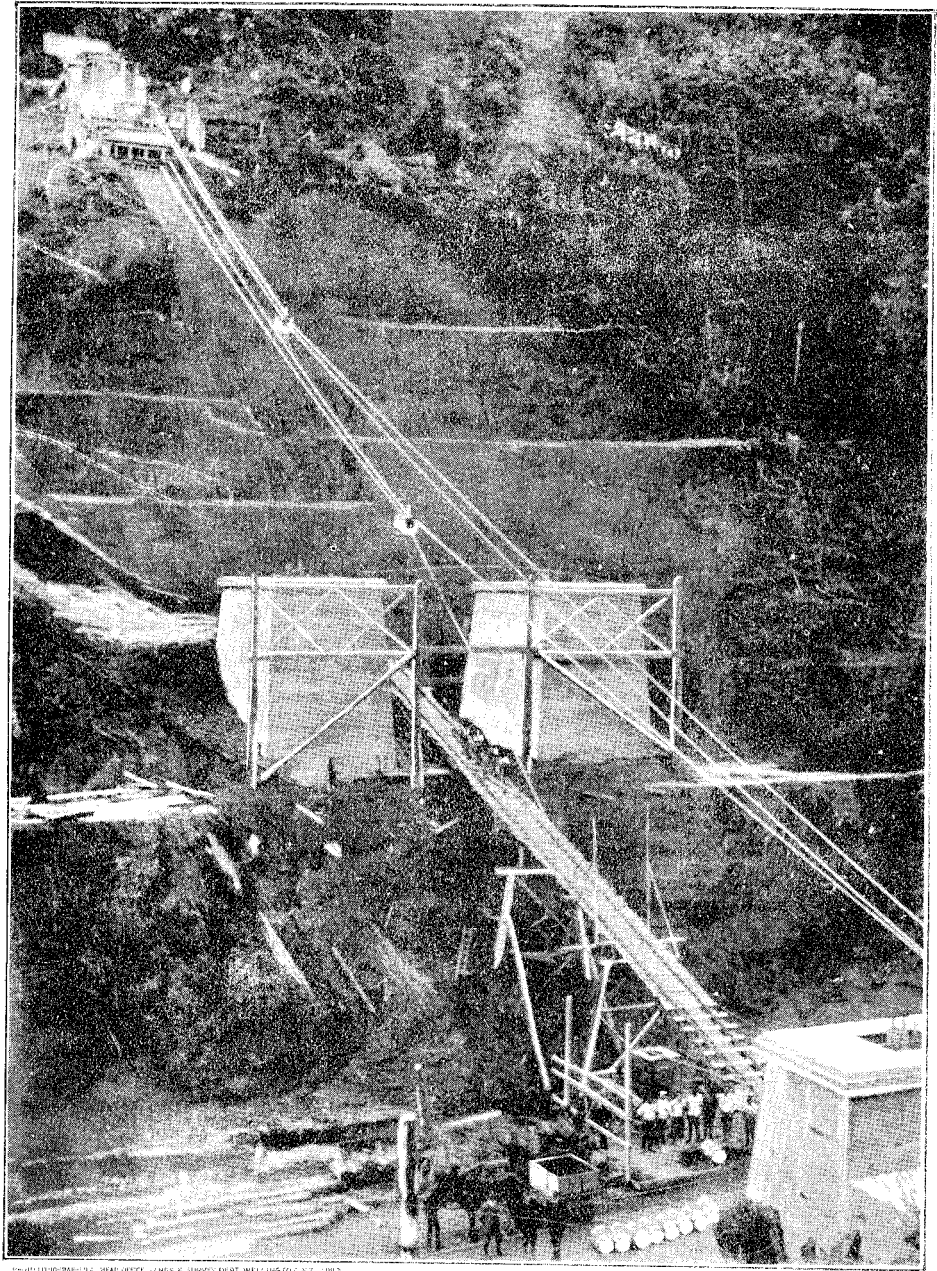


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1899.

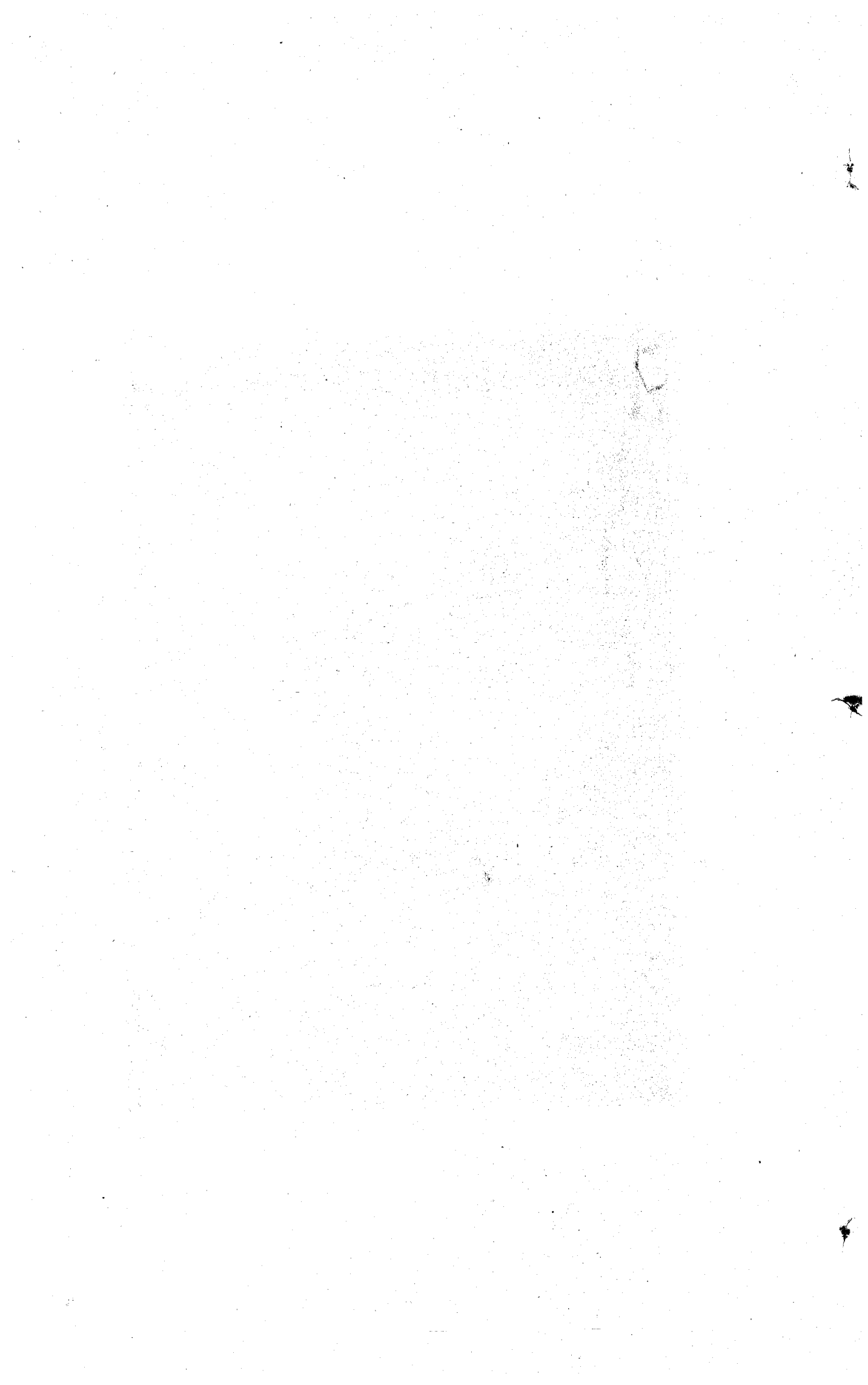
### Midland Railway.

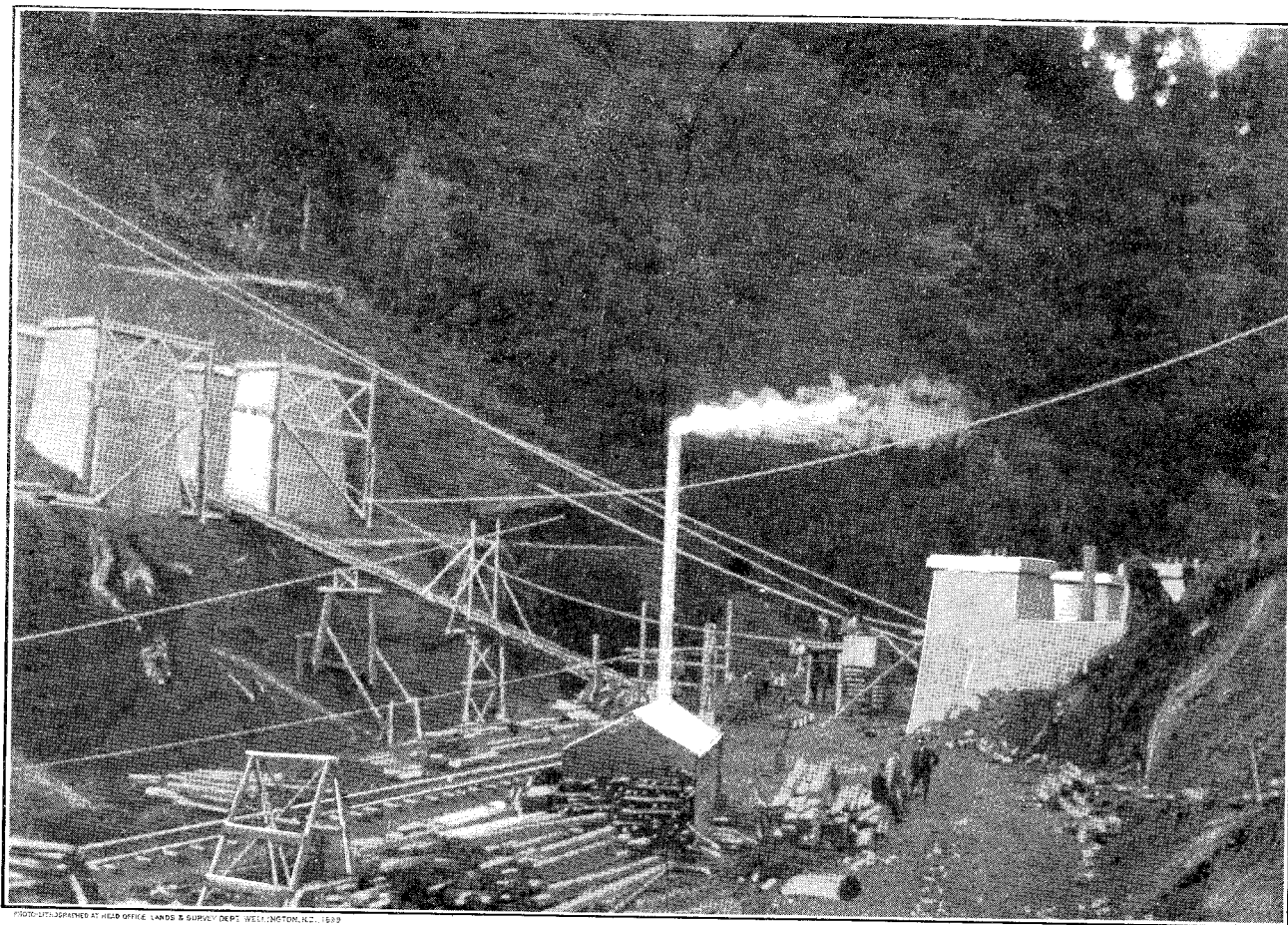
Ruins of Temporary Viaduct over Patterson's Creek, about Six Miles from Springfield.





Foundation Piers of Makohine Viaduct.  
North Island Trunk Railway.





PHOTOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT., WELLINGTON, N.Z., 1919

Foundation Piers of Makohine Viaduct.  
North Island Trunk Railway.



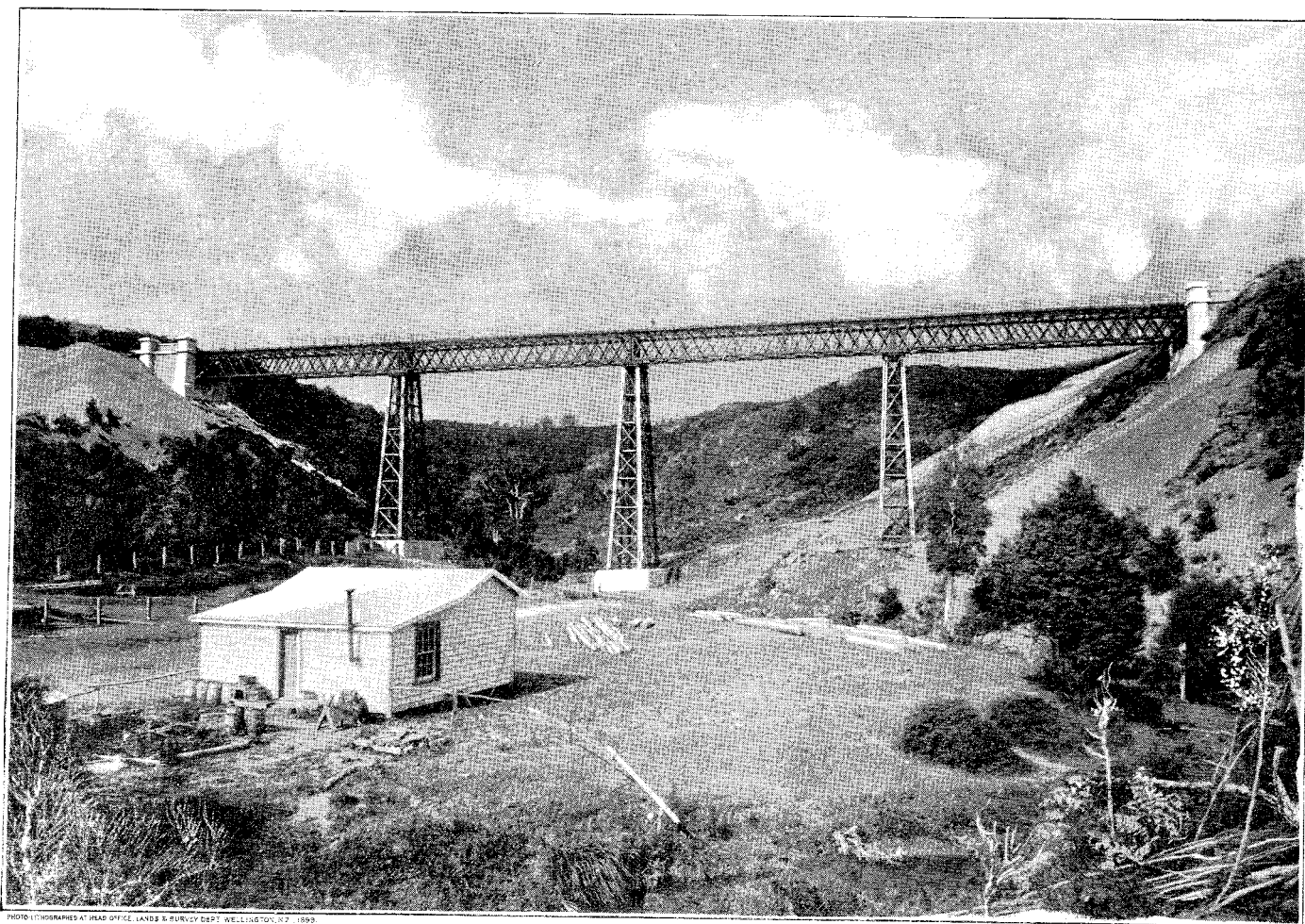
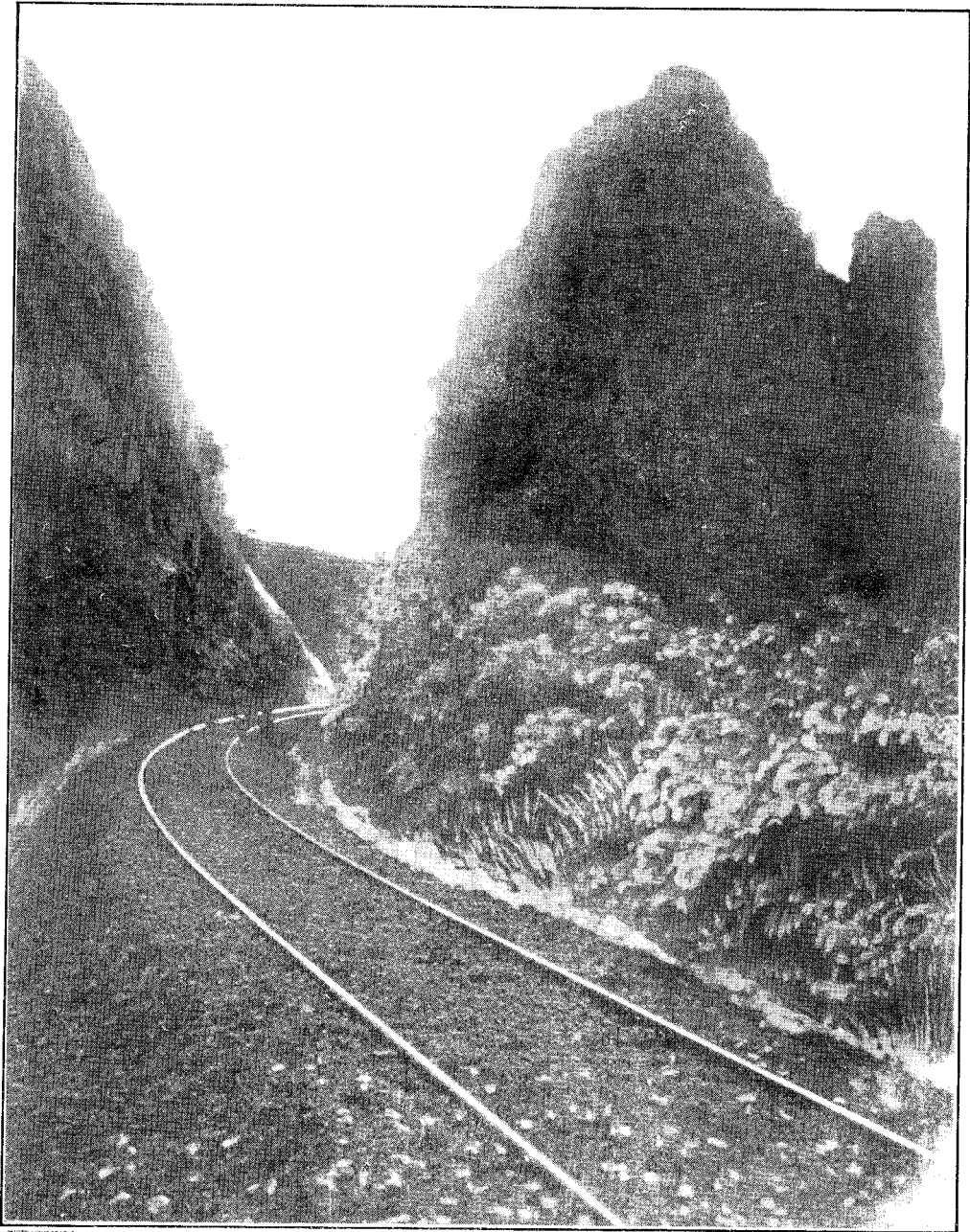


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1899.

Waitara Viaduct, from West Side.

4 spans of 160 ft. R.R. level 218 ft. above sea level.





PHOTOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1899.

Waterfall Cutting, Mokau Section, North Island Trunk Railway, 1899.



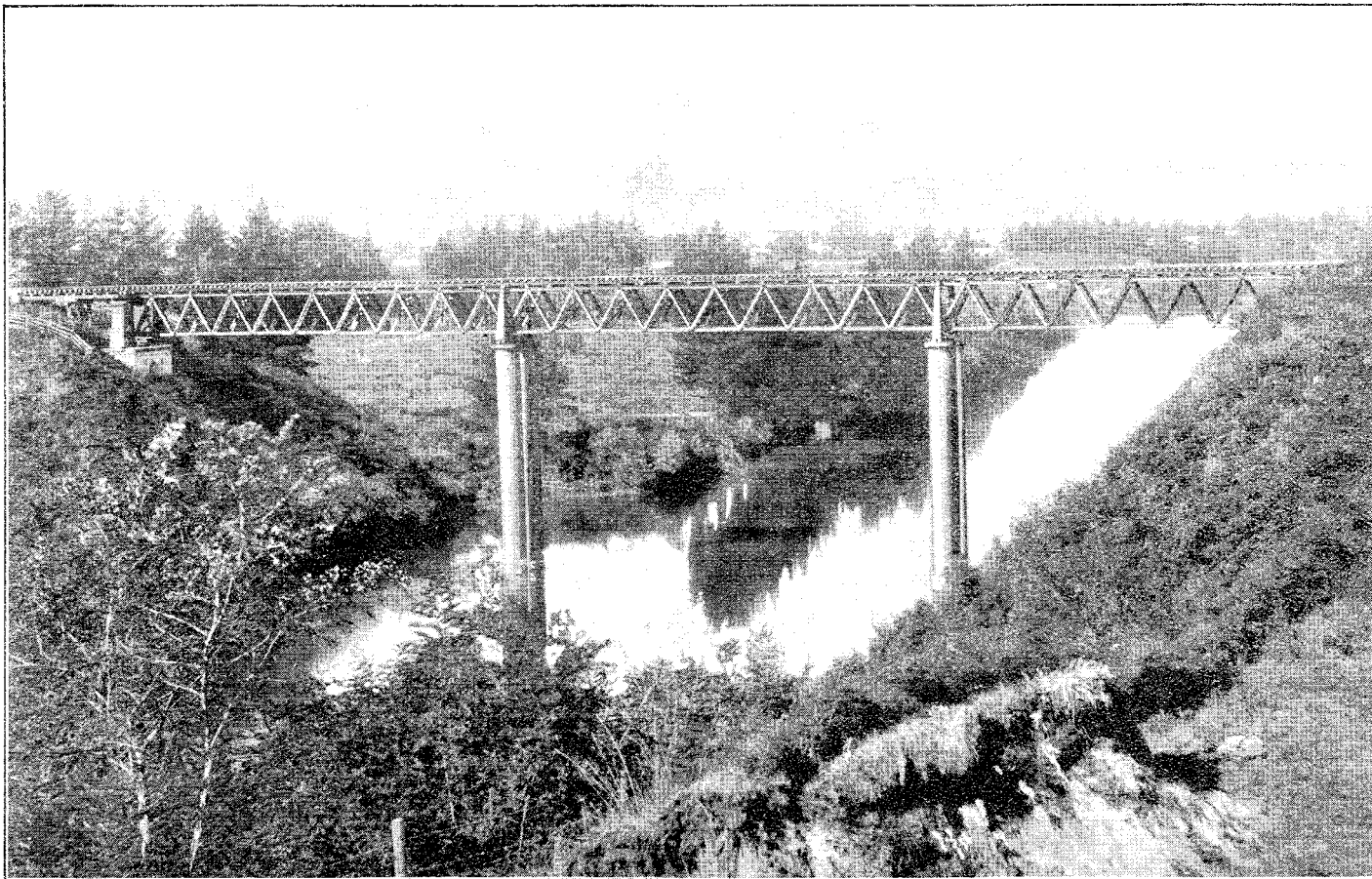


PHOTO LITHOGRAPHED BY HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1939

### Waikato-Thames Railway.

Bridge over the Waikato River. Three Spans of 132 ft. and Four Spans of 20 ft.  
100 ft. from Rails to Bed of River.



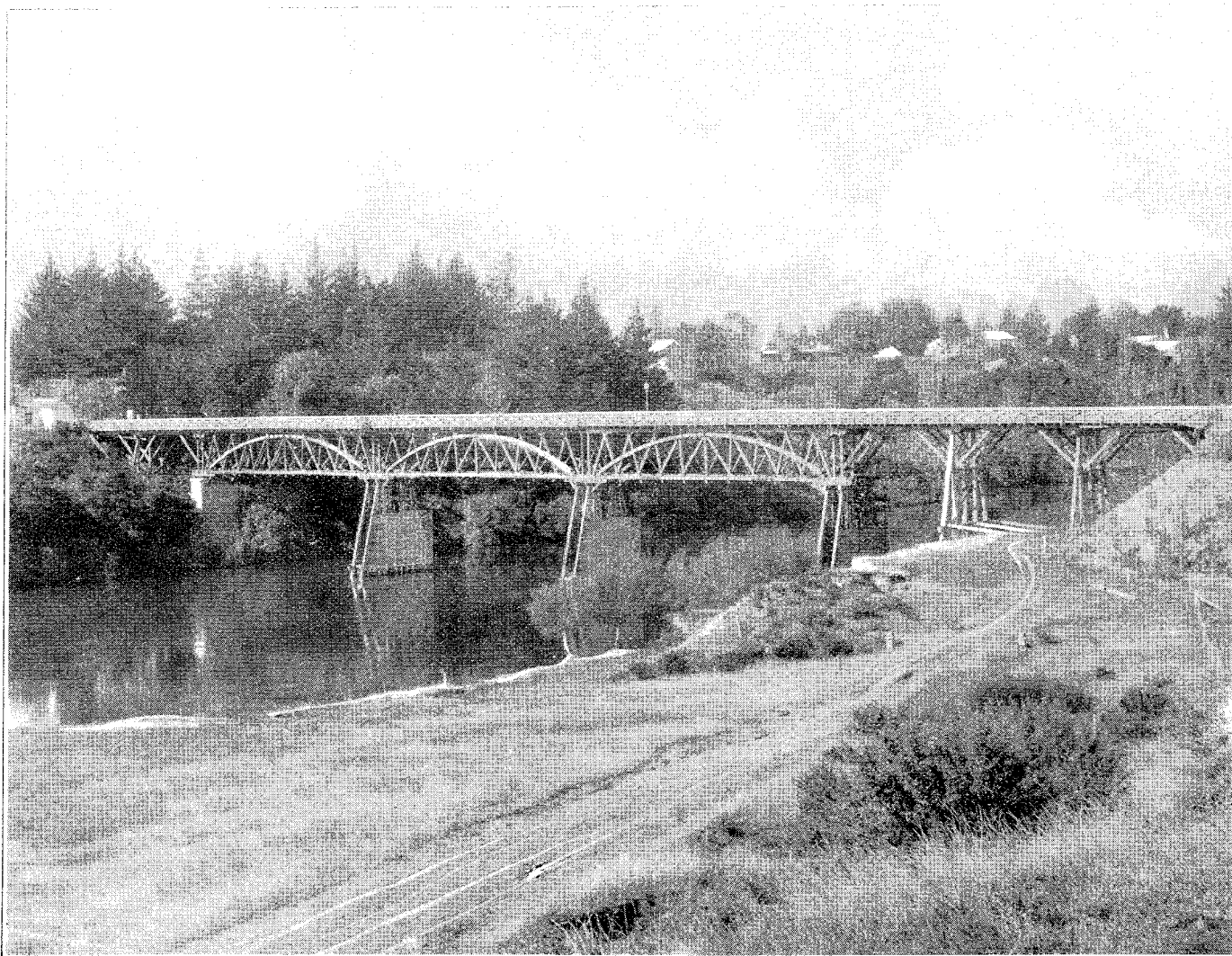
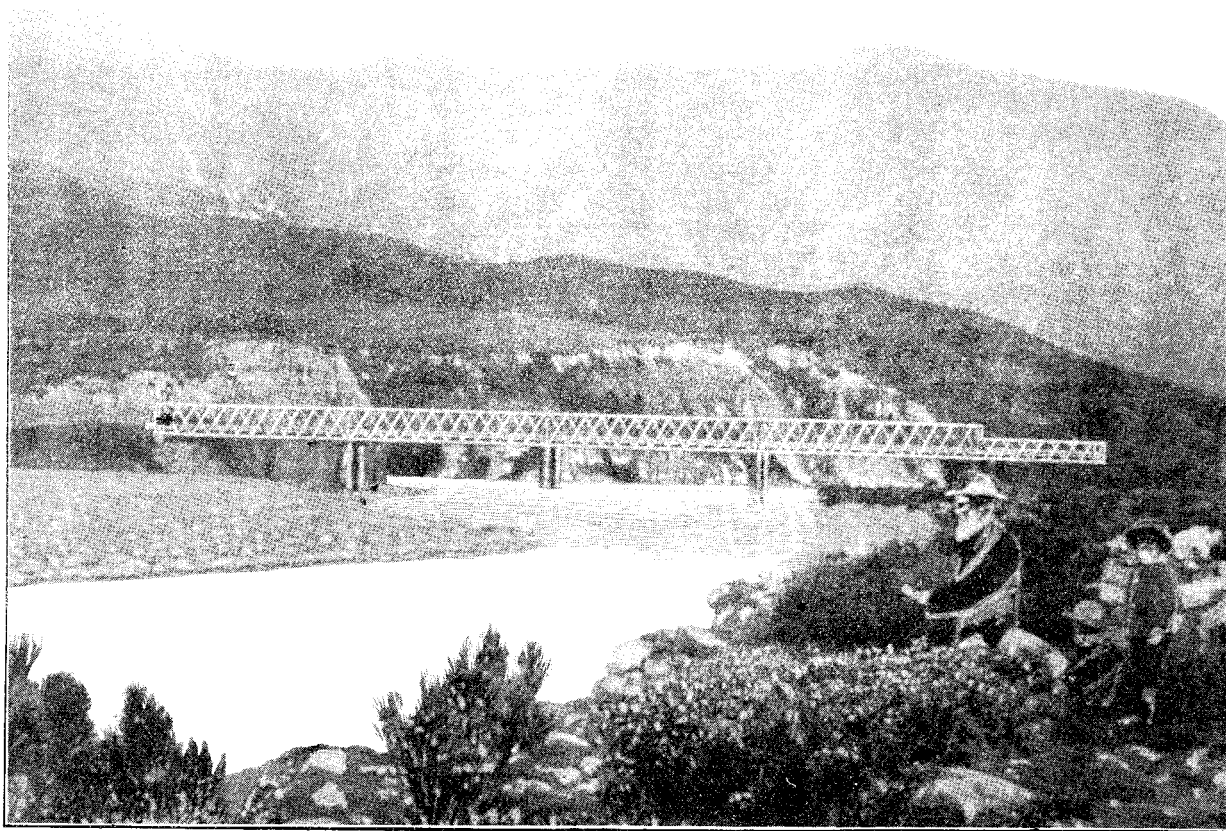


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT., WELLINGTON, N.Z., 1899.

Hamilton Traffic-bridge, Waikato River, from the West Side. April, 1899.  
3 spans of 100 ft. and 5 spans of 40 ft. Road-level 70 ft. above river-bed.





Picton-Hurunui Railway.

Combined Road- and Railway-bridge over Clarence River. Four Spans of 120 ft. and Span of 60 ft.



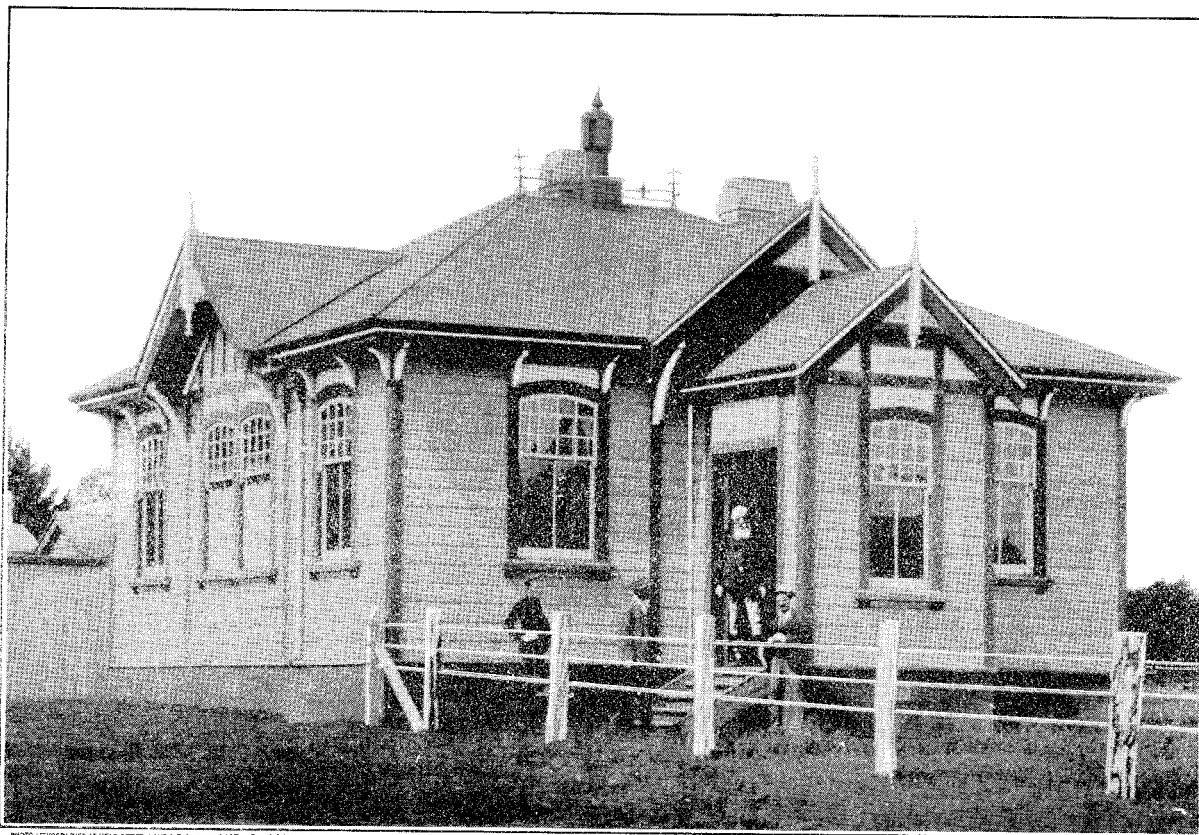


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1895.

Featherston Courthouse, erected 1896.



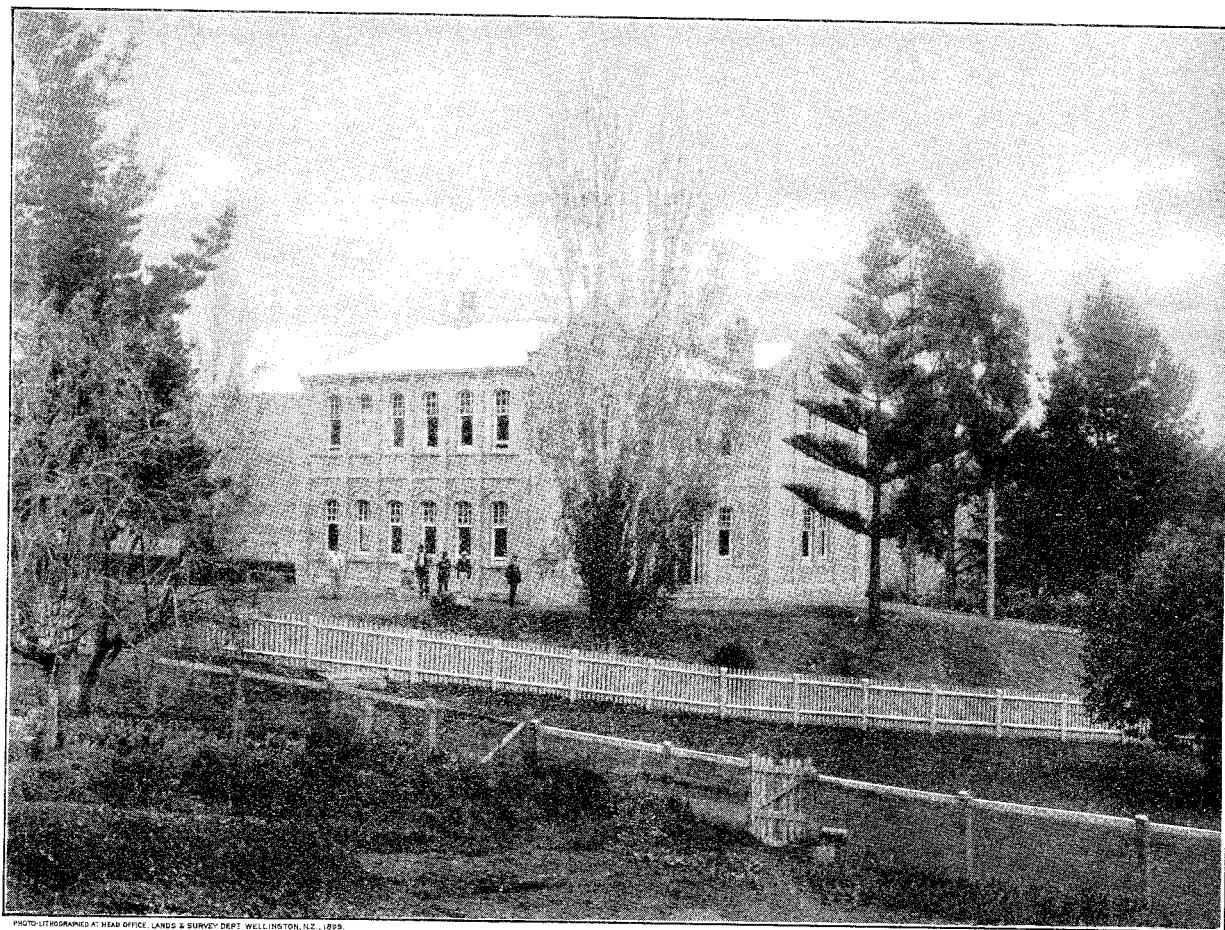


PHOTO LITHOGRAPHED AT HEAD OFFICE, LANDS & SURVEY DEPT. WELLINGTON, N.Z., 1899.

Nelson Auxiliary Asylum, erected 1898.

