1933.

VICTORIA.

# COUNTRY ROADS BOARD.

# TWENTIETH ANNUAL REPORT

FOR YEAR ENDED 30TH JUNE, 1933.

PRESENTED TO BOTH HOUSES OF PARLIAMENT PURSUANT TO ACT No. 3662.

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# TWENTIETH ANNUAL REPORT.

Exhibition Building,
Carlton, N.3,
10th November, 1933.

*The Hon. J. P. Jones, M.L.C.,*
*Minister for Public Works,*
*Melbourne, C.1.*

SIR,

In compliance with the requirements of Section 96 of the Country Roads Act (No. 3662) the Board has the honor to submit to you for presentation to Parliament the Annual Report of its proceedings for the financial year ended 30th June, 1933.

## FINANCE.

Motor registration fees, which constitute the Board's principal source of revenue, increased during the year by £96,603. Owing to additional demands on account of the extended mileage of main roads and state highways, the amount expended on maintenance was £823,391 as compared with £647,422 for the previous financial year.

Under the Federal-aid roads agreement the total amount received was £332,088 representing an increase of £54,279. Developmental projects of considerable importance to the State and to the settlers, particularly those settlers isolated from the main arteries of traffic, were carried through to completion during the year.

Works involving the expenditure of loan moneys on declared main and developmental roads had again to be considerably curtailed. From the loan authorization passed by Parliament and intended to be expended over a five-year period from the 1st July, 1925, an amount of £115,767 was expended during the year, leaving a balance of £251,443 available from this source.

It is felt by the Board that the time has now arrived when the expenditure of additional loan moneys beyond the existing authorization under the Country Roads Act should cease, and that the cost of construction of roads and bridges should be paid from other sources.

Under the Federal-aid roads agreement the Board has been enabled to carry out work of great importance, and thus materially assist Shire Councils in constructing roads that open up and develop first class agricultural and dairying areas without cost to the ratepayers.

The provision of unemployment relief funds has also been of great value in augmenting the programme of works, £183,591 having been expended from that source during the year.

An examination of the financial statements for last year indicates that the Country Roads Board Fund was applied as follows :—

1. In payment of interest and sinking funds on loan moneys expended in road construction.
2. Maintenance of main roads and State highways.
3. Cost of materials, stores, &c.
4. Administration expenses.
5. Cost of administration under the Motor Omnibus Act.

Comparing the expenditure by the Board under all headings with that of the previous year, an increase of £664,519 is shown, representing 69%.

## STATE HIGHWAYS.

When the Country Roads Board was constituted in 1913 only short sections of what are now State highways were fit to be used by traffic. The legislation then existing provided for the declaration as main roads of such roads as were considered by the Board to be of sufficient importance to be main roads. Recognizing that the prime object of that legislation was the construction, restoration and maintenance of the principal traffic-bearing arteries of the State, the Board included in its initial programme of works the construction of sections of main roads between important towns to enable settlers to reach the railway. Amongst these may be mentioned lengths of what are now known as the Prince's Highway between Darnum and Moe, sections between Morwell and Traralgon and Drouin and Warragul, and a section of the Hume Highway from Benalla to Glenrowan. Realizing, however, the necessities of the Gippsland district where the settlers were unable to reach railway or market during the winter months on account of bad roads, and where in many instances no roads of any kind existed, the Board made determined efforts to build main roads for these settlers, and in co-operation with the Shire Councils many roads were constructed, which, under the restricted application of the legislation then in force, could only come under the category of main roads, of which half the cost was required to be paid by the Shire Councils. Reference to the map of Victoria appearing in the Board's First and Second Annual Reports for the years ended 30th June, 1914, and the 30th June, 1915, will show the present State highways included amongst the first declared main roads.

As the amount available for expenditure on construction at that time was limited to £400,000 per annum during the first five years, the Board was precluded from making as much headway with construction works as was felt to be necessary, but, with the passing of the Developmental Roads Act in 1918, under which loan provision was made for the construction of developmental roads, and the enactment of the Highways and Vehicles Act in 1924, providing for the declaration of State highways and the maintenance thereof to become the sole responsibility of the Board, the financial responsibilities of municipalities for future works were considerably eased, resulting in tremendous progress being made in road construction works throughout the State.

From that time, a programme of works for restoring and improving State highways has been drawn up each year, and with the increased annual revenue derived from motor taxation, these roads have now been placed in a condition capable of carrying traffic at all seasons of the year.

Within the past four years, marked progress has been made in the construction and improvement of the State highways. It is claimed that the average types of road being built to-day should, with adequate maintenance, have a considerably longer life than those roads constructed at much greater cost at that period when motor traffic was in its infancy in this State. A noticeable feature along the highways, which is apparent even to the casual observer, is the erection of up-to-date residences, the improvement of farm buildings, and the clearing of land which hitherto has not been put to profitable use.

As indicated in previous reports, the improvement and maintenance of State highways is executed in general under the direct supervision of the Board. This work has now advanced to a stage where it can be stated that with the exception of unmade sections of the Murray Valley Road, which were only recently declared part of the State highway system, it has been completed to a standard adequate to the present traffic needs. This improvement, which has been gradual and progressive, has been effected entirely with funds provided out of revenue.

The length of State highways was added to during the year by the declaration of 783 miles. This mileage includes the main road between Geelong and Ballarat, which, with the roads between Benalla and Shepparton, and from Benalla to Maindample, is now known as the Midland Highway, the total length of which is 114 miles, the Murray Valley Highway from Corryong to the South Australian border, covering a length of 513 miles, 83 miles of the South Gippsland Highway, from Dandenong to Nyora, and from Sale to Yarram, and 73 miles of the road between Orbost and Delegate, N.S.W. as far as the border, known as the Bonang Highway.

With these additions, the total length of State highways brought under the provisions of the Country Roads Act is 2296 miles.

In general, methods of improvement and restoration have been on the lines adopted in previous years. Where suitable local gravel is available, extensive use has been made of it, and in other instances, when proved to be economical, fine crushed rock has been utilized. Works of reconstruction were primarily carried out with the object of reducing maintenance costs and for the provision of increased safety. The widening of pavements, benching of curves, and the sealing of gravelled surfaces constitute the major operations under this heading.

Experiments made by the Board in constructing and restoring roads at low costs have strikingly illustrated the fact that adequate and efficient roads can be built, which are capable of giving excellent service for many years.

They have also proved that effective surfaces of cheap local materials can be secured at a cost as low as £650 per mile for a road 18 feet wide, with subsequent reduction in maintenance costs. There is, however, still a wide field for development in methods, materials and plant now used or that may be used in future in constructing and maintaining low-cost roads.

The interest taken in these experiments has been far and wide, as representatives of road authorities of other States have, from time to time, visited Victoria to investigate the methods employed by the Board.

The total length of State highways restored under this system is 516·9 miles, representing 22·7% of the total. In continuing the system of progressive stage development, and finally surfacing these roads with tar and bitumen, it has been proved beyond doubt that the cost of maintenance is being materially reduced, although traffic has increased.

From the results obtained it can definitely be asserted that considerable economy has been effected, a suitable road capable of carrying all normal traffic has been provided, smooth surfaces have been secured, and the important result to the road user is that the operating cost of his motor vehicle has been reduced.

The more general use of fine crushed rock, which has been found to be eminently satisfactory even when subject to heavy traffic, has been an important factor in reducing construction costs. With a depth of 2½ inches only on a poor sub-grade, roads constructed with this material are carrying traffic without showing any signs of failure. The total length of formation treated in this way during last year was 20 miles.

To construct a road suitable for the needs of both motor vehicles and horse-drawn traffic, is a difficult problem for the road constructing authority. For the average country traffic carried on pneumatic tires, a pavement of the type already described is sufficient, but where subjected to heavy loads conveyed on horse-drawn vehicles fitted with iron tires, it is necessary to substantially strengthen the pavement. It is therefore obvious that in the case of lightly-constructed roads carrying iron-tired traffic, the cost of maintenance is considerably increased. For that reason the Board has been compelled to take action under its legislation to reduce the weight carried on horse-drawn vehicles over certain roads for the purpose of protecting the surfaces against excessive damage.

Where economy can be shown, the aim of the Board is to continue its road surfacing operations by mechanical means in place of hand methods previously employed.

The superiority of the machines over the old system is already manifest in the higher standard of work completed at much less cost. With the use of mechanical sprayers, greater areas of the road have been treated and the bituminous material more evenly distributed, resulting in better riding qualities and considerable saving in the cost of maintenance.

Full particulars of the work carried out with the Board's spraying plant are set out in the report of the Chief Engineer.

In the Board's last Annual Report, emphasis was laid on the necessity for continuous maintenance of roads. The success of the low-cost type of road is dependent upon its being systematically and regularly maintained, attention given to drainage, the application of additional surfacing material at the right time, proper shaping of the surface, and, in the case of gravelled roads not treated with tar or bitumen, frequent dragging in order to maintain a satisfactory surface.

Owing to the great variation in the quality of gravels found in different localities, maintenance costs vary according to the district in which roads of this type are constructed. For instance, in one district where first-quality gravel is obtainable the material can be spread direct from the pit on to the road bed, but in other districts where the deposits of gravel are of a less cementitious nature or of poor grading it is necessary to add other suitable material, in which case the cost of construction would necessarily be increased. It is essential that gravelled roads, in common with all other types of roads, should be well graded, constructed to an adequate width, and satisfactorily drained.

Maintenance organization is one of the most important features in any highway system. On the State highways, the maintenance is carried out by patrolmen who are supplied with motor trucks or horses and drays.

By the employment of skilled men and the use of a motor truck, a length of from 40 to 60 miles of bitumen-treated road can be efficiently maintained, and in the case of untreated gravelled roads, maintenance is attended to by one man working with a horse and dray over a length of from 6 to 10 miles. In this way, the responsibility for the condition of a particular section of road is fixed on the man employed on that section, resulting in the road being safeguarded from erosion and kept up to a proper standard by attention at the proper time.

During last year, maintenance works extended over a length of 1677·2 miles of the State highways.

The usual practice of taking a census of traffic on the State highways during the months of August and February was followed during the year. Valuable information is thus obtained, which forms a basis on which the highways may be designed for the traffic they will be expected to carry. The census of traffic taken by the Board on the State highways in February last discloses that the percentage of horse-drawn traffic is still slowly decreasing, and that the percentage of solid rubber-tired vehicles is also diminishing.

This census proved of considerable value in drawing up the programme of works for the following financial year on the newly-declared State highways. For instance, it was previously considered that it would be economical to seal the Benalla-Mansfield section of the Midland Highway, but in view of the results indicated by the census, it was found from an economical standpoint that only the sections of roadway immediately adjacent to Benalla and Shepparton should be sealed at present.

As pointed out in previous reports, the building of first class pavements for light traffic cannot be justified when low-cost roads can be built to a serviceable standard and economically maintained. According to the volume, nature, and density of traffic, existing roadways can be strengthened or the design modified or adjusted from time to time by increasing the thickness of the wearing surface, and when required, a coat of bituminous material can be applied. With a pavement thus strengthened the cost of construction and maintenance is made proportionate to the importance of the traffic to be served, and an excellent riding surface capable of bearing the heaviest type of traffic is secured. With surfaces of this type, maintained to the required standard, impact is reduced to a minimum, resulting in less wear and tear to the road, and at the same time a considerable economy is effected in vehicle operating costs.

The total amount expended on State highways for the year was £423,150. £2,925 was provided from Unemployment Relief Funds on constructing a section of the Murray Valley Road between Walwa and Burrowye, supplemented by £804 from the Country Roads Board Fund for cost of materials, £3,151 was provided from Federal funds for completing new bridges on the Prince's Highway at Dartmoor and Swan Reach, and £416,270 from the Country Roads Board Fund for restoration works costing £318,775 and general maintenance involving an expenditure of £97,495.

A considerable amount of work was done during the year on the Murray Valley Highway extending from Corryong to the South Australian border, which was declared a State highway in September, 1932. In continuation of the work done in previous years, stage construction was carried out over a length of 46·7 miles. The improvements effected have thus raised the road to such a standard that the portions from Echuca to Piangil on the west, and from Yarrawonga to Corryong on the east, are now trafficable throughout the year.

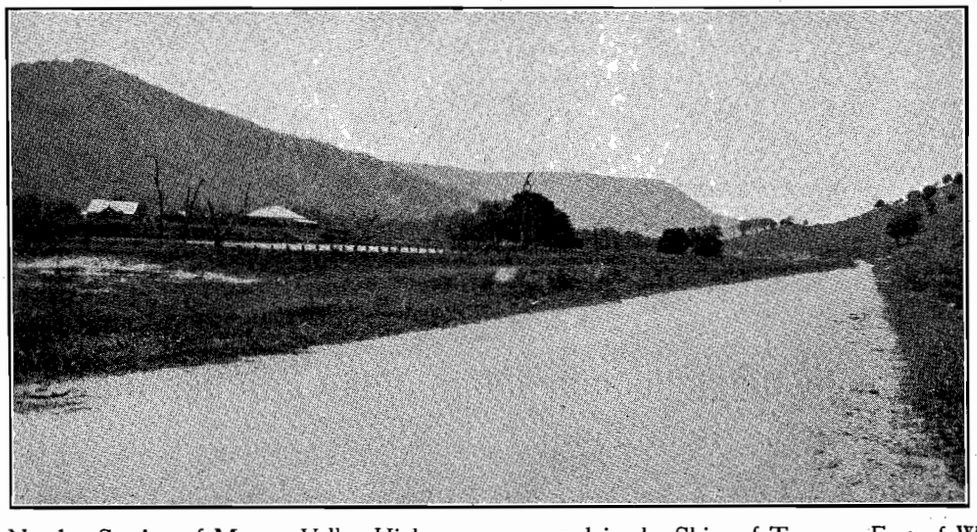


Plate No. 1.—Section of Murray Valley Highway constructed in the Shire of Towong, East of Walwa.

The importance of this highway, which was stressed in the last Annual Report of the Board, has already become apparent by reason of the rapid development taking place on both sides of the river. With such important towns as Wodonga, Rutherglen, Yarrawonga, Cobram, Echuca, Cohuna, Kerang, Swan Hill and Mildura linked up by a highway and served by developmental roads from extensive agricultural areas, incalculable benefits must accrue to the producers and the State.

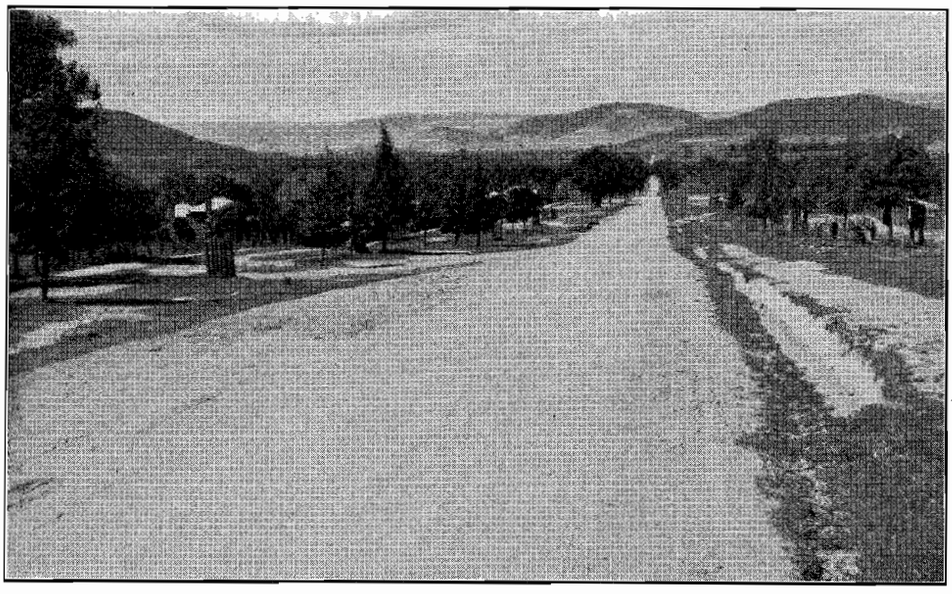


Plate No. 2.—Murray Valley Highway at Corryong.

Prior to the declaration of the Murray Valley Highway, the bad condition of sections from Echuca and Swan Hill prevented winter traffic between those towns. Formations constructed and consolidated in 1932 were sheeted to a consolidated depth of $2\frac{1}{2}$ inches with fine crushed rock obtained from Pyramid Hill. This method has proved quite satisfactory, as no surface failures have occurred. The road has been the means of providing for the transport of cream supplies, perishable goods and general stores at all seasons of the year.

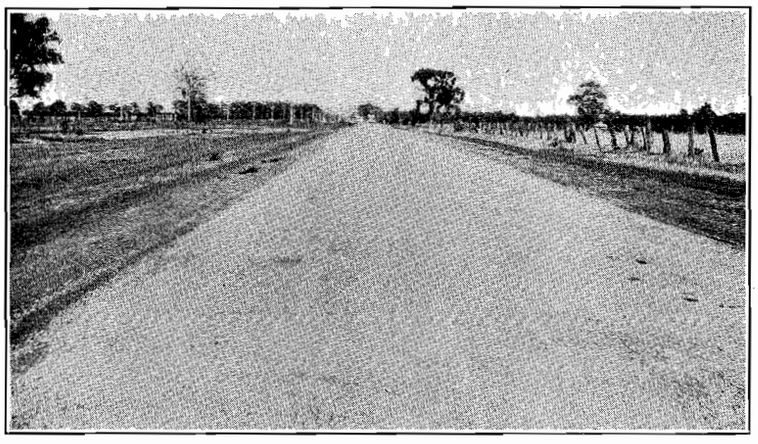


Plate No. 3.—Showing constructed section of the Murray Valley Road, between Kerang and Cohuna.

Between Piangil and Hattah where traffic is light, general maintenance of constructed lengths has been carried out to enable traffic to use the road as soon as possible after heavy rain.

On the eastern side of Wodonga improvements were effected under day-labour conditions to the Murray Valley Highway by widening on a new alignment the road length between Burrowye and Walwa. In addition, three new timber bridges and approaches across the Kiewa river flats were completed, adding considerably to the utility of the highway.

On the Northern Highway, between Bendigo and Echuca 3·31 miles were re-shaped, re-sheeted and later sealed, whilst 9·76 miles were re-conditioned and sealed.

The section which was formerly a main road within the Huntly township was declared as part of the Northern Highway. Maintenance re-sealing was completed over a length of 12 miles.

Extensive works comprising re-sheeting and sealing where necessary were carried out on the Calder Highway between Bendigo and Wycheproof. From Wedderburn to Wycheproof 2·60 miles were re-shaped, re-sheeted and sealed, 11·82 miles were re-conditioned and sealed and re-sheeting over a length of 2·81 miles was completed with a view to ultimate sealing.

Between Wycheproof and Mittyack sections of the road, originally partly constructed with marl, were re-sheeted with limestone rubble. From Mittyack to Trinita, low-lying portions which became boggy in winter were sheeted with limestone rubble, and unformed sections which were a serious hindrance to traffic during the summer through sand drifts were formed. It was noticeable that during last summer, drivers of wheat waggons, which in the past required the same team to draw the load from the farm to the railway station, now reduce the size of the team as soon as the highway is reached.

The sandy sections of the Calder Highway from Trinita to Red Cliffs, which caused most trouble during the summer, were formed, graded and sheeted with limestone. Regular maintenance by patrolmen has greatly improved the surface and added to the life of the road.

Between Castlemaine and Bendigo the maintenance costs were becoming increasingly high, as a large proportion of the road which was reconstructed and sealed nearly 20 years ago had become rather narrow for the greatly increased traffic. As a measure of economy, it was decided to reconstruct this length and an experimental section of 2 miles of the existing sealed road was widened, super-elevated and re-sheeted to an average depth of 4 inches of loose granitic sand obtained from the road reserve. It is anticipated that an excellent road will result when sealed.

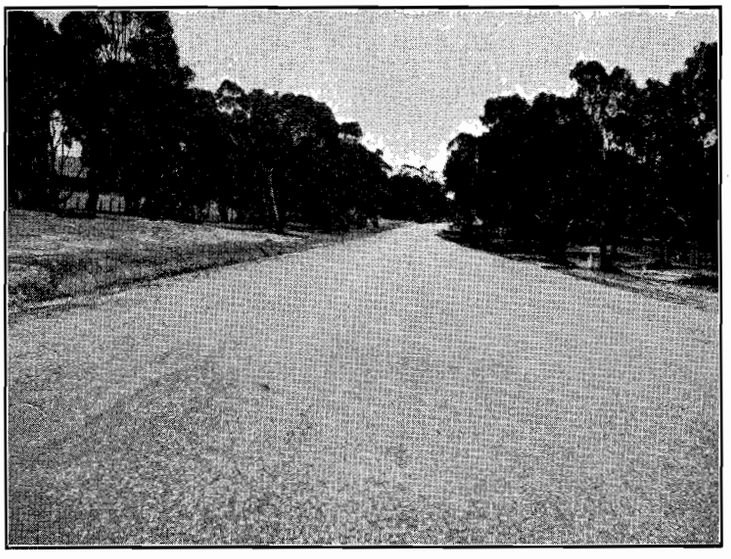


Plate No. 4.—Granitic sand pavement on Calder Highway between Castlemaine and Bendigo.

Re-sealing of various sections of the highway under maintenance conditions was carried out over a length of 10 miles.

The Western Highway between Melbourne and the South Australian border was considerably improved throughout the year by re-sealing 60 miles and extending bitumen surfacing for a distance of 5 miles.

Between Ballarat and the border 52·66 miles were re-sealed and bitumen surfacing extended by 13·5 miles.

By continuing this method of treatment it is anticipated that by the end of the present financial year the work of surfacing with bitumen the entire length of the Western Highway where considered necessary for present traffic will be completed.

Between Stawell and Horsham, a length of 7·43 miles was re-constructed in gravel. Included in the work was the removal of an old narrow bridge at Green Lake and its replacement with a modern structure, elimination of bad curves, and widening the road to the required standard.

General maintenance by patrolmen operated over 200·28 miles. Gravelling was extended on parts of the highway as indicated in detail in appendix, and a number of bad curves were eliminated. The completion of the works during last year has made this highway an all-weather road from Melbourne to the South Australian border.

On the western portion of the Prince's Highway the work of widening and restoration was continued. The length of 65·2 miles between Yambuk and Dartmoor has now been constructed with metal and gravel.

Plate No. 5.—Showing section of Prince's Highway between Dartmoor and South Australian Border preparatory to sealing.

Re-sealing with bitumen was effected over various lengths of the highway between Footscray and the South Australian border, the work extending over a length of 36·72 miles. Sections of the existing pavement were sealed over a total distance of 5·21 miles.

Progressive improvements were made, culverts renewed and repaired where necessary, and general maintenance carried out over a total of 247 miles. Details of the work accomplished are given in Appendix H.

Patrolmen carrying out systematic maintenance operated over 309·62 miles of the eastern section of the Prince's Highway. A number of culverts were reconstructed, widened or repaired, and the road generally improved to the required standard.

Bitumen surfacing was extended as far as the Township of Nicholson, thus providing a sealed road over a continuous length of 182 miles from Melbourne. Between Nicholson and Lakes Entrance the road was re-conditioned and gravelled preparatory to surfacing with bitumen during the ensuing season.

The total mileage of resealing completed during the year was 24·60 and 16·13 miles of pavement were sealed.

Details of the work done are set out in Appendix H.

Between Violet Town and Euroa and from Baddaginnie to Benalla, the Hume Highway was restored to good condition, and the whole length of the highway between Melbourne and the Murray River was kept in good order by continuous maintenance by patrolmen, resulting in considerable improvement.

17·2 miles between Somerton and Tallarook were re-sealed and sections were similarly treated between Old Longwood and Euroa over a distance of 9·15 miles.

Widening and re-sheeting between Faithfull's Creek Bridge and Violet Town was effected over 3·35 miles. Within the Benalla district 28·84 miles were primed and sealed and 29½ miles of existing pavement were re-sealed, leaving only 1¾ miles to be treated with bitumen between Melbourne and the River Murray.

An illustration of the work done is shown in Plate No. 6.

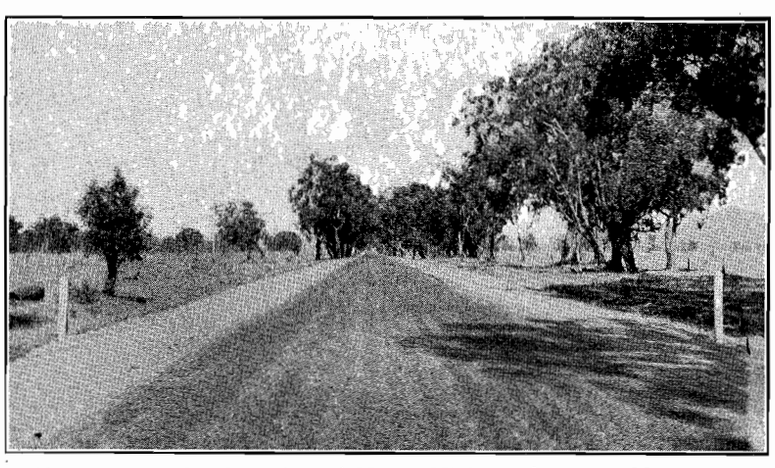


Plate No. 6.—Showing completed section of Hume Highway between Glenrowan and Wangaratta.

The first section of the Midland Highway, which comprises 48·6 miles between Geelong and Ballarat, was immediately taken in hand by improving the riding qualities throughout. By the addition of gravel, which forms part of the stage construction, a good temporary riding surface has been provided. Approximately 13 miles were re-conditioned ready for sealing early this Spring.

The Midland Highway between Benalla and Shepparton (Section 4), and from Benalla to the Maindample turnoff near Mansfield (Section 5), was greatly improved in accordance with the programme of construction and maintenance works prepared by the Board.

Section 4 was restored partly by contract and partly by day labour, resulting in an excellent surface throughout. The new pavement between Nalinga and Pine Lodge was sealed over a length of 6 miles and preparations are now being made to seal the road between Nalinga and Benalla.

On Section 5 the old surface was improved, particularly the worst portion of 3 miles at the Benalla end, which was reconstructed with local gravel.

The Omeo Highway was maintained by patrolmen and the bridge over the Nicholson River at Sarsfield was re-decked and re-conditioned.

The road between Orbost and Delegate as far as the New South Wales border, which was declared a State highway during the year, was kept in excellent order by maintenance patrol over its length of 72 miles. This highway, which is fast becoming an important Interstate route, ensures means of transport to the rail head at Orbost from settlements at Bonang, Dellicknora, and the Tubbut area, and will serve additional areas at Bendoc as soon as the lateral roads into that district have been improved.

It is interesting to report that several farmers have discontinued dairying in the Orbost district, and have since established dairy farms at Bonang, where suitable land is available at a cheap rate, as it has been found by them that it is more profitable to carry on operations on cheaper land and cart their cream into Orbost, for a distance of 61 miles over the newly-constructed road.

## MAIN ROADS.

Owing to the restricted amount of loan funds, a total of £35,052 only was expended on the construction of declared main roads, resulting in 70·6 miles of new work being added to that of previous years.

Municipal Councils were responsible for the expenditure of £34,566 of the above sum, whilst £486 was expended directly by the Board. Forty-eight municipalities participated in this expenditure, and 66 new works were carried out, details of which are given in Appendix F.

From the Federal-aid grant a total sum of £240,386 was expended, an expenditure of £10,859 was incurred out of funds provided by the Employment Council under the State Unemployment Relief Act No. 4000, and £62 was expended out of the balance of a grant made by the Commonwealth Government in 1930 for the relief of unemployment.

The methods of construction adopted in previous years were continued, resulting in marked improvement of many sections of main roads which urgently required attention. Gravelled and metalled lengths were linked up, considerable improvement was effected to roads which through the inability of the Municipal authority to maintain them had become badly rutted and worn, and many miles of roads were constructed for the development of agricultural areas and the service of settlers.

With the provision of funds under the Unemployment Relief Act an amount of valuable work was completed, and at the same time employment was provided for a large number of men. The total length of main roads completed or partially completed was 3·7 miles, in addition to the mileage constructed from loan funds.

The length of surveys made on main roads during the year totalled 43 miles.

Contracts were entered into for forming, gravelling or metalling 67·74 miles compared with 25·51 miles during the previous year.

Permanent works constructed out of loan funds covered a length of 70·6 miles as against 38·39 miles during the year ended 30th June, 1932.

The system of main roads that Victoria possesses to-day is, it is claimed, gradually approaching that state of efficiency which, at no distant date, will enable goods to be transported from every part of the State at any period of the year with speed and safety.

Experience has shown that main roads constructed with waterbound macadam some years ago are no longer serviceable for modern traffic unless surfaced with bitumen to prevent disintegration, which always occurs during the dry months of the year. As opportunity arises, the Board is using every endeavour to provide funds for the purpose of re-shaping and, where necessary, re-sheeting these roads and treating them with bituminous materials with a view to preserving the surface, and at the same time, effecting economy in maintenance costs.

The amount estimated by municipal councils and the Board, as being necessary for the maintenance of 6,376 miles of main roads, was £692,406 for the year. £610,386 was allotted by the Board, and £407,121 or 66 per cent. of the allotment was expended, as against £394,240 during the previous financial year.

As the mileage of constructed roads increases, and as additional roads are added to the main road system, so the responsibility for and the cost of maintenance is increased. The importance of systematic maintenance, although stressed by the Board in its previous annual reports, and frequently at various Municipal Conferences, is not yet fully realized by many municipalities who fail to appreciate the fact that all roads require maintenance regardless of their cost, and that the cost of inadequate maintenance ultimately exceeds the cost of organized and regular maintenance. It is an economic waste to spend large sums in construction and restoration, and then neglect to maintain the road, which is the all-important factor in its life.

With the prevailing economic conditions the Board has given very close attention to the cost of maintaining and improving declared main roads, and cannot but view with concern any proposals for restricting or delaying maintenance, which are frequently put forward as a measure of economy. Delay or restriction, in fact, involves considerable loss, as the postponement of the necessary "stitch in time" ultimately entails a much heavier expenditure in restoring or reconstructing the road. Continuous maintenance is profitable expenditure and from a financial and economical point of view is most important.

By the patrol system, maintenance of proper drainage is assured, repairs to the surface are attended to as soon as required and not delayed until the cost becomes greater, and the shoulders and water tables receive attention at the right time. Maintenance is required on every type of road, from the earth formation to the most expensive type of pavement.

This aspect the Board has from time to time impressed on shire councils and their engineers, who in general are giving regular attention to the roads, and are gradually extending the most economical and efficient system of routine maintenance by patrolmen, by which method, longer lengths of roads are being dealt with at low cost.

It has been proved beyond doubt in the case of the State highways on which permanent patrolmen are employed under the direct supervision of the Board, that these roads are being economically and efficiently maintained. That adequate maintenance results in decreased cost and better roads is strikingly shown in those municipal districts in which councils have applied the patrol system.

The work of maintaining main roads is a duty imposed on municipalities under the Country Roads Act. In the first instance, the whole cost is borne by the Board, but during the ensuing financial year, generally one-third of the total amount expended is apportioned amongst the municipalities.

In the case of main roads carrying timber traffic or traffic not of local origin, the Board may, subject to the approval of the Governor in Council, reduce the municipal contribution below one-third, and to assist municipal councils, advantage was taken of this provision by making a total reduction of £31,768 in the municipal repayments during last financial year.

With the relief thus given, the assistance granted for maintaining main and developmental roads under the Federal Aid Roads Agreement, and that afforded under Act No. 4038, by which municipalities were relieved of the payment of £25,000 on account of Interest and Sinking Fund on permanent works on State highways, main roads, and developmental roads, the financial position of councils was considerably eased.

In many of the subdivided shires, difficulties are experienced by the Board, from time to time, in having necessary maintenance work carried out, on the ground that a riding is not in a position to finance its proportion of the cost, with the consequence that a section of road in portion of the shire in which the finances are on a satisfactory basis, is adequately maintained, but the section of the same road in the adjoining riding, which is in a less satisfactory financial position, is not maintained to a proper standard, which ultimately involves greater expenditure in restoring the road to trafficable condition.

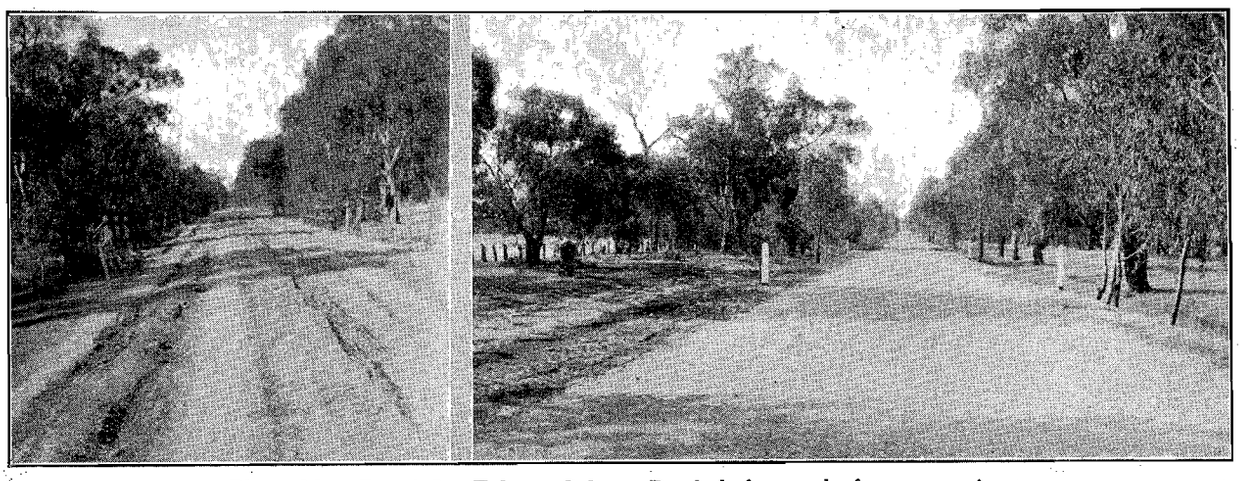
It is, however, recognized by the Board that most of the municipalities are prepared to maintain their roads to a proper standard, but in a great number of instances their financial resources preclude their doing so on account of the difficulty in collecting rates, due to falling land values and low prices for primary products. Consequently the amount expended by those councils on maintenance must be governed by the sum which they will be required to pay as their contribution during the next financial year.

To further assist municipalities in the maintenance of roads, 633 miles of main roads were declared during last financial year, bringing the total mileage of main roads to 6,376.

The Board has exercised great care in maintaining close and economical working in its own activities as well as those carried on by the municipalities. Regular supervision by the Board's Engineers is given to works in progress directly under the Board, and individual inspections are made in company with the shire engineers of works being carried out by municipal councils. In this way any departure from the specification is detected, or any adjustments necessary to meet circumstances unforeseen when the specifications were drawn up, can be made.

It has been the aim of the Board to lay out its works on a sound basis by the selection of the best location. Heavy expenditure in re-location and excessive after-maintenance costs are thus avoided and an asset is created which can be gradually improved according to traffic needs. This particularly applies to such districts as the hill country in Gippsland and the Otway, where new roads have been constructed and old roads deviated to meet present conditions. Although low cost types of construction have been adopted, maintenance costs have been found to be reasonable, the average cost being approximately £30 per mile per annum.

With funds provided under the Federal Aid Roads Agreement the section of road from the Murray Valley Highway to the town of Echuca, known as the Echuca-Cohuna Road, was re-formed and gravelled under the direct supervision of the Board. Owing to neglect of maintenance this road had fallen into a bad state of disrepair, and after conferring with the Echuca Borough Council, it was arranged that the Board should undertake the work required to place it in good condition. With the completion of the bridge over the Campaspe River at Warren Street an excellent road will be provided between Echuca and the districts to the west. The condition of the road before and after treatment is shown in Plates Nos. 7 and 8.



Plates Nos. 7 and 8.—Echuca-Cohuna Road, before and after restoration.

On the Castlemaine–Maryborough Road between Castlemaine and Joyce's Creek extensive work was done in re-forming, widening and re-sheeting with gravel. It is intended to seal this section at an early date with a view to reducing maintenance costs.

In the Shire of Stawell, a road suitable for the needs of the district was completed between Stawell and Marnoo, thus supplying a much-needed outlet to a rich agricultural district.

The road from Stawell to Warracknabeal traversing the Shires of Stawell, Dunmunkle, and Borung was further advanced leaving only ½ a mile to complete as far as Warracknabeal. From that town as far as Hopetoun it is expected that a good road will be provided before next winter.

By the use of local materials a more rapid extension of construction work has been maintained in the Shires of Borung and Dunmunkle, and at the same time costs have been considerably reduced.

Within the Borough of Sebastopol a troublesome gap in the Ballarat–Hamilton Road was restored and surfaced with bitumen and at several points between Ballarat and Glenthompson bitumen treatment was extended for some distance.

In the Warrnambool district contracts were entered into for forming and gravelling 13 miles of the Hamilton–Horsham Road within the Dundas Shire, and 9·5 miles were completed during the year. The construction of this road from the Horsham side was advanced for a further distance of 3 miles as far as Cherrypool. As funds become available the aim of the Board is to extend this work with the object of linking up these two important towns as early as possible.

In completing the gravelling of the road as far as Quontong, an all-weather road has been provided between Horsham and Natimuk. The necessity of extending the work as far as Murtoa through the Shire of Wimmera is being kept in mind with a view to completion as soon as funds can be provided.

The Peterborough Road within the Shire of Warrnambool was completed by forming and gravelling 3 miles between Warrnambool and Peterborough.

The restoration of 6 miles of the Rutherglen–Wahgunyah Road was practically completed by the 30th June, thereby supplying an important trafficable interstate road connecting with the bridge over the Murray at Wahgunyah.

By constructing 3 miles of the Heathcote–Elmore Road southerly from Toolleen the worst parts of the road have now been dealt with.

Owing to the neglect by the municipalities concerned of the Goulburn Valley Road, traversing the Shires of Seymour, Goulburn, Euroa and Shepparton, complaints of its bad condition were being made from time to time. Although the municipalities were allotted year by year the amounts estimated by them as being needed for the proper maintenance of the road, the amount expended fell far short of what was required to place the road even in reasonable order, with the result that traffic passing through Seymour and Nagambie was unable to reach important towns to the north during wet weather, thereby detrimentally affecting the interests of Shepparton, Numurkah, and Cobram, and other towns along the route.

At a conference held at Shepparton between the Board and Municipalities, Progress Associations and other bodies, representations were made to the Board to have the road declared a State Highway, with a view to having it placed in trafficable condition, and thereafter maintained at the expense of the Board, but as the Board was not in a financial position to accept any further responsibility in this direction, it was subsequently decided that the Board would itself undertake the work necessary to restore the road under the main road provisions of the Country Roads Act, and this work is now in progress.

The Town of Shepparton, which has been described as the metropolis of the Goulburn Valley, is an important rural centre surrounded by irrigation areas in which fruit-growing, dairying, and mixed farming are carried on on an extensive scale. Situated in the centre of a rich area bounded by the Murray Valley, the Hume and the Northern highways, and served by main roads leading from those highways into the town, Shepparton, it is considered, has now become one of the most important towns in the northern part of the State.

The Board is, therefore, using every endeavour to improve the facilities for transport as funds become available. To this end a considerable amount of work has already been undertaken and additional works are now in hand.

The road from Benalla to Shepparton, running between the main Sydney railway and the Goulburn Valley line, which is now part of the Midland Highway, to which reference is made under the heading of State Highways, has now been constructed throughout, and worn out sections restored to excellent condition.

From Shepparton, through Tatura and Stanhope, as far as Corop, effective road improvements have been made, and further works have been scheduled for inclusion in the current year's programme.

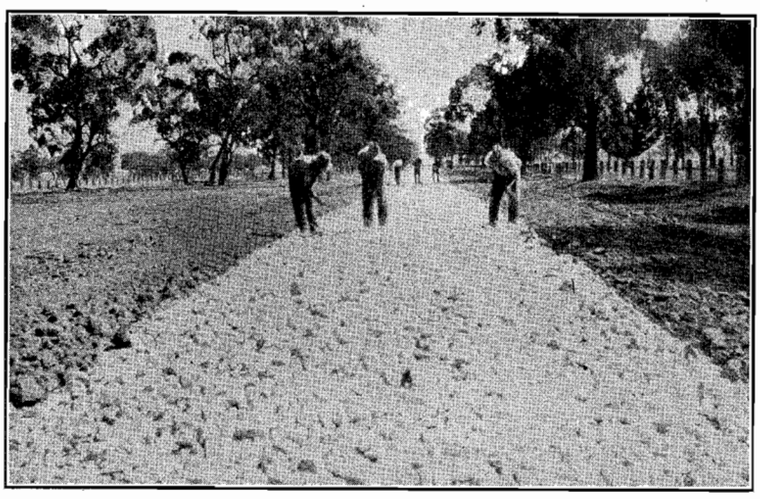


Plate No. 9.—Showing the road between Shepparton and Corop under construction, with soft stone used as a base course.

The main roads between Violet Town and Nalinga, from Violet Town to Murchison, and from Euroa to Arcadia, which all connect with the through roads leading to Shepparton have also been much improved and the work required to place them in good order throughout will be continued during the present year.

As soon as the Board is in a position to finance the project, it is intended to construct the road from Shepparton to Wyuna, where it junctions with the Murray Valley Road, thus providing an all-weather road from Shepparton to Echuca and other towns along the Murray Valley, as well as giving access to the Riverina.

With money provided from Federal funds, the Dookie–Nalinga Road was constructed past the Dookie Agricultural College to the Midland Highway over a distance of 3½ miles. This road forms an important feeder to Benalla and Violet Town.

In addition to the work carried out under an Unemployment Relief grant of £3,000, extensive forming and gravelling were done over the worst section of the Loddon Valley Road, extending from 6 miles south of Durham Ox to within 1 mile of the Murray Valley Highway, south of Kerang. The discovery within the Shires of Kerang and Gordon of deposits of swamp gravel and limestone suitable for road-making was a material factor in reducing the cost of construction. 29·14 miles were formed, of which 9·54 miles were sheeted with swamp gravel. The whole of this work was provided for from Federal funds.

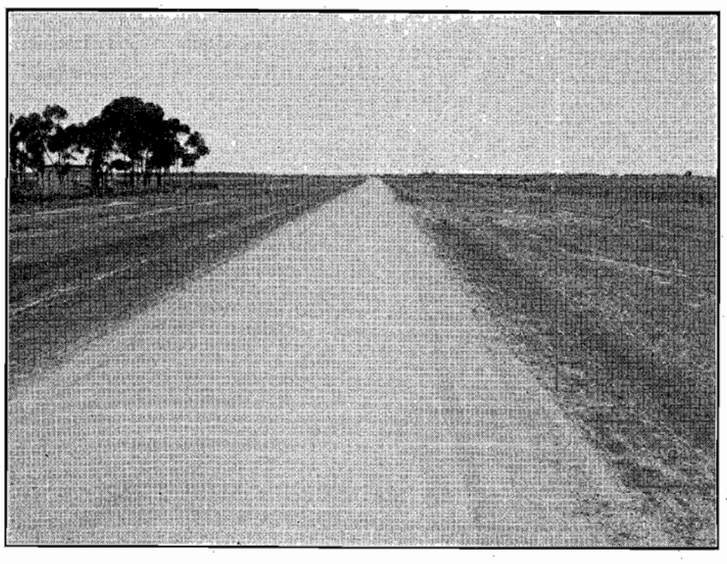


Plate No. 10.—Completed work on the Loddon Valley Road, Gordon Shire.

A contract for the formation of 5 miles of the road connecting the important towns of Wangaratta and Yarrawonga was entered into. When completed the work will, in addition to benefiting the two towns, be of considerable advantage to farmers living along and in the vicinity of the road. A section of the Beechworth Road near Wangaratta which had become very rough and pot-holey was greatly improved by the construction of a floodway across a low-lying area known as " The Avenue."

Two sections of the Frankston–Flinders Road near Hastings and Tyabb were re-constructed and widened to 20 feet under the direct supervision of the Board, with the object of making this road safer for the increasing traffic. During the coming summer it is intended to surface the new work with bitumen.

The formation of the Fyansford deviation near Geelong, which was completed during the previous financial year from Unemployment Relief funds, was surfaced with penetration cement concrete over a length of 4,700 lineal feet. The whole road is now an all-weather road for all classes of traffic.

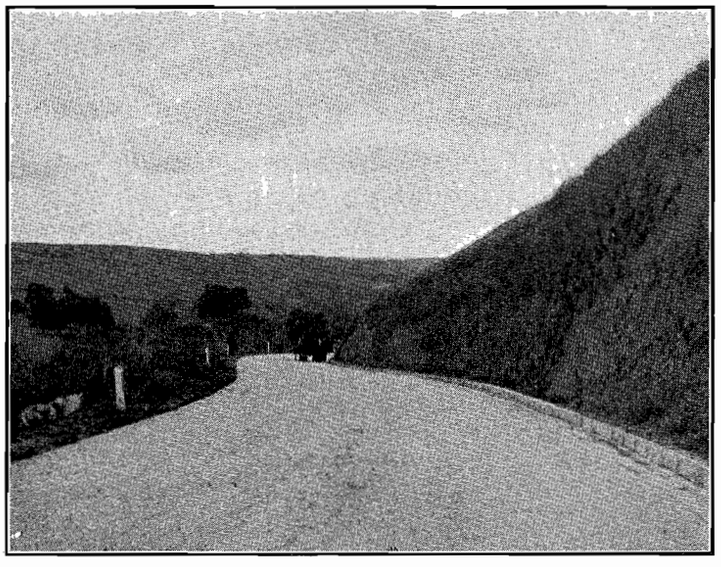


Plate No. 11.—Fyansford Road, surfaced with penetration cement concrete.

## DEVELOPMENTAL ROADS.

Before the construction of Developmental Roads was undertaken by the Board it was not uncommon to find in various parts of the State fertile areas far removed from railways and markets in which settlers were living under the most primitive conditions. Transportation was impossible during the winter months, and during the summer was only possible over rough unmade tracks, involving heavy cost for cartage, with the result that these areas lost much of their economic value.

To-day, with suitably constructed roads capable of being used at all seasons of the year, markets and railways are gradually becoming accessible within a few hours, and many areas have now become valuable producing districts, particularly those in which dairying pursuits are being carried on.

Whilst the greatest amount of traffic is conveyed over the State highways and main roads, close attention is being given to developmental roads which represent a large percentage of the total road mileage of the State. As low cost surfaces meet all traffic needs the work done during the year on developmental roads has been carried out under that system.

The construction of roads of this character capable of being used at all times to give the farmer safe and easy access to the railways and markets constitutes one of the most pressing needs in rural areas as yet unserved by road facilities. The construction of developmental roads aids settlement and production by reducing operating costs, and so assists to better meet the growing competition of other countries in the sale of produce.

The amount expended out of loan funds was £80,715 during the year, supplemented by an expenditure of £181,517 provided under the Federal-aid roads agreement, £190,981 from State Unemployment Relief Funds, and £1,566 from the balance of the 1930 Commonwealth Unemployment Relief Fund. The expenditure was distributed amongst 102 shires and 175 separate projects were put in hand.

With a total amount of £454,779 made available from these sources, the Board has been enabled to speed up its programme of developmental road works. By using local materials, enormous savings in cost have been effected in construction and in cartage costs, and at the same time a much greater mileage of roads has been made available.

The work done comprised the extension and linking up of existing roads and the construction of new roads in country where progress was retarded through lack of adequate means of conveying produce to market or railway.

On the declared roads, the mileage of which was 3,577 at 30th June last, 137·74 miles constructed out of loan funds were added to the developmental works completed or partially completed in previous years, compared with 128·74 miles during the year ended 30th June, 1932. 136·56 miles were dealt with by shire councils and 1·18 miles directly by the Board. Details of expenditure are set out in Appendix E.

By the expenditure of an amount of £96,096 provided from State and Federal Unemployment Relief grants, supplemented by a contribution of £20,217 from the Country Roads Board Fund to cover cost of materials, &c., 19·5 miles of developmental roads were completed or initially constructed, and thirteen short roads were built to farms isolated from the main system at a cost of £340.

Under the *Federal Aid Roads Act* 1931, an amount of £181,517 was expended on constructing developmental roads in parts of the State not served by railways or road communication, and an expenditure of £20,708 was incurred in maintaining roads of this class previously constructed out of the grant.

A pleasing feature, resulting from the construction of roads in undeveloped areas of the State, particularly in the southern and north-eastern parts, is the extension of land settlement, and the re-occupation of land abandoned some years ago.

In Gippsland and the Otway districts, considerable development has taken place during the past 3 years. Many new farms have been established, on or adjacent to constructed main roads, and on developmental roads radiating from the main system. In these areas, remarkable progress has been made in the dairying industry in spite of the low prices prevailing within the past twelve months.

The progress made by the large majority of the settlers under the Government's scheme of unemployment land settlement, under which 102 Crown land blocks and 60 closer settlement blocks were allotted and occupied, already gives every promise of success, and should be of material assistance in the further development of the Gippsland and Otway areas.

The re-opening of schools which had been closed on account of the attendance of the children falling below the minimum required, and the establishment of new schools is further evidence of the increased settlement that has taken place. From information obtained from the Education Department it is shown that from 1st July, 1930, to the 30th June, 1933, 22 schools have been re-opened in the Gippsland, Heytesbury and Otway districts, whilst 19 new schools have been established.

Following the practice of previous years, a number of developmental roads leading to main roads and State highways were declared main roads in order to assist councils as far as possible in their maintenance. On completion of the developmental road work a great deal of traffic apart from the local traffic makes use of these roads and so brings them under the category of main roads as defined by the Country Roads Act. The length of roads of this character which were declared main roads during last year was 599 miles and 78 municipalities were thus assisted.

The completion of the Corryong–Benambra Road forms an important connexion between the north-eastern part of the State and Gippsland, and already carries a large amount of traffic. This road, which traverses extensive areas of good country, has already proved of great benefit to settlers and graziers, giving them easy access to the market towns of Corryong and Omeo. The total length of the constructed road is 80 miles, which is being maintained and improved by patrolmen under the supervision of the shire councils.

The construction of roads in the Heytesbury forest in which extensive areas of land were settled by the Lands Department some two years ago, was continued during the year, resulting in 13·7 miles being gravelled on the Ayersford Road, the Eastern Creek Road, and on the road between Timboon and Curdievale, whilst 51·3 miles in the settlement itself were partially constructed by clearing, forming, and loaming.

These roads have already proved a great benefit to the settlers in conveying their produce to the railway at Timboon as well as supplying them with means of reaching the important towns of Cobden, Terang and Warrnambool. The expenditure incurred on the road system in this area during last year was £21,800.

In the Shire of Warrnambool, the Childers' Cove Road was completed by the forming and gravelling of 4 miles. Access has thus been provided to good dairying country within the vicinity of the town of Warrnambool.

Works completed on the Tolmie–Whitfield Road in the Shires of Oxley and Mansfield comprise the surfacing and formation carried out by contract and day labour. This road which traverses the centre of the Tolmie plateau serves an extensive area of rich agricultural country suitable for settlement. It is interesting to record that during the past two years ten new settlers have taken up land on the plateau, five of whom had settled in the district since road works commenced in 1932 under the Unemployment Relief grants.

The Tolmie–Whitfield Road was further advanced by forming and surfacing by an unemployment relief gang, and 5 miles was completed, leaving only 2 miles of surfacing to be done to ensure an all-weather road to serve numbers of settlers who have arrived in the district since road construction commenced.

Plates Nos. 12 and 13.—Showing condition of sections of the Arapiles–Grassy Flat Road before and after construction.

The completion of the surfacing of the Toombullup Road during last year has now provided a good road suitable for traffic throughout the year. The road is being effectively maintained by patrolmen.

The Tolmie East Road was dealt with by completing formation and drainage over a length of 4½ miles. Settlers in the Mahaikah district have now been given an outlet, which will be surfaced as soon as possible in order to provide an all-weather road.

An additional 5½ miles of the Rose River Road was formed, and the erection of two timber bridges over the Rose River is in hand, together with a further 2 miles of forming. When the work done and in hand is surfaced, an excellent road will have been provided between Whitfield and Myrtleford, along a valley of excellent land suitable for settlement.

In the Arapiles Shire, developmental work completed on the Arapiles–Grassy Flat Road resulted in great improvements being effected. Some idea of the conditions before and after the road was constructed is indicated in Plates Nos. 12 and 13.

The Mt. Camel Estate Road, in the Shires of McIvor and Waranga, was further improved by the construction of a deviation north of Mt. Camel homestead where a section was impassable in winter. This work, together with that done under the Waranga shire council's supervision has now provided an all-weather road as far north as Colbinabbin.

The extension of road works in the Shire of Otway was of great assistance to the settlers. Apollo Bay and Hordernvale were connected for the first time by a metalled or gravelled road, thereby enabling settlers on the route to Hordernvale an opportunity of conveying their produce to the butter factory at any time of the year.

With the object of serving an area of land proposed to be thrown open for settlement by the Lands Department, the Aire River Settlement Road was formed over a length of 3 miles.

The surfacing of the Ferguson–Charley's Creek Road was extended a further length of 1½ miles, and a contract was entered into for the completion of the formation of the road over its full length. South of Gellibrand the road was gravelled for a distance of 2 miles towards Ferguson.

Between Apollo Bay and the Kennett River, widening and surfacing was extended as far as the latter point, and a ford was constructed over the Carisbrook River.

With a view to subsequently reducing the cost of maintenance, sections of the Lorne–Dean's Marsh Road were reconditioned and sealed with bitumen, leaving only ¾ of a mile to be surfaced with bitumen between Dean's Marsh and Lorne.

The Skene's Creek Road, in the Shire of Otway, which serves an area of fertile dairying country between Tanybryn and Apollo Bay was surfaced with fine crushed rock and gravel, and this developmental road is now available for the use of the settlers at any season of the year.

In the Shire of Colac, contracts were let for grubbing, clearing, and forming 5·12 miles serving the Irrewillipe settlement, and the work was immediately put in hand by the Council. This road will serve a large number of settlers engaged in dairying, and it is considered, will at the same time be the means of opening up additional areas of land within easy reach of the railway and butter factories.

## UNEMPLOYMENT RELIEF WORKS.

Out of the amount of £150,000 made available to the Board at the commencement of last financial year from the National Recovery Loan, to replace a similar amount transferred from the Country Roads Board Fund to consolidated revenue during the year ended the 30th June, 1932 under Act No. 4038, the sum of £96,791 was expended to the 30th June, 1933.

The whole of this expenditure, which was incurred on roads of a developmental character, formed a valuable addition to the usual programme of road works, and gave material assistance to municipalities which were unable to contribute towards the cost of works of the nature and extent included in the Schedule. The work done being of a reproductive nature, has also been the means of assisting settlers by providing them with suitable roads, and works which under ordinary circumstances could not have been entered upon for many years have been completed. The expenditure was distributed over 167 roads, and with the exception of 4 projects, the whole of the work was carried out by contract, the number of contracts let being 258. 241 contracts were entered into by shire councils to the total value of £108,306 whilst 17 contracts totalling £16,332 were let by the Board and carried out under its direct supervision.

It is estimated that the expenditure of £96,791 above referred to provided employment during the twelve months for 1,600 men.

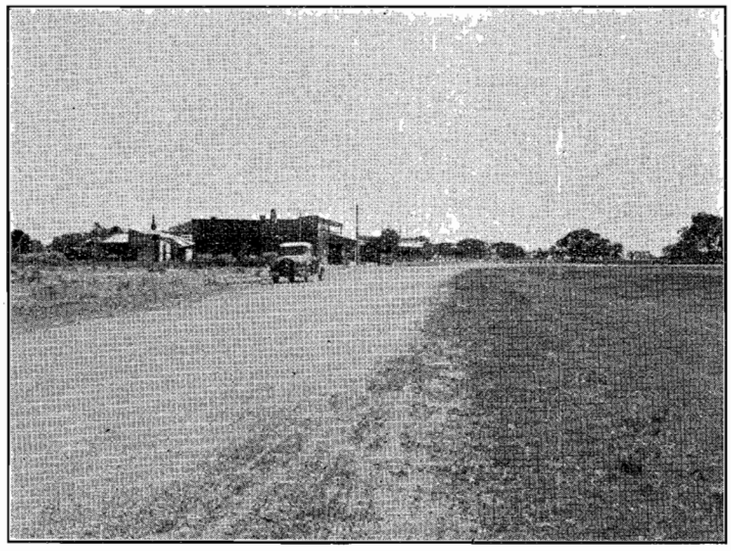


Plate No. 14.—Illustrates the type of work done on Loddon Valley Road.

A total sum of £140,650 was allotted by the Employment Council during the year, £128,950 from the National Recovery Loan, and £11,700 from unemployment taxation. The expenditure to the 30th June, amounting to £107,472, which included £83,309 on account of labour, and £24,163 paid out of the Country Roads Board Fund for materials, was distributed amongst 28 municipalities for works on 51 roads, of which 42 were developmental and 9 main roads. 29 projects were carried out by day labour, and 34 by contract.

The work accomplished on developmental roads was mainly in extension of works previously commenced with funds from other sources, and formed a valuable contribution not only in relieving the unemployment situation, but in assisting settlers by improving their means of communication.

Supplemented by an amount of £1,863 provided under Unemployment Relief Acts Nos. 3866 and 3948, and carried forward from the 30th June, 1932, the total expenditure from State Unemployment Relief Funds was £109,335 for the year.

The work done which comprised mainly grubbing, clearing, and earthworks, required a considerable amount of day labour, and the engagement of a large number of men. The projects selected were considered the most suitable for manual labour and provided the maximum employment without sacrificing any advantages from the use of machinery and plant. Rationed employment was made available for 2,911 men. The work was widely distributed over the State, and its advantages to the State and the municipalities were considerable, inasmuch as practical relief was afforded and valuable works of a nature which will materially assist in the development of the State were completed.

From an amount of £76,500 granted to the State by the Commonwealth Government in July, 1930, for unemployment relief works, an unexpended balance of £1,628, representing commitments from the previous year, was expended on works in progress at the end of June, 1932. With this expenditure the whole of the funds available from that source were exhausted.

Of the new works put in hand from these grants may be mentioned the road to Kangaroo Lake district, near Kerang. This area, adapted to citrus growing, is still in course of development, and the construction of a road serviceable at all times is urgently required by the settlers. By using previously unknown deposits of limestone a suitable road, giving access to Kerang, via the Murray Valley Highway, will be provided.

The progress of the work on the road from Portland to Nelson, via Winnap and Drik Drik will be materially assisted by an amount of £4,000, provided from relief funds, from which £427 was expended during the year. On completion, a valuable connecting road between the Prince's Highway and the Glenelg River at Nelson will be provided.

In the Heytesbury Forest, in the Shire of Heytesbury, developmental roads included in the road scheme for the settlement 19 miles were formed with the funds made available.

Plates Nos. 15 and 16.—Showing (1) Section of the Winnap-Drik Drik Road, and (2) A view on the Glenelg River at Nelson.

In the Shire of Tambo 11 miles of road were cleared, grubbed, and formed to serve settlers in the Nungurner area situated south of the Prince's Highway, and adjoining Lakes Entrance. The importance of the new roads to the settlers is already indicated by the fact that additional blocks have been taken up for the growing of beans and peas.

In the same shire considerable progress was possible by the provision of relief funds for re-aligning and regrading the Gelantipy–Wulgulmerang Road, which forms part of the road between Buchan and the Snowy River Bridge near the New South Wales border. This work was undertaken to provide for the requirements of the settlers in the conveyance of their produce to the railway at Nowa Nowa.

Works previously in hand were extended along the Deddick River Road towards the Snowy River Bridge to serve a large area of occupied land and provide an outlet to the railhead at Orbost.

Other works of considerable importance in the Gippsland, Otway, Upper Murray, Northern, and North-western Districts of the State were also put in hand, which will ultimately serve a large number of settlers.

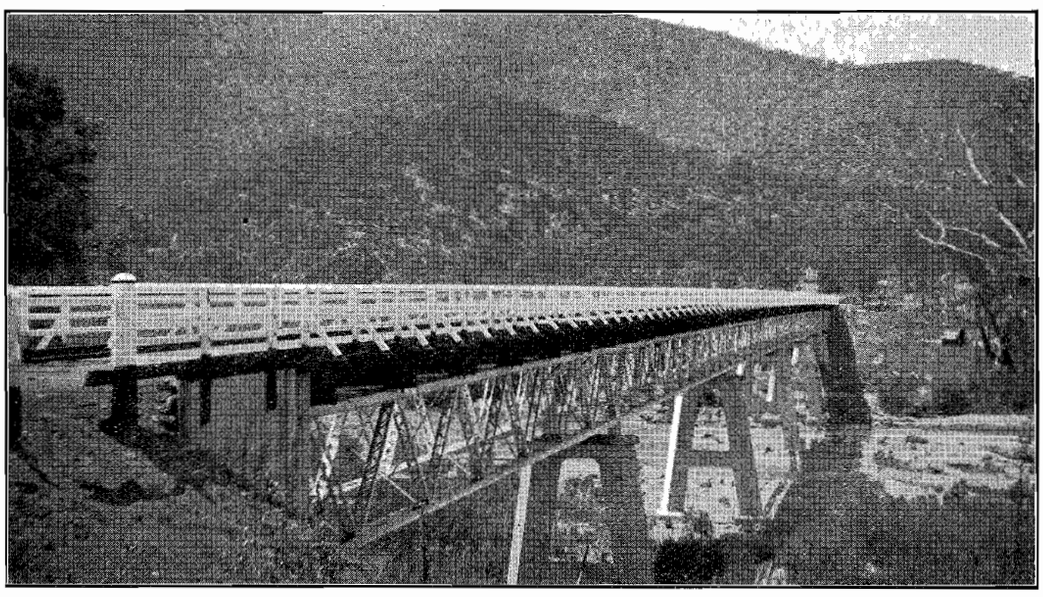


Plate No. 17.—Showing completed Snowy River Bridge.

## FEDERAL AID ROADS.

Under the Federal-aid roads agreement, the sum of £332,088 was made available to the State for the year ended 30th June last. Supplemented by an amount of £140,197 carried forward from the previous year, the total expenditure was £469,062.

In view of the importance of developmental roads to the settler, the Board followed the practice of devoting the greater portion of the grant to the completion of roads of that character, particularly in inaccessible parts of the State where little revenue is derived by municipal councils from rates. In this way, not only is the far back settler being assisted by reason of reduced transport costs, but the municipalities are being aided by the provision of roads which they themselves could not possibly finance, and neither municipal nor State debts are being increased.

In certain cases where the municipality was in a position to do so, the grant for roads made to isolated farms was supplemented by a grant from municipal funds, and additional work was thus undertaken.

The number of projects put in hand was 332, of which 226 were on developmental roads, and 106 on main roads. Of the total expenditure, £202,224 was incurred on developmental roads, £23,300 on the provision of roads for isolated settlers, £240,387 on main roads, and £3,151 on the reconstruction of two worn-out bridges on State highways.

With the expenditure on developmental roads, and roads to isolated farms, the programme of works in agricultural districts of the State made considerable progress, and valuable areas of land were served with means of communication. The length of roads of this type constructed was 157 miles.

The work done on main roads was mainly the construction and improvement of trunk roads carrying traffic from developmental and other roads to the railways and market towns. A length of 254 miles of main trunk roads was dealt with.

An amount of £3,151 was expended on the construction of two bridges on the Prince's Highway, £2,004 on erecting new structures at Dartmoor, beyond Portland, and £1,147 towards the erection of a new bridge over the Tambo River at Swan Reach, the description of which was given in the last annual report of the Board.

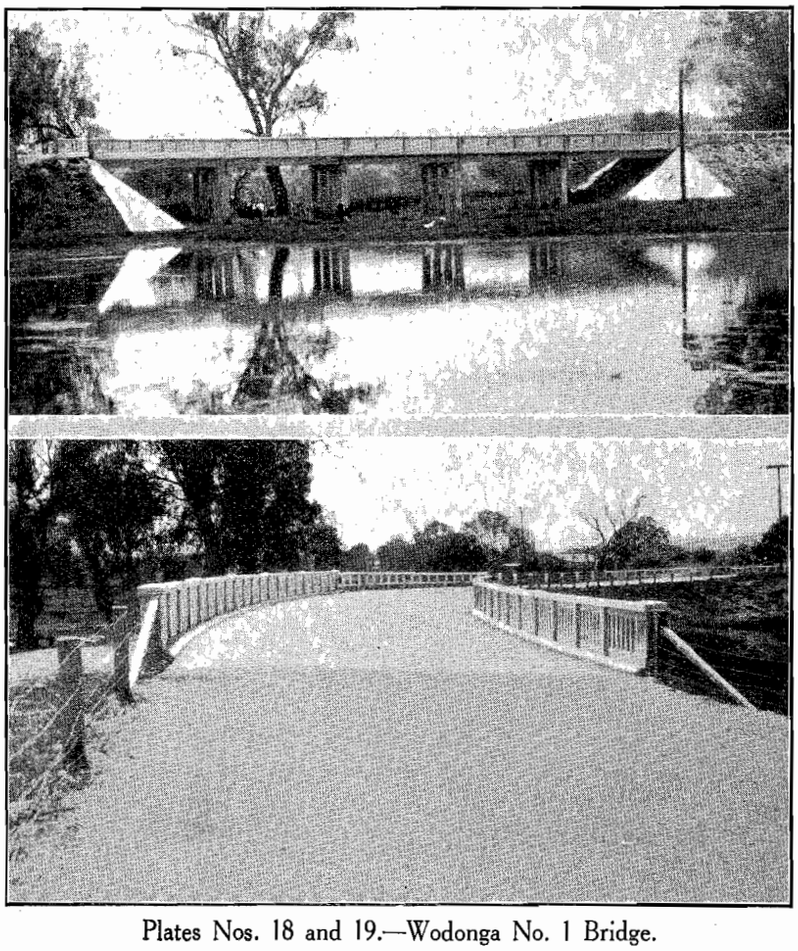
To assist necessitous shires in the maintenance of main and developmental roads an amount of £106,835 was allotted from Federal-aid funds, with balances carried forward from 30th June, 1932. £98,674 was expended to the 30th June, 1933—£77,966 on main roads and £20,708 on developmental roads, the latter having been previously constructed with funds from the same source.

## BRIDGES.

During the year, 120 bridges and culverts were erected, 30 by the shire councils and the remainder under the direct supervision of the Board. This brings the total number of bridges constructed since the inception of the Board to 1,365.

The total length of bridges erected on State highways during the year was 848 feet.

A number of important bridges was completed, including one on the Hume Highway at Wodonga over the flats between Albury and Wodonga, known as No. 1 bridge. This structure, erected in reinforced concrete, is 150 feet long and 22 feet wide between kerbs, and consists of five spans of 30 feet each. Being on a curve in the road, the bridge superstructure is super-elevated, the piers radial, and the kerb lines truly curved, but the beam stems are straight between piers. The total cost of the bridge was £2,489, representing 15s. 2d. per square foot.



Plates Nos. 18 and 19.—Wodonga No. 1 Bridge.

The timber bridge over the Goulburn River at Seymour on the Hume Highway, erected 40 years ago, was not capable of carrying modern traffic with a reasonable factor of safety, and it was therefore necessary to reconstruct it. As the old bridge was 24 feet wide, the work was done successfully in half widths under traffic. The superstructure was reconstructed with 24-in. x 7½-in. x 90-lb. rolled steel joists, with crossbeams and longitudinal decking, and the approach from the Melbourne side was improved by increasing the effective radius to 150 feet and by widening the bridge gradually in the three end spans.

The total length of this bridge is 350 feet. The cost of reconstruction was £2,500, which provided for renewing the superstructure of the old bridge and allowed 720 square feet of additional area due to widening. The cost per square foot was 6s. 3d.

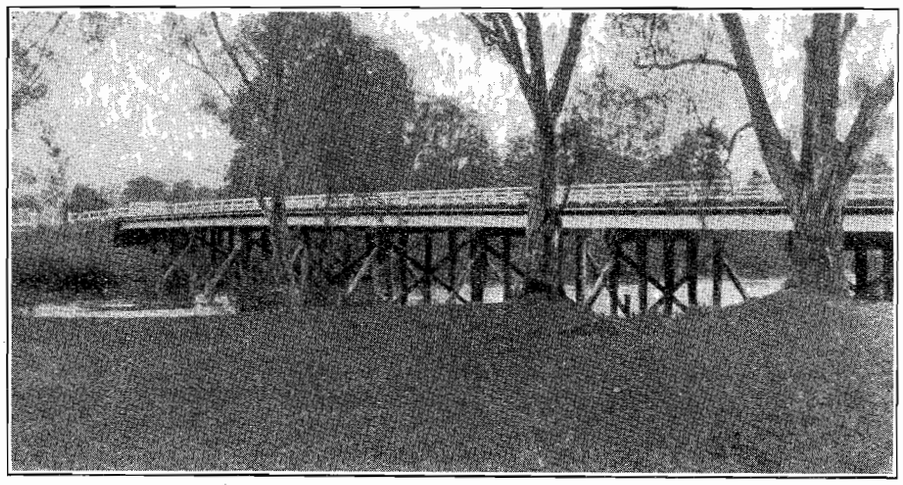


Plate No. 20.—Showing reconditioned bridge over the Goulburn River at Seymour.

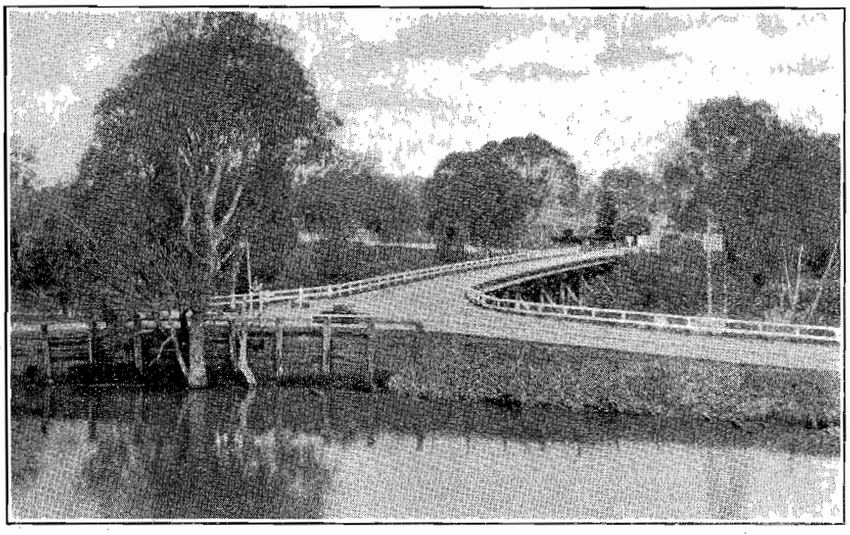


Plate No. 21.—Showing approach to bridge over Goulburn River from Melbourne side.

Old worn out timber culverts were replaced by the erection of four concrete culverts between South Wangaratta and Baddaginnie. Seven timber structures were also widened to 22 feet to conform to the width of the highway which was restored and widened by day labour.

On the Prince's Highway, the road formerly crossed the Brodribb River over a low level bridge and floodway sections, and traffic was delayed for several days at a time in consequence of floods occurring on an average of twelve times a year. Plans and specifications were, therefore, prepared by the Board for a new high-level structure on a deviation 6,000 feet long, and a new bridge was completed in March last, at a site approximately ½ mile upstream from the existing crossing. The new bridge is 200 feet long and 22 feet wide, consisting of three spans of 64 feet, 72 feet, and 64 feet, and has a cantilever arrangement of plate girders with a suspended span of 50 feet. The deck is of timber on 6-in. x 7-in. timber crossbeams. The total cost was £2,770, or 12s. 7d. per square foot of bridge. Plate No. 22 shows the new bridge and road deviation through adjoining land.

Owing to the log abutment of the bridge over the Nicholson River at Sarsfield on the Prince's Highway being infested with white ants, the piles being in bad condition and the truss timber dangerously decayed, it was necessary to reconstruct the bridge.

The structure was widened from 15 to 20 feet and the centre truss replaced by two 30-ft. stringer spans with a new central pier. This work forms a typical example of reconstruction of an old weak timber bridge and full particulars are set out in the report of the Chief Engineer.

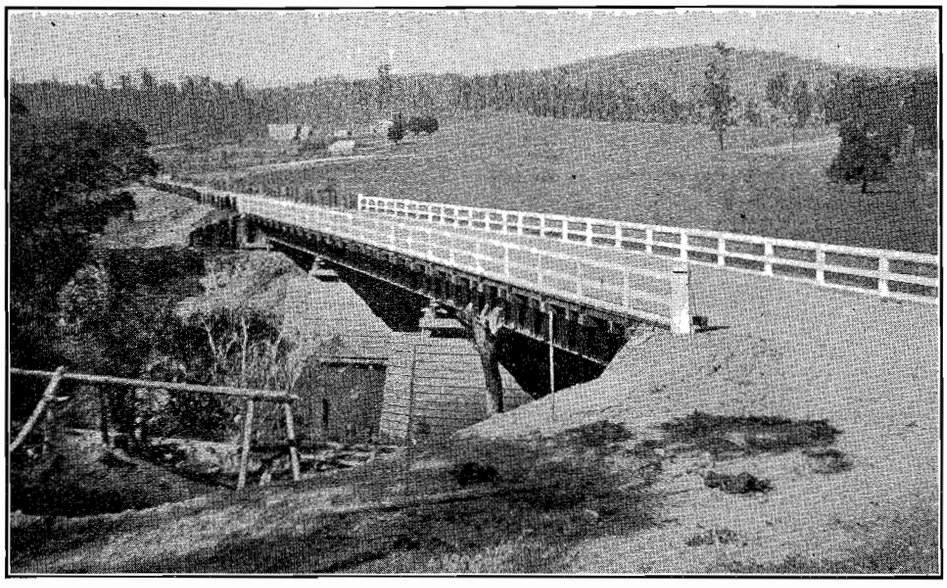


Plate No. 22.—Showing new bridge over Brodribb River.

On the western section of the Prince's Highway, over the Glenelg River at Dartmoor, a new composite bridge of steel and timber was completed by contract at a total cost of £2,955. This bridge consists of three 50-ft. plate girder spans and nine 30-ft. stringer spans, with a width over kerbs of 19 feet.

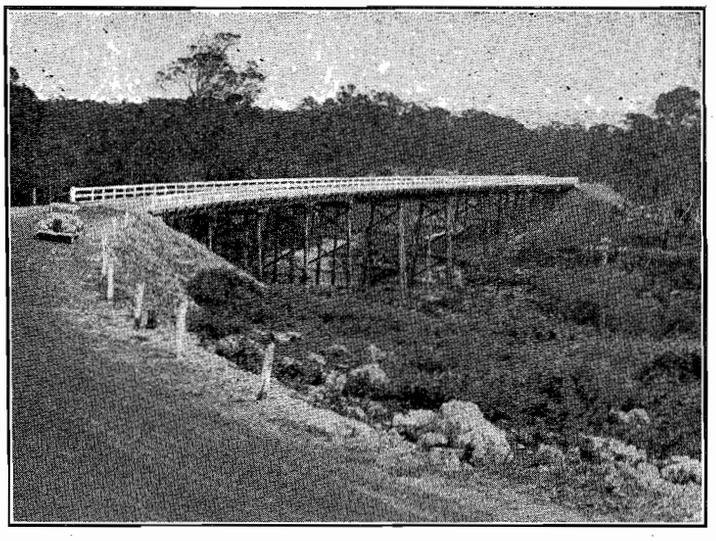


Plate No. 23.—Showing completed bridge over the Glenelg River at Dartmoor.

On the Hamilton–Coleraine–Casterton main road in the Shire of Wannon, an old bridge at Coleraine over the Koroite Creek was found to be unsafe for traffic, and a new bridge was constructed. This had a length of 210 feet with an 18-ft. roadway and a 5-ft. footway. The cost of the structure, built under contract, was £1,898, including approaches.

On account of the dangerous condition of the Flooding Creek bridge in the town of Sale, it was necessary to replace it with a new structure of 100 feet in length. This was constructed in timber, under contract, to a width of 22 feet, the abutment sheeting consisting of concrete slabs.

In the Shire of Traralgon, the Traralgon–Maffra Road leaves the high ground on the south bank of the river, approximately 2 miles east of Traralgon, and crosses the river at the narrowest part of wide alluvial flats subject to severe flooding. The immediate approaches to the Scarne bridge over the river channel proper were reconstructed as a level floodway two years ago, and had greatly improved that portion of the crossing. The portion, however, near Traralgon was frequently flooded with backwaters. During the year, contracts were let and almost completed for the deviation of this section of the road to better alignment, and for the construction of embankments and two bridges of five spans, having a width between kerbs of 20 feet and an overall length of 125 feet each.

The total length of bridges completed on main roads during the year was 1,161 feet.

A number of small bridges on the Bonang–Gelantipy Road have been completed over the tributaries of the Deddick River, east of the Snowy River, and three bridges are now being constructed by contract over creeks between Gelantipy and Wulgulmerang.

At Boundary Creek, where an open crossing at the bottom of steep grades of 1 in 5 existed for many years, a two-span timber bridge is being constructed on a deviation. The bridge will be 50 feet long and, though rated as a single track crossing, is being made 15 feet wide to expedite stock traffic.

Similar bridges are also being constructed over Seldom Seen Creek and Currie Creek.

A new timber bridge 260 feet long, having ten spans each of 20 feet and a width between kerbs of 18 feet, was constructed on the Dunrobin–Wando Vale Road in the Shire of Glenelg, over the Glenelg River, under Contract.

The bridges erected on developmental roads during last financial year were of a total length of 1,561 feet.

## ROADS TO ISOLATED FARMS.

The construction of roads to give access to the farms of isolated settlers constitutes one of the pressing needs of the road problem. Unless the farmer has means of access to and egress from his property, capable of being used at any time of the year he is at a great disadvantage in earning his living. An outlet is essential to his success, just as the successful farmer is necessary to the prosperity of the community.

The construction of roads of this character induces more people to settle on the land, and thereby promotes decentralization, assists in the re-occupation of abandoned farms, has a direct effect in keeping on the land the men already there, and supplies the farmer with better access to railways and markets.

Although the greatest amount of traffic passes over the State highways and main roads, the farm to market road must be considered in the general road scheme. It has been observed by the Board that where access by a reasonable road is provided there are fewer unoccupied properties than on the unsurfaced track, and that more employment is provided on improved roads than on unmade roads. Greater loads can be hauled on the surfaced road in a much shorter time than on earth roads, resulting in considerable saving of expense to the farmer. Economical distribution of farm produce is nullified if the cost of transportation of marketable produce from the farm to the railway is excessive.

Outside greater Melbourne, the total length of roads in the State is 100,574 miles, of which 12,249 miles have been declared main roads, State highways, or developmental roads under the provisions of the Country Roads Act.

The latest figures obtainable from the Government Statist show that there are 75,000 pastoral and agricultural holdings in the State, a large number of which is, of course, situated on declared roads or have reasonable access to those roads, but the remainder, which represent the greater proportion, are not provided with adequate means of communication to the railways or markets, and the occupiers are, therefore, considerably handicapped in carrying on farming operations. For this reason, the Board has used every endeavour to accelerate the building of roads to the isolated settler.

By the expenditure of £23,640 out of Federal-aid roads and State Unemployment Funds, which was the total amount allotted during the year ending 30th June last, 222 roads serving 538 farms will be added to the list of roads constructed or put in hand for the use of settlers isolated from the main system.

Plate No. 24.—Showing condition of Green's Lane in the Alexandra Shire.

The amounts provided by the Board were, in certain instances, supplemented by contributions from the shire councils or from the settlers themselves, and in other cases the farmers benefiting gave considerable help by employing their horses on the work, or carting and spreading gravel. In this way, serviceable roads, capable of being used at any season of the year, were constructed to the settlers' gates, or greater lengths than could have been laid down with the funds allotted were put in hand.

The policy of building low cost roads to isolated farms, by utilizing suitable local materials in the form of crushed rock or gravel, and the employment of local labour was followed during the year. Plates Nos. 25 and 26 convey some idea of the changed conditions brought about during last financial year by the construction of the road illustrated.

Plates Nos. 25 and 26.—Showing Rossiter's Road, South Gippsland, before and after partial construction.

## CORRUGATION OF ROADS.

The phenomenon of corrugation of road pavements has been one of the minor problems of the present road age. In the days when the volume of road traffic was small, and when all vehicles were steel shod and generally horse-drawn, the chief problem in road maintenance was the deterioration of pavements owing to actual abrasion or dislodgment of the particles of which the pavement was composed. Further, vehicles travelled very slowly although with high wheel load concentration on the pavement surface. This type of traffic still remains in wheat-growing districts, where it creates its own particular problems, and has an important influence on the cost of road construction.

The advent of fast moving motor traffic, equipped with rubber tires, resulted in different load conditions. The wheels impose a considerable horizontal reaction and in any type of pavement in which the particles are readily disturbed, a churning effect is produced. Owing to the speed of travel the springs of such vehicles are made more flexible than with the old slow moving steel-shod vehicles, and the natural vibration of the vehicle becomes important. In some way, these factors combine to produce corrugations in certain types of road pavement. The factors are so many and the connexions between them so complex that no very useful results have been obtained from theoretical investigations.

However, practical measures have been taken to lessen the inconvenience to traffic resulting from corrugations. The trouble is particularly acute with certain fine grained pavements such as granitic sand, or where the particles are very rounded as with river gravel or ironstone " buckshot." On the other hand, materials which contain a good proportion of suitable fine binder, so that the particles cohere as long as there is the slightest moisture present, are much less liable to corrugate. Corrugations on all types of roads become more severe when the cohesion between the particles is reduced by summer conditions.

Accordingly, in combating the trouble, selection of pavement material plays an important part, and materials deficient in the necessary binder are, as far as possible, avoided.

It is found also that constant dragging is very beneficial. This fills up any corrugations which have commenced to form, so that if any rain falls the materials will set again while the road surface is true. More frequent dragging is required in drier weather, as the corrugations tend to form again very quickly with the passage of a very small number of vehicles.

Where the materials are of poorer quality, and where traffic is dense, the cost of maintenance by dragging may become unduly excessive, and in addition the repeated disturbance of the pavement material is undesirable owing to the loss of binder in the form of dust. Under these conditions it may become both economical and desirable to apply a bituminous surface treatment after the road has been brought to satisfactory shape at the right season. It is found that a thin bituminous surface mat is quite adequate to prevent corrugation in any pavement which has sufficient cohesion to carry traffic loads.

There has also been a considerable improvement in motor vehicles. The use of balloon tires has reduced the impact upon the vehicle and pavement. When travelling over corrugated roads, low pressure tires are deformed very readily and do not bounce like the former high pressure tires, so that the vehicle is not bumped up and down or jolted to the same extent. The springing of motor vehicles has also been improved, and in addition the speed of travel has increased, so that a slightly corrugated road may be travelled without the corrugations being felt at all.

Accordingly, both from the standpoint of the vehicle and of the road pavement, the problem of corrugation has been made considerably less acute than when the motor vehicle first came into use. This result is of course true only for a road system cared for with regular and systematic maintenance.

## THE SAFETY OF THE ROAD.

For the greater safety of the users of the roads, the Board has given close attention to the elimination, as far as possible, of all potential sources of danger on State highways and main roads. Where narrow, sharp curves existed, these have been improved by superelevation, straightening up and widening, and shoulders of pavement have received special attention by maintenance men. By erecting guard fencing and posts which have been painted white to make them easily discernible at night, additional security has been given to travellers. Standard modern signs, in the shape of red triangles fitted with reflectors have also been erected at danger points along the roads, and these have proved of great advantage in warning drivers of possible danger.

The safety of the road has been the fundamental consideration of the Board in the location, design and maintenance of the road. No effort is spared in making the roads safer to the travelling public, as it is felt that any additional expenditure incurred in eliminating any possible source of danger to traffic is always justifiable.

The most serious menace now existing, particularly on State highways, as well as on a number of the more important main roads, is the presence of unattended horses and cattle wandering at will over these roads. As stated in the Board's 18th Annual Report the danger is more prevalent on the 3-chain roads, which offer convenient areas for pasturing.

Information obtained from the Police Department indicates that during the year 1931, 76 accidents were caused by collisions with wandering stock on public roads, 22 of which were fatal. In 1932, the number of accidents from this cause increased to 121, of which 21 were fatal.

The Board is strongly of opinion that with the increasing traffic, the time has now arrived for definite action to be taken, and to that end is seeking the necessary legislative authority to deal with the nuisance.

The number of accidents on State highways during the year under review totalled 251, of which 23 were fatal. Investigations made by the Board's officers indicated that the causes of these accidents were mostly due to lack of sufficient care on the part of the drivers of motor vehicles.

## DAMAGE TO ROADS.

In view of the excessive damage caused to roads by solid rubber tires fitted to the wheels of commercial motor vehicles used on country roads, the Board has, after careful investigation, come to the conclusion that the time has now arrived for action to be taken for the prohibition of tires of this description.

From the census of traffic taken on the several State highways during the past four years, it has been found that at the beginning of 1929 solid tired vehicles represented 3·36% of the total number of motor vehicles registered in the State. In February 1933, the traffic count showed that the percentage had fallen to 1·09%, a decrease of 2·27%.

From these particulars, it is obvious that truck owners are realizing the advantages of the pneumatic tired vehicle over the solid tired type, the reduction in running costs no doubt being a factor in their decision to make the change over, apart from the lower registration fees chargeable for a pneumatic tired truck.

From England and the United States of America, where comprehensive series of tests have been made, information has been obtained which indicates that on an average country road the extent of damage to surfaces by the solid tired vehicle would be five times as great as that caused by the vehicle fitted with pneumatic tires. Legislation has been enacted in England and in several States of the United States of America to prohibit the use of solid tires, whilst this prohibition has been in force in Italy since the 1st January, 1932.

Taking into consideration the fact that the roads constructed throughout the State are of the low cost type, which are capable of carrying 98% of the traffic, the Board is strongly of opinion that action should now be taken to protect the roads by prohibiting the use of solid tires, and to enable truck owners to replace their tires, such prohibition should not operate until a reasonable time has elapsed after the passing of a Bill which will be necessary to give legislative sanction to the proposal.

To protect certain roads which are subjected to heavy motor traffic, it was again necessary for the Board to exercise its statutory powers to prohibit the use of such roads by motor vehicles exceeding, with the load, 6 tons in weight. As several drivers of motor vehicles continued to traverse these roads with loads in excess of the limit allowed, it was necessary to take action against them, and proceedings were instituted in seven cases, resulting in fines being inflicted.

For the same reason, the Board was compelled to prohibit the use of trailers drawn by motor trucks over a section of the Calder Highway, which was recently constructed with local materials, and was being severely damaged during wet weather by the loaded trailers breaking through the road surface.

## PLANT.

Amongst useful items of plant introduced during the year for the maintenance of unsurfaced roads, the pneumatic-tired power grader has been particularly successful. Previously this type of plant, with solid rubber tires, had been very limited in use when working off hard pavements, but the use of twin pneumatic tires giving excellent adhesion has enabled the power graders to do a good deal of shouldering and light construction work, and has also enabled them

to do fairly heavy scarifying on gravel roads, with the result that the complete restoration of old gravel roads both on surface and shoulders can now be undertaken at low cost by one of these units in charge of one man only.

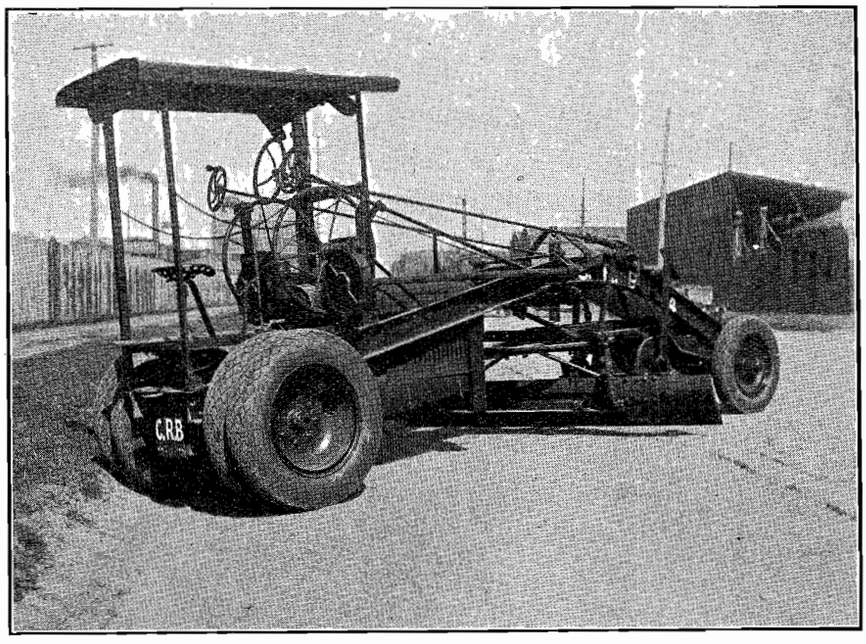



Plate No. 27.—Pneumatic-tired Power Grader.

The higher speeds of the modern motor vehicle has caused demands for better riding qualities being obtained on roads. The cheap type of gravel and crushed rock pavement lends itself particularly well to obtaining at very low cost a riding surface that is much superior to that obtainable with any expensive type of hard surface pavement. The use of heavy long wheel-base graders, drawn by crawler tractors, for final trimming of the road prior to spraying, has enabled excellent surfaces to be cheaply secured. An illustration of the type of grader referred to is shown in Plate No 28.

Plate No. 28.—Heavy long wheel-base grader drawn by Fordson crawler tractor.

## ROAD RESEARCH.

Since the advent of the motor vehicle, more and more attention is being given to constructing durable roads at lower cost, with a view to securing longer lengths of highways that will be serviceable throughout the year.

Research is an important factor in deciding on the design of a roadway and on the type of surfacing that will best serve the needs of traffic at the lowest possible cost.

The work done in the laboratory, equipped at the Board's Office for the testing of materials, has been of great advantage in the work of roadbuilding in this State. Continuous research carried on in the laboratory in the testing of soils and roadmaking materials has resulted in the utilization of only such materials as have been proved suitable for the purpose, and at the same

time, the work has contributed in no small degree to the reduction in construction costs. In the research work, considerable savings can be made by ascertaining accurately the suitability of materials in different localities for particular works.

On this subject, Mr. Arthur M. Hyde, Secretary of Agriculture of the United States of America, at the convention of the American Association of Highway Officials held in November last, speaking for his Department as director of federal activities and expenditures for highway development, stated that in dealing with the great national subject of highway improvement, he could suggest nothing and could ask nothing of greater significance than that every Highway Department shall dedicate itself to a greater and farther-reaching programme of research, both economic and physical, than it has ever undertaken in the past, that it is not contradictory to state that, as the funds for the highway programme decrease, the greater should be the funds devoted to investigational reviewing and research and that, through the disclosures, the correct policies of management and technical standards shall be constantly adjusted to the needs.

The following summary sets out the nature and extent of the tests carried out in the laboratory during the last financial year :—

| Material | No. of Samples. | No. of Tests. |
|---|---|---|
| Gravel, metal, &c. .. .. | 1,000 | 1,000 |
| Soil .. .. .. .. | 125 | 650 |
| "Bitural" .. .. .. | 250 | 300 |
| Other bituminous materials .. | 275 | 425 |
| Miscellaneous .. .. .. | 100 | 100 |
| Total .. .. | 1,750 | 2,475 |

Having in mind the importance of research bearing directly on the road problem, and the wide field for investigation, the Board hopes in the near future to be in a position to extend the scope of this Branch of its work.

Details of the work done during last year in the Board's laboratory, are given in the appended report of the Chief Engineer.

## TREE PLANTING.

Efforts to improve the appearance of roadsides and beautify the landscape, have been continued by municipal councils, progress associations, and other organizations.

The Calder Memorial Avenue on the Prince's Highway, between Melbourne and Geelong, was further extended during the year by the addition of 30 plantations. To date 5,200 permanent trees and 62,000 cover trees have been planted. The permanent trees were donated by the Nurserymen and Seedsmen's Association of Victoria, Mr. James Railton, Messrs. G. Rimington Pty. Ltd., a number of metropolitan municipalities, and the Werribee and Heidelberg Shire Councils, and the cost of planting has been partly met from public subscriptions.

With the assistance of the Geelong Town Planning Association, it is anticipated that the scheme will be completed during next financial year by planting 80 additional plantations on the opposite side of the roadway where belts of trees were planted and fenced by the association some years ago.

On the Calder Highway in the Shire of Gisborne, the line of trees planted in previous years by the local Shire Council and the Nurserymen and Seedsmen's Association, under the direction of Cr. James Railton, will form in the near future, with proper care and attention, an avenue which will be a pleasing feature on this section of the highway.

At the instigation of Cr. Frank Langlands, the Horsham Rotary Club was instrumental in planting a number of trees on the Western Highway at Green Lake, 7 miles on the Melbourne side of Horsham. The result of this effort will, at no distant date, be shown in the improvement and beautification of a bare strip of land between the lake and the roadway. Members of the committee of the club have undertaken the care and maintenance of the trees until they become properly established.

Some years ago, the Board established the practice of recording in a separate account, the proceeds derived from the sale of dead timber on main roads and State highways, and utilizing the amount from time to time in planting trees to replace those which had been cut down on account of their interfering with telephone and electric transmission lines. By this means, a number of trees were planted in suitable localities. As additional funds become available, it is intended to continue this policy.

## AMENDING LEGISLATION.

During last financial year, the following Acts affecting the Country Roads Board were passed by Parliament.

### Country Roads Board Fund Act 1932, No. 4038.

Under the provisions of Section 38 (2) of the *Country Roads Act* 1928, it is provided that in every financial year, the sum of £50,000 shall be paid into the Country Roads Board Fund from the Consolidated Revenue, one-fifth of which sum is appropriated for the maintenance of main roads and State highways, and four-fifths for distribution amongst the several metropolitan and provincial municipalities mentioned in the Act, to be applied by them towards the construction, renewal, reconstruction, repair and maintenance of streets or roads in such manner as the Country Roads Board may direct.

In July, 1932, an Act was passed to provide that payment of £10,000 for the maintenance of main roads be discontinued in respect of the year commencing on the 1st day of July, 1931.

Under the same Act, it was also provided that in respect of the financial year 1931–1932, the sum of £150,000 be applied out of the Country Roads Board Fund and paid into Consolidated Revenue. In lieu of this amount, a similar sum was made available to the Board out of the National Recovery Loan.

An important provision affecting municipalities was also included in the Bill by which such municipalities as the Minister, on the recommendation of the Board, determined, should be relieved in the financial year beginning on the 1st July, 1932, from the payment of so much of their liabilities in respect of permanent works on Main Roads, State Highways and Developmental Roads as the Board recommended. Such relief was not to exceed £25,000, and was to be paid to the Treasurer of Victoria out of the Country Roads Board Fund.

### Country Roads (Traction Engine Fees) Act 1932, No. 4050.

Under this Act, which was passed in October, 1932, it is provided that if any traction-engine of whatever weight is not used on any highway other than for the haulage of agricultural implements or machinery, the annual registration fee shall be £1 1s., in lieu of the fees of £6 to £15 stipulated in the *Country Roads Act* 1928. Provision is also made for a reduction in the registration fee for traction-engines used on any highway for the haulage of roadmaking machinery or plant to £5 5s. per annum in lieu of the amounts ranging from £6 to £15.

### Country Roads Board Fund Act 1932 (No. 2), No. 4086.

This Act, which was passed in December last, provided that—

1. Fees for licences to drive motor cars paid under the Motor Car Act were not to be paid into the Country Roads Board Fund in respect of the financial year commencing on the first day of July, 1932.
2. Annual payment be suspended of £50,000 from Consolidated Revenue into the Country Roads Board Fund, of which £10,000 under the original Act was to be used for the maintenance of main roads and State highways, and £40,000 for distribution amongst certain municipalities towards the construction, renewal, maintenance etc., of streets or roads.

## LICENSING OF COUNTRY MOTOR OMNIBUSES.

The number of licences issued, routes prescribed, etc., from the 1st July, 1932, to the 30th June, 1933, are shown in the following statement :—

| | | Fees Payable. £ s. d. |
|---|---|---|
| Stage Motor Omnibuses— | | |
| Licences issued and renewed | 277 | 684 0 10 |
| Permits issued | 22 | 11 0 0 |
| Routes prescribed | 13 | .. |
| Touring Motor Omnibuses | | |
| Licences issued and renewed | 73 | 249 12 9 |
| Light Motor Omnibuses— | | |
| Licences issued and renewed | 415 | 1,725 16 0 |
| Drivers' Licences issued | 724 | 181 0 0 |
| | | 2,851 9 7 |

The total number of routes prescribed since the Omnibus Act was enacted is 232.

For various offences against the provisions of the Omnibus Acts and Regulations, proceedings were instituted in 145 cases, and fines and costs imposed amounted to £1,156 10s. 4d.

A comparison of the number of vehicles licensed during last year with the number licensed during the preceding year shows that 765 licences were issued for the period ended 30th June, 1933, as against 712 for the previous financial year.

## OFFENCES UNDER THE MOTOR CAR ACT.

As a safeguard against excessive damage to roads, the Board is given power under the Motor Car Act to control the weight and speed of motor cars carrying goods for hire or in course of trade on State highways and declared main roads.

It was necessary to institute proceedings against drivers of motor vehicles for travelling at speeds in excess of the limits prescribed under the Act, and fines were imposed in 173 cases. Drivers of licensed motor vehicles carrying passengers for hire were prosecuted in 20 instances and fines inflicted. The total amount of fines and costs amounted to £1,249.

For carrying goods which, with the weight of the vehicle, were in excess of the limits of weight allowed by law, proceedings were taken in 29 cases, and fines and costs imposed totalling £186 3s. 6d.

## STATEMENTS OF ACCOUNTS.

Statements of Accounts for the year ended 30th June, 1933, of the Country Roads Board Fund and balance sheets as at that date appear in Appendix A.

On referring to the statement of the Country Roads Board Fund, it will be seen that the motor registration fees, which are the Board's principal source of revenue, amounted to £1,144,101 0s. 1d.; fines under the Motor Car Act to £11,614 11s. 7d.; a total gross revenue of £1,155,715 11s. 8d.

The cost of collection totalling £69,850 13s. 1d. included the following items of expenditure :—

| | | |
|---|---|---|
| Motor Registration Branch— | | |
| Salaries and Wages .. .. .. | £22,600 | |
| Police Patrol — | | |
| Wages .. .. .. .. | 14,551 | |
| Motor cycle expenses .. .. .. | 3,196 | |
| Allowances .. .. .. .. | 2,049 | |
| | | £42,396 |
| Postage, printing and stationery .. .. .. | | 10,520 |
| Number plates, etc. .. .. .. .. .. | | 14,013 |
| Miscellaneous .. .. .. .. .. | | 2,921 |
| | | £69,850 |

The net revenue under the Motor Car Act was, therefore, £1,085,864.

The receipts from the licensing of country motor omnibuses under the Motor Omnibus Act was £3,365; whilst the expenditure incurred in the administration of the Act totalled £4,932; representing a deficiency of £1,567, which was borne by the Country Roads Board Fund.

Of the amount expended from loan funds, £35,051 was spent on declared main roads and £80,715 on developmental roads. In the former case, half the total cost is required under the Country Roads Act to be repaid by the municipalities at the rate of 6% per annum, representing 4½% interest and the balance sinking fund, whilst in the case of developmental roads an average rate of 2% on the capital cost is to be paid by the Councils on account of interest.

With this expenditure, the total loan liability of the Board as at 30th June last was £10,893,089. The whole of the interest and sinking fund payments on this expenditure is now made by the Board out of the Country Roads Board Fund and by the municipalities out of the municipal fund. The amount paid out of the Board's fund during last financial year in respect of interest, sinking fund and exchange was £315,290 18s. on account of the State's proportion of expenditure, and £212,184 1s. 5d. represented payments by municipalities.

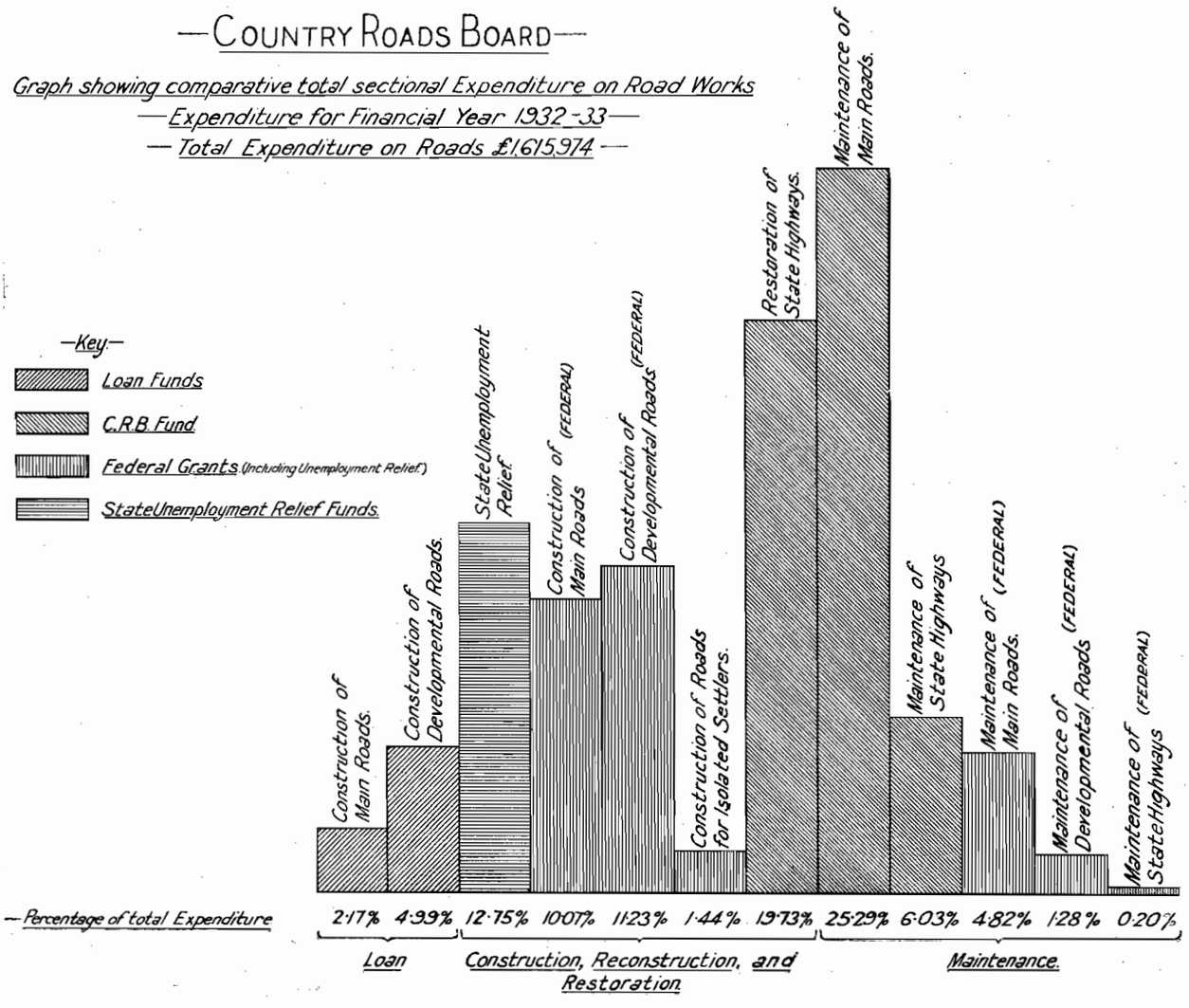
Statement of expenditure on road construction and maintenance, including expenditure under special appropriations, is submitted below in summarised form, from which it will be noted that the total for the year was £1,615,974.

| — | — | Under Direct Supervision of the Board. | Under Supervision of Municipalities. | Total. |
|---|---|---|---|---|
| 1. State Highways— | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Maintenance and reconditioning .. | .. | 351,419 2 7 | 68,002 0 2 | 419,421 2 9 |
| 2. Main Roads— | | | | |
| Construction and restoration .. | 197,471 13 2 | .. | .. | .. |
| Maintenance and reconditioning .. | 485,087 11 1 | 148,353 8 7 | 534,205 15 8 | 682,559 4 3 |
| 3. Developmental Roads— | | | | |
| Construction, &c. .. .. | 282,939 8 8 | .. | .. | .. |
| Roads for Isolated Settlers .. | 23,300 6 10 | 131,539 5 7 | 174,700 9 11 | 306,239 15 6 |
| 4. State Unemployment Relief— | | | | |
| Main and Developmental Roads .. | 205,786 4 0 | .. | .. | .. |
| Roads for Isolated Settlers .. | 340 1 3 | 113,868 18 9 | 92,257 6 6 | 206,126 5 3 |
| 5. Commonwealth Unemployment Relief- | | | | |
| Main and Developmental Roads .. | .. | 1,566 7 11 | 61 14 4 | 1,628 2 3 |
| | | 746,747 3 5 | 869,227 6 7 | 1,615,974 10 0 |

Towards the expenditure on the reconstruction of bridges on State highways and the construction and maintenance of main roads and developmental roads, the Commonwealth Government contributed an amount of £469,061 15s. 5d. under the provisions of the Federal Aid Roads Act 1931.

Under Act 3662, an amount of £40,000 was allotted each year to certain municipalities for the construction, reconstruction, maintenance &c. of streets and roads, but these payments were suspended in respect of the financial years ended 30th June, 1932 and 1933. An expenditure of £15,123 16s. 6d. was incurred by municipalities during the year under review, from grants made prior to the passing of the Act suspending such payments.

A graph showing comparative expenditure on road works from various sources during the financial year ended 30th June, 1933, is appended.



## APPORTIONMENT OF COSTS.

In accordance with the provisions of Section 28 of the *Country Roads Act* 1928, the cost of Permanent Works and Maintenance was apportioned for the year ended 30th June, 1932. An amount of £8,350 13s 5d. was charged to municipalities in respect of expenditure on Permanent Works and £99,644 19s. 6d. on Maintenance.

As stated in the Board's last Annual Report a number of municipalities failed to pay contributions due to the 30th June, 1932, the total arrears at that date being £41,745 8s. 2d.

With amounts paid by certain of these municipalities during the year under review, supplemented by relief afforded under Act No. 4038, the aggregrate arrears were reduced at 30th June, 1933 to £39,068 18s. 4d., the shires in respect of which sums are still outstanding being Beechworth, Birchip, Charlton, Eltham, Healesville, Huntly, Lillydale, Otway, Shepparton, Swan Hill, and Walpeup.

## MOTOR REGISTRATION.

During the year ended 30th June, 1933, 179,602 motor cars were registered, the following classes of vehicles being included in the total :—

| | | |
|---|---|---|
| Private cars | | 124,609 |
| Commercial motor vehicles | | 28,612 |
| Hire Cars | | 2,095 |
| Licensed omnibuses— | | |
| Metropolitan | 185 | |
| Urban and country | 662 | |
| | — | 847 |
| Motor cycles | | 23,439 |
| TOTAL | | 179,602 |

Comparing the total registrations with those of the previous year, an increase of 11,650 is shown, equivalent to 6·34 per cent. The number of private cars increased by 7,449, commercial vehicles by 3,644, motor cycles by 871 and motor omnibuses by 16. The registration of hire cars decreased to the number of 330.

The net revenue received during last year was £1,085,864, as compared with £1,058,491 for the year ended 30th June, 1932. In making this comparison, allowance must be made for the transfer of the amount of £35,485 5s. 6d. received for motor drivers' licence fees to consolidated revenue under Act No. 4,086, which operated during the year ended 30th June last.

We have the honour to be, Sir,

Your obedient servants,

W. T. B. McCORMACK, Chairman.

F. W. FRICKE, Member.

W. L. DALE, Member.

R. F. JANSEN, Secretary.

11315.—3

# CHIEF ENGINEER'S REPORT.

The Chairman,

Sir,—

I have the honour to submit herewith my report on technical details of work carried out during the year ending 30th June, 1933.

1. *Construction Methods.*—Methods of construction in general followed those in use in previous years. More general use of soil analysis enabled more rational designs of pavements to be made, and as a result many miles of very thin pavements were constructed, and stood up remarkably well during the winter. The stage-construction work carried out in recent years has exceeded expectations in the life of the first stage, and the wisdom of these methods of construction, using an initial stage of traffic-bound, fine-grained, drag-maintained material has been abundantly justified. Very many miles of pavement constructed of 2-in. or 3-in. of gravel some years ago are still carrying traffic without any signs whatsoever of failure, and at very low maintenance cost. The tendency to look upon all construction as stage construction is growing, and it is very interesting indeed to note the remarks of the Director of the Bureau of Highways, in the State of Ohio, in America. In January of this year, the Director stated:—"Stern realities have harshly awakened us from our Utopian dream of a permanent pavement, and we find ourselves face to face with the problem of salvaging pavements which were not designed with that in view. Recent experiences with reconstruction have convinced us that the sooner we consider all of our highway improvements as stage-construction projects, the sooner we will have reached a rational or logical basis for the solution of our problem."

2. *Districts.*—Municipal engineers work under very considerable disadvantage, as they have not access to a well equipped laboratory, or to any volume of technical literature, nor have they the advantage of close co-operation and discussion with other engineers carrying out similar work. Again, the very limited funds which have been available to municipalities during recent years have made them very cautious in attempting any experimental work which might result in failure. For these reasons, municipalities in general lag behind centralized bodies, such as the Board, in the adoption or new methods, or improvement of old methods, although individual municipal engineers in many cases have shown themselves extremely progressive. The Board's district engineers serve an extremely useful purpose in introducing to the municipalities the new methods of construction adopted by the Board from time to time. Not only are these methods the results of the Board's experience and experiment, but are frequently the results of the co-operation of the Board's officers with municipal engineers throughout the State, and the manner in which the municipalities in general co-operate with the Board's engineers in an endeavour to improve the standards of road construction and reduce costs, is very gratifying to all concerned. With a return to prosperity and a more vigorous prosecution of road improvement, the results of general improvement to the technique of road construction will probably be widely used in the construction of those roads for which responsibility lies entirely with the municipalities, as well as for those on which the responsibility is shared with the Board.

3. *Gravel Pavements.*—The Board has consistently maintained, frequently in the face of severe criticism, that for rural roads through Victoria, even fairly near the larger cities, a sealed gravelled pavement was quite adequate for present traffic, and for traffic to be expected for some years. Not only has the Board's experience justified this attitude, but experience in America, where traffic is much denser, has confirmed the wisdom of this practice.

In 1925, an 8-mile length of experimental road in South Carolina was surface treated in various ways, the base being in nearly all cases what was known as "top soil," which very much resembles the lower class fine-grained gravel or sandy loam used in Victoria. It was, in fact, the early success of this type of work in America that encouraged the Board to extend largely its activities in this direction. The Bureau of Public Roads, in America, probably the outstanding highway research organization in the world, has from time to time reported on the experiment, and has now issued its final report after eight years of observation of this 8-mile length, the results of which have been highly satisfactory. In view of the fact that this road carries heavier traffic than any rural road in Victoria, although consisting, as stated before, merely of surface-treated "top soil," the conclusion of the bureau is of very considerable interest. The traffic in 1930-31 averaged throughout the year 956 vehicles daily, with a maximum of 1,402 vehicles per day. The maintenance cost since 1925 has remained practically uniform, and the bureau says:—

> "At the termination of the experiment, all the sections were in good condition, and indicated that they would have continued to give excellent service."

The termination of experiment referred to the fact that, owing to the indifferent location of this section of the road, the road was re-located.

4. *Loam Bases.*—While no new types of construction were used generally during the financial year, considerable technical advance was made in the adaptation of existing methods to newer types of materials in reducing cost, and in general refinement of methods of construction. Wider use was made of experimental data obtained from laboratory work, and results of soil analysis were applied to pavement designs with greater certainty. As previously indicated, much thinner pavements were used with confidence, which has been justified by results. In particular, loam bases of thickness depending on the nature of the sub-grade, and carrying wearing surfaces of fine crushed rock or gravel of only 1 inch to 2 inches in thickness, have proved very satisfactory for developmental or main roads carrying no great amount of heavy steel-tired traffic. This type of traffic is still the controlling factor in the design of light pavements, and were general use made of rubber and particularly pneumatic tires, maintenance cost would be still further reduced.

5. *Surface Smoothness.*—With the higher cruising speeds made possible by improvements in car design, the smoothness of road surfaces, and in particular the absence of longer irregularities or "swings," has become increasingly important. For this reason, considerable attention has been paid in initial construction to boning in lengths of 100 feet on all roads being prepared for spraying. While heavy maintenance plant, such as

tractor-drawn graders, power graders, planers, &c., can produce a very smooth surface free from small irregularities, unless initial construction is very carefully carried out, it is difficult to make a road "good riding" for speeds much in excess of 40 miles per hour. While it may be considered that such speeds are excessive, it must be realized that the tendency is for speeds to increase, and with the design of vehicles improving rapidly, such speeds are in general perfectly safe on long straight stretches of highway with good visibility. Short rough sections, however, tend to cause loss of control, and, therefore, it is highly important that the road shall be of as uniform a character as possible. In this respect, the use of roadmix seals in improving short bad sections of road occurring in otherwise good long lengths has proved valuable. Again, superelevation of curves, and improvement of visibility on horizontal and vertical curves, is necessary to provide for safety, and the works of reconstruction carried out on the State highways during the past year have been limited almost entirely to works required to either reduce maintenance cost or improve the safety of the road for traffic.

6. *Pneumatic Tires.*—It has been pointed out from time to time that one of the major problems confronting road authorities in countries such as Australia is that of providing for heavy steel-tired vehicles, which, although forming only 1 per cent. or 2 per cent. of the total volume of traffic on the roads, yet require a very much more expensive type of surfacing than that required for the pneumatic-tired vehicle, which is becoming very common on all self-propelled units. Solid rubber tires, as indicated by the traffic census, are gradually disappearing. In this connexion, it is very interesting to note the work that is done in England and America in fitting tractors and farm lorries with pneumatic tires. The experiments have reached the stage in which in some countries large balloon tires of, say, 46 x 11.15 sections, used at pressures of from 9 to 16 lb. per square inch, are now being commercially produced for the use of tractors, and it has been stated by some authorities that the steel wheel with lugs is obsolete for farm tractors. Not only is the fuel consumption reduced by about 30 per cent., but the utility of the tractor is considerably increased, as it can be readily used for road haulage at reasonably high speed, and the general operating cost of the unit owing to the reduction of vibration has been considerably reduced. The Board is in touch with the rubber companies with a view to fitting one of the Board's vehicles with this type of tire in order to gain experience with them in this country. So far none has been available in Australia, although high pressure pneumatic tires have been successfully adapted to certain types of heavy maintenance plant. The use of pneumatic tires for the ordinary farm lorry has also been proved in England to reduce the cost of haulage with horses, and an extension of this type of equipment would undoubtedly assist road authorities, and apparently will also reduce the cost of ordinary farming operations.

7. *Drainage.*—The demand for an extension of good surfaces on all types of roads has had one unfortunate effect, in that many engineers, in endeavouring to accede to the present demands for pavement improvement, have pushed ahead without regard in many cases to providing thoroughly for drainage. In most types of civil engineering construction, adequate drainage should receive first consideration, but one frequently sees instances of pavements otherwise well constructed failing because adequate attention has not been given to this highly important factor. There are, of course, limits to the effectiveness of drainage operations, and here, again, soil tests are of considerable value in estimating the effectiveness of different types of drainage works. However, even in the absence of such tests, common sense and the adoption of elementary engineering principles will generally lead to a rational design of drainage for most conditions.

The expenditure, generally speaking, need not be large, but the cost of failure due to lack of drainage is often very high indeed.

8. *Bituminous Materials.*—Now that penetration and semi-penetration types of construction have been entirely dropped from the Board's standard methods of construction, it is becoming increasingly difficult to find any economic field for the use of the heavier tar products, although light tar products, such as cold tars for primer coats, &c., as well as tar oils and tar fluxes, can be economically used. There does not appear to be any satisfactory substitute for bitumen for final surface sealing. In an endeavour to use as much of the locally produced material as possible, the Board has, during the past year, adopted somewhat different types of seal coat for initial sealing of roads constructed of fine crushed rock, or very well bonded gravel, granitic sand, &c. In lieu of the primer coat generally used, a first seal of approximately .2 gallon per square yard of a soft "Bitural," with a float test of 80 secs. at 90 deg. F., is first sprayed on the road and covered with covering material (screenings, or gravel), at the rate of approximately 1 cubic yard to 120 square yards. Traffic is then allowed to use this seal after broom dragging and rolling until it is convenient to apply the remainder of the seal coat, which consists of about the same amount per square yard of bitumen fluxed usually to a float test of approximately 400 seconds. This second seal is usually applied within one to three months of the initial seal. By this means, a seal coat of approximately .4 gallons per square yard is built up, and the "Bitural" is protected from the attack of weather. The soft "Bitural" containing a fair percentage of oils appears, by a process of selective absorption, to obtain a very good bond to the immediate road surface, while the bitumen sprayed on to the comparatively soft "Bitural" seal appears to obtain, by a fluxing action, a very intimate contact with the first seal.

It is hoped that this type of construction will be quite as satisfactory as the ordinary "primer plus bitumen" seal, and will result in the use of the locally-produced material. The poor susceptibility of the "Bitural," however, common to all tars, is still presenting difficulties in the field.

9. *Road-mix Seal.*—A connsiderable amount of road-mix seal work was done in various parts of the State, and the method has now become well developed, so that satisfactory results may be obtained with certainty. Following experience of previous years, a new type of road-mix planer has been developed, and it is hoped that this will still further decrease the cost and increase the efficiency of this type of construction. One difficulty that has arisen in the use of this type of seal is that many old roads, perfectly sound and already sealed, have an excessive camber, a great deal of the cross fall occurring on the outside 2 or 3 feet of the pavement. A method successfully adapted to this condition has been developed. This generally involves the following details:—

Shoulders are first put up to provide for the normal crossfall required. The road is then scarified along the lines where the excess crossfall commences, to a width of about 1 foot. The outside of the road between this point and the shoulder is made up with gravel, fine crushed rock, or similar material, and consolidated by rolling and traffic until complete consolidation is obtained. Maintenance of the new portion is carried out during consolidation as for ordinary gravel or crushed rock pavement, and at the proper time the side is primed with cold tar, and a road-mix seal placed over the whole width of the road. Where the general shape, however, is so poor that this method is not applicable, it is generally much more economical to re-sheet the whole road with fine crushed rock or gravel than to attempt to take out irregularities with a thick road-mix seal, the total cost of which may be excessive.

10. *Speedometer Surveys.*—In order to push on more rapidly with the record surveys of the State highways, which have been found extremely valuable in drawing up programmes of work, and in administrative work in general, a trial was made early in the financial year with the use of a utility truck fitted with an accurate calibrated speedometer, reading to .001 mile. The result exceeded expectations, and over a length of 6 miles, which had previously been surveyed in detail for construction work, the speedometer survey checked up to within 3 feet of the chainage surveyed. As with improvements to curves, &c., the actual chained length of the centre line of a highway generally becomes shortened with the passage of years, any slight error in a speedometer survey is not of particular significance, and the result has been that two men equipped with a survey truck of this type can average about 5 miles of surveys per day in average country. These record surveys comprise the obtaining of a record of all bridges and culverts, widths, thickness, and types of pavement, width of formation, widths of right of way, radii of curves, and general nature of soil, &c. Permanent pegs are put in every quarter of a mile, and mile posts and ½-mile posts later erected.

11. *Workshop.*—In order to maintain the Board's mechanical plant, and also to carry out the maintenance of the State Government motor cars, which are entrusted to the Board for repair, the Board maintains a well-equipped workshop in South Melbourne. It has been found that, as the Board's equipment comprises many units which are peculiar to the Board's work alone, it is absolutely necessary to maintain a staff of mechanics especially equipped to render service to these items of plant. In particular, spraying units have been considerably improved in design and details of manufacture. Generally, however, manufacturing work is not attempted, and full use is made of private firms manufacturing or carrying out special types of work.

During the financial year, opportunity was taken of an exceptionally favorable offer of a second-hand universal milling machine in good order, and this is now installed in the shop, and has been found very useful, particularly in gear-cutting work, general milling work, and manufacture of runners for bitumen pumps, &c.

12. *Surface Treatment.*—Some details of interest regarding surface treatment are given below, and it will suffice here to draw attention to the necessity for carefully selecting the primer material to be used when surface sealing the less stable pavement types, such as sandy gravels, sandy loams, heavy clays, or gravel containing an excess of heavy clay. The principles involved have been set out from time to time, and two standard types of primer made available, but it is felt that engineers are somewhat inclined to simply adopt a type of primer coat that has been found satisfactory on one type of surface and use it somewhat blindly for all seal-coat work. It cannot be too strongly emphasized that the stability of a surface of the types of material just mentioned depend very largely on the correct amount and correct type of primer being selected. Further, care is required in selecting good weather conditions for priming these types of surface and, while it is somewhat difficult possibly to maintain surfaces of a sandy nature in dry weather, any attempt to carry out surface sealing work in cool weather by using a light primer on such surfaces will, if steel-tired traffic is at all heavy, result in considerable failure.

## SURFACE TREATMENT OF ROADS.

*General.*—Fourteen sprayers were again put into commission during the season 1932-33, but owing to a slight increase in work over the previous year, each of the units worked the full season. It was not necessary to purchase a new plant. Certain repairs which would have been carried out on the 800-gallon units, particularly heaters, if this type of plant were to be maintained until the sprayers were worn out, were not carried out in view of their unwieldy nature and the desirability of replacing them with units which can be moved more quickly and are less liable to damage the roads over which they are towed.

*Plant Efficiency.*—The efficiency of operation of the 400 and 800 gallon plants is given in the table below. The figures are calculated on the total time the plant was away from the storeyard, exclusive of time stored in the field. The rated output for 800-gallon plants is taken at four loads of 680 gallons cold material per day, and that of the 400-gallon sprayers at eight loads of 350 gallons cold material per day. In both cases, the week is considered to consist of five and a half working days.

PERCENTAGES OF TIME AWAY FROM STOREYARD, EXCLUSIVE OF TIME STORED IN THE FIELD, SPENT IN VARIOUS OPERATIONS, OR IDLENESS DUE TO DELAYS.

| Item. | 800-gallon sprayer. | 400-gallon sprayer. |
|---|---|---|
| Spraying .. .. .. .. | 48.2 | 51.6 |
| Moving .. .. .. .. | 32.2 | 22.9 |
| Holidays .. .. .. .. | 7.9 | 7.2 |
| Weather delays .. .. .. | 6.0 | 12.5 |
| Mechanical delays .. .. .. | 2.4 | 2.3 |
| Avoidable delays .. .. .. | 3.2 | 7.7 |
| TOTAL .. .. .. | 99.9 | 104.2* |
| Stored in field .. .. .. | 6.85% | 5.0% |

* Due to rated output being exceeded.

The chief reasons for avoidable delays were stoppages for completion of the preparation of the road in the case of priming and sealing, and shortage of covering material generally. In the case of the 800-gallon sprayers, the total percentage of time spent in spraying was greater than during any season since 1926-27, when records of this nature were first compiled The previous maximum was 47.5 per cent., in 1930-31.

The only previously recorded efficiency in the case of the 400-gallon sprayers is that for the season 1931-32, when it was 43.2 per cent.

These results are considered satisfactory. They can be improved only if thorough attention is paid to the construction and preparation of roads before the arrival of the sprayer, the supply of aggregate well ahead of the work, and the organization of the actual spraying to ensure the maximum output possible from the plant.

### PLANT.

*Bitumen Heaters.*—During the year, a survey was made of the existing types of horse-drawn, 80-gallon wood-fired bitumen heaters for patrol maintenance, and heating tests were carried out with six heaters produced by different manufacturers. A design was then prepared for a Country Roads Board pattern heater of this class, details of which are shown on the accompanying drawings Fig. 1 (*a*) and (*b*). Marked reduction in time of heating and filling has been obtained.

*Mixer-planer for Road-mix Sealing.*—After a year's work with two types of mixer-planer machine for road-mix sealing, a design as shown on the accompanying drawing (Fig. 2) has been prepared embodying the alterations made and experience gained while using the first two machines.

## Materials.

*Aggregates.*—It has been observed that aggregate containing only a small percentage of fines is very much more easily forced into the bituminous binder by rolling. It has, therefore, been decided on certain work under the direct control of the Board to obtain this advantage, while retaining those of a more graded aggregate by applying the covering material in two applications. The first application will consist of ⅞-in. to ½-in. particles, which, after broom dragging and rolling, will be covered by material graded from ½ inch downwards.

The mechanical analysis of the coarse (one size) and fine (graded) aggregate is as follows:—

*Screenings or Crushed Gravel* (Specification 20A 1. Direct work).

The material shall be crushed from clean, hard gravel or stone having a French co-efficient of wear of not less than 10, and shall comply with the following grading requirements when tested with laboratory screens.

Percentages by weight of materials which shall pass the following screens and sieves:—

| Material. | ⅞" circular. | ¾" circular. | ½" circular. | ⅜" circular. | ¼" circular. | No. 8 B.S. I sieve. | No. 18 B.S. I sieve. |
|---|---|---|---|---|---|---|---|
| Coarse screenings | 100 | 95–100 | 0–30 | .. | 0–2 | .. | .. |
| Fine screenings .. | .. | .. | 100 | 95–100 | 50–90 | 0–35 | 0–6 |

The ratio of coarse screenings to fine screenings shall be not less than 2 to 1 nor more than 3 to 1.

Gravel, before crushing, shall be screened so that the whole of the material fed to the crusher is held on 1-in. circular openings when tested with a laboratory screen. (Fine material passing a 1-in. screen before crushing shall be rejected.)

The surfaces of the particles of crushed material shall be clean and free from dust.

*Binders.*—Four principal types of binder were used in the past year, each being suitable for a particular class of surface treatment, and being varied slightly within its type to suit weather conditions and classes of aggregate—

(*a*) Medium tar—("Bitural," 200-350 penetration at 68 deg. F.).

(*b*) Soft asphalts and tars—(85-100 penetration bitumen fluxed with asphaltic oil, and straight-run soft "Bitural").

(*c*) Asphalts cut back with light oils, and a small quantity of fluxed "Bitural."

(*d*) Bituminous emulsion.

The first two types (*a*) and (*b*) are first heated to produce the necessary fluidity for application and incorporation of aggregate. As soon as they have cooled down after having been applied to the road, they have reached their stable state, except for such changes as are brought about by weathering.

In the third type, two methods are used to soften the material so that it can be applied and the aggregate incorporated. Certain light volatile oils (tar oil No. 1, special tar oil, kerosene, and petrol) are added to the heated bitumen. The first change after applying to the road takes place with the loss of temperature, and a second and slower change with the evaporation of the light oils. The rate of final setting up is controlled by the class and quantity of light oils added.

In the fourth type, the necessary fluidity is obtained by the dispersion of the binder in water, with the addition of chemicals to ensure stability in the drums. The bitumen in the emulsion is left behind on the aggregate in its normal form as soon as the bitumen has separated from the water on exposure to the air—that is as soon as the emulsion breaks. The rate of breaking cannot (weather conditions excepted) be varied in the field as it is fixed within certain limits by the process of manufacture. In all cases, the rates of hardening, setting up, or breaking are affected by the prevailing weather conditions, nature of the road surface, and type of aggregate being used. The presence of an excess of fine material, especially dust, has a marked effect on the action of each type.

*Types of Materials Supplied.*

(*a*) *Bitumen.*—The basic binder used—bitumen—was supplied having a penetration of 85/100.

(*b*) *Tar* ("*Bitural*").—A tar binder, "Bitural," was supplied in either of three grades, depending on the work to be performed, the locality and the nature of the pavement—

1. 200-350 penetration.
2. Fluxed (80-100 seconds float test at 90 deg. F). No. 3 primer on double-coat work in small quantities.
3. Soft straight-run, 80-100 seconds float test at 90 deg. F.

(*c*) *Asphaltic* (*Residual*) *Oil.*—Asphaltic (residual) oil was supplied for the fluxing or cutting back of 85/100 penetration bitumen. It is considered to remain in the pavement after the hardening of the binder.

(*d*) *Tar Oils.*—Three grades are supplied, as follows:—

Special.—Total oils to 270 deg. C., 90-100 per cent. Distillate up to 235 deg. C., 75-95 per cent.

No. 1 Tar Oil.—Total oils to 300 deg. C., 85-95 per cent. Distillate up to 235 deg. C., 50-62 per cent.

No. 2 Tar Oil.—Total Oils to 300 deg. C., 70-80 per cent. Distillate up to 235 deg. C., 10-17 per cent.

(*e*) *Dehydrated Crude Tar Primers.*—Light grade No. 1, Engler viscosity at 104 deg. F., 6.12 deg. Medium grade No. 2, Engler viscosity at 104 deg. F., 20-30 deg.

(*f*) *Bituminous Emulsions.*

(*g*) *Distilled Tar.*—Various grades.

## Normal Uses for Materials.

| Purpose. | Parts by volume 60° F. | | | | | |
|---|---|---|---|---|---|---|
| | No. 1 primer | No. 2 primer | 85/100 pen. Bitumen. | Residual Oil. | Tar Oil No. 1. | Power Kero No. 2 Petrol or Special Tar Oil. |
| *Normal sealing or resealing —400 secs. float test at 90°F | .. | .. | 35 | 8 | .. | .. |
| Sealing or resealing in hot areas—800 secs. float test at 90° F. .. .. | .. | .. | 35 | 6 | .. | .. |
| Sealing or resealing on cracked road—200 secs. float test at 90° F. .. | .. | .. | 35 | 12 | .. | .. |
| Roadmix seal. Macadam type | .. | .. | 100 | 10 | 10 | 17½–20 depending on weather. |
| Priming dense surface .. | 100 | .. | .. | .. | .. | .. |
| Priming more open surface such as sandy or silty gravel .. .. | .. | 100 | .. | .. | .. | .. |
| Bituminous emulsion and distilled tar—Patching .. | .. | .. | .. | .. | .. | .. |

* Straight Run "Bitural" (300–350 penetration) was used after priming for certain first seals carried out directly by the Board and for the first seal of modified macadam.

*Marking of Containers.*—To facilitate the handling of materials in the field and the return of empty drums, a system of marking has been adopted in which the colour of the end of the drums indicates the supplier, and that of two crosses painted on the bilge the nature of the material.

*Temperature—Viscosity.*—In order to avoid unnecessary heating of softer materials with loss of the more volatile constituents and waste of time and fuel, the viscosity temperature chart (Fig. 3) was prepared by the laboratory staff. It will be noted that this chart enables the consistencies of both light and heavy materials employed to be directly compared by reference to viscosity.

## LABORATORY.

In previous reports, attention has been drawn to the importance of laboratory work, both for routine tests of materials being used, and for research on new materials or new methods of construction.

The testing of tar and bitumen binders is particularly important. Tar, as produced by most modern gasworks where vertical retorts are installed, is about the worst of the binder materials commercially available. It costs just as much to apply an inferior binder as it does to apply the best available, and, of course, the maintenance of work done with the poorer product is very costly. Tar manufacturers in Victoria have recognized this, and have endeavoured to improve by special processes the properties of tars prepared for road purposes. Difficulty is, however, experienced in maintaining each product at a uniform standard. Uniformity is generally very necessary, both in those properties which indicate ability to resist disintegration, and also in properties such as consistency and susceptibility of consistency to change of temperature, which affect the methods and plant used in applying the tars, or in subsequent maintenance. It is, however, only by constant testing of the products that the desired properties and uniformity can be measured.

*Weathering Tests.*—An accelerated weathering test mentioned in the Board's Eighteenth Annual Report has been continued for routine testing of refined tar supplied by contract. The test as at present carried out consists of heating in a pot about 120 gms. of the material to be tested to 210 deg. F., and then spreading enough of it on to a steel plate to completely cover it to a depth of 1 mm. The steel plate is 14½ inches diameter, ¼ inch thick, and has a lip ⅛ inch high. It is divided across the centre to allow two samples to be tested at once. It is placed in a water bath at 150 deg. F., and levelled with the water level ⅜ inch above the bottom of the plate.

The water is automatically maintained at 150 deg. throughout by an electric heater, stirrer, and thermostat. The bath is 16½ inches square, and the upper edge is covered by a strip of rubber, on which rests a sheet of "Vita" glass .075 inch thick, thus making the bath practically airtight.

An arc lamp burning 8 mm. diameter soft carbon-cored carbons at the rate of 1⅓ inches an hour, is set with the arc flame 12 inches above the centre of the plate, and 10 inches above the glass sheet.

The sample is left exposed to these conditions for twenty hours, after which it is scraped off and placed in a pot. This pot, together with the pot containing the untreated portion of the sample, is placed in an oven until the weathered sample has completely melted; both pots are then taken out, allowed to cool to room temperature, and are then placed in a water bath. The temperature of this bath is varied until the unweathered sample has a penetration of 100. Whilst the bath is still at this temperature, the weathered sample is penetrated. This last penetration is recorded, and is known as the penetration after test.

Further series of actual exposure tests have also been carried out, as mentioned in the Board's Nineteenth Annual Report, the materials being exposed in a film 1 mm. thick on a horizontal galvanized iron tray placed on a roof about 25 feet above the ground for about three months during the summer. Tests on the materials before and after exposure have been compared with tests before and after the accelerated weathering test, and confirm the value of the latter as an indication of relative behaviour at least for any one kind of binder, e.g., for supply under a contract. (See Table A.)

Although not intended to indicate the values of the various materials in use, the results show that the accelerated test gives a good indication of the comparative hardening which will take place under atmospheric conditions.

*Consistency Tests.*—These have been necessary not only in checking tarry materials, but also in designing bituminous mixtures. The use of soft bituminous binder for surface application in sealing or re-sealing has been continued, the bitumen being fluxed at the job by adding asphaltic residual oil and light tar oil. The consistencies of these components have been carefully investigated so as to determine the desirable proportions, so that the cheaper oils should be used to the best advantage, and a well-filled "mat," bound with the necessary and sufficient amount of durable and adhesive binder, should be formed in one operation. The development of the road mixed seal, as described in the last report, has called for similar further investigation.

In order to facilitate the various tests for consistency, apparatus shown in Plate 29 has been installed. Some particulars follow.

*Automatically-controlled Constant Temperature Bath.*—In carrying out the penetration test and other tests on bitumen and tar pitches, it is necessary to maintain the temperature of the sample within very close limits at the temperature of test for one to one and one-half hours. Formerly this was done by means of a water bath heated electrically and controlled by a series resistance which was adjusted manually to give the required temperature. This necessitated a considerable amount of attention, and often caused delay owing to variations in temperature. An automatically-controlled bath was, therefore, designed and constructed to enable the tests to be carried out more expeditiously and with a minimum of attention.

The bath, which is shown at A, consists of a copper tank insulated with cork board and fitted in a wooden box. It is provided with a mechanical stirrer driven from shafting, and is heated by two radiator lamps of 250 watts each, which are controlled by a three-heat switch and a sensitive toluene thermostat. By this

TABLE A.

| Californian Bitumen. | Blown Bitumen. | Mexican Bitumen. | 60 Per Cent. Bitumen with Tar. | "Bitural." | "Bitural." | Mixture of Horizontal Retort Tar and 10 Per Cent. Trinidad Bitumen. | Coke Oven Tar. |
|---|---|---|---|---|---|---|---|
| TEMPERATURE IN °C. AT WHICH PENETRATION, 100 G. 5 SEC. WAS 100. | | | | | | | |
| 26·2 | 26·5 | 25·4 | 17·8 | 16·4 | 16·3 | 17·4 | 14·6 |
| PENETRATION 100 G. 5 SEC. AT ABOVE TEMPERATURE AFTER EXPOSURE TO ACCELERATED WEATHERING TEST. | | | | | | | |
| 86 | 82 | 80 | 81 | 70 | 52 | 39 | 20 |
| PENETRATION 100 G. 5 SEC. AT ABOVE TEMPERATURE AFTER EXPOSURE TO WEATHER FROM 8TH DECEMBER, 1932, TO 24TH FEBRUARY, 1933. | | | | | | | |
| 45 | 42 | 36 | 21 | 8 | 7 | 5 | 5 |

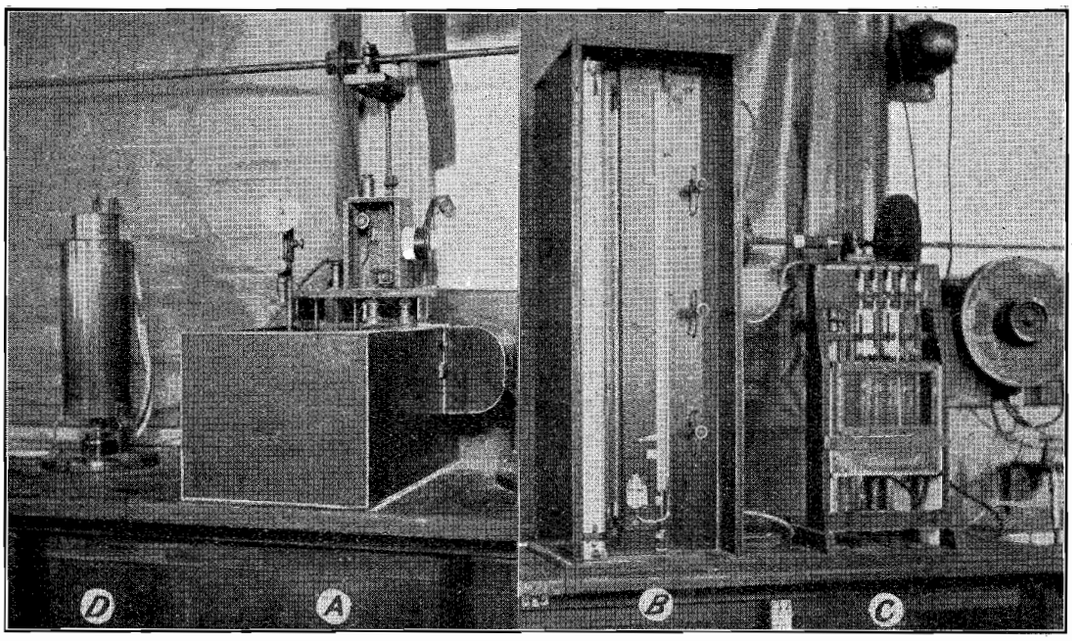



Plate 29.—Apparatus for testing tar and bitumen.

means the temperature in the bath is maintained within the specified limits ($\pm \frac{1}{10}$° C.) of the temperature required. Under normal conditions the variation is less than one-twentieth degree C.

*Capillary Viscometer.*—In order to provide a means of testing the viscosity of soft special tar and other materials supplied under contracts, it has been necessary to install a viscometer of somewhat unusual type. The design of this viscometer is based on, and was suggested by, an installation in the laboratory of the Compagnie Française de Raffinage, which was described in the reports of the 1931 Conference at Zurich of the International Association for Testing Materials. In design the instrument resembles the "Scarpa" viscometer, though the method of use is slightly modified.

The apparatus consists essentially of a capillary pipette which is filled with the material being tested by means of a constant suction applied to the upper stem of the pipette. The time of filling is proportional to the viscosity of the material. The apparatus shown at B is used to produce the constant suction while the pipettes are maintained at the required temperature in the glass-sided bath shown at C.

This viscometer, which was manufactured locally, provides more accurate temperature control than the commercial types of viscometer, in addition to which it avoids certain defects inherent in these short tube viscometers. It has been found particularly easy to clean, and enables one operator to carry out fifteen or twenty tests per day on soft "Bitural." The tests on this material, which is of approximately the same consistency as No. 1 Tar (B.S.I. Specification), are carried out at a temperature of 122° F. Results are expressed in absolute units, and the instrument may be used over a very wide range of viscosities.

*Hot Extractor.*—At D is shown the hot extractor (A.S.T.M. pattern) which is being used to examine portions of road surfaces which have been sealed with bituminous materials. The sample is placed in the apparatus and treated with hot benzol, whereby the bituminous material is dissolved. The residue of mineral aggregate is weighed and sieved, thus enabling the amount of bitumen and grading of the aggregate to be determined.

*Soil Analysis.*—Constant use has been made of soil tests in connexion with various projects for new work as well as with measures undertaken to maintain or reconstruct old roads which have suffered owing to bad foundation conditions. The tests in use follow those developed at the Bureau of Public Roads, Washington, U.S.A. They include plasticity tests and related tests applicable to clayey material, shrinkage tests, and tests designed to indicate the capacity of the soil to absorb water, as well as tests to indicate permeability. Continued use has also been made of the mechanical analysis.

The test results considered together afford very valuable qualitative information about soil, and enable the details of road design or the method of carrying out work to be arranged as economically as possible. An example of this is afforded in the work done on the Murray Valley Highway, in the Kerang area.

Consideration of results is facilitated by use of a soil classification such as that established by the Bureau of Public Roads. This classification is based

Table B.—Uniform Sub-Grade Groups.

| Group. | General Character. | Internal Friction. | Cohesion. | Capillarity. | Compressibility. | Elasticity. |
|---|---|---|---|---|---|---|
| A.1 | Well graded—Stable | High | High | No | No | No |
| A.2 | Poor grading or poor binder—Unstable if moist | High or low | High or low | May be detrimental | | |
| A.3 | Coarse—Unstable if unconfined | High | Nil | Nil | Nil | Nil |
| A.4 | Inelastic silt—Softens readily | High or low | Low | Yes | Low | No |
| A.5 | Elastic silt—Elastic even if dry | High or low | Low | Yes | Yes | Yes |
| A.6 | Inelastic clay—Softens when manipulated | Low | High | No | Yes | Low |
| A.7 | Elastic clay—Great shrinkage | Low | High | No | Yes | Yes |
| A.8 | Peat and mucks—Soft and spongy | Low | Low | Yes | High | High |

TABLE C.—TYPICAL SOIL TEST RESULTS.

| Description. | Number. | L.L. | P.I. | F.M.E. | S.L. | S.R. | L.S. | Coarse Sand. | Fine Sand. | Silt. | Clay. | Group. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | % | | | | | | |
| Swamp cement used to surface Murray Valley Highway near Gunbower | 5,483 | 15 | Nil | 14 | 13 | 9·95 | 0·35 | 38 | 19 | 26 | 17 | A.1 | 20 per cent. retained No. 10 (vesicular ironstone) |
| Heytesbury sandy loam .. | 6,289 | 14 | Nil | 16 | 15 | 1·77 | 0·2 | 31 | 41 | 19 | 9 | A.2 | |
| Halls' Gap, soft foundation .. | 6,031 | 26 | 10 | 20 | 17 | 1·80 | 1·8 | 24 | 44 | 11 | 21 | A.2 | 14 per cent. retained No. 10 |
| Beach sand .. .. | 7,073 | 21 | Nil | 26 | .. | .. | .. | 51 | 47 | 0 | 2 | A.3 | |
| Heytesbury loam .. .. | 5,689 | 24 | Nil | 33 | 26 | 1·45 | 3 | 4 | 19 | 56 | 21 | A.4 | |
| Cohuna silt, Murray Valley Highway | 5,675 | 25 | 9 | 26 | 14 | 1·87 | 6·5 | 11 | 15 | 42 | 32 | A.4 | |
| Heytesbury black loam (poor surfacing or foundation material) | 5,643 | 37 | Nil | 50 | 29 | 1·37 | 8 | 23 | 33 | 24 | 20 | A.5 | Loss on ignition 14 per cent. |
| Morwell Shire, Hatchery Road, Gunyah | 5,630 | 52 | 18 | 44 | 24 | 1·57 | 9 | 3 | 16 | 31 | 50 | A.5 | |
| Kerang–Cohuna .. .. | 5,778 | 39 | 21 | 28 | 11 | 2·00 | 9 | 2 | 10 | 33 | 55 | A.6 | |
| Tatura–Murchison Road, Murchison | 6,561 | 51 | 30 | 28 | 14 | 1·97 | 8 | 1 | 3 | 20 | 76 | A.6 | |
| Kerang–Swan Hill .. .. | 6,767 | 68 | 40 | 42 | 12 | 2·03 | 15 | 3 | 8 | 19 | 73 | A.7 | |
| Koo-wee-rup Swamp, black clay | 6,901 | 96 | 47 | 65 | 16 | 1·79 | 19 | 2 | 6 | 19 | 73 | A.7 | Loss on ignition 23 per cent. |
| No sample tested .. .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | A.8 | |

on soil behaviour, the characteristics of the various soil constituents being those shown in the following table:—

| Soil Behaviour. | Constituents. |
|---|---|
| High internal friction .. | Gravel<br>Sand |
| Detrimental capillarity .. | Silt<br>Peat<br>Diatoms |
| Cohesion .. .. | Clay<br>Gluey colloids |
| Compressibility .. | Clay and colloids unflocculated and associated with silt |
| Elasticity .. .. | Mica flakes<br>Peat<br>Flocculated clay and colloids |

Using the same criterion of soil behaviour shown in this table, the Bureau has established eight groups of soil, as shown in Table B.

In Table C some typical results on actual soils are shown. The test values included are those regularly used, namely:—

1. Lower liquid limit.
2. Plasticity index.
3. Field moisture equivalent.
4. Shrinkage limit.
5. Shrinkage ratio.
6. Lineal shrinkage from F.M.E.
7. Bureau of Public Roads grading classification—
   Coarse sand, passing 10 mesh (2 mm.), retained on No. 60 (0.25 mm.).
   Fine sand, passing No. 60, greater than 0.05 mm.
   Silt, less than 0.05 mm., greater than 0.005 mm.
   Clay, less than 0.005 mm.

Figure 4 is taken from the soil identification chart prepared by the Bureau, and shows, for the various sub-grade groups, the general ranges of values of plasticity index, field moisture equivalent, and shrinkage ratio in relation to the liquid limit. This chart is used for classifying the samples, but the reported behaviour of the soil in the field is first considered, or, if the field behaviour is not known, the behaviour when moulding the material in the laboratory is sometimes used to aid classification.

## BRIDGES.

### WODONGA NO. 1 BRIDGE.

Details of this reinforced concrete bridge are described on p. 21 of this report. The piers consist of four cast-in-situ columns directly over four driven reinforced concrete piles with a cast-in-situ tie beam at the junction and with a square cap over the columns. The whole of the flood plain of the Murray River between Wodonga and the river consists of alluvial soil over gravel deposits of great depth, so that a firm foundation exists into which piles may be driven. The superstructure of the earlier concrete bridges on this flood plain were made continuous over supports, but the three last bridges have all been simply supported. Judging by the condition of the older continuous bridges settlement is either small or very even, for no cracks in the old bridges are visible.

### BRODRIBB RIVER BRIDGE.

The general details of this new, important high-level crossing are described on p. 22 of this report.

Approximately half a mile upstream from the existing low-level crossing, the river banks are sufficiently high to take practically all flood waters, though a small amount of water flows through a depression on the east bank. A 40-ft. timber bridge is provided at this latter site, while a 200-ft. bridge is provided over the main channel. Bores indicated that the rock continued across the river from the high hill on the west bank, but at too great a depth to be used on the east bank. Over the stream width, rock is overlaid by 5 to 10 feet of silty mud and by 12 to 16 feet of water with low velocity except at flood times. Piles could, therefore, not be driven in the normal manner, and the depth of water made the use of concrete piers fairly costly. It was, therefore, resolved to try the method of driving the piles into the bedrock, which was previously shattered by explosives at the site of each pile. Holes were drilled into the rock through a 1½-in. diameter pipe, which was driven to rock first and securely fastened to the staging. The holes were then loaded with a continuous string of gelignite over the drilled depth. This has the effect of leaving a clean vertical hole into which the pile point may be driven. The diameter of the hole and cross section of the charge will vary with the particular rock, but it would appear that a single row of plugs is about right for materials of the hard sandstone type. The penetration of the pile into the rock was 3 to 4 feet.

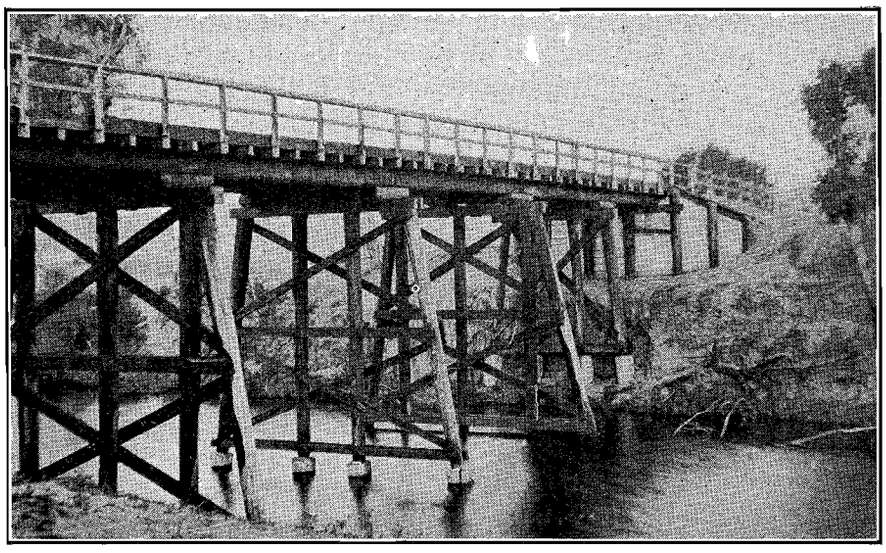


Plate No. 30.—Bridge over Nicholson River at Sarsfield.

This method was used about 40 years ago for the piers of the Sunday Creek bridge on the Hume Highway, and was so effective in that instance that the old piles were subsequently removed only by being cut through. The base of the piles was comparable in fixity to a pile potted in concrete into solid rock. The same fixity was noted at the Brodribb River piers, where the double row of piles in each pier required considerable force to bring them together at the tops. The bridge is of deck type on three lines of plate girders, with a skew of 30 degrees. The plate girders were shop-welded for the most part, but splices and erection of transverse stiffening frames were done in the field using a direct current welding set.

### Nicholson River, Sarsfield.

This bridge was originally constructed about 40 years ago, and consisted of four stringer spans and a 60-ft. truss span, with a width between kerbs of 15 feet. Investigation showed that the old log abutments were badly infested with white ants, that some piles were in bad condition, and that the truss timbers were dangerously decayed. The width between kerbs was inadequate, but 50 per cent. of the stringers were sound, and two river piers were in good order and the deck planks generally good. It was determined to reconstruct the bridge to a width of 20 feet. The centre truss was replaced by two 30-ft. stringer spans with a new central pier. The reconstructed bridge is shown in Plate No. 30.

Several features of construction for this type of work are of special interest.

1. *Width.*—Without altering existing piers and stringers (except for replacement of old members), a width of 20 feet in place of the previous 15 feet width was obtained by the use of crossbeams and longitudinal decking.

2. *Centre Pier.*—The pile lengths required, if of one piece, were over 60 feet. The portions below water level were, however, only 25 feet. These were, therefore, driven from a pair of leaders supported by the deck of the old bridge, and spliced at low-water level by a concrete sleeve, as shown in the picture.

3. *Old Piles.*—The old piles were in good order from a few feet below ground level. They were cut off at this level, a new top pile set in position, and the two spliced in the standard manner. The pier so treated is shown on the far bank.

4. *Concrete Sheeting at Abutments.*—The concrete slabs were precast to the correct lengths to span between piles and of section of 12 inches x 3 inches. The appearance of the abutments is shown. It is noted that, although 11 feet of earth filling is retained, no trace of cracking in any slab has been found.

5. *Traffic.*—There was no difficulty in the superstructure conversion of the stringer spans. For the truss span, the new centre pier was first completed without disturbing traffic. Traffic was then converted to half width on the old truss, while the 30-ft. stringers were placed without disturbing the truss system other than cutting away portions of the transverse floor beams. After this new portion of the bridge was sufficiently completed to transfer traffic, the trusses were removed and the work completed. It is estimated that such provision for traffic increases the cost of work by approximately 20 per cent. for the superstructure, but that this was more economical and safe in this instance than a temporary bridge.

### Timber Bridges.

(*a*) *Species.*—Considerable concern has been experienced over the varying behaviour of Victorian timbers in bridges. Authentic records exist of bridges "lasting" from 40 to 70 years, though in many cases they have placed severe restrictions on traffic or have a greatly reduced safety factor. On the other hand, relatively new bridges have failed by rotting at an early age. An extreme sample of this is the rotting of hardwood decking under 3 inches of sheet asphalt on the Maribyrnong River bridge at Keilor in less than six years. Designs which may be reasonably satisfactory for high-class timbers are not so when applied to poor-class timber. The difficulty of positively identifying species and lack of data on their suitability have made the problem unduly complicated. Research by the C.S.I.R. into the microstructure of the various Australian timbers has now placed identification on a more positive basis; and, by examination of the species of timbers from old bridges which have been proved to be satisfactory after many years' service, it is hoped to develop a technique which will minimize the use of unsuitable species of timber in the future and permit the use of some species at present banned.

(*b*) *Structural Details.*—No changes of magnitude have been found necessary in the major features of timber stringer bridges described in previous reports. The deck fastening to crossbeams has been altered to provide an attachment for facilitating replacement of planks and at the same time avoiding holes in the crossbeams. It has been found that with the heart side of a deck plank placed downwards there is sufficient natural curl on deck planks so that, when securely fastened down at the ends, the intermediate bearings are in firm contact without fastening. The details of the fastening are shown in Fig. 5.

The use of precast concrete slabs for abutment and wing sheeting follows the Queensland Main Roads Commission's practice, and would appear to be the satisfactory solution of an old problem. Concrete slabs are cast in lengths sufficient to span between abutment and wing piles. They are 12 inches wide and 3 inches deep. The average cost of such slabs is approximately 1s. per square foot, which is equivalent to 33s. 4d. per 100 super. feet for timber which is in the worst possible position with regard to decay, white-ant attack, &c. Abutment sheeting is difficult to treat effectively and to replace.

The drawing shows the present form of the details (Fig. 6). Particularly where the filling behind abutments has cohesive properties, the calculations for strength required are not very exact, but it would appear that the 3-in. thick slabs, reinforced as shown, are quite satisfactory for spans of 7 feet and fillings of about 12 feet.

(*c*) *"A" Frames.*—This type of bridge, illustrated in the eighteenth annual report, has been found to have a fairly wide application. Since the original bridge was constructed over Merriman's Creek, in Alberton shire, similar bridges have been constructed over Nariel Creek, in the Shire of Upper Murray; over Watkins Creek, in Mirboo shire; and over the Gibbo River, in Omeo shire. Similar bridges will be constructed at an early date over the Morwell River, on the Livingstone-road, in Morwell shire, and over the Little Albert River, on the Albert River-road, in Alberton shire.

A similar difficulty to that experienced in timber trusses is found in the main floorbeam for "A" frame bridges. Due to the great concentration of dead load from a 30-ft. span, it is necessary to use a large round log for this member or large pieces of squared timber. With these, the nuts and washers on the vertical suspension rods poke down below the member, foul the waterway and generally provides an unsatisfactory and ugly detail. The drawing (Fig. 7) indicates how a rolled steel joist may be satisfactorily used for this member.

### Hydraulic Properties of Culverts.

Considerable difficulty is experienced in finding suitable formulae to determine the hydraulic characteristics of culverts with various conditions of inlet and exit. A bulletin published by the University of Iowa, U.S.A., describes unique experiments made on various types of culverts typical of road structures. The bulletin ("The Flow of Water through Culverts") derives a series of formulae for different types and conditions of culverts, and is commended for use by municipal engineers.

### Concrete Practice.

The most important alteration in concrete practice abroad would appear to be the use of vibratory tools to assist the consolidation of concrete placed in forms. Particularly where thin sections or large quantities of reinforcements are required, it has been found that relatively little improvement on loosely-placed concrete can be effected by ordinary manipulation. It has, therefore, been necessary to increase the proportion of fine aggregate in the concrete required for such purposes, and, as the voids cannot be eliminated by ramming, to use more water in the concrete to secure workability. Such increases in voids cause low-strength, porous concrete, lacking the desirable attributes of permanent construction.

In view of the claims made for vibratory tools, experiments were made to determine their effectiveness both on the actual construction of bridges and on laboratory test cylinders. When a light tool was applied to the outside of the formwork of vertical 6-in. walls, it was found that the loosely-placed concrete settled rapidly into a dense condition. The effectiveness of the settling was indicated from the water displaced by the more intimate contact of the particles. Further vibration then dispelled pockets of trapped air, which bubbled up through the water on top of the concrete. When a pneumatic clay-digger was operated in stiff concrete placed on a deck, it was found that the mass of concrete quickly lost its stiffness and could be placed into position very readily. Vibration applied to the formwork of a tee beam stem quickly settled the concrete around the main reinforcing bars in a manner unattainable with ordinary methods.

To ascertain the quantitative value of vibrated concrete, experiments were made on standard cylinders, 9 inches high x 6 inches diameter. With a rather poor sand and stone, it was found that the maximum amount of stone which could be used with a mortar made with a water-cement ratio of 0.75, and with 1 part of cement to 2 parts of sand, was 4 parts of stone to 1 part of cement. When, however, vibration was applied to the cylinder, 6 parts of stone could be used to 1 part of cement, keeping the sand-cement ratio constant. The strengths of the two concretes was identical, as might be expected, when the mortar was kept constant.

It would therefore appear that, provided that vibratory tools (pneumatic or electrical) are available, together with sources of power, improvement in the quality of placed concrete may be obtained and/or a saving in cement made. The practical difficulty in application is the lack of a small compressor. It is hoped that further practical experiments will be made this year to determine what financial benefit is derived from vibration, but it would appear that, with the same cost, the placed concrete is much denser and more permanent than the concrete hitherto obtained, which is already showing signs of decomposition in some of the earlier Victorian concrete bridges.

Yours obediently,

L. F. LODER,

Chief Engineer.

# APPENDIX A.

## COUNTRY ROADS BOARD FUND.

*Dr.* RECEIPTS. *Cr.*

| 1932. | | £ s. d. | £ s. d. | £ s. d. |
|---|---|---|---|---|
| July 1. | To Balance .. .. .. .. .. .. | | | 29,853 13 4 |
| 1933. | | | | |
| June 30. | ,, Motor Car Act No. 3741— | | | |
| | Registration Fees .. .. | 1,144,101 0 1 | | |
| | Fines .. .. .. | 11,614 11 7 | | |
| | | 1,155,715 11 8 | | |
| | *Less* Refunds and Cost of Collection .. .. | 69,850 13 1 | | |
| | | | 1,085,864 18 7 | |
| | ,, Motor Omnibus Act No. 3742— | | | |
| | Fees and Fines .. .. .. .. | | 3,364 17 3 | |
| | ,, Country Roads Board Act No. 3662— | | | |
| | Registration of Traction Engines .. .. .. | 664 9 10 | | |
| | ,, Fees and Fines .. .. | 474 11 6 | | |
| | | 1,139 1 4 | | |
| | ,, Acts Nos. 3662, 3741 and 3742— | | | |
| | Costs .. .. .. | 368 4 6 | | |
| | | | 1,507 5 10 | |
| | ,, Municipalities Repayments— | | | |
| | Permanent Works .. .. | 125,588 12 7 | | |
| | Relief—Act No. 4038 .. | 12,072 4 5 | | |
| | | 137,660 17 0 | | |
| | Maintenance .. .. | 105,845 13 8 | | |
| | | | 243,506 10 8 | |
| | ,, Hire of Plant .. .. | 31,493 19 8 | | |
| | ,, Stores and Materials .. | 168,074 13 5 | | |
| | ,, Sundries .. .. .. | 40,648 19 5 | | |
| | | | 240,217 12 6 | |
| | ,, Unclaimed Grants to Municipalities .. .. | | 5,818 0 0 | |
| | | | | 1,580,279 4 10 |
| | ,, Act No. 3866—Relief of Unemployment .. .. .. | | | 1,335 16 8 |
| | ,, Act No. 4097—Relief of Unemployment .. .. .. | | | 83,309 5 6 |
| | | | | 1,694,778 0 4 |

PAYMENTS.

| 1933. | | £ s. d. | £ s. d. |
|---|---|---|---|
| June 30. | By Maintenance—(Appendix) .. .. .. .. .. | | 823,391 6 9 |
| | ,, Interest and Sinking Fund (Municipalities Repayments) .. .. .. .. .. .. | | 117,757 1 2 |
| | ,, Recoup to Revenue Act No. 3944— | | |
| | Interest—Main Roads .. .. .. | 113,117 15 4 | |
| | Developmental Roads .. .. | 153,523 14 2 | |
| | ,, Sinking Fund Contributions .. .. .. | 23,630 2 6 | |
| | Exchange .. .. .. | 25,019 6 0 | |
| | | | 315,290 18 0 |
| | ,, Relief to Municipalities Act No. 4038 .. .. | .. .. .. | 25,000 0 0 |
| | ,, Stores and Materials .. .. .. | 170,375 16 9 | |
| | ,, Motor Expenses .. .. .. .. | 5,473 2 7 | |
| | ,, Plant Purchase and Repairs .. .. .. | 13,479 8 11 | |
| | ,, Storeyard .. .. .. .. | 9,016 10 10 | |
| | ,, Sundry Debtors .. .. .. .. | 25,262 18 6 | |
| | ,, Suspense Account .. .. .. .. | 3,794 1 4 | |
| | ,, Motor Omnibus Act (Administration) .. .. | 4,932 10 11 | |
| | ,, Motor Car Acts— | | |
| | No. 3741, sec. 11–13 / No. 3901, sec. 24–26 } Administration .. | 1,233 2 8 | |
| | ,, General Expenditure (Salaries, &c.) .. .. | 56,574 17 4 | |
| | | | 290,142 9 10 |
| | ,, Act No. 3866—Construction of Roads for Relief of Unemployment .. .. .. .. .. .. | | 1,335 16 8 |
| | ,, Act No. 4097—Construction of Roads for Relief of Unemployment (Wages) .. .. .. | | 83,309 5 6 |
| | ,, Materials, &c., provided from C.R.B. fund for works under Act No. 4097 .. .. .. .. | | 24,163 4 0 |
| | ,, Unclaimed Grants to Municipalities .. .. .. .. | | 5,613 16 6 |
| | Balance .. .. .. .. .. .. | | 8,774 1 11 |
| | | | 1,694,778 0 4 |

RECONCILIATION STATEMENT.

| | £ s. d. |
|---|---|
| Balance as per Treasury Books .. .. .. .. .. .. | 6,335 5 6 |
| *Add* Outstanding Transfers .. .. .. .. .. .. | 8,342 18 6 |
| | 14,678 4 0 |
| *Deduct* Accounts in Transit .. .. .. .. .. .. | 5,904 2 1 |
| Balance as per Country Roads Board Accounts .. .. .. .. | 8,774 1 11 |

## REVENUE ACCOUNT, 30TH JUNE, 1933.

*Dr.*

| 1933. | | £ | s. | d. | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|
| June 30. | To Maintenance Works—General .. | .. | | .. | 400,327 | 12 | 0 | | | |
| | Wood's Point Road (1) .. | 2,024 | 11 | 11 | | | | | | |
| | Wood's Point Road (2) .. | 1,980 | 9 | 8 | | | | | | |
| | Mt. Buffalo Road .. .. | 896 | 2 | 4 | | | | | | |
| | Walhalla Road .. .. | 1,892 | 9 | 7 | | | | | | |
| | State Highways .. .. | 416,270 | 1 | 3 | | | | | | |
| | | | | | 423,063 | 14 | 9 | | | |
| | | | | | | | | 823,391 | 6 | 9 |
| | ,, Contribution to Sinking Fund .. | .. | | .. | 29,439 | 5 | 4 | | | |
| | ,, Interest on Loans .. .. | .. | | .. | 88,317 | 15 | 10 | | | |
| | | | | | | | | 117,757 | 1 | 2 |
| | ,, Recoup to Revenue Act No. 3944— | | | | | | | | | |
| | Interest—Main Roads .. | 113,117 | 15 | 4 | | | | | | |
| | Developmental Roads | 153,523 | 14 | 2 | | | | | | |
| | | | | | 266,641 | 9 | 6 | | | |
| | ,, Sinking Fund Contributions .. | .. | | .. | 23,630 | 2 | 6 | | | |
| | Exchange .. | .. | | .. | 25,019 | 6 | 0 | | | |
| | | | | | | | | 315,290 | 18 | 0 |
| | ,, Relief to Municipalities Act No. 4038 .. | .. | | .. | .. | | .. | 25,000 | 0 | 0 |
| | ,, Audit Fee .. .. .. | .. | | .. | 399 | 7 | 3 | | | |
| | ,, Experimental Section .. .. | .. | | .. | 10 | 14 | 0 | | | |
| | ,, Fidelity Guarantee .. .. | .. | | .. | 197 | 9 | 8 | | | |
| | ,, Gravel Sites and Metal Investigation | .. | | .. | 400 | 12 | 10 | | | |
| | ,, Instruments .. .. .. | .. | | .. | 143 | 12 | 6 | | | |
| | ,, Motor Expenses .. .. | .. | | .. | 5,457 | 13 | 11 | | | |
| | ,, New Offices—Exhibition Building | .. | | .. | 482 | 13 | 8 | | | |
| | ,, New Storeyard .. .. | .. | | .. | 888 | 17 | 2 | | | |
| | ,, Storeyard Reconstruction .. | .. | | .. | 122 | 8 | 6 | | | |
| | ,, Office Expenses .. .. | .. | | .. | 1,904 | 12 | 10 | | | |
| | ,, Office Furniture .. .. | .. | | .. | 1,198 | 12 | 1 | | | |
| | ,, Patrolmens' Cottages .. | .. | | .. | 2,536 | 1 | 5 | | | |
| | ,, Plans, Purchase .. .. | .. | | .. | 661 | 14 | 7 | | | |
| | ,, Plant, Purchase .. .. | .. | | .. | 9,490 | 6 | 2 | | | |
| | ,, Postages and Telegrams .. | .. | | .. | 1,460 | 12 | 2 | | | |
| | ,, Printing and Stationery .. | .. | | .. | 1,364 | 2 | 4 | | | |
| | ,, Salaries .. .. .. | .. | | .. | 38,836 | 13 | 8 | | | |
| | ,, Storage Sites .. .. .. | .. | | .. | 63 | 19 | 11 | | | |
| | ,, Telephones .. .. .. | .. | | .. | 831 | 10 | 9 | | | |
| | ,, Testing Materials .. .. | .. | | .. | 600 | 2 | 3 | | | |
| | ,, Timber, &c., Revenue Account .. | .. | | .. | 44 | 11 | 5 | | | |
| | ,, Travelling Expenses .. .. | .. | | .. | 1,766 | 17 | 8 | | | |
| | ,, Motor Omnibus Act—Administration | .. | | .. | 4,932 | 10 | 11 | | | |
| | ,, Motor Car Acts—No. 3741, Sec. 11–13; No. 3901, Sec. 24–26 .. | .. | | .. | 1,233 | 2 | 8 | | | |
| | ,, Investigation Surveys .. .. | .. | | .. | 439 | 2 | 1 | | | |
| | ,, Tree Planting .. .. .. | .. | | .. | 114 | 6 | 8 | | | |
| | Carried forward .. .. .. | | | | 75,582 | 9 | 1 | 1,281,439 | 5 | 11 |

*Cr.*

| 1932. | | £ | s. | d. | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|
| July 1. | By Balance .. .. .. | .. | | .. | .. | | .. | 307,609 | 8 | 3 |
| 1933. | | | | | | | | | | |
| June 30. | ,, Motor Car Act No. 3741— | | | | | | | | | |
| | Registration Fees .. .. | 1,144,101 | 0 | 1 | | | | | | |
| | Fines .. .. .. | 11,614 | 11 | 7 | | | | | | |
| | | 1,155,715 | 11 | 8 | | | | | | |
| | *Less* Refunds and Cost of Collection .. .. | 69,850 | 13 | 1 | | | | | | |
| | | | | | 1,085,864 | 18 | 7 | | | |
| | ,, Motor Omnibus Act No. 3742— | | | | | | | | | |
| | Fees and Fines .. .. .. | | | | 3,364 | 17 | 3 | | | |
| | ,, Country Roads Act No. 3662— | | | | | | | | | |
| | Registration of Traction Engines .. .. | | | | 664 | 9 | 10 | | | |
| | Fees and Fines .. .. .. | | | | 474 | 11 | 6 | | | |
| | Costs (Acts 3662, 3741 and 3742) .. .. | | | | 298 | 9 | 1 | | | |
| | Forfeited Deposits .. .. .. | | | | 125 | 11 | 5 | | | |
| | Plans, Sale of .. .. .. | | | | 165 | 17 | 6 | | | |
| | Plant Earnings .. .. | 32,092 | 8 | 9 | | | | | | |
| | *Deduct* Working Costs .. | 14,805 | 15 | 6 | | | | | | |
| | | | | | 17,286 | 13 | 3 | | | |
| | Rents .. .. .. .. .. | | | | 689 | 15 | 11 | | | |
| | Royalty on Gravel and Metal .. .. | | | | 889 | 12 | 6 | | | |
| | Sale of Old Roads .. .. .. | | | | 13 | 13 | 10 | | | |
| | Storeyard Account .. .. .. | | | | 606 | 13 | 9 | | | |
| | Timber, &c., Revenue Account .. .. | | | | 27 | 9 | 4 | | | |
| | Materials—Sale of .. .. .. | | | | 16 | 17 | 3 | | | |
| | Unclaimed Grants to Municipalities .. .. | | | | 5,818 | 0 | 0 | | | |
| | ,, Maintenance Works— | | | | | | | | | |
| | Contributions payable by Municipalities .. | | | | 107,572 | 15 | 2 | | | |
| | ,, Permanent Works— | | | | | | | | | |
| | Contributions payable by Municipalities .. | | | | 139,016 | 15 | 5 | | | |
| | | | | | | | | 1,362,897 | 1 | 7 |
| | Carried forward .. .. .. .. .. | | | | | | | 1,670,506 | 9 | 10 |

*Dr.* REVENUE ACCOUNT, 30TH JUNE 1933—*continued.* *Cr.*

| 1933. | | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| June 30. | Brought forward .. .. .. | 75,582 | 9 | 1 | 1,281,439 | 5 | 11 |
| | To Advertising, Government Printer .. .. | 597 | 13 | 10 | | | |
| | ,, Direction Boards and Warning Signs .. .. | 868 | 1 | 1 | | | |
| | ,, Incidentals .. .. .. .. .. | 31 | 0 | 8 | | | |
| | | | | | 77,079 | 4 | 8 |
| | ,, Unclaimed Grants to Municipalities .. .. | 5,613 | 16 | 6 | | | |
| | | | | | 5,613 | 16 | 6 |
| | ,, Materials Provided for Unemployment Relief Works under Act 4097 | | | | 24,163 | 4 | 0 |
| | Balance .. .. .. .. .. .. | | | | 282,210 | 18 | 9 |
| | | | | | 1,670,506 | 9 | 10 |

| | £ | s. | d. |
|---|---|---|---|
| Brought forward .. .. .. .. .. | 1,670,506 | 9 | 10 |
| | 1,670,506 | 9 | 10 |

## BALANCE-SHEET AS AT 30TH JUNE, 1933.

| LIABILITIES. | £ | s. | d. |
|---|---|---|---|
| Contractors' Deposits .. .. .. .. .. .. .. | 13,204 | 18 | 7 |
| Sundry Liabilities .. .. .. .. .. .. .. .. | 8,099 | 11 | 11 |
| Sinking Fund .. .. .. .. .. .. .. .. | 411,776 | 3 | 2 |
| Revenue Account .. .. .. .. .. .. .. .. | 282,210 | 18 | 9 |
| | 715,291 | 12 | 5 |

| ASSETS. | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|
| Country Roads Board Fund .. .. .. .. .. | | | | 8,774 | 1 | 11 |
| Maintenance Expenditure— | | | | | | |
| Contributions payable by Municipalities .. .. .. | 107,572 | 15 | 2 | | | |
| Contributions payable by Municipalities in Arrears .. .. | 10,684 | 7 | 9 | | | |
| | | | | 118,257 | 2 | 11 |
| Permanent Works— | | | | | | |
| Contributions payable by Municipalities .. .. .. | 139,016 | 15 | 5 | | | |
| Contributions payable by Municipalities in Arrears .. .. | 8,472 | 19 | 9 | | | |
| | | | | 147,489 | 15 | 2 |
| Outstanding Accounts .. .. .. .. .. .. | | | | 2,658 | 9 | 2 |
| Materials, Stock— | | | | | | |
| Storeyard .. .. .. .. .. .. | 10,866 | 11 | 0 | | | |
| Branches .. .. .. .. .. .. | 2,264 | 10 | 6 | | | |
| | | | | 13,131 | 1 | 6 |
| Investment Account for Redemption of Loans .. .. | | | | 411,776 | 3 | 2 |
| Trust Account .. .. .. .. .. .. | | | | 13,204 | 18 | 7 |
| | | | | 715,291 | 12 | 5 |

## COUNTRY ROADS BOARD LOAN ACCOUNT, ACT No. 3662.

RECEIPTS.

| | | £ | s. | d. |
|---|---|---|---|---|
| 1932. July 1. | To Balance | 3,629 | 7 | 3 |
| 1933. June 30. | To State Loans Repayment Fund | 31,927 | 15 | 11 |
| | | 35,557 | 3 | 2 |

PAYMENTS.

| | | £ | s. | d. |
|---|---|---|---|---|
| 1933. June 30. | By Permanent Works (Appendix) | 35,051 | 14 | 5 |
| | Balance | 505 | 8 | 9 |
| | | 35,557 | 3 | 2 |

RECONCILIATION.

| | £ | s. | d. |
|---|---|---|---|
| Treasury Balance | 316 | 6 | 9 |
| *Add* Outstanding Credits | 242 | 15 | 6 |
| | 559 | 2 | 3 |
| *Less* Accounts in Transit | 53 | 13 | 6 |
| | 505 | 8 | 9 |

## BALANCE-SHEET AT 30TH JUNE, 1933.

LIABILITIES.

| | £ | s. | d. | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|
| Interest on Permanent Works | | | | | | | 32,628 | 9 | 6 |
| Loan Securities Issued | 4,771,718 | 6 | 8 | | | | | | |
| *Less* Amount repaid to Treasury | 80,000 | 0 | 0 | | | | | | |
| | | | | 4,691,718 | 6 | 8 | | | |
| *Deduct* Discount | | | | 57,722 | 11 | 3 | | | |
| | | | | | | | 4,633,995 | 15 | 5 |
| State Loans Repayment Fund | | | | | | | 31,927 | 15 | 11 |
| | | | | | | | 4,698,552 | 0 | 10 |

ASSETS.

| | £ | s. | d. |
|---|---|---|---|
| Permanent Works Expenditure to Date (Main Roads) | 4,665,418 | 2 | 7 |
| Interest Capitalized on Permanent Works Act No. 3662 | 32,628 | 9 | 6 |
| Country Roads Board Loan Account | 505 | 8 | 9 |
| | 4,698,552 | 0 | 10 |

## DEVELOPMENTAL ROADS LOAN ACCOUNT, ACT No. 3662.

RECEIPTS.

| | | £ | s. | d. |
|---|---|---|---|---|
| 1933. June 30. | To State Loans Repayment Fund | 82,875 | 0 | 8 |
| | | 82,875 | 0 | 8 |

PAYMENTS.

| | | £ | s. | d. |
|---|---|---|---|---|
| 1932. July 1. | By Balance | 2,021 | 13 | 6 |
| 1933 June 30. | By Expenditure (Appendix) | 80,715 | 5 | 11 |
| | Balance | 138 | 1 | 3 |
| | | 82,875 | 0 | 8 |

RECONCILIATION.

| | £ | s. | d. |
|---|---|---|---|
| Treasury Balance | 28 | 0 | 6 |
| *Add* Outstanding Credits | 187 | 12 | 8 |
| | 215 | 13 | 2 |
| *Deduct* Accounts in Transit | 77 | 11 | 11 |
| | 138 | 1 | 3 |

## BALANCE-SHEET AT 30TH JUNE, 1933.

| LIABILITIES. | £ s. d. | £ s. d. |
|---|---|---|
| Loan Securities Issued | 6,230,605 0 6 | |
| *Deduct* Discount | 94,743 15 8 | |
| | | 6,135,861 4 10 |
| Treasury Developmental Railways, Act No. 3662 (sec. 83/16) | 11,394 14 9 | |
| Consolidated Revenue Act No. 3662 (sec. 84/17) | 35,476 8 8 | |
| | | 46,871 3 5 |
| Interest, Act No. 3662 (sec. 86/1) | 73,334 16 8 | |
| Arrears of Interest, Act No. 3662 (sec. 86/1) | 11,540 7 5 | |
| Contributions Postponed | 16,656 13 7 | |
| | | 101,531 17 8 |
| State Loans Repayment Fund | | 91,948 4 0 |
| | | 6,376,212 9 11 |

| ASSETS. | £ s. d. | £ s. d. |
|---|---|---|
| Permanent Works Expenditure (Developmental Roads) | | 6,227,671 7 7 |
| Contributions Payable by Municipalities, Act No. 3662 (sec. 83/16 and sec. 84/17) | 38,500 0 0 | |
| Contributions Payable by Municipalities in Arrears | 8,371 3 5 | |
| | | 46,871 3 5 |
| Contributions Payable by Municipalities, Act No. 3662 (sec. 86/1) | 89,991 10 3 | |
| Contributions Payable by Municipalities in Arrears | 11,540 7 5 | |
| | | 101,531 17 8 |
| Developmental Roads Loan Account | | 138 1 3 |
| | | 6,376,212 9 11 |

## DEVELOPMENTAL ROADS INTEREST, ACT No. 3662 (Sections 83/16, 84/17, AND 86/1).

| 1933. | RECEIPTS. | £ s. d. | £ s. d. |
|---|---|---|---|
| June 30. | To Interest Contributed by Municipalities— | | |
| | Act No. 3662, sec. 83/16 | 8,029 13 4 | |
| | sec. 84/17 | 23,903 19 1 | |
| | sec. 86/1 | 62,493 7 10 | |
| | | 94,427 0 3 | |
| | Act No. 4038—Relief | 12,927 15 7 | |
| | | | 107,354 15 10 |
| | | | 107,354 15 10 |

| 1933. | EXPENDITURE. | £ s. d. |
|---|---|---|
| June 30. | By Payments to Treasury | 107,354 15 10 |
| | | 107,354 15 10 |

## AUDITOR-GENERAL'S CERTIFICATE.

The Accounts have been audited and compared with the books, with which they agree. Reconciliations have also been made with the books of the Treasury. I certify that the statements submitted are correct.

J. A. NORRIS,
Auditor-General,
30th October, 1933

E. J. HICKS, Accountant,
30th October, 1933.

## COUNTRY ROADS BOARD.

### SUMMARY OF BOARD'S ASSETS AS AT 30TH JUNE, 1933.

| | £ s. d. |
|---|---|
| Patrolmen's Cottages | 12,369 1 0 |
| Workshop Fittings, Tools, &c. | 1,587 3 6 |
| Motor Car Tools, &c. | 89 1 8 |
| Furniture and Fittings | 5,057 0 3 |
| Testing Laboratory Equipment | 515 4 0 |
| Furniture, &c., Motor Registration Branch | 4,350 6 6 |
| Works Film | 180 0 0 |
| Survey Instruments | 476 0 0 |
| Pistols | 49 5 0 |
| Motor Cars and Cycles, including Police Motor Cycles | 5,308 0 0 |
| Motor Car Accessories | 92 0 0 |
| Loadometers | 1,260 0 0 |
| Boards Storeyards | 4,183 0 0 |
| | 35,516 1 11 |
| Working Plant | 48,901 13 0 |
| Total | 84,417 14 11 |

# APPENDIX B.

## SPECIAL APPROPRIATIONS.

SUMMARY OF EXPENDITURE FOR YEAR ENDED 30TH JUNE, 1933.

| | £ | s. | d. |
|---|---|---|---|
| 1. State Unemployment Relief (Act 3866) | 1,335 | 16 | 8 |
| 2. State Unemployment Relief (Act 3948) | 527 | 7 | 9 |
| 3. State Unemployment Relief (Act 4097)— | | | |
| Expended from Relief grant (wages only) £83,309 5 6 | | | |
| Contribution from C.R.B. Fund (materials, &c.) 24,163 4 0 | | | |
| | 107,472 | 9 | 6 |
| 4. Special Loan (representing expenditure under a special unconditional grant of £150,000 from the National Recovery Loan—Act 4097) | 96,790 | 11 | 4 |
| 5. Commonwealth Unemployment Relief— | | | |
| Balance of expenditure from grant of £76,500 allotted by Commonwealth Government in July, 1930 | 1,628 | 2 | 3 |
| 6. Federal Aid Roads Act 1931 | 469,061 | 15 | 5 |
| Grants to Municipalities—Act 3662— | | | |
| Expenditure in respect of grants made prior to 1st July, 1932 | 15,123 | 16 | 6 |

# APPENDIX C.

# COUNTRY ROADS BOARD.

## STATEMENT OF APPORTIONMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE OF MAIN ROADS FOR THE YEAR ENDED 30TH JUNE, 1932.

| Name of Municipality. | Permanent Works. | | Maintenance. |
|---|---|---|---|
| | Principal. | Interest. | Amount. |
| | £ s. d. | £ s. d. | £ s. d. |
| Alberton Shire .. | 632 9 6 | 14 16 7 | 1,436 8 11 |
| Alexandra Shire .. | 1 4 9* | 0 0 7 | 738 10 5 |
| Arapiles Shire .. | 262 5 10 | 4 1 3 | 356 7 10 |
| Ararat Borough .. | .. | .. | 46 10 5 |
| Ararat Shire .. | .. | .. | 2,894 15 11 |
| Avoca Shire .. | .. | .. | 474 6 10 |
| Avon Shire .. | .. | .. | 207 17 8 |
| Bacchus Marsh Shire | .. | .. | 436 11 6 |
| Bairnsdale Shire .. | .. | .. | 304 19 2 |
| Ballan Shire .. | .. | .. | 484 3 0 |
| Ballarat Shire .. | .. | .. | 1,096 15 4 |
| Bannockburn Shire | .. | .. | 653 5 2 |
| Barrarbool Shire .. | .. | .. | 448 11 3 |
| Bass Shire .. | 204 0 8 | 4 13 1 | 863 15 0 |
| Beechworth Shire | .. | .. | 409 1 3 |
| Belfast Shire .. | .. | .. | 275 1 2 |
| Bellarine Shire .. | .. | .. | 1,231 4 0 |
| Benalla Shire .. | .. | .. | 779 8 7 |
| Berwick Shire .. | 155 13 0 | 4 16 2 | 429 19 9 |
| Bet Bet Shire .. | .. | .. | 225 18 5 |
| Birchip Shire .. | .. | .. | 374 6 11 |
| Blackburn and Mitcham | .. | .. | 286 3 4 |
| Borung Shire .. | 93 10 0 | 2 15 11 | 1,027 10 1 |
| Braybrook Shire .. | .. | .. | 236 19 3 |
| Bright Shire .. | 113 14 0 | 0 15 9 | 399 17 6 |
| Broadford Shire .. | .. | .. | 6 7 7 |
| Broadmeadows Shire | .. | .. | 188 18 4 |
| Bulla Shire .. | .. | .. | 135 8 1 |
| Buln Buln Shire .. | .. | .. | 1,546 18 9 |
| Bungaree Shire .. | .. | .. | 104 3 0 |
| Buninyong Shire | .. | .. | 300 18 0 |
| Castlemaine Borough | .. | .. | 73 11 8 |
| Charlton Shire .. | 37 19 10 | 1 2 9 | 321 18 10 |
| Chelsea City .. | .. | .. | 110 7 4 |
| Chiltern Shire .. | .. | .. | 155 18 10 |
| Clunes Borough .. | .. | .. | 37 6 11 |
| Cohuna Shire .. | .. | .. | 454 7 8 |
| Colac Shire .. | .. | .. | 1,815 12 2 |
| Corio Shire .. | .. | .. | 1,044 0 0 |
| Cranbourne Shire | .. | .. | 1,508 8 10 |
| Creswick Shire .. | .. | .. | 489 4 0 |
| Dandenong Shire .. | .. | .. | 337 9 1 |
| Daylesford Borough | .. | .. | 676 8 7 |
| Deakin Shire .. | 137 5 10 | 1 3 3 | 693 2 3 |
| Dimboola Shire .. | .. | .. | 1,153 8 5 |
| Donald Shire .. | .. | .. | 186 13 11 |
| Doncaster and Templestowe | 7 16 7* | 0 1 0 | 886 5 6 |
| Dundas Shire .. | 25 3 3 | 0 18 4 | 3,313 17 0 |
| Dunmunkle Shire | 124 19 0 | 0 17 8 | 548 17 2 |
| Eaglehawk Borough | .. | .. | 245 18 2 |
| East Loddon Shire | .. | .. | 82 1 7 |
| Echuca Borough | .. | .. | 128 16 7 |
| Eltham Shire .. | 187 19 3 | 3 2 2 | 764 10 7 |
| Euroa Shire .. | 69 0 0 | 0 5 2 | 388 10 7 |
| Ferntree Gully Shire | 50 11 7 | 1 6 11 | 1,423 9 6 |
| Flinders Shire .. | 180 10 9 | 3 4 6 | 1,235 3 8 |
| Footscray City .. | .. | .. | 553 6 8 |
| Frankston and Hastings Shire | 7 19 3* | 0 5 2 | 1,316 3 1 |
| Gisborne Shire .. | .. | .. | 75 18 11 |
| Carried forward | 2,292 3 1 | 44 6 3 | 38,421 19 11 |

| Name of Municipality. | Permanent Works. | | Maintenance. |
|---|---|---|---|
| | Principal. | Interest. | Amount. |
| | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | 2,292 3 1 | 44 6 3 | 38,421 19 11 |
| Glenelg Shire .. | 343 11 2 | 4 11 2 | 1,903 19 4 |
| Glenlyon Shire .. | 20 4 6 | 0 16 8 | 453 8 8 |
| Goulburn Shire .. | .. | .. | 264 3 7 |
| Grenville Shire .. | .. | .. | 1,121 12 2 |
| Hamilton Town .. | .. | .. | 354 0 11 |
| Hampden Shire .. | .. | .. | 1,883 7 2 |
| Healesville Shire .. | .. | .. | 419 15 7 |
| Heidelberg Shire | .. | .. | 1,382 5 9 |
| Heytesbury Shire | 128 17 2 | 4 11 1 | 1,871 9 0 |
| Horsham Town .. | .. | .. | 831 1 2 |
| Huntly Shire .. | .. | .. | 5 8 9 |
| Inglewood Borough | .. | .. | 25 12 11 |
| Kara Kara Shire .. | 273 14 8 | 9 4 9 | 1,015 6 11 |
| Karkarooc Shire .. | .. | .. | 948 14 5 |
| Keilor Shire .. | .. | .. | 178 13 11 |
| Kerang Shire .. | .. | .. | 30 16 1 |
| Kilmore Shire .. | .. | .. | 95 10 6 |
| Koroit Borough .. | .. | .. | 166 5 1 |
| Korong Shire .. | .. | .. | 118 16 3 |
| Korumburra Shire | 262 8 0 | 1 2 0 | 1,518 14 11 |
| Kowree Shire .. | 83 6 0 | 0 8 10 | 708 2 6 |
| Kyneton Shire .. | 23 11 11 | 0 17 6 | 532 10 1 |
| Lawloit Shire .. | .. | .. | 748 12 11 |
| Leigh Shire .. | .. | .. | 732 12 11 |
| Lexton Shire .. | .. | .. | 87 3 10 |
| Lillydale Shire .. | 117 7 11 | 3 14 9 | 690 19 3 |
| Lowan Shire .. | 462 17 11 | 1 17 5 | 884 7 2 |
| Maffra Shire .. | .. | .. | 1,752 16 2 |
| Maldon Shire .. | .. | .. | 329 2 8 |
| Mansfield Shire .. | .. | .. | 512 12 1 |
| Marong Shire .. | .. | .. | 394 17 4 |
| Maryborough Borough | .. | .. | 105 13 9 |
| McIvor Shire .. | .. | .. | 228 13 11 |
| Melton Shire .. | .. | .. | 19 4 4 |
| Metcalfe Shire .. | .. | .. | 212 1 10 |
| Mildura Shire .. | 354 14 2 | 3 1 7 | 597 2 6 |
| Mildura Town .. | .. | .. | 38 0 8 |
| Minhamite Shire .. | .. | .. | 1,030 16 10 |
| Mirboo Shire .. | 70 0 0 | 0 0 9 | 198 8 4 |
| Moorabbin Shire .. | .. | .. | 429 5 9 |
| Mordialloc City .. | .. | .. | 206 5 1 |
| Mornington Shire .. | .. | .. | 21 13 3 |
| Mortlake Shire .. | .. | .. | 2,178 1 6 |
| Morwell Shire .. | 738 19 5 | 17 10 3 | 650 3 9 |
| Mount Rouse .. | .. | .. | 2,169 4 11 |
| Mulgrave Shire .. | .. | .. | 169 13 8 |
| Narracan Shire .. | 28 12 2 | 1 4 4 | 568 16 3 |
| Newham and Woodend Shire | 74 9 4 | 0 8 0 | 184 6 4 |
| Newstead and Mt. Alexander Shire | .. | .. | 258 13 9 |
| Numurkah Shire | 150 7 7 | 0 14 7 | 726 2 5 |
| Oakleigh City .. | .. | .. | 17 17 0 |
| Omeo Shire .. | 129 0 8 | 4 7 1 | 387 11 3 |
| Orbost Shire .. | 39 7 5 | 1 3 0 | 368 18 5 |
| Otway Shire .. | .. | .. | 908 7 3 |
| Oxley Shire .. | 111 8 8 | 0 3 9 | 424 10 4 |
| Phillip Island .. | .. | .. | 460 12 8 |
| Port Fairy Borough | .. | .. | 89 15 5 |
| Portland Shire .. | .. | .. | 358 0 1 |
| Preston City .. | .. | .. | 405 17 9 |
| Carried forward | 5,705 1 9 | 100 3 9 | 73,798 18 11 |

* Liability paid in full.

STATEMENT OF APPORTIONMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE OF MAIN ROADS, ETC.—*continued.*

| Name of Municipality. | Permanent Works. | | | Maintenance. |
|---|---|---|---|---|
| | Principal. | Interest. | Amount. | |
| | £ s. d. | £ s. d. | £ s. d. | |
| Brought forward | 5,705 1 9 | 100 3 9 | 73,798 18 11 | |
| Pyalong Shire .. | .. | .. | 91 19 7 | |
| Queenscliffe Borough | .. | .. | 391 5 5 | |
| Ringwood Borough | 2 12 2* | 0 0 3 | 517 11 4 | |
| Ripon Shire .. | .. | .. | 932 3 0 | |
| Rochester Shire .. | 145 1 1 | .. | 483 12 6 | |
| Rodney Shire .. | 42 15 2 | 1 11 3 | 2,219 4 3 | |
| Romsey Shire .. | 5 16 3* | 0 3 5 | 556 19 5 | |
| Rosedale Shire .. | .. | .. | 542 16 5 | |
| Rutherglen Shire | .. | .. | 658 13 3 | |
| St. Arnaud Borough | .. | .. | 279 2 3 | |
| Sale Town .. | .. | .. | 70 0 6 | |
| Sebastopol Borough | .. | .. | 83 19 1 | |
| Seymour Shire .. | .. | .. | 468 6 8 | |
| Shepparton Borough | .. | .. | 310 0 4 | |
| Shepparton Shire | .. | .. | 842 15 9 | |
| South Barwon Shire | .. | .. | 902 14 2 | |
| South Gippsland Shire | 12 17 8 | 0 9 6 | 633 8 2 | |
| Stawell Borough .. | .. | .. | 110 10 4 | |
| Stawell Shire .. | 12 1 8 | 0 2 1 | 1,362 16 5 | |
| Strathfieldsaye Shire | .. | .. | 635 18 5 | |
| Swan Hill Shire .. | 16 7 0 | 0 11 0 | 512 13 6 | |
| Talbot Shire .. | .. | .. | 79 7 6 | |
| Tambo Shire .. | .. | .. | 473 0 1 | |
| Towong Shire .. | .. | .. | 998 4 8 | |
| Carried forward | 5,942 12 9 | 103 1 3 | 87,956 1 11 | |

| Name of Municipality. | Permanent Works. | | | Maintenance. |
|---|---|---|---|---|
| | Principal. | Interest. | Amount. | |
| | £ s. d. | £ s. d. | £ s. d. | |
| Brought forward | 5,942 12 9 | 103 1 3 | 87,956 1 11 | |
| Traralgon Shire .. | 511 1 5 | 8 3 1 | 430 2 2 | |
| Tullaroop Shire .. | .. | .. | 356 1 2 | |
| Tungamah Shire .. | 981 13 8 | 22 12 11 | 722 18 10 | |
| Upper Murray Shire | 139 3 1 | 0 19 8 | 244 19 11 | |
| Upper Yarra Shire | .. | .. | 349 6 0 | |
| Violet Town Shire | .. | .. | 118 12 7 | |
| Walpeup Shire .. | .. | .. | 132 13 0 | |
| Wangaratta Borough | .. | .. | 35 13 9 | |
| Wangaratta Shire | .. | .. | 154 2 11 | |
| Wannon Shire .. | .. | .. | 617 12 7 | |
| Waranga Shire .. | .. | .. | 119 0 9 | |
| Warragul Shire .. | .. | .. | 1,459 3 10 | |
| Warrnambool Shire | .. | .. | 1,765 11 6 | |
| Werribee Shire .. | .. | .. | 29 3 4 | |
| Whittlesea Shire .. | 66 16 0 | 2 10 2 | 327 3 0 | |
| Wimmera Shire .. | 282 16 0 | 5 18 11 | 731 8 2 | |
| Winchelsea Shire | .. | .. | 143 17 11 | |
| Wodonga Shire .. | .. | .. | 208 19 5 | |
| Wonthaggi Borough | .. | .. | 428 15 2 | |
| Woorayl Shire .. | .. | .. | 1,648 11 7 | |
| Wycheproof Shire | 212 19 2 | 2 12 5 | 551 6 2 | |
| Yackandandah Shire | 202 6 4 | 1 3 3 | 573 7 7 | |
| Yarrawonga Shire | .. | .. | 218 15 5 | |
| Yea Shire .. | 11 5 0 | 0 5 9 | 321 10 10 | |
| Total .. | 8,350 13 5 | 147 7 5 | 99,644 19 6 | |

* Liability paid in full.

# APPENDIX D.

# COUNTRY ROADS BOARD.

## STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE OF MAIN ROADS FOR THE YEAR ENDING 30th JUNE, 1933.

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| ALBERTON SHIRE— | | | | |
| Albert River–Welshpool Road | .. | | 270 8 5 | |
| Balook–Yarram Road | .. | | 248 17 10 | |
| Boolarra–Welshpool Road | .. | | Bd. 468 11 7 | |
| Carrajung–Gormandale Road | 742 9 9 | | 1,208 12 4 | |
| Foster–Yarram Road | .. | | 1,056 6 1 | |
| Sale-Yarram Road | .. | | 356 11 1 | |
| Yarram-Boolarra Road | .. | | 1,079 4 2 | |
| Yarram–Port Albert Road | .. | | 986 19 9 | |
| Yarram–Won Wron Road | .. | | 915 7 9 | |
| | | 742 9 9 | | 6,590 19 0 |
| ALEXANDRA SHIRE— | | | | |
| Cathkin–Mansfield Road | .. | | 267 10 10 | |
| Healesville–Alexandra Road | .. | | 1,177 5 0 | |
| Terip Terip Road | .. | | 3 8 6 | |
| Upper Goulburn Road | .. | | 1,327 8 11 | |
| Yarck Road | .. | | 342 18 11 | |
| | | | | 3,118 12 2 |
| ARAPILES SHIRE— | | | | |
| Horsham–Hamilton Road | 27 17 6 | | 632 12 11 | |
| Horsham–Natimuk–Edenhope Road | 255 0 0 | | 206 18 5 | |
| | | 282 17 6 | | 839 11 4 |
| ARARAT SHIRE— | | | | |
| Ararat–Elmhurst Road | .. | | 773 4 10 | |
| Ararat–Warrnambool Road | .. | | 3,870 8 2 | |
| Ballarat–Hamilton Road | .. | | 3,244 16 8 | |
| Maroona–Glenthompson Road | .. | | 2,287 1 8 | |
| | | | | 10,175 11 4 |
| ARARAT BOROUGH— | | | | |
| Ballarat–Stawell Road | .. | | 55 7 5 | |
| | | | | 55 7 5 |
| AVOCA SHIRE— | | | | |
| Ararat Road | .. | | 147 0 10 | |
| Ballarat–St. Arnaud Road | .. | | 488 11 1 | |
| Bealiba Road | .. | | 64 4 8 | |
| Landsborough Road | .. | | 18 0 0 | |
| Maryborough Road | .. | | 77 6 6 | |
| | | | | 795 3 1 |
| AVON SHIRE— | | | | |
| Dargo Road (Section "A") | .. | | 136 17 2 | |
| Dargo Road (Section "B") | .. | | 212 2 0 | |
| Maffra–Sale Road | .. | | 67 0 2 | |
| Maffra–Stratford Road | .. | | 23 0 6 | |
| Prince's Highway | .. | | 1 2 10 | |
| | | | | 440 2 8 |
| BACCHUS MARSH SHIRE— | | | | |
| Ballarat Road | .. | | 15 5 5 | |
| Balliang Road | .. | | 1,767 16 10 | |
| Geelong–Bacchus Marsh Road | .. | | 687 6 10 | |
| Gisborne Road | .. | | 1,381 3 2 | |
| | | | | 3,851 12 3 |
| BACCHUS MARSH AND CORIO SHIRES (Joint Works)— | | | | |
| Balliang Road | .. | | .. | |
| BAIRNSDALE SHIRE— | | | | |
| Bairnsdale—Paynesville Road | .. | | 1,239 1 11 | |
| Bairnsdale—Lindenow Road | .. | | 1,324 0 1 | |
| Bullumwaal–Tabberabbera Road | .. | | 437 15 4 | |
| Prince's Highway | .. | | 525 12 11 | |
| | | | | 3,526 10 3 |
| BALLAN SHIRE— | | | | |
| Ballarat Road | .. | | Bd. 4 6 4 | |
| Daylesford Road | .. | | 1,344 3 9 | |
| Gordon–Meredith Road | .. | | 581 14 4 | |
| Mount Wallace Road | .. | | 796 5 7 | |
| Spargo Creek Road | .. | | 1 19 7 | |
| | | | | 2,728 9 7 |
| BALLAN AND BUNINYONG SHIRES (Joint Works)— | | | | |
| Gordon–Meredith "A" Road | .. | | 14 16 11 | |
| | | | | 14 16 11 |
| Carried forward | .. | 1,025 7 3 | .. | 32,136 16 0 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 1,025 7 3 | .. | 32,136 16 0 |
| BALLARAT SHIRE— | | | | |
| Ballarat–Lexton Road .. .. .. .. | .. | | 1,208 12 6 | |
| Maryborough–Ballarat Road .. .. .. | .. | | 928 10 5 | |
| | | | | 2,137 2 11 |
| BALLARAT AND BUNGAREE SHIRES (Joint Works)— | | | | |
| Ballarat–Creswick Road .. .. .. .. | .. | | Bd. 322 4 11 | |
| | | | | 322 4 11 |
| BANNOCKBURN SHIRE— | | | | |
| Geelong–Ballarat Road .. .. .. .. | .. | | 665 18 8 | |
| Gordon–Meredith Road .. .. .. .. | .. | | 18 19 9 | |
| Inverleigh Road .. .. .. .. | .. | | 1,931 19 11 | |
| Shelford–Bannockburn Road .. .. .. | .. | | 997 16 0 | |
| | | | | 3,614 14 4 |
| BARRARBOOL SHIRE— | | | | |
| Airey's Inlet Road .. .. .. .. | .. | | Bd. 224 2 1 | |
| Airey's Inlet Road .. .. .. .. | .. | | 156 16 3 | |
| Anglesea Road .. .. .. .. .. | .. | | 2,850 1 4 | |
| Hendy Main Road .. .. .. .. | .. | | 189 6 2 | |
| | | | | 3,420 5 10 |
| BASS SHIRE— | | | | |
| Almurta Road .. .. .. .. .. | .. | | 323 4 4 | |
| Almurta–Grantville Road .. .. .. | .. | | 184 13 11 | |
| Anderson–Dalyston Road .. .. .. .. | .. | | 289 7 9 | |
| Dalyston–Glen Forbes .. .. .. .. | .. | | 342 1 5 | |
| Dalyston–Wonthaggi Road .. .. .. | .. | | 444 19 7 | |
| Inverloch–Wonthaggi Road .. .. .. | .. | | 649 2 1 | |
| Korumburra–Wonthaggi Road .. .. .. | .. | | 306 14 4 | |
| Main Coast Road .. .. .. .. | 1,176 15 5 | | 89 1 10 | |
| Wonthaggi–Loch Road .. .. .. .. | .. | | 937 0 9 | |
| | | 1,176 15 5 | | 3,566 6 0 |
| BASS SHIRE AND WONTHAGGI BOROUGH (Joint Works)— | | | | |
| Loch–Wonthaggi Road .. .. .. .. | .. | | 296 10 0 | |
| | | | | 296 10 0 |
| BEECHWORTH SHIRE— | | | | |
| Beechworth Road .. .. .. .. | .. | | 381 16 11 | |
| Bright Road .. .. .. .. .. | .. | | 121 3 4 | |
| Everton–Myrtleford Road .. .. .. | .. | | 320 4 8 | |
| Myrtleford–Yackandandah .. .. .. | .. | | 6 4 8 | |
| Stanley Road .. .. .. .. .. | .. | | 89 3 11 | |
| | | | | 918 13 6 |
| BELFAST SHIRE— | | | | |
| Hamilton Road .. .. .. .. | .. | | 151 1 8 | |
| Penshurst Road .. .. .. .. .. | .. | | 217 2 0 | |
| | | | | 368 3 8 |
| BELLARINE SHIRE— | | | | |
| Geelong–Portarlington Road .. .. .. | .. | | Bd. 1,079 17 2 | |
| Geelong–Queenscliff Road .. .. .. | .. | | Bd. 1,338 1 1 | |
| Barwon Heads–Ocean Grove Road .. .. | .. | | Bd. 31 1 4 | |
| Portarlington–St. Leonards Road .. .. .. | .. | | Bd. 499 5 10 | |
| | | | | 2,948 5 5 |
| BENALLA SHIRE— | | | | |
| Benalla–Mansfield Road .. .. .. .. | 430 9 4 | | 147 3 10 | |
| Benalla–Shepparton Road .. .. .. | .. | | 35 11 3 | |
| Gooroombat Road .. .. .. .. | .. | | 543 4 8 | |
| Gooroombat–Thoona Road .. .. .. | 467 9 8 | | 252 3 11 | |
| Greta Road .. .. .. .. .. | .. | | 3 9 5 | |
| Kilfeera Road .. .. .. .. .. | .. | | 256 18 7 | |
| Lima Road .. .. .. .. .. | .. | | 93 4 6 | |
| Sydney Road .. .. .. .. .. | .. | | 604 2 2 | |
| Tatong–Tolmie Road .. .. .. .. | .. | | 66 7 0 | |
| | | 897 19 0 | | 2,002 5 4 |
| BERWICK SHIRE— | | | | |
| Beaconsfield–Emerald Road .. .. .. | .. | | 906 1 11 | |
| Cockatoo–Gembrook Road .. .. .. | .. | | 67 6 4 | |
| Gembrook Road .. .. .. .. | .. | | 239 12 8 | |
| Gembrook–Beenak Road .. .. .. .. | .. | | 49 2 6 | |
| Hallam–Emerald Road .. .. .. .. | 54 17 6 | | 76 14 5 | |
| Hallam–Emerald Road .. .. .. .. | .. | | Bd. 188 16 7 | |
| Koo-wee-rup–Longwarry Road .. .. .. | .. | | 33 0 0 | |
| Nar-nar-goon–Longwarry Road .. .. .. | .. | | 811 5 1 | |
| Prince's Highway .. .. .. .. | .. | | 117 13 11 | |
| Woori Yallock–Pakenham–Koo-wee-rup Road .. | .. | | 1,743 10 9 | |
| Worri Yallock–Pakenham–Koo-wee-rup Road .. | .. | | Bd. 316 19 4 | |
| | | 54 17 6 | | 4,550 3 6 |
| BET BET SHIRE— | | | | |
| Avoca–Bealiba Road .. .. .. .. | .. | | 187 0 10 | |
| Betley Road .. .. .. .. .. | .. | | 15 14 3 | |
| Dunolly Road .. .. .. .. .. | .. | | 357 14 8 | |
| Dunolly–Eddington Road .. .. .. .. | .. | | 10 16 0 | |
| Maryborough–Dunolly Road .. .. .. | .. | | 101 17 6 | |
| | | | | 673 3 3 |
| BET BET AND TULLAROOP SHIRES (Joint Works)— | | | | |
| Dunolly–Eddington .. .. .. .. | .. | | 10 0 0 | |
| | | | | 10 0 0 |
| Carried forward .. .. .. .. | .. | 3,154 19 2 | .. | 56,964 14 8 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 3,154 19 2 | .. | 56,964 14 8 |
| BIRCHIP SHIRE— | | | | |
| Beulah–Birchip–Wycheproof Road .. .. .. | .. | | 137 2 11 | |
| Donald–Birchip–Sealake Road .. .. .. | .. | | 317 5 11 | |
| | | | | 454 8 10 |
| BLACKBURN AND MITCHAM SHIRE— | | | | |
| Burwood Road .. .. .. .. .. | .. | | 1,203 14 10 | |
| Main Healesville Road .. .. .. .. | .. | | 710 2 8 | |
| | | | | 1,913 17 6 |
| BORUNG SHIRE— | | | | |
| Birchip Road .. .. .. .. .. | .. | | 950 12 10 | |
| Dimboola Road .. .. .. .. .. | .. | | 557 2 0 | |
| Hopetoun Road .. .. .. .. .. | 25 8 0 | | 2,082 16 9 | |
| Minyip Road .. .. .. .. .. | 445 3 3 | | 1,564 11 8 | |
| Rainbow Road .. .. .. .. .. | .. | | 2,000 6 2 | |
| | | 470 11 3 | | 7,155 9 5 |
| BRAYBROOK SHIRE— | | | | |
| Ballarat Road .. .. .. .. .. | .. | | 2,550 4 11 | |
| Prince's Highway .. .. .. .. | .. | | Bd. 1,265 1 4 | |
| | | | | 3,815 6 3 |
| BRIGHT SHIRE— | | | | |
| Bright Road .. .. .. .. .. | .. | | 612 3 6 | |
| Harrietville Road .. .. .. .. | .. | | 316 12 7 | |
| Kiewa Valley Road .. .. .. .. | 318 12 10 | | 302 3 5 | |
| Mount Buffalo Road .. .. .. | .. | | Bd. 896 2 4 | |
| Myrtleford–Yackandandah Road .. .. .. | .. | | 596 6 3 | |
| | | 318 12 10 | | 2,723 8 1 |
| BRIGHT AND BEECHWORTH SHIRES (Joint Works)— | | | | |
| Bright Road .. .. .. .. .. | .. | | 57 11 0 | |
| | | | | 57 11 0 |
| BROADFORD SHIRE— | | | | |
| Sydney Road .. .. .. .. .. | .. | | Bd. 345 15 9 | |
| | | | | 345 15 9 |
| BROADMEADOWS SHIRE— | | | | |
| Sydney Road .. .. .. .. .. | .. | | 216 1 5 | |
| | | | | 216 1 5 |
| BROADMEADOWS AND KEILOR SHIRES (Joint Works)— | | | | |
| Lancefield Road .. .. .. .. | .. | | 495 4 7 | |
| | | | | 495 4 7 |
| BULLA SHIRE— | | | | |
| Melbourne–Lancefield Road .. .. .. | .. | | 540 8 4 | |
| Sunbury Road .. .. .. .. .. | .. | | 132 11 3 | |
| The Gap Road .. .. .. .. .. | .. | | 11 7 6 | |
| | | | | 684 7 1 |
| BULLA AND KEILOR SHIRES (Joint Works)— | | | | |
| Melbourne–Lancefield .. .. .. .. | .. | | 115 1 3 | |
| | | | | 115 1 3 |
| BULN BULN SHIRE— | | | | |
| Bloomfield Road .. .. .. .. | .. | | 32 0 10 | |
| Fumina Road .. .. .. .. .. | .. | | 32 2 7 | |
| Koo-wee-rup–Longwarry Road .. .. .. | .. | | 544 0 2 | |
| Loch Valley Road .. .. .. .. | .. | | 48 4 0 | |
| Longwarry–Drouin Road .. .. .. | 30 1 6 | | 219 17 0 | |
| Main Neerim Road .. .. .. .. | .. | | 1,567 1 0 | |
| Main South Road .. .. .. .. | .. | | 803 13 9 | |
| Neerim East Road .. .. .. .. | .. | | 66 12 11 | |
| Neerim North–Noojee .. .. .. .. | .. | | 12 10 0 | |
| Prince's Highway .. .. .. .. | .. | | 259 14 2 | |
| Westernport Road .. .. .. .. | .. | | 570 2 6 | |
| | | 30 1 6 | | 4,155 18 11 |
| BUNGAREE SHIRE— | | | | |
| Daylesford–Ballarat Road .. .. .. | .. | | 1,385 8 6 | |
| | | | | 1,385 8 6 |
| BUNINYONG SHIRE— | | | | |
| Ballarat–Rokewood Road .. .. .. | .. | | 762 3 3 | |
| Elaine–Mount Mercer Road .. .. .. | .. | | 49 5 8 | |
| Geelong–Ballarat Road .. .. .. .. | .. | | 226 0 1 | |
| | | | | 1,037 9 0 |
| CASTLEMAINE BOROUGH— | | | | |
| Melbourne–Bendigo Road .. .. .. | .. | | 272 1 4 | |
| | | | | 272 1 4 |
| CHELSEA CITY— | | | | |
| Point Nepean Road .. .. .. .. | .. | | 224 9 8 | |
| | | | | 224 9 8 |
| CHARLTON SHIRE— | | | | |
| Bendigo Road .. .. .. .. .. | .. | | 222 1 5 | |
| Donald Road .. .. .. .. .. | 1,228 6 5 | | 1,006 8 6 | |
| St. Arnaud Road.. .. .. .. .. | .. | | 28 6 4 | |
| | | 1,228 6 5 | | 1,256 16 3 |
| CHILTERN SHIRE— | | | | |
| Barnawartha–Howlong Road .. .. .. | .. | | 138 19 4 | |
| Chiltern–Howlong Road .. .. .. .. | .. | | 99 2 5 | |
| Rutherglen–Wodonga Road .. .. .. | .. | | 68 2 2 | |
| Sydney Road .. .. .. .. .. | .. | | 478 16 2 | |
| | | | | 785 0 1 |
| Carried forward .. .. .. .. | .. | 5,202 11 2 | .. | 84,058 9 7 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 5,202 11 2 | .. | 84,058 9 7 |
| CLUNES BOROUGH— | | | | |
| Maryborough–Ballarat Road .. .. .. | .. | | 129 0 6 | |
| | | | | 129 0 6 |
| COLAC SHIRE— | | | | |
| Colac–Ballarat Road .. .. .. .. | .. | | 5,677 16 5 | |
| Colac–Beech Forest Road .. .. .. .. | .. | | 805 6 8 | |
| Colac–Forrest Road .. .. .. .. | .. | | 1,433 4 2 | |
| Cororooke Road .. .. .. .. .. | .. | | 1,727 11 8 | |
| Cressy–Inverleigh Road .. .. .. .. | .. | | 131 5 8 | |
| Prince's Highway .. .. .. .. | .. | | 343 10 10 | |
| Swan Marsh Road .. .. .. .. | .. | | 93 12 2 | |
| | | | | 10,212 7 7 |
| CORIO SHIRE— | | | | |
| Ballarat Road .. .. .. .. .. | .. | | 19 8 0 | |
| Geelong–Bacchus Marsh Road .. .. .. | .. | | 2,439 19 1 | |
| Prince's Highway .. .. .. .. | .. | | Bd. 256 9 7 | |
| | | | | 2,715 16 8 |
| CORIO AND BACCHUS MARSH SHIRES (Joint Works)— | | | | |
| Bacchus Marsh Road .. .. .. .. | .. | | 186 14 10 | |
| | | | | 186 14 10 |
| CRANBOURNE SHIRE— | | | | |
| Cranbourne–Frankston Road .. .. .. | .. | | 272 12 2 | |
| Koo-wee-rup–Longwarry Road .. .. .. | .. | | 121 19 10 | |
| Koo-wee-rup–Pakenham Road .. .. .. | .. | | 2,346 14 6 | |
| Lang Lang–Nyora Road .. .. .. .. | .. | | 30 18 10 | |
| Main Coast Road .. .. .. .. | .. | | 850 1 11 | |
| Westernport Road .. .. .. .. | 162 4 5 | | 505 3 8 | |
| | | 162 4 5 | | 4,127 10 11 |
| CRESWICK BOROUGH— | | | | |
| Ballarat–Creswick .. .. .. .. | .. | | 104 19 3 | |
| | | | | 104 19 3 |
| CRESWICK SHIRE— | | | | |
| Castlemaine–Ballarat Road .. .. .. | .. | | 586 15 5 | |
| Daylesford–Ballarat Road .. .. .. | .. | | 335 1 11 | |
| Daylesford–Ballarat Road .. .. .. | .. | | Bd. 701 15 5 | |
| | | | | 1,623 12 9 |
| COHUNA SHIRE— | | | | |
| Cohuna–Leitchville Road .. .. .. .. | .. | | 595 1 6 | |
| Murray River Valley Road .. .. .. | .. | | Bd. 5 7 7 | |
| Murray River Valley .. .. .. .. | .. | | 40 8 4 | |
| | | | | 640 17 5 |
| DANDENONG SHIRE— | | | | |
| Cheltenham Road .. .. .. .. | .. | | 209 16 6 | |
| Prince's Highway .. .. .. .. | .. | | 247 7 1 | |
| | | | | 457 3 7 |
| DANDENONG AND CRANBOURNE SHIRES (Joint Works)— | | | | |
| Dandenong–Frankston Road .. .. .. | 1,436 7 1 | | 228 0 10 | |
| | | 1,436 7 1 | | 228 0 10 |
| DAYLESFORD BOROUGH— | | | | |
| Ballan Road .. .. .. .. .. | .. | | 128 4 9 | |
| Ballarat Road .. .. .. .. .. | .. | | 180 13 0 | |
| Castlemaine Road .. .. .. .. | .. | | 195 2 0 | |
| Daylesford–Trentham .. .. .. .. | .. | | 147 0 5 | |
| Hepburn–Daylesford Road .. .. .. | .. | | 458 17 11 | |
| Malmsbury–Daylesford Road .. .. .. | .. | | 518 18 11 | |
| | | | | 1,628 17 0 |
| DEAKIN SHIRE— | | | | |
| Echuca–Cornella Road .. .. .. .. | .. | | 25 0 0 | |
| Echuca–Picola Road .. .. .. .. | .. | | 2 11 10 | |
| Kyabram–Nathalia Road .. .. .. | 446 0 5 | | 307 16 2 | |
| Kyabram–Tongala Road .. .. .. .. | .. | | 200 11 7 | |
| Rochester–Kyabram Road .. .. .. | .. | | 102 14 9 | |
| | | 446 0 5 | | 638 14 4 |
| DEAKIN AND NUMURKAH SHIRES (Joint Works)— | | | | |
| Echuca–Picola Road .. .. .. .. | .. | | 32 10 0 | |
| Kyabram–Nathalia Road .. .. .. | .. | | 25 0 4 | |
| | | | | 57 10 4 |
| DEAKIN AND RODNEY SHIRES (Joint Works)— | | | | |
| Kyabram–Tongala Road .. .. .. .. | .. | | 324 18 0 | |
| Rochester–Kyabram Road .. .. .. | .. | | 343 7 3 | |
| | | | | 668 5 3 |
| DIMBOOLA SHIRE— | | | | |
| Horsham Road .. .. .. .. .. | .. | | 9 18 5 | |
| Rainbow Road .. .. .. .. .. | 74 16 10 | | 2,351 13 2 | |
| Rainbow Rises Road .. .. .. .. | .. | | 24 17 5 | |
| Warracknabeal Road .. .. .. .. | 454 14 10 | | 938 19 6 | |
| | | 529 11 8 | | 3,325 8 6 |
| DIMBOOLA AND KARKAROOC SHIRES (Joint Works)— | | | | |
| Hopetoun–Rainbow Road .. .. .. | .. | | 298 18 10 | |
| Rainbow Road .. .. .. .. .. | .. | | 274 16 9 | |
| | | | | 573 15 7 |
| Carried forward .. .. .. .. | .. | 7,776 14 9 | .. | 111,377 4 11 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 7,776 14 9 | .. | 111,377 4 11 |
| DONALD SHIRE— | | | | |
| Donald–Charlton Road .. .. .. .. | .. | | 421 15 7 | |
| Donald–Minyip Road .. .. .. .. | .. | | 105 15 5 | |
| Marnoo Road .. .. .. .. | .. | | 60 5 1 | |
| Marnoo–Donald Road .. .. .. .. | .. | | 80 14 8 | |
| St. Arnaud–Birchip Road .. .. .. .. | .. | | 616 4 8 | |
| | | | | 1,284 15 5 |
| DONCASTER AND TEMPLESTOWE SHIRES— | | | | |
| Doncaster Road .. .. .. .. | .. | | 1,669 16 10 | |
| Heidelberg–Warrandyte Road .. .. .. | .. | | 2,600 19 4 | |
| Warrandyte–Ringwood Road .. .. .. | .. | | 358 11 0 | |
| | | | | 4,629 7 2 |
| DUNDAS SHIRE— | | | | |
| Hamilton–Dunkeld Road .. .. .. .. | .. | | 2,636 15 5 | |
| Hamilton–Horsham Road .. .. .. | 1,043 8 1 | | 3,147 3 2 | |
| Hamilton–Mount Gambier Road .. .. .. | .. | | 2,282 10 9 | |
| Hamilton–Port Fairy Road .. .. .. | .. | | 2,793 13 6 | |
| Hamilton–Portland Road .. .. .. .. | .. | | 1,258 14 11 | |
| Hamilton–Warrnambool Road .. .. .. | .. | | 630 15 9 | |
| | | 1,043 8 1 | | 12,749 13 6 |
| DUNDAS SHIRE AND HAMILTON TOWN (Joint Works)— | | | | |
| Hamilton–Warrnambool .. .. .. .. | .. | | 225 11 8 | |
| | | | | 225 11 8 |
| DUNMUNKLE SHIRE— | | | | |
| Horsham–Murtoa Road .. .. .. .. | 1,259 0 0 | | 963 1 5 | |
| Marnoo–Donald Road .. .. .. .. | .. | | 50 4 0 | |
| Marnoo–Rupanyup Road .. .. .. .. | .. | | 269 1 7 | |
| Minyip–Donald Road .. .. .. | 414 2 10 | | 149 8 0 | |
| Rupanyup–Murtoa Road .. .. .. | .. | | 1,117 5 9 | |
| Stawell–Warracknabeal Road .. .. .. | 265 15 8 | | 4,027 4 7 | |
| | | 1,938 18 6 | | 6,576 5 4 |
| EAGLEHAWK BOROUGH— | .. | | | |
| Mount Korong Road .. .. .. .. | .. | | 190 0 11 | |
| | | | | 190 0 11 |
| EAST LODDON SHIRE— | | | | |
| Dingee Road .. .. .. .. .. | .. | | 161 15 6 | |
| Mitiamo Road .. .. .. .. .. | 194 8 3 | | 31 15 1 | |
| Prairie Road .. .. .. .. .. | .. | | 88 4 7 | |
| | | 194 8 3 | | 281 15 2 |
| ECHUCA BOROUGH— | | | | |
| Echuca–Cornella Road .. .. .. .. | .. | | 12 8 11 | |
| Echuca West Road .. .. .. .. | .. | | 370 6 3 | |
| Echuca–Wyuna Road .. .. .. .. | .. | | 144 3 8 | |
| Murray Valley Highway .. .. .. .. | 133 7 11 | | .. | |
| | | 133 7 11 | | 526 18 10 |
| ELTHAM SHIRE— | | | | |
| Eltham–Yarra Glen Road .. .. .. | .. | | 2,244 2 3 | |
| Hurstbridge–Kinglake Road .. .. .. | .. | | 1,443 18 8 | |
| Whittlesea–Kinglake Road .. .. .. | .. | | 15 0 1 | |
| Yarra Glen–Glenburn Road .. .. .. | .. | | 276 1 1 | |
| | | | | 3,979 2 1 |
| EUROA SHIRE— | | | | |
| Arcadia Road .. .. .. .. .. | .. | | 25 11 5 | |
| Avenel–Longwood Road .. .. .. .. | .. | | 99 10 0 | |
| Euroa–Arcadia Road .. .. .. .. | .. | | 386 17 9 | |
| Euroa–Mansfield Road .. .. .. .. | .. | | 177 12 2 | |
| Euroa–Strathbogie Road .. .. .. .. | .. | | 343 7 0 | |
| Murchison–Shepparton Road .. .. .. | 71 10 0 | | 25 8 3 | |
| Murchison–Violet Town Road .. .. .. | .. | | 257 6 4 | |
| Sydney Road .. .. .. .. .. | .. | | Bd. 9 11 2 | |
| | | 71 10 0 | | 1,325 4 1 |
| FERN TREE GULLY SHIRE— | | | | |
| Belgrave–Emerald Road .. .. .. .. | .. | | 1,197 3 4 | |
| Burwood Road .. .. .. .. .. | .. | | 1,041 19 10 | |
| Emerald Road .. .. .. .. .. | .. | | 368 12 10 | |
| Main Fern Tree Gully Road .. .. .. | .. | | 1,694 15 1 | |
| Monbulk Road .. .. .. .. .. | .. | | 393 9 6 | |
| Olinda Road .. .. .. .. .. | .. | | 919 1 0 | |
| | | | | 5,615 1 7 |
| FLINDERS SHIRE— | | | | |
| Hastings–Flinders Road .. .. .. .. | 1,092 16 9 | | 980 5 8 | |
| Mornington–Dromana .. .. .. .. | .. | | 206 1 2 | |
| Mornington–Flinders Road .. .. .. | .. | | 1,421 2 2 | |
| Point Nepean Road .. .. .. .. | .. | | 1,573 11 4 | |
| Red Hill Road .. .. .. .. .. | .. | | 412 2 6 | |
| Rosebud–Flinders Road .. .. .. .. | .. | | 991 12 11 | |
| Stony Point Road .. .. .. .. | .. | | 29 12 7 | |
| | | 1,092 16 9 | | 5,614 8 4 |
| FOOTSCRAY CITY— | | | | |
| Prince's Highway .. .. .. .. | .. | | Bd. 461 5 11 | |
| | | | | 461 5 11 |
| Carried forward .. .. .. .. | .. | 12,251 4 3 | .. | 154,836 14 11 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 12,251 4 3 | .. | 154,836 14 11 |
| FRANKSTON AND HASTINGS SHIRE— | | | | |
| Cranbourne–Frankston Road .. .. .. | .. | | 1,204 7 8 | |
| Frankston–Dandenong Road .. .. .. | .. | | 826 12 9 | |
| Frankston–Flinders Road .. .. .. .. | .. | | 2,285 16 4 | |
| Mooroodue Road .. .. .. .. | .. | | 1,010 18 11 | |
| Point Nepean Road .. .. .. .. | .. | | 1,038 0 0 | |
| | | | | 6,365 15 8 |
| GISBORNE SHIRE— | | | | |
| Bacchus Marsh Road .. .. .. .. | .. | | 326 10 2 | |
| Gisborne Station .. .. .. .. | .. | | 168 8 5 | |
| Melbourne–Bendigo Road .. .. .. | .. | | Bd. 342 11 0 | |
| Mount Macedon Road .. .. .. .. | .. | | 144 17 9 | |
| | | | | 982 7 4 |
| GLENELG SHIRE— | | | | |
| Coleraine–Casterton Road .. .. .. | .. | | 1,177 3 5 | |
| Dergholm Road .. .. .. .. .. | 160 0 6 | | 975 0 3 | |
| Mount Gambier Road .. .. .. .. | .. | | 1,164 11 1 | |
| Portland–Casterton Road .. .. .. .. | .. | | 1,767 8 5 | |
| Wando Vale Road .. .. .. .. | 370 11 2 | | 470 15 7 | |
| | | 530 11 8 | | 5,554 18 9 |
| GLENLYON SHIRE— | | | | |
| Ballan Road .. .. .. .. .. | .. | | 341 13 1 | |
| Ballarat Road .. .. .. .. .. | .. | | 102 3 6 | |
| Castlemaine–Daylesford Road .. .. .. | .. | | 190 17 9 | |
| Castlemaine–Daylesford Road .. .. .. | .. | | Bd. 1,072 10 3 | |
| Daylesford–Hepburn Road .. .. .. | .. | | 121 1 3 | |
| Daylesford–Trentham Road .. .. .. | .. | | 541 1 8 | |
| Malmsbury–Daylesford Road .. .. .. | .. | | 1,189 7 9 | |
| Daylesford–Ballarat Road .. .. .. | .. | | Bd. 377 17 6 | |
| | | | | 3,936 12 9 |
| GOULBURN SHIRE— | | | | |
| Avenel–Longwood Road .. .. .. .. | .. | | 108 19 5 | |
| Goulburn Valley Road .. .. .. .. | .. | | 1,050 15 6 | |
| Murchison–Shepparton Road .. .. .. | .. | | 67 13 10 | |
| Station Road .. .. .. .. .. | .. | | 6 6 0 | |
| Vickers Road .. .. .. .. .. | .. | | .. | |
| | | | | 1,233 14 9 |
| GRENVILLE SHIRE— | | | | |
| Ballarat–Hamilton Road .. .. .. .. | .. | | 4,306 13 8 | |
| Cressy Road .. .. .. .. .. | .. | | 102 17 8 | |
| Lismore Road .. .. .. .. .. | .. | | 212 19 2 | |
| Pitfield Road .. .. .. .. .. | .. | | 198 10 5 | |
| | | | | 4,821 0 11 |
| HAMILTON TOWN— | | | | |
| Ararat Road .. .. .. .. .. | .. | | 153 13 8 | |
| Coleraine Road .. .. .. .. .. | .. | | 216 8 3 | |
| Port Fairy Road .. .. .. .. .. | .. | | 67 15 4 | |
| Portland Road .. .. .. .. .. | .. | | 171 17 9 | |
| | | | | 609 15 0 |
| HAMILTON TOWN AND DUNDAS SHIRE (Joint Works)— | | | | |
| Hamilton–Warrnambool Road .. .. .. | .. | | 98 4 0 | |
| | | | | 98 4 0 |
| HAMPDEN SHIRE— | | | | |
| Terang–Mortlake Road .. .. .. .. | .. | | 301 18 3 | |
| Camperdown–Ballarat Road .. .. .. | .. | | 6,213 16 5 | |
| Caramut–Lismore Road .. .. .. .. | .. | | 1,292 5 6 | |
| Cobden–Terang Road .. .. .. .. | .. | | 513 17 2 | |
| Lismore–Cressy Road .. .. .. .. | .. | | 3,403 1 10 | |
| McKinnon's Bridge–Noorat Road .. .. .. | .. | | 2,248 17 11 | |
| Prince's Highway .. .. .. .. | .. | | 751 4 11 | |
| Terang–Framlingham Road .. .. .. | .. | | 682 16 9 | |
| | | | | 15,407 18 9 |
| HEALESVILLE SHIRE— | | | | |
| Healesville–Alexandra Road .. .. .. | .. | | 322 19 1 | |
| Healesville–Alexandra Road .. .. .. | .. | | Bd. 390 13 3 | |
| Marysville Road .. .. .. .. .. | .. | | Bd. 231 14 4 | |
| Healesville–Woori Yallock Road .. .. .. | .. | | Bd. 272 14 8 | |
| | | | | 1,218 1 4 |
| HEIDELBERG SHIRE— | | | | |
| Greensborough–Hurstbridge Road .. .. .. | .. | | 484 4 1 | |
| Heidelberg–Warrandyte Road .. .. .. | .. | | 286 14 10 | |
| Main Heidelberg–Eltham Road .. .. .. | .. | | 1,596 13 8 | |
| Main Whittlesea Road .. .. .. .. | .. | | 183 12 1 | |
| | | | | 2,551 4 8 |
| HEIDELBERG AND ELTHAM SHIRES (Joint Works)— | | | | |
| Heidelberg–Eltham Road .. .. .. .. | .. | | Bd. 724 8 9 | |
| | | | | 724 8 9 |
| HEIDELBERG AND DONCASTER AND TEMPLESTOWE SHIRES (Joint Works)— | | | | |
| Heidelberg–Warrandyte Road .. .. .. | .. | | Bd. 258 16 2 | |
| | | | | 258 16 2 |
| Carried forward .. .. .. .. | .. | 12,781 15 11 | .. | 198,599 13 9 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 12,781 15 11 | .. | 198,599 13 9 |
| HEYTESBURY SHIRE— | | | | |
| Camperdown–Cobden Road .. .. .. | .. | | 2,650 15 2 | |
| Cobden–Pt. Campbell–Princetown Road .. .. | 5 0 0 | | 1,541 15 1 | |
| Cobden–Pt. Campbell–Princetown Road .. .. | .. | | Bd. 120 11 7 | |
| Cobden–Terang Road .. .. .. .. | .. | | 312 6 5 | |
| Timboon–Nirranda Road .. .. .. .. | .. | | 63 1 2 | |
| Timboon–Port Campbell Road .. .. .. | .. | | 197 13 0 | |
| | | 5 0 0 | | 4,886 2 5 |
| HORSHAM TOWN— | | | | |
| Dimboola–Horsham Road .. .. .. | .. | | 787 0 7 | |
| Dooen Road .. .. .. .. .. | .. | | 151 0 3 | |
| Hamilton Road .. .. .. .. .. | .. | | 222 13 4 | |
| Natimuk Road .. .. .. .. .. | .. | | 252 15 8 | |
| Western Highway .. .. .. .. | .. | | 973 10 0 | |
| | | | | 2,386 19 10 |
| HUNTLY SHIRE— | | | | |
| Bendigo–Echuca Road .. .. .. .. | .. | | Bd. 1,563 0 3 | |
| Heathcote Road .. .. .. .. .. | .. | | 85 0 5 | |
| | | | | 1,648 0 8 |
| INGLEWOOD BOROUGH— | | | | |
| Bendigo–Charlton Road .. .. .. .. | .. | | 232 8 0 | |
| | | | | 232 8 0 |
| KARA KARA SHIRE— | | | | |
| Avoca–St. Arnaud Road .. .. .. .. | 654 7 6 | | 1,093 13 0 | |
| Charlton Road .. .. .. .. .. | .. | | 557 6 1 | |
| Marnoo Road .. .. .. .. .. | .. | | 154 17 4 | |
| Navarre Road .. .. .. .. .. | .. | | 453 7 8 | |
| St. Arnaud–Donald Road .. .. .. .. | 1,639 3 8 | | 2,888 12 2 | |
| | | 2,293 11 2 | | 5,147 16 3 |
| KARKAROOC SHIRE— | | | | |
| Hopetoun–Rainbow Road .. .. .. | 421 3 4 | | 500 10 8 | |
| Hopetoun–Warracknabeal Road .. .. .. | .. | | 1,101 0 11 | |
| Hopetoun–Woomelang–Sealake Road .. .. | 117 0 0 | | 981 1 10 | |
| Rainbow–Beulah–Birchip Road .. .. .. | .. | | 897 18 0 | |
| | | 538 3 4 | | 3,480 11 5 |
| KARKAROOC AND BIRCHIP SHIRES (Joint Works)— | | | | |
| Rainbow–Beulah–Birchip Road .. .. .. | .. | | 138 18 9 | |
| | | | | 138 18 9 |
| KEILOR SHIRE— | | | | |
| Melbourne–Bendigo Road .. .. .. .. | .. | | Bd. 444 5 9 | |
| | | | | 444 5 9 |
| KERANG SHIRE— | | | | |
| Koondrook Road .. .. .. .. | .. | | 333 11 10 | |
| | | | | 333 11 10 |
| KILMORE SHIRE— | | | | |
| Kilmore–Kilmore East Road .. .. .. | .. | | 141 2 7 | |
| Heathcote Road .. .. .. .. .. | .. | | 206 12 4 | |
| Lancefield–Kilmore Road .. .. .. .. | .. | | 164 10 0 | |
| Sydney Road .. .. .. .. .. | .. | | Bd. 18 7 6 | |
| | | | | 530 12 5 |
| KILMORE AND PYALONG SHIRES (Joint Works)— | | | | |
| Heathcote Road .. .. .. .. .. | .. | | 207 11 3 | |
| | | | | 207 11 3 |
| KILMORE AND ROMSEY SHIRES (Joint Works)— | | | | |
| Lancefield–Kilmore Road .. .. .. .. | .. | | 56 14 7 | |
| | | | | 56 14 7 |
| KOROIT BOROUGH— | | | | |
| Koroit–Warrnambool Road .. .. .. | .. | | 712 4 4 | |
| | | | | 712 4 4 |
| KORONG SHIRE— | | | | |
| Borung–Hurstwood Road .. .. .. | .. | | 96 10 0 | |
| Charlton–Bendigo Road .. .. .. .. | .. | | 44 1 6 | |
| Serpentine Road .. .. .. .. | .. | | 274 10 7 | |
| | | | | 415 2 1 |
| KORUMBURRA SHIRE— | | | | |
| Bena–Kongwak Road .. .. .. .. | .. | | 1,072 6 7 | |
| Bena–Korumburra Road .. .. .. .. | .. | | 107 14 5 | |
| Bena–Poowong Road .. .. .. .. | .. | | 319 12 11 | |
| Fairbank Road .. .. .. .. | .. | | 160 14 9 | |
| Kongwak–Inverloch Road .. .. .. | .. | | 9 10 9 | |
| Korumburra–Drouin Road .. .. .. | .. | | 780 14 9 | |
| Korumburra–Leongatha Road .. .. .. | .. | | 207 15 0 | |
| Korumburra–Warragul Road .. .. .. | .. | | 580 10 4 | |
| Korumburra–Wonthaggi Road .. .. .. | 159 7 8 | | 2,016 6 6 | |
| Lang Lang–Nyora Road .. .. .. .. | .. | | 439 4 8 | |
| Loch–Nyora Road .. .. .. .. | .. | | 22 11 8 | |
| Loch–Wonthaggi Road .. .. .. .. | .. | | 968 6 5 | |
| Nyora–Poowong Road .. .. .. .. | .. | | 870 11 4 | |
| Poowong–Ranceby Road .. .. .. .. | .. | | 1,107 3 4 | |
| | | 159 7 8 | | 8,663 3 5 |
| Carried forward .. .. .. .. | .. | 15,777 18 1 | .. | 227,883 16 9 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 15,777 18 1 | .. | 227,883 16 9 |
| KOWREE SHIRE— | | | | |
| Booroopki Road .. .. .. .. .. | 11 5 2 | | 335 5 9 | |
| Booroopki–Frances Road .. .. .. .. | 619 5 7 | | 139 15 3 | |
| Edenhope–Goroke Road .. .. .. .. | .. | | 547 16 4 | |
| Hamilton–Edenhope–Apsley Road .. .. | 273 5 0 | | 716 16 6 | |
| Little Desert Road .. .. .. .. | .. | | 61 12 8 | |
| Wombelano Road .. .. .. .. | .. | | 357 0 0 | |
| | | 903 15 9 | | 2,158 6 6 |
| KYNETON SHIRE— | | | | |
| Daylesford Road .. .. .. .. | .. | | 35 2 0 | |
| Daylesford–Trentham Road .. .. .. | .. | | .. | |
| Melbourne–Bendigo Road .. .. .. | .. | | 248 13 3 | |
| Redesdale Road .. .. .. .. .. | .. | | 125 19 7 | |
| Trentham Road .. .. .. .. .. | .. | | 182 8 10 | |
| Tylden–Woodend Road .. .. .. .. | .. | | 430 8 11 | |
| | | | | 1,022 12 7 |
| LAWLOIT SHIRE— | | | | |
| Broughton Road .. .. .. .. .. | .. | | 702 16 7 | |
| Little Desert Road .. .. .. .. | .. | | 247 12 10 | |
| Nhill–Kaniva–Border Road .. .. .. | .. | | 115 6 10 | |
| South Lillimur Road .. .. .. .. | .. | | 817 7 4 | |
| Yearinga Road .. .. .. .. .. | .. | | 678 13 1 | |
| | | | | 2,561 16 8 |
| LEIGH SHIRE— | | | | |
| Ballarat–Rokewood Road .. .. .. | .. | | 144 14 9 | |
| Cressy–Inverleigh Road .. .. .. .. | .. | | 308 12 10 | |
| Cressy–Rokewood Road .. .. .. .. | .. | | 268 12 0 | |
| Inverleigh–Shelford Road .. .. .. | .. | | 217 11 5 | |
| Rokewood–Shelford Road .. .. .. | .. | | 469 18 2 | |
| Shelford–Bannockburn Road .. .. .. | .. | | 333 18 9 | |
| Werneth Road .. .. .. .. .. | .. | | .. | |
| | | | | 1,743 7 11 |
| LEIGH AND COLAC SHIRES (Joint Works)— | | | | |
| Cressy–Inverleigh Road .. .. .. .. | .. | | 127 11 10 | |
| | | | | 127 11 10 |
| LEXTON SHIRE— | | | | |
| Avoca–Ararat Road .. .. .. .. | .. | | 45 14 3 | |
| Avoca–Ballarat Road .. .. .. .. | .. | | 345 15 2 | |
| | | | | 391 9 5 |
| LILLYDALE SHIRE— | | | | |
| Evelyn–Lilydale Road .. .. .. .. | .. | | 350 10 6 | |
| Main Healesville Road .. .. .. .. | .. | | 103 7 4 | |
| Main Healesville Road .. .. .. .. | .. | | Bd. 383 15 10 | |
| Main Warburton Road .. .. .. .. | .. | | Bd. 285 4 2 | |
| Monbulk Road .. .. .. .. .. | .. | | 742 17 8 | |
| Mount Dandenong Road .. .. .. .. | .. | | 440 8 1 | |
| Yarra Glen Road .. .. .. .. | .. | | 366 15 3 | |
| | | | | 2,672 18 10 |
| LOWAN SHIRE— | | | | |
| Dimboola–Kaniva Road .. .. .. .. | .. | | 271 19 5 | |
| Goroke Road .. .. .. .. .. | 581 10 0 | | 363 13 5 | |
| Lorquon West Road .. .. .. .. | .. | | 1,112 14 6 | |
| Yanac Road .. .. .. .. .. | .. | | 821 3 7 | |
| | | 581 10 0 | | 2,569 10 11 |
| MAFFRA SHIRE— | | | | |
| Boisdale–Briagalong Road .. .. .. | .. | | 57 18 5 | |
| Bushy Park–Valencia Creek Road .. .. | .. | | 155 12 11 | |
| Licola Road .. .. .. .. .. | .. | | 538 4 5 | |
| Maffra–Newry Road .. .. .. .. | .. | | 71 6 2 | |
| Maffra–Sale Road .. .. .. .. | .. | | 686 18 9 | |
| Maffra–Stratford Road .. .. .. .. | .. | | 1,337 12 2 | |
| Tinamba–Boisdale Road .. .. .. .. | .. | | 1,657 15 7 | |
| Tinamba–Newry Road .. .. .. .. | .. | | 406 6 4 | |
| Traralgon–Maffra Road .. .. .. .. | .. | | 2,362 2 1 | |
| | | | | 7,273 16 10 |
| MAFFRA AND AVON SHIRES (Joint Works)— | | | | |
| Maffra–Stratford Road .. .. .. .. | .. | | 6 1 5 | |
| | | | | 6 1 5 |
| MALDON SHIRE— | | | | |
| Baringhup Road .. .. .. .. .. | .. | | 82 5 6 | |
| Castlemaine–Maldon Road .. .. .. .. | .. | | 70 12 10 | |
| Castlemaine–Newstead Road .. .. .. | .. | | 124 10 0 | |
| Maldon–Eddington Road .. .. .. .. | .. | | 302 1 7 | |
| Newstead Road .. .. .. .. .. | .. | | 27 1 2 | |
| | | | | 606 11 1 |
| MANSFIELD SHIRE— | | | | |
| Benalla–Mansfield Road .. .. .. .. | .. | | 135 3 3 | |
| Euroa–Merton Road .. .. .. .. .. | .. | | 24 3 4 | |
| Maindample–Benalla Road .. .. .. | .. | | 28 4 9 | |
| Mansfield Road .. .. .. .. .. | .. | | 1,113 9 9 | |
| Mansfield–Tolmie Road .. .. .. .. | .. | | 21 17 10 | |
| Mansfield–Woodspoint Road .. .. .. | .. | | 288 1 8 | |
| Mansfield–Woodspoint Road .. .. .. | .. | | Bd. 2,024 11 11 | |
| Merton–Strathbogie Road .. .. .. | .. | | 2 13 2 | |
| | | | | 3,638 5 8 |
| Carried forward .. .. .. .. | .. | 17,263 3 10 | .. | 252,656 6 5 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 17,263 3 10 | .. | 252,656 6 5 |
| MARONG SHIRE— | | | | |
| Bendigo–Bridgewater Road .. .. .. | .. | | 321 2 4 | |
| Bendigo–Eddington Road .. .. .. | .. | | 1,450 1 1 | |
| Bendigo–Serpentine Road .. .. .. | .. | | 74 11 4 | |
| | | | | 1,845 14 9 |
| MARYBOROUGH BOROUGH— | | | | |
| Avoca Road .. .. .. .. .. | .. | | 27 17 4 | |
| Ballarat Road .. .. .. .. .. | .. | | 34 10 0 | |
| Eddington Road .. .. .. .. | .. | | 21 4 6 | |
| | | | | 83 11 10 |
| MELTON SHIRE— | | | | |
| The Gap Road .. .. .. .. .. | .. | | 10 6 0 | |
| Toolern Road .. .. .. .. .. | .. | | 159 17 0 | |
| | | | | 170 3 0 |
| METCALFE SHIRE— | | | | |
| Kyneton–Redesdale Road .. .. .. | .. | | 74 3 2 | |
| | | | | 74 3 2 |
| MORDIALLOC CITY— | | | | |
| Point Nepean Road .. .. .. .. | .. | | Bd. 116 2 5 | |
| Point Nepean Road .. .. .. .. | .. | | 932 1 8 | |
| | | | | 1,048 4 1 |
| MILDURA SHIRE— | | | | |
| Deakin Avenue .. .. .. .. .. | .. | | 28 7 11 | |
| Irymple Road .. .. .. .. .. | 1,038 6 2 | | 991 2 4 | |
| Melbourne Road .. .. .. .. | .. | | 103 8 5 | |
| Murray Valley Road .. .. .. .. | .. | | 57 12 0 | |
| Wentworth Road .. .. .. .. | 1,216 19 10 | | 1,068 5 9 | |
| | | 2,255 6 0 | | 2,248 16 5 |
| MILDURA TOWN— | | | | |
| Deakin Avenue .. .. .. .. .. | .. | | 84 3 4 | |
| Punt Road .. .. .. .. .. | .. | | 73 6 3 | |
| | | | | 157 9 7 |
| MINHAMITE SHIRE— | | | | |
| Hamilton–Macarthur–Port Fairy Road .. .. | .. | | 395 2 7 | |
| Warrnambool–Hawkesdale–Penshurst Road .. .. | .. | | 875 19 9 | |
| Woolsthorpe–Bessiebelle Road .. .. .. | .. | | 309 3 10 | |
| | | | | 1,580 6 2 |
| MIRBOO SHIRE— | | | | |
| Allambee East–West Tarwin Road .. .. .. | .. | | 26 13 6 | |
| Boolarra South–Mirboo Road .. .. .. | .. | | 25 1 4 | |
| Mardan Road .. .. .. .. | 78 8 6 | | 258 12 2 | |
| Mirboo–Allambee East Road .. .. .. | .. | | 261 18 11 | |
| Mirboo–Leongatha Road .. .. .. .. | .. | | 159 6 5 | |
| Mirboo South Road .. .. .. .. | .. | | 906 18 11 | |
| Mirboo–Yarragon Road .. .. .. .. | .. | | 191 5 11 | |
| Morwell–Mirboo Road .. .. .. .. | .. | | 259 6 4 | |
| | | 78 8 6 | | 2,089 3 6 |
| MIRBOO AND WOORAYL SHIRES (Joint Works)— | | | | |
| Turtons Creek Road .. .. .. .. | .. | | 11 15 3 | |
| | | | | 11 15 3 |
| MOORABBIN SHIRE— | | | | |
| Centre Dandenong Road .. .. .. .. | .. | | 147 1 11 | |
| Point Nepean Road .. .. .. .. | .. | | 885 7 5 | |
| | | | | 1,032 9 4 |
| MORNINGTON SHIRE— | | | | |
| Mornington–Dromana Road .. .. .. | .. | | 572 12 11 | |
| Point Nepean Road .. .. .. .. | .. | | Bd. 768 9 1 | |
| Point Nepean Road .. .. .. .. | .. | | 322 10 4 | |
| | | | | 1,663 12 4 |
| MORTLAKE SHIRE— | | | | |
| Caramut–Lismore Road .. .. .. .. | .. | | 228 17 8 | |
| Mortlake–Ararat Road .. .. .. .. | .. | | 1,726 9 5 | |
| Mortlake–Warrnambool Road .. .. .. | .. | | 70 18 5 | |
| Terang–Mortlake Road .. .. .. .. | .. | | 1,249 10 7 | |
| Terang–Framlingham Road .. .. .. | .. | | 1,461 18 4 | |
| | | | | 4,737 14 5 |
| MORWELL SHIRE— | | | | |
| Boolarra–Foster Road .. .. .. .. | .. | | Bd. 330 2 0 | |
| Boolarra–Welshpool Road .. .. .. | .. | | Bd. 67 2 0 | |
| Jeeralang West Road .. .. .. .. | .. | | 799 6 2 | |
| Jumbuk Road .. .. .. .. .. | .. | | 763 10 9 | |
| Morwell–Mirboo Road .. .. .. .. | .. | | 971 12 3 | |
| Princes Highway .. .. .. .. | .. | | 104 2 3 | |
| | | | | 3,035 15 5 |
| MOUNT ROUSE SHIRE— | | | | |
| Ballarat–Hamilton Road .. .. .. .. | .. | | 2,747 10 2 | |
| Hamilton–Dunkeld Road .. .. .. .. | .. | | 524 15 9 | |
| Hamilton–Penshurst Road .. .. .. | .. | | 1,890 13 5 | |
| Maroona–Glenthompson Road .. .. .. | .. | | 15 14 7 | |
| Penshurst–Caramut Road .. .. .. | .. | | 1,976 12 1 | |
| | | | | 7,155 6 0 |
| MULGRAVE SHIRE— | | | | |
| Ferntree Gully Road .. .. .. .. | .. | | 580 15 6 | |
| | | | | 580 15 6 |
| Carried forward .. .. .. .. | .. | 19,596 18 4 | .. | 280,171 7 2 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 19,596 18 4 | .. | 280,171 7 2 |
| McIVOR SHIRE— | | | | |
| Heathcote–Elmore Road .. .. .. .. | .. | | 199 14 7 | |
| Heathcote–Redesdale Road .. .. .. | .. | | 588 16 7 | |
| Kilmore–Heathcote–Bendigo Road .. .. | .. | | 576 19 1 | |
| Lancefield–Tooborac Road .. .. .. | .. | | 1 14 8 | |
| | | | | 1,367 4 11 |
| NARRACAN SHIRE— | | | | |
| Allambee–Childers Road .. .. .. .. | .. | | 249 9 1 | |
| Childers–Thorpdale Road .. .. .. .. | .. | | 212 19 9 | |
| Mirboo–Yarragon Road .. .. .. .. | .. | | 255 4 5 | |
| Moe–Yallourn Road .. .. .. .. | .. | | 5 5 5 | |
| Princes Highway .. .. .. .. | .. | | 422 12 8 | |
| Trafalgar–Thorpdale Road .. .. .. | .. | | 385 19 6 | |
| Trafalgar–Willowgrove Road .. .. .. | .. | | 799 16 2 | |
| Walhalla Road .. .. .. .. .. | .. | | 615 13 6 | |
| Walhalla Road .. .. .. .. .. | .. | | Bd. 1,892 9 7 | |
| Willowgrove Road .. .. .. .. | .. | | .. | |
| Yarragon–Leongatha Road .. .. .. | .. | | 460 7 1 | |
| Yarragon–Shady Creek Road .. .. .. | .. | | 83 8 6 | |
| | | | | 5,383 5 8 |
| NEWHAM AND WOODEND SHIRE— | | | | |
| Lancefield Road .. .. .. .. | .. | | 801 15 3 | |
| Melbourne–Bendigo Road .. .. .. | .. | | Bd. 105 7 4 | |
| Mount Macedon Road .. .. .. .. | .. | | 1 12 4 | |
| Tylden Road .. .. .. .. .. | 286 2 10 | | 237 9 0 | |
| | | 286 2 10 | | 1,146 3 11 |
| NEWHAM AND WOODEND AND KYNETON SHIRES (Joint Works)— | | | | |
| Tylden Road .. .. .. .. .. | .. | | 167 6 4 | |
| | | | | 167 6 4 |
| NEWSTEAD AND MT. ALEXANDER SHIRE— | | | | |
| Castlemaine–Daylesford Road .. .. .. | .. | | 168 14 9 | |
| Castlemaine–Maryborough Road .. .. .. | .. | | 254 9 5 | |
| Creswick Road .. .. .. .. .. | .. | | 114 17 3 | |
| Maldon Road .. .. .. .. .. | .. | | 87 10 2 | |
| | | | | 625 11 7 |
| NUMURKAH SHIRE— | | | | |
| Echuca–Picola Road .. .. .. .. | .. | | 319 14 7 | |
| Murray Valley Road .. .. .. .. | .. | | 3 19 9 | |
| Kyabram–Nathalia Road .. .. .. .. | .. | | 340 5 8 | |
| Nathalia North Road .. .. .. .. | .. | | 4 12 3 | |
| Nathalia–Picola Road .. .. .. .. | .. | | 436 10 7 | |
| Numurkah–Nathalia Road .. .. .. | .. | | 298 1 6 | |
| Numurkah–Tungamah Road .. .. .. | .. | | 87 8 1 | |
| Shepparton–Numurkah–Cobram Road .. .. | 853 5 1 | | 371 8 3 | |
| | | 853 5 1 | | 1,862 0 8 |
| NUMURKAH AND DEAKIN SHIRES (Joint Works)— | | | | |
| Echuca–Picola Road .. .. .. .. | .. | | 85 16 0 | |
| | | | | 85 16 0 |
| OAKLEIGH CITY— | | | | |
| Ferntree Gully Road .. .. .. .. | .. | | 30 15 5 | |
| Princes Highway .. .. .. .. | .. | | 180 16 1 | |
| | | | | 211 11 6 |
| OMEO SHIRE— | | | | |
| Benambra Road .. .. .. .. .. | 43 9 6 | | 279 2 8 | |
| Day Avenue .. .. .. .. .. | .. | | 44 2 4 | |
| Swift's Creek East Road .. .. .. .. | .. | | .. | |
| Swift's Creek–Omeo Road .. .. .. .. | .. | | 427 14 6 | |
| | | 43 9 6 | | 750 19 6 |
| OMEO AND BRIGHT SHIRES (Joint Works)— | | | | |
| Bright–Omeo Road .. .. .. .. | .. | | 1,798 11 8 | |
| | | | | 1,798 11 8 |
| ORBOST SHIRE— | | | | |
| Cann Valley Road .. .. .. .. | .. | | Bd. 441 12 11 | |
| Genoa–Gipsy Point Road .. .. .. | .. | | Bd. 81 1 9 | |
| Marlo Road .. .. .. .. | 650 0 5 | | 1,136 13 5 | |
| Princes Highway .. .. .. .. | .. | | 230 1 1 | |
| | | 650 0 5 | | 1,889 9 2 |
| OTWAY SHIRE— | | | | |
| Beech Forest–Apollo Bay Road .. .. .. | .. | | 691 12 7 | |
| Carlisle–Gellibrand Road .. .. .. .. | .. | | 520 17 8 | |
| Colac–Beech Forest Road .. .. .. .. | .. | | 104 10 0 | |
| Lavers Hill–Glenaire Road .. .. .. | .. | | 95 2 8 | |
| | | | | 1,412 2 11 |
| OXLEY SHIRE— | | | | |
| Bright Road .. .. .. .. .. | 134 18 3 | | 1,291 15 0 | |
| Greta–Glenrowan Road .. .. .. .. | .. | | 207 5 6 | |
| Wangaratta–Whitfield Road .. .. .. | .. | | 1,521 4 6 | |
| | | 134 18 3 | | 3,020 5 0 |
| OXLEY SHIRE AND WANGARATTA BOROUGH (Joint Works)— | | | | |
| Wangaratta–Whitfield Road .. .. .. | .. | | 7 1 4 | |
| | | | | 7 1 4 |
| Carried forward .. .. .. .. | .. | 21,564 14 5 | .. | 299,898 17 4 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 21,564 14 5 | .. | 299,898 17 4 |
| PHILLIP ISLAND SHIRE— | | | | |
| Newhaven Road .. .. .. .. .. | .. | | 341 2 1 | |
| Phillip Island Road .. .. .. .. | .. | | 317 4 2 | |
| Ventnor Road .. .. .. .. .. | .. | | 426 9 10 | |
| | | | | 1,084 16 1 |
| PORT FAIRY BOROUGH— | | | | |
| Hamilton Road .. .. .. .. .. | .. | | 5 2 7 | |
| Prince's Highway (Portland) .. .. .. | .. | | 26 2 3 | |
| Prince's Highway (Warrnambool) .. .. .. | .. | | 281 12 6 | |
| | | | | 312 17 4 |
| PORTLAND SHIRE— | | | | |
| Bridgewater Road .. .. .. .. | .. | | 15 7 1 | |
| Heath Road .. .. .. .. | .. | | 247 7 11 | |
| Portland–Casterton Road .. .. .. .. | .. | | 542 17 5 | |
| Portland–Hamilton Road .. .. .. .. | .. | | 1,635 18 3 | |
| | | | | 2,441 10 8 |
| PRESTON CITY— | | | | |
| Epping Road .. .. .. .. .. | .. | | 694 4 9 | |
| Whittlesea Road .. .. .. .. | .. | | 580 4 3 | |
| | | | | 1,274 9 0 |
| PYALONG SHIRE— | | | | |
| Kilmore–Heathcote–Bendigo Road .. .. | .. | | 287 1 5 | |
| Lancefield–Tooborac Road .. .. .. | .. | | 91 4 0 | |
| | | | | 378 5 5 |
| PYALONG AND McIVOR SHIRES (Joint Works)— | | | | |
| Lancefield–Tooborac Road .. .. .. | .. | | 3 3 6 | |
| | | | | 3 3 6 |
| QUEENSCLIFFE BOROUGH— | | | | |
| Geelong Road .. .. .. .. .. | .. | | 112 1 10 | |
| Point Lonsdale Road .. .. .. .. | .. | | Bd. 701 7 1 | |
| | | | | 813 8 11 |
| RINGWOOD BOROUGH— | | | | |
| Main Healesville Road .. .. .. .. | .. | | 1,337 1 8 | |
| Mount Dandenong Road .. .. .. .. | .. | | 73 16 5 | |
| Ringwood–Warrandyte Road .. .. .. | .. | | 192 4 9 | |
| | | | | 1,603 2 10 |
| RINGWOOD BOROUGH AND DONCASTER AND TEMPLESTOWE SHIRE (Joint Works)— | | | | |
| Ringwood–Warrandyte Road .. .. .. | .. | | 8 1 3 | |
| | | | | 8 1 3 |
| RIPON SHIRE— | | | | |
| Ballarat–Ararat Road .. .. .. .. | .. | | 24 6 4 | |
| Ballarat–Hamilton Road .. .. .. .. | .. | | 1,728 0 8 | |
| Skipton Road .. .. .. .. .. | .. | | 1,575 1 4 | |
| | | | | 3,327 8 4 |
| RIPON AND HAMPDEN SHIRES (Joint Works)— | | | | |
| Skipton Bridge .. .. .. .. .. | .. | | 4 10 0 | |
| | | | | 4 10 0 |
| ROCHESTER SHIRE— | | | | |
| Bendigo-Echuca Road .. .. .. .. | 546 19 1 | | 187 4 9 | |
| Rochester–Bamawm Prairie Road .. .. .. | 1,813 17 5 | | 1,427 8 5 | |
| Timmering Road .. .. .. .. | .. | | 1,616 0 1 | |
| | | 2,360 16 6 | | 3,230 13 3 |
| RODNEY SHIRE— | | | | |
| Kyabram–Nathalia Road .. .. .. | .. | | 244 5 4 | |
| Kyabram–Tongala Road .. .. .. .. | .. | | 91 7 10 | |
| Mooroopna–Undera Road .. .. .. .. | .. | | 50 19 1 | |
| Shepparton–Tatura Road .. .. .. .. | .. | | 2,737 3 2 | |
| Tatura–Byrneside–Kyabram Road .. .. .. | .. | | 1,993 10 11 | |
| Tatura–Murchison Road .. .. .. .. | 1,454 5 8 | | 1,048 18 4 | |
| | | 1,454 5 8 | | 6,166 4 8 |
| RODNEY SHIRE AND SHEPPARTON BOROUGH (Joint Works)— | | | | |
| Shepparton–Tatura Road .. .. .. .. | .. | | 60 18 8 | |
| | | | | 60 18 8 |
| ROMSEY SHIRE— | | | | |
| Lancefield–Kilmore Road .. .. .. .. | .. | | 159 18 0 | |
| Lancefield–Tooborac Road .. .. .. | .. | | 57 11 2 | |
| Melbourne–Lancefield Road .. .. .. | .. | | 628 18 3 | |
| Woodend–Lancefield Road .. .. .. | .. | | 251 19 0 | |
| | | | | 1,098 6 5 |
| ROSEDALE SHIRE— | | | | |
| Prince's Highway .. .. .. .. | .. | | 39 3 8 | |
| Sale–Yarram Road .. .. .. .. | .. | | 84 15 8 | |
| Seaspray Road .. .. .. .. | .. | | 366 0 7 | |
| Traralgon–Gormandale Road .. .. .. | .. | | 130 15 7 | |
| Traralgon–Maffra Road .. .. .. .. | .. | | 1,120 19 10 | |
| Willung Road .. .. .. .. .. | .. | | 71 5 11 | |
| | | | | 1,813 1 3 |
| ROSEDALE AND ALBERTON SHIRES (Joint Works)— | | | | |
| Carrajung–Gormandale Road .. .. .. | .. | | 1 9 3 | |
| | | | | 1 9 3 |
| Carried forward .. .. .. .. | .. | 25,379 16 7 | .. | 323,521 4 2 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 25,379 16 7 | .. | 323,521 4 2 |
| RUTHERGLEN SHIRE— | | | | |
| Barnawartha–Howlong Road .. .. .. | .. | | 26 8 0 | |
| Chiltern–Howlong Road .. .. .. .. | .. | | 45 15 4 | |
| Murray Valley Road .. .. .. .. | .. | | 41 0 10 | |
| Rutherglen–Wahgunyah Road .. .. .. | .. | | 325 19 0 | |
| Springhurst–Rutherglen Road .. .. .. | .. | | 621 17 1 | |
| Wodonga Road .. .. .. .. .. | .. | | 51 6 11 | |
| Yarrawonga Road .. .. .. .. | .. | | 44 12 0 | |
| | | | | 1,156 19 2 |
| RUTHERGLEN AND WANGARATTA SHIRES (Joint Works)— | | | | |
| Yarrawonga Road .. .. .. .. | .. | | 158 17 0 | |
| | | | | 158 17 0 |
| SALE TOWN— | | | | |
| Prince's Highway .. .. .. .. | 486 2 5 | | 5 10 11 | |
| Sale–Longford Road .. .. .. .. | .. | | 434 18 8 | |
| | | 486 2 5 | | 440 9 7 |
| SEBASTOPOL BOROUGH— | | | | |
| Ballarat–Hamilton Road .. .. .. .. | .. | | Bd. 781 16 3 | |
| Ballarat–Rokewood Road .. .. .. | .. | | 121 14 3 | |
| | | | | 903 10 6 |
| SEYMOUR SHIRE— | | | | |
| Avenel–Longwood Road .. .. .. .. | .. | | 184 6 1 | |
| Goulburn Valley Road .. .. .. .. | .. | | 126 11 11 | |
| Highlands Road .. .. .. .. .. | .. | | 365 0 2 | |
| Seymour–Yea Road .. .. .. .. | .. | | 305 14 9 | |
| Sydney Road .. .. .. .. .. | .. | | Bd. 99 7 4 | |
| Upper Goulburn Road .. .. .. .. | .. | | 528 4 7 | |
| | | | | 1,609 4 10 |
| SHEPPARTON BOROUGH— | | | | |
| Shepparton–Nagambie Road .. .. .. | .. | | 420 13 1 | |
| Shepparton–Nalinga Road .. .. .. | .. | | 34 17 11 | |
| Shepparton–Numurkah Road .. .. .. | .. | | 31 19 4 | |
| | | | | 487 10 4 |
| SHEPPARTON BOROUGH AND RODNEY SHIRE (Joint Works)— | | | | |
| Shepparton–Tatura Road .. .. .. .. | .. | | 93 13 2 | |
| | | | | 93 13 2 |
| SHEPPARTON SHIRE— | | | | |
| Dookie–Nalinga Road .. .. .. .. | .. | | 249 14 8 | |
| Katandra Road .. .. .. .. .. | .. | | 21 15 9 | |
| Pine Lodge Road .. .. .. .. | .. | | 601 18 7 | |
| Shepparton–Nagambie Road .. .. .. | .. | | 271 2 6 | |
| Shepparton–Nalinga Road .. .. .. | 14 0 0 | | 145 11 3 | |
| Shepparton–Numurkah Road .. .. .. | .. | | 465 5 4 | |
| | | 14 0 0 | | 1,755 8 1 |
| SHEPPARTON SHIRE AND SHEPPARTON BOROUGH (Joint Works)— | | | | |
| Pine Lodge Road .. .. .. .. | .. | | 25 8 0 | |
| Shepparton–Nagambie Road .. .. .. | .. | | 121 17 0 | |
| Shepparton–Nalinga Road .. .. .. | .. | | 3 3 3 | |
| | | | | 150 8 3 |
| SOUTH BARWON SHIRE— | | | | |
| Barwon Heads Road .. .. .. .. | .. | | 2,163 11 1 | |
| Prince's Highway .. .. .. .. | .. | | 318 16 10 | |
| Torquay Road .. .. .. .. .. | .. | | 1,408 1 6 | |
| | | | | 3,890 9 5 |
| SOUTH BARWON AND BARRARBOOL SHIRES (Joint Works)— | | | | |
| Torquay Road .. .. .. .. .. | .. | | 2,208 7 1 | |
| | | | | 2,208 7 1 |
| SOUTH BARWON AND BELLARINE SHIRES (Joint Works)— | | | | |
| Barwon Heads Bridge Road .. .. .. .. | .. | | 201 4 1 | |
| | | | | 201 4 1 |
| SOUTH GIPPSLAND SHIRE— | | | | |
| Albert River–Welshpool Road .. .. .. | .. | | 3 4 1 | |
| Boolarra–Foster Road .. .. .. .. | .. | | 253 16 7 | |
| Boolarra–Welshpool Road .. .. .. | .. | | 305 9 4 | |
| Falls Road .. .. .. .. .. | .. | | 116 11 9 | |
| Foster–Yarram Road .. .. .. .. | .. | | 1,295 14 1 | |
| Main South Gippsland Road .. .. .. | .. | | 1,510 7 6 | |
| Stony Creek–Dollar Road .. .. .. .. | .. | | 61 6 2 | |
| Toora–Gunyah Road .. .. .. .. | .. | | 193 10 7 | |
| Toora–Wonyip Road .. .. .. .. | .. | | 258 7 2 | |
| Turton's Creek Road .. .. .. .. | .. | | 127 1 5 | |
| | | | | 4,125 8 8 |
| SOUTH GIPPSLAND AND WOORAYL SHIRES (Joint Works)— | | | | |
| Boolarra–Foster Road .. .. .. .. | .. | | Bd. 704 11 2 | |
| Main South Gippsland Road .. .. .. | .. | | 82 9 9 | |
| | | | | 787 0 11 |
| ST. ARNAUD BOROUGH— | | | | |
| Avoca–St. Arnaud Road .. .. .. .. | .. | | 162 2 4 | |
| Charlton Road .. .. .. .. .. | .. | | 74 8 6 | |
| Navarre Road .. .. .. .. .. | .. | | 254 19 3 | |
| St. Arnaud–Donald Road .. .. .. .. | .. | | 123 1 0 | |
| | | | | 614 11 1 |
| Carried forward .. .. .. .. | .. | 25,879 19 0 | .. | 342,104 6 4 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 25,879 19 0 | .. | 342,104 6 4 |
| STAWELL BOROUGH— | | | | |
| Ararat–Stawell Road .. .. .. .. | .. | | 339 2 7 | |
| | | | | 339 2 7 |
| STAWELL SHIRE— | | | | |
| Landsborough Road .. .. .. .. | .. | | 25 17 3 | |
| Marnoo Road .. .. .. .. .. | .. | | 573 6 8 | |
| Marnoo–Rupanyup Road .. .. .. .. | .. | | 5 11 2 | |
| Navarre Road .. .. .. .. | .. | | 650 0 7 | |
| Stawell–Glenorchy–Horsham Road .. .. | .. | | 822 11 10 | |
| Stawell–Grampians Road .. .. .. .. | .. | | 507 14 6 | |
| Stawell–Warracknabeal Road .. .. .. | .. | | 330 0 1 | |
| | | | | 2,915 2 1 |
| STAWELL AND KARA KARA SHIRES (Joint Works)— | | | | |
| Navarre Road .. .. .. .. .. | 5 3 4 | | | |
| | | 5 3 4 | | |
| STRATHFIELDSAYE SHIRE— | | | | |
| Heathcote–Bendigo Road .. .. .. .. | .. | | 867 4 0 | |
| Mandurang Road .. .. .. .. | .. | | 420 12 4 | |
| Strathfieldsaye Road .. .. .. .. | .. | | 562 1 4 | |
| | | | | 1,849 17 8 |
| SWAN HILL SHIRE— | | | | |
| Euston Road .. .. .. .. .. | .. | | 618 1 5 | |
| Nyah–Ouyen Road .. .. .. .. | .. | | 230 19 4 | |
| Piangil Station Road.. .. .. .. .. | .. | | 144 4 8 | |
| Swan Hill Road .. .. .. .. .. | .. | | 142 9 0 | |
| Tooleybuc Road .. .. .. .. | .. | | .. | |
| Ultima Road .. .. .. .. .. | .. | | 1,108 18 0 | |
| Ultima–Sea Lake Road .. .. .. .. | .. | | 159 12 6 | |
| | | | | 2,404 4 11 |
| TALBOT SHIRE— | | | | |
| Maryborough–Ballarat Road .. .. .. | .. | | 289 13 7 | |
| | | | | 289 13 7 |
| TAMBO SHIRE— | | | | |
| Bairnsdale–Bruthen Road .. .. .. | .. | | 49 17 4 | |
| Basin Road .. .. .. .. .. | .. | | 121 5 10 | |
| Bruthen–Omeo Road .. .. .. .. | .. | | 28 17 7 | |
| Mossiface Road .. .. .. .. | .. | | 37 18 5 | |
| Nowa Nowa–Buchan–Gelantipy Road .. .. | .. | | 724 12 10 | |
| Prince's Highway .. .. .. .. | .. | | Bd. 388 0 1 | |
| | | | | 1,350 12 1 |
| TOWONG SHIRE— | | | | |
| Murray Valley Road .. .. .. .. | .. | | 592 8 3 | |
| Omeo Road .. .. .. .. .. | .. | | 185 4 7 | |
| | | | | 777 12 10 |
| TRARALGON SHIRE— | | | | |
| Prince's Highway .. .. .. .. | .. | | 195 19 0 | |
| Traralgon–Balook Road .. .. .. .. | .. | | 220 13 2 | |
| Traralgon Creek Road .. .. .. .. | .. | | 151 5 5 | |
| Traralgon–Gormandale Road .. .. .. | .. | | 365 4 5 | |
| Traralgon–Jeeralang Road .. .. .. | .. | | 216 14 5 | |
| Traralgon–Maffra Road .. .. .. .. | 1,002 16 5 | | 576 17 6 | |
| Tyers Road .. .. .. .. .. | .. | | 1,429 0 8 | |
| | | 1,002 16 5 | | 3,155 14 7 |
| TULLAROOP SHIRE— | | | | |
| Avoca Road .. .. .. .. .. | .. | | 840 15 10 | |
| Ballarat Road .. .. .. .. .. | .. | | 912 2 6 | |
| Castlemaine–Maryborough Road .. .. | .. | | Bd. 431 1 4 | |
| Eddington Road .. .. .. .. | .. | | 47 2 0 | |
| Maryborough–Dunolly Road .. .. .. | .. | | 29 4 4 | |
| Natte Yallock Road .. .. .. .. | .. | | 23 5 6 | |
| | | | | 2,283 11 6 |
| TUNGAMAH SHIRE— | | | | |
| Cobram–Katamatite Road .. .. .. | .. | | 1 18 7 | |
| Cobram South Road .. .. .. .. | .. | | 563 15 10 | |
| Cobram–Strathmerton Road .. .. .. | .. | | 19 2 5 | |
| Katandra Estate Road .. .. .. .. | .. | | 36 2 10 | |
| Murray Valley Highway .. .. .. .. | 576 11 4 | | .. | |
| Numurkah–Tungamah–Wilby Road .. .. | 647 13 11 | | 328 13 8 | |
| St. James Road .. .. .. .. | 324 3 10 | | 19 6 9 | |
| Yarrawonga–Cobram Road .. .. .. | 278 19 8 | | 897 4 6 | |
| | | 1,827 8 9 | | 1,866 4 7 |
| UPPER MURRAY SHIRE— | | | | |
| Corryong Road .. .. .. .. .. | 340 16 3 | | 330 16 5 | |
| Tintaldra Road .. .. .. .. .. | 527 11 10 | | 322 17 0 | |
| Murray Valley Road .. .. .. .. | .. | | 34 11 10 | |
| | | 868 8 1 | | 688 5 3 |
| UPPER YARRA SHIRE— | | | | |
| Don Road .. .. .. .. .. | .. | | 237 19 1 | |
| Little Yarra Road .. .. .. .. | .. | | 353 7 4 | |
| Main Warburton Road .. .. .. .. | .. | | Bd. 700 0 0 | |
| Warburton Road.. .. .. .. .. | .. | | 513 15 3 | |
| Woods Point Road .. .. .. .. | .. | | Bd. 1,980 9 8 | |
| | | | | 3,785 11 4 |
| Carried forward .. .. .. .. | .. | 29,583 15 7 | .. | 363,809 19 4 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 29,583 15 7 | .. | 363,809 19 4 |
| UPPER YARRA AND HEALESVILLE SHIRES (Joint Works)— | | | | |
| Healesville–Woori Yallock Road .. .. .. | .. | | Bd. 40 6 6 | 40 6 6 |
| VIOLET TOWN SHIRE— | | | | |
| Murchison–Violet Town .. .. .. .. | .. | | 45 9 2 | |
| Shepparton Road .. .. .. .. | .. | | 7 5 11 | |
| Sydney Road .. .. .. .. .. | .. | | Bd. 6 9 9 | |
| Violet Town–Dookie Road .. .. .. | 707 15 0 | | 137 9 8 | |
| | | 707 15 0 | | 196 14 6 |
| WALPEUP SHIRE— | | | | |
| Mildura Road .. .. .. .. .. | .. | | 5 7 9 | |
| Ouyen–Pinnaroo Road .. .. .. .. | .. | | 245 9 4 | |
| | | | | 250 17 1 |
| WANGARATTA BOROUGH— | | | | |
| Sydney Road .. .. .. .. .. | .. | | 74 6 3 | |
| | | | | 74 6 3 |
| WANGARATTA SHIRE— | | | | |
| Beechworth Road .. .. .. .. | .. | | 595 1 11 | |
| Peechelba Road .. .. .. .. | .. | | 11 8 0 | |
| Rutherglen Road .. .. .. .. | .. | | 67 8 6 | |
| Wangaratta–Myrtleford Road .. .. .. | .. | | 23 2 8 | |
| Yarrawonga Road .. .. .. .. | .. | | 54 12 5 | |
| | | | | 751 13 6 |
| WANGARATTA AND BEECHWORTH SHIRES (Joint Works)— | | | | |
| Beechworth Road .. .. .. .. | .. | | 2 8 1 | |
| | | | | 2 8 1 |
| WANNON SHIRE— | | | | |
| Coleraine–Harrow–Apsley Road .. .. .. | .. | | 602 1 3 | |
| Hamilton–Coleraine–Casterton Road .. .. | 1,273 5 3 | | 1,246 18 10 | |
| Wannon Bridge Road .. .. .. .. | .. | | 221 18 6 | |
| | | 1,273 5 3 | | 2,070 18 7 |
| WANNON AND GLENELG SHIRES (Joint Works)— | | | | |
| Hamilton–Coleraine–Casterton Road .. .. | .. | | 36 7 4 | |
| | | | | 36 7 4 |
| WANNON AND KOWREE SHIRES (Joint Works)— | | | | |
| Coleraine–Harrow–Apsley Road .. .. .. | .. | | 18 14 8 | |
| | | | | 18 14 8 |
| WARANGA SHIRE— | | | | |
| Colbinabbin–Moora Road .. .. .. | .. | | 92 18 3 | |
| Elmore–Colbinabbin Road .. .. .. | .. | | 311 11 9 | |
| Heathcote–Elmore Road .. .. .. .. | .. | | 479 6 4 | |
| Murchison–Rushworth Road .. .. .. | .. | | 227 17 11 | |
| Tatura Road .. .. .. .. .. | .. | | 12 2 3 | |
| | | | | 1,123 16 6 |
| WARANGA AND GOULBURN SHIRES (Joint Works)— | | | | |
| Murchison–Rushworth Road .. .. .. | .. | | 35 15 4 | |
| | | | | 35 15 4 |
| WARRAGUL SHIRE— | | | | |
| Bloomfield Road .. .. .. .. | .. | | 381 4 1 | |
| Brandy Creek Road .. .. .. .. | .. | | 1,095 18 9 | |
| Darnum–Allambee Road .. .. .. .. | .. | | 298 3 7 | |
| Prince's Highway .. .. .. .. | .. | | 242 12 0 | |
| Warragul–Korumburra Road .. .. .. | .. | | 702 17 3 | |
| | | | | 2,720 15 8 |
| WARRNAMBOOL SHIRE— | | | | |
| Allansford–Nirranda Road .. .. .. | .. | | 2,088 14 6 | |
| Caramut–Lismore Road .. .. .. .. | .. | | 91 15 11 | |
| Framlingham Road .. .. .. .. | .. | | 321 10 1 | |
| Garvoc–Laang Road .. .. .. .. | .. | | 303 18 2 | |
| Mortlake Road .. .. .. .. .. | .. | | 1,338 12 0 | |
| Peterborough Road .. .. .. .. | 1,375 17 1 | | 720 17 4 | |
| Timboon–Nirranda Road .. .. .. .. | .. | | 1,124 3 10 | |
| | | 1,375 17 1 | | 5,989 11 10 |
| WERRIBEE SHIRE— | .. | | | |
| Geelong–Bacchus Marsh Road .. .. .. | .. | | 117 11 10 | |
| Prince's Highway .. .. .. .. | .. | | Bd. 69 10 11 | |
| | | | | 187 2 9 |
| WHITTLESEA SHIRE— | | | | |
| Epping Road .. .. .. .. .. | .. | | 1,370 17 2 | |
| Main Whittlesea Road .. .. .. .. | .. | | 1,040 4 9 | |
| Wallan Road .. .. .. .. .. | .. | | 97 14 6 | |
| Whittlesea–Kinglake Road .. .. .. | .. | | 255 6 6 | |
| | | | | 2,764 2 11 |
| WIMMERA SHIRE— | | | | |
| Dooen Road .. .. .. .. .. | .. | | 978 16 2 | |
| Horsham–Murtoa Road .. .. .. .. | .. | | 39 0 6 | |
| Horsham–Wal Wal Road .. .. .. .. | .. | | 573 1 7 | |
| Natimuk Road .. .. .. .. .. | .. | | 1,831 18 6 | |
| | | | | 3,422 16 9 |
| WIMMERA AND ARAPILES SHIRES (Joint Works)— | | | | |
| Horsham–Hamilton Road .. .. .. | .. | | 453 0 6 | |
| | | | | 453 0 6 |
| Carried forward .. .. .. .. | .. | 32,940 12 11 | .. | 383,949 8 1 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward .. .. .. | .. | 32,940 12 11 | .. | 383,949 8 1 |
| WIMMERA AND ARAPILES SHIRES AND HORSHAM TOWN (Joint Works)— | | | | |
| Horsham–Hamilton Road .. .. .. | .. | | 30 14 11 | |
| | | | | 30 14 11 |
| WINCHELSEA SHIRE— | | | | |
| Birregurra–Dean Marsh Road .. .. .. | .. | | 1,493 17 2 | |
| Birregurra–Forrest Road .. .. .. .. | .. | | 887 11 5 | |
| Lorne Road .. .. .. .. | .. | | 17 6 9 | |
| Prince's Highway .. .. .. .. | .. | | Bd. 134 6 8 | |
| | | | | 2,533 2 0 |
| WODONGA SHIRE— | | | | |
| Kiewa–Wodonga Road .. .. .. .. | .. | | 42 1 4 | |
| Sydney Road .. .. .. .. .. | .. | | 39 8 10 | |
| Tallangatta Road .. .. .. .. | .. | | 52 7 8 | |
| Wodonga–Yackandandah Road .. .. .. | .. | | 440 9 7 | |
| | | | | 574 7 5 |
| WONTHAGGI BOROUGH— | .. | | | |
| Loch–Wonthaggi Road .. .. .. .. | .. | | 785 4 3 | |
| Wonthaggi–Inverloch Road .. .. .. | .. | | 2,563 12 7 | |
| Wonthaggi–Korumburra Road .. .. .. | .. | | 80 1 3 | |
| | | | | 3,428 18 1 |
| WOORAYL SHIRE— | | | | |
| Fairbank Road .. .. .. .. .. | .. | | 77 19 11 | |
| Farmers Road .. .. .. .. .. | .. | | 2,222 11 8 | |
| Inverloch–Leongatha Road .. .. .. | .. | | 1,066 19 5 | |
| Inverloch–Wonthaggi Road .. .. .. | .. | | 181 5 3 | |
| Kongwak–Inverloch Road .. .. .. | .. | | 23 5 6 | |
| Leongatha–Mirboo Road .. .. .. | .. | | 556 10 3 | |
| Leongatha–Yarragon Road .. .. .. | 780 5 7 | | 421 1 4 | |
| Lower Tarwin Road .. .. .. .. | .. | | 530 8 3 | |
| Main South Gippsland Road .. .. .. | .. | | 3,503 5 4 | |
| Mardan Road .. .. .. .. | .. | | 1,152 11 8 | |
| Turtons Creek Road .. .. .. .. | .. | | 15 16 5 | |
| Warragul–Leongatha Road .. .. .. | .. | | 16 8 6 | |
| Wild Dog Valley .. .. .. .. | .. | | 281 18 8 | |
| | | 780 5 7 | | 10,050 2 2 |
| WYCHEPROOF SHIRE— | | | | |
| Birchip–Sealake Road .. .. .. .. | 264 0 3 | | 69 6 7 | |
| Birchip–Wycheproof Road .. .. .. | .. | | 108 7 9 | |
| Corack Road .. .. .. .. | .. | | .. | |
| Sealake–Ultima Road .. .. .. .. | 15 0 0 | | 174 12 4 | |
| Woomelang–Sealake Road .. .. .. | .. | | 40 0 0 | |
| Wycheproof–Sealake Road .. .. .. | .. | | .. | |
| | | 279 0 3 | | 392 6 8 |
| YACKANDANDAH SHIRE— | | | | |
| Dederang Road .. .. .. .. .. | .. | | 573 3 4 | |
| Gundowring Road .. .. .. .. | 489 6 9 | | 479 4 9 | |
| Kergunyah South Road .. .. .. .. | .. | | 982 10 0 | |
| Kiewa East Road .. .. .. .. | .. | | 109 19 7 | |
| Kiewa–Wodonga Road .. .. .. .. | .. | | 229 14 1 | |
| Myrtleford–Yackandandah Road .. .. .. | .. | | 284 15 11 | |
| Yackandandah–Wodonga Road .. .. .. | .. | | 393 10 11 | |
| | | 489 6 9 | | 3,052 18 7 |
| YARRAWONGA SHIRE— | | | | |
| Peechelba Road .. .. .. .. .. | .. | | 79 16 8 | |
| Tungamah–Wilby Road .. .. .. .. | .. | | .. | |
| Wangaratta–Yarrawonga Road .. .. .. | .. | | 415 1 0 | |
| Yarrawonga–Cobram Road .. .. .. | 562 8 11 | | 20 8 5 | |
| Yarrawonga–Rutherglen Road .. .. .. | .. | | 13 14 10 | |
| | | 562 8 11 | | 529 0 11 |
| YEA SHIRE— | | | | |
| Highlands Road .. .. .. .. .. | .. | | 51 10 5 | |
| Molesworth–Dropmore Road .. .. .. | .. | | 55 5 5 | |
| Upper Goulburn Road .. .. .. .. | .. | | 1,267 7 4 | |
| Whittlesea–Yea Road .. .. .. .. | .. | | 448 11 9 | |
| Yarra Glen–Glenburn Road .. .. .. | .. | | 272 13 11 | |
| Yea–Glenburn Road .. .. .. .. | .. | | 450 10 8 | |
| | | | | 2,545 19 6 |
| YEA AND BROADFORD SHIRES (Joint Works)— | | | | |
| Upper Goulburn Road .. .. .. .. | .. | | 34 7 2 | |
| | | | | 34 7 2 |
| Total .. .. .. .. .. | .. | 35,051 14 5 | .. | 407,121 5 6 |

# APPENDIX E.

# COUNTRY ROADS BOARD.

## STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS FOR YEAR ENDED 30TH JUNE, 1933.

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| **ALBERTON SHIRE—** | | |
| Albert River Road .. .. | 1,140 6 11 | |
| Blackwarri–Yarram Road .. | 139 9 7 | |
| Christies–Albert River Road | 540 18 3 | |
| Gelliondale Road .. .. | 921 3 11 | |
| Madalya Road .. .. | 133 5 4 | |
| Whitelaws Track Road .. | 549 17 3 | |
| | | 3,425 1 3 |
| **ARAPILES SHIRE—** | | |
| Miga Lake–Gymbowen Road | 87 10 2 | |
| | | 87 10 2 |
| **AVON SHIRE—** | | |
| Bengworden Road .. .. | 250 1 0 | |
| Dargo Road .. .. | 0 5 0 | |
| | | 250 6 0 |
| **BAIRNSDALE SHIRE—** | | |
| Bullumwaal – Tabberabbera Road .. .. | 532 14 2 | |
| Bairnsdale–Bengworden Road | 12 13 6 | |
| Glenaladale–Lindenow Road | 374 17 5 | |
| Hodges Estate Road .. | 76 18 6 | |
| Lindenow–Meerlieu Road .. | 456 18 7 | |
| | | 1,454 2 2 |
| **BALLAN SHIRE—** | | |
| Bungeeltap Road .. .. | 168 5 4 | |
| | | 168 5 4 |
| **BASS SHIRE—** | | |
| Glen Alvie Road .. .. | 355 12 0 | |
| | | 355 12 0 |
| **BENALLA SHIRE—** | | |
| Molyullah–Tatong Road .. | 56 12 10 | |
| | | 56 12 10 |
| **BERWICK SHIRE—** | | |
| Beaconsfield–Emerald Road | 907 13 11 | |
| Garfield–Catani Road | 164 5 3 | |
| Tynong–Tonimbuk Road .. | 245 14 8 | |
| | | 1,317 13 10 |
| **BIRCHIP SHIRE—** | | |
| Berriwillock Road .. .. | 1,302 13 10 | |
| Curyo West Road .. .. | 100 0 0 | |
| Kinnabulla West Road .. | 166 0 0 | |
| Watchupga Road .. .. | 98 0 0 | |
| | | 1,666 13 10 |
| **BORUNG AND KARKAROOC SHIRES (Joint Works)—** | | |
| Galaquil West Road— .. | 38 18 6 | |
| | | 38 18 6 |
| **BRIGHT SHIRE—** | | |
| Buffalo River Road .. | 1,311 7 9 | |
| Happy Valley Road .. | 199 9 8 | |
| Kiewa Valley Road .. | 29 2 3 | |
| Myrtleford –Yackandandah Road .. .. | 21 9 2 | |
| | | 1,561 8 10 |
| **BULLA SHIRE—** | | |
| Riddell Road .. .. | 868 16 6 | |
| | | 868 16 6 |
| **BULN BULN SHIRE—** | | |
| Poowong Road .. .. | 100 0 0 | |
| | | 100 0 0 |
| **BUNINYONG SHIRE—** | | |
| Hennessy's Road .. .. | 357 15 9 | |
| Murphy's Road .. .. | 282 6 5 | |
| | | 640 2 2 |
| **CHARLTON SHIRE—** | | |
| Borung–Charlton Road .. | 118 10 7 | |
| Glenloth Road .. .. | 120 0 0 | |
| Lake Marmal Road .. | 409 3 5 | |
| Teddywaddy Road .. | 498 11 3 | |
| Yeungroon Road .. .. | 259 11 10 | |
| | | 1,405 17 1 |
| Carried forward .. | .. | 13,397 0 6 |

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 13,397 0 6 |
| **COHUNA SHIRE—** | | |
| Cohuna–McMillans Road .. | 330 10 11 | |
| Cohuna–Mead Road .. | 698 2 11 | |
| Gannawarra Road .. .. | 735 13 1 | |
| Murray River Valley Road .. | 443 16 5 | |
| | | 2,208 3 4 |
| **COLAC SHIRE—** | | |
| Cundare–Duverney Road .. | 117 6 8 | |
| | | 117 6 8 |
| **CORIO SHIRE—** | | |
| Gilmores Road .. .. | 260 9 1 | |
| McArthurs Road .. .. | 326 11 6 | |
| | | 587 0 7 |
| **CRANBOURNE SHIRE—** | | |
| Manks Road .. .. | 155 3 0 | |
| Pearcedale Road .. .. | 204 7 1 | |
| | | 359 10 1 |
| **DEAKIN SHIRE—** | | |
| Echuca East Road .. .. | 943 14 3 | |
| Girgarre North Road .. | 483 5 0 | |
| Girgarre East Road .. | 239 4 3 | |
| Strathallan East Road .. | 455 3 8 | |
| Girgarre West Road .. | 144 0 9 | |
| Taripta Road .. .. | 466 11 3 | |
| Tongala East Road.. .. | 378 17 11 | |
| | | 3,110 17 1 |
| **DIMBOOLA SHIRE—** | | |
| Detpa–Hindmarsh Road .. | 264 16 0 | |
| Glenlee–Jeparit Road .. | 256 13 5 | |
| | | 521 9 5 |
| **DONALD SHIRE—** | | |
| Litchfield Road .. .. | 1 19 0 | |
| | | 1 19 0 |
| **DUNDAS SHIRE—** | | |
| Melville Forest Road .. | 302 12 11 | |
| | | 302 12 11 |
| **EAST LODDON SHIRE—** | | |
| Tandarra Road .. .. | 226 1 11 | |
| | | 226 1 11 |
| **ELTHAM SHIRE—** | | |
| Cottle's Bridge–Strathewen Road .. .. .. | 169 10 2 | |
| | | 169 10 2 |
| **EUROA SHIRE—** | | |
| Merton–Strathbogie Road .. | 499 0 0 | |
| Strathbogie Road .. .. | 348 10 0 | |
| | | 847 10 0 |
| **FERN TREE GULLY SHIRE—** | | |
| Emerald–Monbulk Road .. | 333 15 3 | |
| | | 333 15 3 |
| **FLINDERS SHIRE—** | | |
| Bittern–Dromana Road .. | 294 6 0 | |
| Main Creek Road .. .. | 213 18 6 | |
| Rosebud–Flinders Road .. | 1,348 3 4 | |
| | | 1,856 7 10 |
| **GLENELG SHIRE—** | | |
| Dergholm–Elderslie Road .. | 199 10 4 | |
| | | 199 10 4 |
| **GLENLYON SHIRE—** | | |
| Daylesford–Trentham Road .. | 922 4 2 | |
| Porcupine Ridge Road .. | 12 18 11 | |
| South Bullarto Road .. | 180 8 0 | |
| | | 1,115 11 1 |
| **GOULBURN SHIRE—** | | |
| Longwood–Ruffy Road .. | 220 7 11 | |
| | | 220 7 11 |
| **HAMPDEN SHIRE—** | | |
| Cundare–Duverney Road .. | 1,254 1 11 | |
| Foxhow Road .. .. | 815 4 8 | |
| | | 2,069 6 7 |
| Carried forward .. | .. | 27,644 0 8 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS, ETC.—*continued.*

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 27,644 0 8 |
| HEYTESBURY SHIRE— | | |
| Devil's Gully Road .. | 407 14 6 | |
| South Ecklin Road .. | 653 18 6 | |
| Timboon–Cowley's Creek Road | 736 11 6 | |
| Timboon–Scott's Creek Road | 743 6 0 | |
| | | 2,541 10 6 |
| KARA KARA SHIRE— | | |
| Coonooer Road .. .. | 486 12 6 | |
| Marnoo–St. Arnaud Road .. | 214 8 0 | |
| Sandy Creek Road .. .. | 195 11 6 | |
| Swan Water Road .. .. | 40 0 0 | |
| | | 936 12 0 |
| KARKAROOC SHIRE— | | |
| Hopetoun–Yaapeet Road .. | 101 9 2 | |
| | | 101 9 2 |
| KERANG SHIRE— | | |
| Murrabit Road .. .. | 145 13 2 | |
| Winlaton Road .. .. | 294 12 0 | |
| | | 440 5 2 |
| KORONG SHIRE— | | |
| Kurting–Rheola Road .. | 80 0 0 | |
| Mysia East Road .. .. | 324 0 0 | |
| Wedderburn–Springhill Road | 341 19 6 | |
| Wychitella North Road .. | 269 17 11 | |
| Borung West Road .. | 2 15 0 | |
| Kinypanial Road .. .. | 200 0 0 | |
| Mysia West Road .. .. | 134 7 4 | |
| Woolshed Road .. .. | 1 11 8 | |
| | | 1,354 11 5 |
| KORUMBURRA SHIRE— | | |
| Bena–Kongwak Road .. | 546 9 7 | |
| Korumburra South Road .. | 890 3 8 | |
| Poowong Estate Road .. | 132 3 3 | |
| Poowong–Olsen Road .. | 16 0 0 | |
| Sheepways Road .. .. | 231 8 2 | |
| Territory Road .. .. | 548 4 9 | |
| | | 2,364 9 5 |
| KOWREE SHIRE— | | |
| Benayeo Road .. .. | 17 14 9 | |
| Edenhope–Natimuk Road .. | 237 17 5 | |
| Elderslie Road .. .. | 163 5 8 | |
| Miga Lake–Gymbowen Road | 11 16 4 | |
| Minimay Road .. .. | 28 6 7 | |
| | | 459 0 9 |
| KYNETON SHIRE— | | |
| Baynton Road .. .. | 220 13 2 | |
| | | 220 13 2 |
| LAWLOIT SHIRE— | | |
| Miram West Road .. .. | 5 0 0 | |
| | | 5 0 0 |
| LILLYDALE SHIRE— | | |
| Olinda Creek Road .. | 0 2 0 | |
| | | 0 2 0 |
| LOWAN SHIRE— | | |
| Netherby Road .. .. | 296 9 0 | |
| Winiam Road .. .. | 504 8 9 | |
| Yanac South Road .. | 316 17 3 | |
| | | 1,117 15 0 |
| McIVOR SHIRE— | | |
| Baynton Road .. .. | 149 18 6 | |
| | | 149 18 6 |
| McIVOR AND PYALONG SHIRES (Joint Works)— | | |
| Tooborac–Lancefield Road .. | 53 14 0 | |
| | | 53 14 0 |
| MAFFRA SHIRE— | | |
| Bundalaguah Road .. | 395 5 9 | |
| | | 395 5 9 |
| MANSFIELD SHIRE— | | |
| Merton–Strathbogie Road .. | 54 16 6 | |
| | | 54 16 6 |
| MARONG SHIRE— | | |
| Newbridge–Shelbourne Road | 486 5 1 | |
| Yarraberb Road .. .. | 16 13 2 | |
| | | 502 18 3 |
| MILDURA SHIRE— | | |
| Benetook Avenue .. .. | 103 19 10 | |
| Redcliffs East Road .. | 143 11 3 | |
| Red Cliffs South East Road .. | 284 4 2 | |
| Redcliffs West Road .. | 239 7 10 | |
| | | 771 3 1 |
| Carried forward .. | .. | 39,113 5 4 |

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 39,113 5 4 |
| MINHAMITE SHIRE— | | |
| Condah–MacArthur Road .. | 497 1 2 | |
| | | 497 1 2 |
| MIRBOO SHIRE— | | |
| Allambee–Thorpdale Road .. | 230 9 6 | |
| Mirboo North–Thorpdale Road | 5 8 6 | |
| | | 235 18 0 |
| MORWELL SHIRE— | | |
| Thorpdale East Road .. | 207 16 3 | |
| | | 207 16 3 |
| NEWHAM AND WOODEND SHIRE— | | |
| Campaspe Road .. .. | 541 13 2 | |
| Macedon Village Settlement Road .. .. .. | 8 11 0 | |
| | | 550 4 2 |
| NEWSTEAD AND MT. ALEXANDER | | |
| Glengower–Joyce's Creek Road | 50 12 2 | |
| | | 50 12 2 |
| NURMURKAH SHIRE— | | |
| Waaia North Road .. | 61 0 0 | |
| | | 61 0 0 |
| OMEO SHIRE— | | |
| Little River Road .. .. | 13 0 0 | |
| Reedy Creek Road .. .. | 4 17 0 | |
| | | 17 17 0 |
| ORBOST SHIRE— | | |
| Bete–Bolong–Waygara Road | 220 1 1 | |
| Jarrahmond Road .. .. | 218 13 5 | |
| Orbost–Delegate Road .. | 231 3 8 | |
| | | 669 18 2 |
| OXLEY SHIRE— | | |
| Boggy Creek Road .. .. | 898 7 9 | |
| Buffalo River Road .. | 226 13 9 | |
| Carboor–Meadow Creek Road | 81 13 1 | |
| Fifteen Mile Creek Road .. | 166 10 2 | |
| | | 1,373 4 9 |
| OXLEY AND BRIGHT SHIRES (Joint Contributory)— | | |
| Buffalo River Road .. | 9 3 0 | |
| | | 9 3 0 |
| PORTLAND SHIRE— | | |
| Bare Hills Road .. .. | 189 12 0 | |
| Grubbed Road .. .. | 1,076 12 3 | |
| Drik Drik–Winnap Road .. | 482 2 9 | |
| | | 1,748 7 0 |
| PYALONG SHIRE— | | |
| Lancefield–Tooborac Road .. | 461 12 7 | |
| | | 461 12 7 |
| RIPON SHIRE— | | |
| Modesty Lane Road .. | 145 17 1 | |
| Trawalla West Road .. | 381 15 3 | |
| | | 527 12 4 |
| ROCHESTER SHIRE— | | |
| Echuca West Road .. | 593 10 1 | |
| Kotta East Road .. .. | 495 19 6 | |
| | | 1,089 9 7 |
| RODNEY SHIRE— | | |
| Mooroopna–Undera Road .. | 1,279 18 6 | |
| Tatura–Toolamba Road .. | 1,789 17 0 | |
| | | 3,069 15 6 |
| ROMSEY SHIRE— | | |
| Baynton Road .. .. | 259 10 7 | |
| | | 259 10 7 |
| SEYMOUR SHIRE— | | |
| Highlands Road .. .. | 5 8 10 | |
| | | 5 8 10 |
| SHEPPARTON SHIRE— | | |
| Grahamvale Road .. .. | 0 2 0 | |
| | | 0 2 0 |
| SOUTH GIPPSLAND SHIRE— .. | | |
| Boys Road .. .. | 16 0 0 | |
| Dollar–Foster Road .. | 5 12 0 | |
| Franklin River Road .. | 26 3 0 | |
| Harding–Lawson Road .. | 45 8 6 | |
| Turtons Creek Road .. | 0 7 6 | |
| | | 93 11 0 |
| STAWELL SHIRE— .. | | |
| Marnoo–St. Arnaud Road .. | 471 15 8 | |
| Pomonal Road .. .. | 78 18 0 | |
| | | 550 13 8 |
| Carried forward .. | .. | 50,592 3 1 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS, ETC.—*continued.*

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 50,592 3 1 |
| TOWONG SHIRE— | | |
| Murray Valley Road .. | 864 19 0 | |
| Shelley–Jingellic Road .. | 12 11 7 | |
| Tallangatta Creek Road .. | 195 1 3 | |
| Yabba Road .. .. | 316 0 7 | |
| | | 1,388 12 5 |
| TRARALGON SHIRE— | | |
| Traralgon–Jeeralang Road .. | 478 15 4 | |
| | | 478 15 4 |
| TUNGAMAH SHIRE— | | |
| Boweya Road .. .. | 427 14 1 | |
| Katandra Road .. .. | 314 3 1 | |
| Katandra Estate Road .. | 376 8 2 | |
| Wunghnu–Youanmite .. | 735 14 1 | |
| Yabba North Road .. | 388 2 4 | |
| Yabba South Road .. | 490 0 7 | |
| | | 2,732 2 4 |
| UPPER MURRAY SHIRE— | | |
| Benambra–Corryong Road .. | 767 9 0 | |
| Thowgla Road .. .. | 349 3 10 | |
| Murray Valley Highway .. | 117 2 6 | |
| | | 1,233 15 4 |
| VIOLET TOWN SHIRE— | | |
| Fern Hills Road .. .. | 256 7 11 | |
| Harrys Creek Road .. | 997 3 6 | |
| | | 1,253 11 5 |
| WANNON SHIRE— | | |
| Melville Forest Road .. | 185 5 1 | |
| | | 185 5 1 |
| WANGARATTA SHIRE— | | |
| Peechelba Station Road .. | 502 9 8 | |
| | | 502 9 8 |
| WARRAGUL SHIRE— | | |
| Ferndale Road .. .. | 16 1 0 | |
| Mountain View Road .. | 61 5 10 | |
| Mountain View–McDonalds Track Road .. .. | 432 10 5 | |
| Telegraph Road .. .. | 365 8 11 | |
| | | 875 6 2 |
| WARRNAMBOOL SHIRE— | | |
| Childers Cove Road .. | 1,918 11 0 | |
| Naringle Road .. .. | 498 13 9 | |
| Panmure Road .. .. | 427 8 6 | |
| | | 2,844 13 3 |
| WHITTLESEA SHIRE— | | |
| Chadds Creek Road .. | 748 14 0 | |
| Eden Park Road .. .. | 403 19 0 | |
| | | 1,152 13 0 |
| WINCHELSEA SHIRE— | | |
| Inverleigh–Winchelsea Road | 425 0 0 | |
| Pennyroyal Road .. .. | 59 4 5 | |
| | | 484 4 5 |
| WODONGA SHIRE— | | |
| Beechworth–Wodonga Road | 712 6 1 | |
| | | 712 6 1 |
| WOORAYL SHIRE— | | |
| Canavans Road .. .. | 987 18 7 | |
| Dollar–Dumbalk Road .. | 464 8 6 | |
| Dumbalk Road .. .. | 229 7 3 | |
| Inverloch–Lower Tarwin Road | 57 0 0 | |
| Leongatha–Mirboo Road .. | 71 8 0 | |
| Mardan–Dumbalk Road .. | 300 0 4 | |
| Nerrena Road .. .. | 27 9 6 | |
| | | 2,137 12 2 |
| WOORAYL & SOUTH GIPPSLAND SHIRES— (Joint Works) | | |
| Dumbalk .. .. | 728 9 1 | |
| | | 728 9 1 |
| YACKANDANDAH SHIRE— | | |
| Kergunyah Road .. .. | 289 4 0 | |
| Myrtleford–Yackandandah Road .. .. .. | 250 7 0 | |
| Sandy Creek Road .. .. | 264 9 6 | |
| | | 804 0 6 |
| YEA SHIRE— | | |
| Flowerdale Road .. .. | 813 16 7 | |
| Highlands Road .. .. | 228 16 2 | |
| | | 1,042 12 9 |
| Carried forward .. | .. | 69,148 12 1 |

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 69,148 12 1 |
| SPECIAL PROVISION. | | |
| ALBERTON SHIRE— | | |
| Albert River Road .. .. | 992 12 9 | |
| Binginwarri South Road .. | 201 9 10 | |
| Madalya Road .. .. | 13 5 0 | |
| Jenkin's Road .. .. | 467 14 2 | |
| Tarra Valley Road .. .. | 1,084 4 1 | |
| | | 2,759 5 10 |
| BASS SHIRE— | | |
| Wonthaggi–Loch Road .. | 522 10 8 | |
| | | 522 10 8 |
| BERWICK SHIRE— | | |
| Nar-nar-goon–Gembrook Road | 0 17 1 | |
| | | 0 17 1 |
| BULN BULN SHIRE— | | |
| Jindivick–Neerim South Road | 549 11 9 | |
| Mountain View Road .. | 458 6 0 | |
| | | 1,007 17 9 |
| ELTHAM SHIRE— | | |
| Kinglake–Glenburn Road .. | 26 0 6 | |
| | | 26 0 6 |
| HEYTESBURY SHIRE— | | |
| Kennedy's Creek Road .. | 75 6 8 | |
| Eastern Creek Road .. | 30 2 6 | |
| Scott's Creek–Carpendeit Road | 1 5 0 | |
| Timboon–Nirranda Road .. | 2 1 6 | |
| | | 108 15 8 |
| KORUMBURRA SHIRE— | | |
| Trida–Strezlecki Road .. | 22 5 4 | |
| | | 22 5 4 |
| MIRBOO SHIRE— | | |
| Mardan Road .. .. | 780 16 8 | |
| Nicholl's Road .. .. | 21 15 10 | |
| | | 802 12 6 |
| MORWELL SHIRE— | | |
| Walker's Road .. .. | 1,018 12 8 | |
| | | 1,018 12 8 |
| NARRACAN SHIRE— | | |
| Allambee–Childers Road .. | 123 17 5 | |
| Erica Road .. .. | 414 12 0 | |
| Sunny Creek Road .. .. | 184 11 3 | |
| Thorpdale East Road .. | 190 15 4 | |
| Trafalgar South Road .. | 7 4 0 | |
| Willowgrove–Fumina Road .. | 36 13 0 | |
| | | 957 13 0 |
| OMEO SHIRE— | | |
| Reedy Creek Connection Road | 387 18 6 | |
| Little River Road .. .. | 98 3 0 | |
| | | 486 1 6 |
| ORBOST SHIRE— | | |
| Bete–Bolong Road .. .. | 14 15 9 | |
| Buldah .. .. .. | 37 16 1 | |
| Lower Bendoc Road .. | 17 7 6 | |
| Lower Tonghi Road .. | 341 19 9 | |
| Wangrabelle Road .. .. | 0 2 6 | |
| | | 412 1 7 |
| OTWAY SHIRE— | | |
| Amiet's Track .. .. | 24 2 0 | |
| Apollo Bay–Elliott River Road | 139 10 1 | |
| Carlisle North Road .. | 54 17 6 | |
| Denhert's Road .. .. | 2 9 6 | |
| Gellibrand–Beech Forest Road | 3 0 0 | |
| Gellibrand East Road .. | 96 13 9 | |
| Glen Aire–Laver's Hill Road .. | 4 11 6 | |
| Hordern Vale Road .. | 22 18 0 | |
| Princetown–Port Campbell Road .. .. .. | 31 4 8 | |
| Skene's Creek Road .. | 84 17 10 | |
| Sunnyside Road .. .. | 91 10 9 | |
| Wait-a-While Track .. | 93 15 2 | |
| | | 649 10 9 |
| OXLEY SHIRE— | | |
| Tolmie–Whitfield Road .. | 1 11 8 | |
| | | 1 11 8 |
| SOUTH GIPPSLAND SHIRE— | | |
| Agnes Falls Road .. .. | 48 7 9 | |
| Foster–Mt. Best Road .. | 859 13 0 | |
| Woorarra West Road .. | 60 0 0 | |
| | | 968 0 9 |
| TRARALGON SHIRE— | | |
| Callignee South Road .. | 2 19 0 | |
| Walker's Road .. .. | 7 11 9 | |
| | | 10 10 9 |
| Carried forward .. | .. | 78,903 0 1 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS, ETC.—*continued.*

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 78,903 0 1 |
| TRARALGON AND MORWELL SHIRES (Joint Works)— | | |
| Walker's Road .. .. | 7 8 4 | 7 8 4 |
| WARRAGUL SHIRE— | | |
| Darnum–Allambee Road .. | 180 0 0 | |
| McDonald's Track Road .. | 0 9 0 | |
| Nilma–Shady Creek Road .. | 0 17 6 | |
| Telegraph Road .. .. | 406 11 8 | |
| Trida–Strezlecki Road .. | 12 13 11 | |
| | | 600 12 1 |
| Carried forward .. | .. | 79,511 0 6 |

| Municipality and Road. | Act No. 3662 (3255). Amount. | Total. |
|---|---|---|
| | £ s. d. | £ s. d. |
| Brought forward .. | .. | 79,511 0 6 |
| WARRAGUL AND NARRACAN SHIRES—(Joint Works)— | | |
| Nilma–Shady Creek Road .. | 670 5 3 | 670 5 3 |
| WOORAYL SHIRE— | | |
| Leongatha–Mirboo Road .. | 15 9 6 | |
| Meeniyan–Nerrena Road .. | 518 10 8 | |
| | | 534 0 2 |
| Total .. .. | | 80,715 5 11 |

# APPENDIX F.

# COUNTRY ROADS BOARD.

## MAIN ROADS.

### STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED AND MAINTAINED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928 DURING THE YEAR ENDED 30TH JUNE, 1933.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | **UNDER MUNICIPALITIES.** | | |
| ALBERTON SHIRE— | | | |
| Albert River–Welshpool Road | Patrol maintenance throughout | .. | 9 |
| Balook–Yarram Road | Patrol maintenance throughout, and sheeting gravel road | .. | 9 |
| Carrajung–Gormandale Road | Forming and gravelling from Greig's Road to old creamery corner, Won Wron | 1·45 | .. |
| ,, ,, ,, | Resealing black road from Mason's Creek to Reville's Hill (near Yarram) | .. | ·68 |
| ,, ,, ,, | Reconditioning and double seal coat on flood sections at Calrossie | .. | ·23 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 30 |
| Foster–Yarram Road | Double coat sealing on gravel road from Shire boundary to Brown Coal Mine | .. | 1·9 |
| ,, ,, ,, | Reconditioning and double coat sealing on metal road from Brown Coal Mine to Gelliondale | .. | 2·45 |
| ,, ,, ,, | General maintenance throughout | .. | 8 |
| Sale–Yarram Road | Resealing black road from Carpenter's Bridge to Yarram Mechanic's corner | .. | ·47 |
| Yarram–Boolarra Road | Reconditioning and double coat sealing on metal road from Jack River to Keating's corner | .. | ·95 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 14 |
| Yarram–Port Albert Road | Reconditioning and double coat sealing, metal road from Sullivan's Gully, Alberton, towards Port Albert | .. | ·38 |
| ,, ,, ,, | Resealing black road from Le Grand's to Sillivan's Gully, Alberton | .. | 2 |
| ,, ,, ,, | General maintenance throughout | .. | 9 |
| Yarram–Wonwron Road | Reconditioning and double coat sealing on existing metal, and gravel near Yarram Cemetery | .. | ·77 |
| ,, ,, ,, | General maintenance throughout | .. | 5 |
| ALEXANDRA SHIRE— | | | |
| Cathkin–Mansfield Road | Patrol maintenance throughout | .. | 12 |
| Healesville–Alexandra Road | Patrol maintenance throughout | .. | 18 |
| Upper Goulburn Road | Regrading at Cathkin | .. | ·97 |
| ,, ,, ,, | Double coat surfacing (flood crossing) at Cathkin | .. | ·19 |
| ,, ,, ,, | Double coat surfacing in Alexandra township | .. | ·28 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 27 |
| Yarck Road | Timber bridge, 25-ft. span, at Milliard's | .. | — |
| ,, ,, | Patrol maintenance throughout | .. | 3·3 |
| ARAPILES SHIRE— | | | |
| Horsham–Hamilton Road | Resheeting and reshouldering between mileages 8 and 9 and at mileage 24, and between mileages 18·1 and 18·6 | .. | ·87 |
| ,, ,, ,, | General maintenance throughout | .. | 25 |
| Horsham – Natimuk – Edenhope Road | Limestone metalling between Allotments 25A and 21, Parish of Tooan | ·3 | .. |
| ,, ,, | General maintenance throughout | .. | 23·5 |
| ARARAT BOROUGH— | | | |
| Ballarat–Stawell Road | General maintenance | .. | 3·5 |
| ARARAT SHIRE— | | | |
| Ararat–Elmhurst Road | Patrol maintenance throughout | .. | 21 |
| Ararat–Warrnambool Road | Patrol maintenance throughout | .. | 33 |
| ,, ,, ,, | Regravelling and sealing | .. | 1·8 |
| ,, ,, ,, | Resealing | .. | 2·25 |
| Ballarat–Hamilton Road | Patrol maintenance from Lake Bolac to Wickliffe | .. | 7·5 |
| ,, ,, ,, | Regravelling | .. | 1 |
| ,, ,, ,, | Sealing | .. | 2 |
| Maroona–Glenthompson Road | Patrol maintenance throughout | .. | 22·5 |
| ,, ,, ,, | Regravelling | .. | 1·5 |
| ,, ,, ,, | Sealing | .. | 1 |
| ,, ,, ,, | Resealing | .. | 2·25 |
| AVOCA SHIRE— | | | |
| Ararat Road | Patrol maintenance throughout | .. | 7·2 |
| Ballarat–St. Arnaud Road | Resheeting quartz and gravel road with surface gravel between 8 and 11 miles north of Avoca | .. | 1 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 23·25 |
| Bealiba Road | Patrol maintenance throughout | .. | 9 |
| Maryborough Road | Patrol maintenance throughout | .. | 5 |
| AVON SHIRE— | | | |
| Dargo Road | General maintenance | .. | 45 |
| Maffra–Sale Road | General maintenance | .. | 3 |
| Maffra–Stratford Road | General maintenance | .. | 2 |
| Prince's Highway | General maintenance | .. | ·75 |
| BACCHUS MARSH SHIRE— | | | |
| Ballarat Road | Patrol maintenance throughout | .. | 1·21 |
| Balliang Road | Shouldering and gravel resheeting, 0 mile to 2·3 miles, and 5·1 miles to 6·6 miles | .. | 3·8 |
| ,, ,, | Shouldering and resheeting with crushed rock, 8·6 miles to 9·5 miles | .. | ·9 |
| ,, ,, | Patrol maintenance throughout | .. | 15·4 |
| Geelong–Bacchus Marsh Road | Resealing, ·8 mile to 1·7 miles | .. | ·9 |
| ,, ,, ,, ,, | Patrol maintenance throughout | .. | 7·8 |
| Gisborne Road | Resealing, ·2 mile to 2·7 miles | .. | 2·5 |
| ,, ,, | Shouldering and resheeting with gravel, 4·5 miles to 6 miles | .. | 1·5 |
| ,, ,, | Patrol maintenance throughout | .. | 9·9 |
| | Carried forward | 1·75 | 444·35 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 1·75 | 444·35 |
| BAIRNSDALE SHIRE— | | | |
| Bairnsdale–Lindenow Road .. | Gravel reconstruction and bitumen sealing .. .. .. .. .. | .. | 1·23 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. | .. | 9 |
| Bulumwaal–Tabberabbera Road | General maintenance, resealing, and repairs to bridge over Mitchell River .. | .. | 16 |
| Prince's Highway .. .. | General maintenance and resealing .. .. .. .. .. | .. | 3·4 |
| Bairnsdale–Paynesville Road .. | Reconstruction and bitumen sealing .. .. .. .. .. | .. | 1·4 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | 10 |
| BALLAN SHIRE— | | | |
| Ballarat Road .. .. | Patrol maintenance in Ballan township .. .. .. .. .. | .. | 1 |
| Daylesford Road .. .. | Resheeting with crushed rock and double coat bitumen sealing in four sections between Western Highway and State Forest | .. | ·98 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12·7 |
| Gordon–Meredith "A" Road .. | Resheeting with mine tailings between Gordon Railway Station and Mt. Egerton, in sections | .. | 0·6 |
| ,, ,, ,, ,, .. | Replacement of timber culvert with double precast concrete culvert near Egerton | .. | — |
| ,, ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 3·6 |
| Gordon–Meredith "B" Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| Mount Wallace Road .. | Resheeting with metal and double coat bitumen sealing northerly from Beam Wireless Station | .. | ·9 |
| ,, ,, ,, .. | Double coat bituminous sealing near "Yaloak" Homestead .. .. .. | .. | ·85 |
| ,, ,, ,, .. | Installation of three r.c. pipe culverts near "Yaloak" Homestead .. .. | .. | — |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 10·7 |
| Spargo Creek Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1 |
| BALLAN AND BUNINYONG SHIRES (Joint Works)— | | | |
| Gordon–Meredith "A" Road .. | General maintenance .. .. .. .. .. .. | .. | ·4 |
| BALLARAT SHIRE— | | | |
| Ballarat–Lexton Road .. | Resealing bitumen road from ·4 mile to 1·4 miles .. .. .. .. | .. | 1 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 18·2 |
| Maryborough–Ballarat Road .. | Reconditioning, scarifying, reforming, and gravelling, ·75 mile of waterbound macadam road, and priming and sealing with bitural, 1·5 miles of waterbound macadam road from 4·5 miles to 6 miles | .. | 1·5 |
| ,, ,, ,, .. | Resealing portions of bitumen road from 00 mile to 4·3 miles .. .. | .. | 2·4 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 13 |
| BANNOCKBURN SHIRE— | | | |
| Gordons–Meredith Road .. | Gravel sheeting .. .. .. .. .. .. .. .. | .. | ·38 |
| Inverleigh Road .. .. | Double coat sealing on gravel near Stonehaven and Murgheboluc .. .. | .. | 1·63 |
| ,, ,, .. .. | Gravel reconstruction preparatory to sealing near Stonehaven, Murgheboluc, and Inverleigh | .. | 4·01 |
| ,, ,, .. .. | Resealing near Murgheboluc .. .. .. .. .. .. | .. | ·7 |
| Shelford–Bannockburn Road .. | Double coat sealing on gravel through Bannockburn .. .. .. .. | .. | 1·81 |
| BARRABOOL SHIRE— | | | |
| Aireys Inlet Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 7 |
| Anglesea Road .. .. | Reconstruction and sealing .. .. .. .. .. .. | .. | 2 |
| ,, ,, .. .. | General maintenance balance of road .. .. .. .. .. | .. | 15 |
| Handy Main Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 14 |
| BASS SHIRE— | | | |
| Almurta Road .. .. | Resheeting with granitic sand .. .. .. .. .. .. | .. | 1 |
| ,, ,, .. .. | 3-ft. diameter concrete culvert about ½ mile east of Almurta .. .. .. | .. | .. |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·5 |
| Almurta–Grantville Road .. | Sheeting with gravel .. .. .. .. .. .. .. | .. | 1 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·25 |
| Anderson–Dalyston Road .. | Dressing with gravel and crushed rock .. .. .. .. .. | .. | 3 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·5 |
| Dalyston–Glen Forbes Road .. | Reshaping and sheeting with crushed rock .. .. .. .. .. | .. | 3 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8·33 |
| Dalyston–Wonthaggi Road .. | Dressing with crushed rock screenings from Dalyston to Powlett River .. | .. | ·7 |
| ,, ,, ,, .. | Double coat bitumen spraying from Wonthaggi–Loch Road to Powlett River bridge | .. | 1 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·63 |
| Inverloch–Wonthaggi Road .. | Resheeting easterly from Wonthaggi Borough boundary .. .. .. | .. | 1 |
| ,, ,, ,, .. | Resheeting with crushed rock from west of Woorayl Shire boundary .. .. | .. | 1·25 |
| ,, ,, ,, .. | Double coat bitumen spraying from west of Woorayl Shire boundary .. .. | .. | 1·25 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·75 |
| Korumburra–Wonthaggi Road .. | Resheeting with crushed rock between borough boundary and floodway .. | .. | 1 |
| ,, ,, ,, .. | Double coat bitumen surfacing between borough boundary and floodway .. | .. | 1·25 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8 |
| Main Coast Road .. .. | Dressing with gravel .. .. .. .. .. .. .. | .. | 10 |
| ,, ,, ,, .. | Regrading and gravelling Gurdies section .. .. .. .. .. | ·77 | .. |
| ,, ,, ,, .. | Regrading and gravelling .. .. .. .. .. .. | ·92 | .. |
| ,, ,, ,, .. | Regrading and gravelling at San Remo .. .. .. .. .. | ·84 | .. |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 18·75 |
| Wonthaggi–Loch Road .. | Sheeting with gravel where necessary between Glen Alvie Road and Ryanston .. | .. | 6 |
| ,, ,, ,, .. | Resheeting with crushed rock west from Wonthaggi Borough boundary .. | .. | ·68 |
| ,, ,, ,, .. | Double coat bitumen spraying west from Wonthaggi Borough boundary .. | .. | ·68 |
| ,, ,, ,, .. | Modified macadam surfacing at Powlett River floodway .. .. .. | .. | ·57 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 16 |
| BASS SHIRE AND WONTHAGGI BOROUGH (Joint Works)— | | | |
| Wonthaggi–Loch Road .. | Single coat bitumen sealing throughout .. .. .. .. .. | .. | ·7 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·7 |
| BEECHWORTH SHIRE— | | | |
| Beechworth Road .. .. | General maintenance and reconditioning throughout .. .. .. | .. | 25 |
| Bright Road .. .. | General repairs Rocky Point to Barwidgee Creek .. .. .. .. | .. | 4 |
| Everton–Myrtleford Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 13 |
| Myrtleford–Yackandandah Road | General maintenance at Healey's .. .. .. .. .. .. | .. | 1 |
| Stanley Road .. .. | General maintenance from Silver Creek to Myrtle Creek .. .. .. .. | .. | 8 |
| BELFAST SHIRE— | | | |
| Hamilton Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 13·5 |
| Penshurst Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 9·5 |
| BENALLA SHIRE— | | | |
| Benalla–Shepparton Road .. | Construction of deviation .. .. .. .. .. .. | .. | ·38 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | ·9 |
| Goorambat Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 5·6 |
| Goorambat–Thoona Road .. | Construction of timber bridge .. .. .. .. .. .. | — | .. |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 11·8 |
| Greta Road .. .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·8 |
| Kelfeera Road .. .. | Reshaping, pipe culverts, and patrol maintenance .. .. .. .. | .. | 8·5 |
| Lima Road .. .. .. | Provision of additional pipe culverts and patrol maintenance .. .. .. | .. | 2·9 |
| Sydney Road .. .. | Resealing .. .. .. .. .. .. .. .. | .. | 1·32 |
| ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 2 |
| Tatong–Tolmie Road .. | Provision of additional pipe culverts and patrol maintenance .. .. .. | .. | 10 |
| | Carried forward .. .. .. .. .. .. | 4·28 | 826·93 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 4·28 | 826·93 |
| BERWICK SHIRE— | | | |
| Beaconsfield–Emerald Road .. | Sealing north from the Prince's Highway at Beaconsfield .. .. .. | .. | 1·2 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4·8 |
| Cockatoo–Gembrook Road .. | Sealing between Cockatoo and Gembrook railway crossing .. .. .. | .. | 3·07 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·23 |
| Gembrook Road .. .. | Sealing north from Ararat Creek .. .. .. .. .. .. | .. | 1·38 |
| ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3·12 |
| Gembrook–Beenak Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 2 |
| Hallam–Emerald Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4·5 |
| Koo-wee-rup–Longwarry Road | Patrol maintenance .. .. .. .. .. .. .. | .. | 2 |
| Nar-Nar-Goon–Longwarry Road | Sealing at Nar-Nar-Goon and Garfield .. .. .. .. .. .. | .. | 1·45 |
| ,, ,, ,, | Patrol maintenance .. .. .. .. .. .. .. | .. | 10·25 |
| Woori Yallock–Pakenham–Koo-wee-rup Road | Sealing at Cockatoo, Pakenham Upper, and Pakenham .. .. .. | .. | 3·66 |
| ,, ,, ,, | Patrol maintenance .. .. .. .. .. .. .. | .. | 14·09 |
| BET BET SHIRE— | | | |
| Avoca–Bealiba Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Betley Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 4·5 |
| Dunolly Road .. .. | Gravelling adjoining Allotment 15A, Section VII., Parish of Painswick .. .. | .. | ·3 |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 12 |
| Dunolly–Eddington Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 5 |
| Maryborough–Dunolly Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 4·5 |
| BIRCHIP SHIRE— | | | |
| Beulah – Birchip – Wycheproof Road | Forming, grading, limestoning, and gravelling west of Birchip .. .. | 1·25 | .. |
| ,, ,, ,, | Patrol maintenance throughout .. .. .. .. .. .. | .. | 20 |
| BLACKBURN AND MITCHAM SHIRE— | | | |
| Burwood Road .. .. | Resealing throughout with the exception of approximately 1 mile of road west of Springvale Road resealed last year | .. | 2·8 |
| ,, ,, .. .. | Reforming shoulders and table drains on above section .. .. .. | .. | 2·8 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·8 |
| Main Healesville Road .. | Reconditioning of shoulders with crushed rock through reconstructed sections .. | .. | 2·6 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·16 |
| BORUNG SHIRE— | | | |
| Birchip Road .. .. | Resheeting at about 3 miles north-east from Warracknabeal .. .. .. | .. | ·26 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 14 |
| Dimboola Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 7·5 |
| Hopetoun Road .. .. | Limestone and gravel construction 3 miles north of Warracknabeal .. .. | .. | ·57 |
| ,, ,, .. .. | Limestone and gravel construction at Galaquil .. .. .. .. | .. | 1 |
| ,, ,, .. .. | Metalling at Lah .. .. .. .. .. .. .. | .. | 1·04 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 18 |
| Minyip Road .. .. | Metalling about 1 mile south of Sheep Hills .. .. .. .. | ·9 | .. |
| ,, ,, .. .. | Metalling about 2 miles north of Sheep Hills .. .. .. .. | .. | ·5 |
| ,, ,, .. .. | Metalling about 1 mile north of Sheep Hills .. .. .. .. | .. | 1·8 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 13 |
| Rainbow Road .. .. | Limestone and gravel construction about 9 miles north-west of Warracknabeal .. | .. | 1·6 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 18 |
| BRAYBROOK SHIRE— | | | |
| Ballarat Road .. .. | Double coat sealing and broom dragging between Footscray tramway and Albion railway gates | .. | 3·33 |
| BRIGHT SHIRE— | | | |
| Bright Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 20 |
| Harrietville Road .. .. | Patrol maintenance and placing pipe culverts .. .. .. .. | .. | 16 |
| Kiewa Valley Road .. .. | Construction and gravelling near western boundaries of Allotments 9B and 9C, Parish of Mullindolingong | ·64 | .. |
| ,, ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 7·8 |
| Myrtleford–Yackandandah Road | Patrol maintenance and placing pipe culverts .. .. .. .. | .. | 10·6 |
| BROADMEADOWS SHIRE— | | | |
| Lancefield Road .. .. | Bitumen sealing from Essendon City boundary to Aerodrome .. .. | .. | 1·14 |
| ,, ,, .. .. | Shouldering from Aerodrome to Broadmeadows Road .. .. .. | .. | 2 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·5 |
| Sydney Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2 |
| BULLA SHIRE— | | | |
| Melbourne–Lancefield Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 14·25 |
| Sunbury Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 2·75 |
| The Gap Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·75 |
| BULLA AND KEILOR SHIRES (Joint Works)— | | | |
| Melbourne–Lancefield Road .. | General maintenance throughout .. .. .. .. .. .. | .. | ·75 |
| BULN BULN SHIRE— | | | |
| Bloomfield Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·9 |
| Fumina Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·7 |
| Koo-wee-rup–Longwarry Road .. | Reshaping and sealing with bitumen .. .. .. .. .. | .. | 1 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·5 |
| Loch Valley Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·4 |
| Longwarry–Drouin Road .. | Sealing and resealing with bitumen .. .. .. .. .. | .. | 1·91 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·7 |
| Main Neerim Road .. .. | Resealing existing bitumen and modified macadam with bitumen .. .. | .. | 4·75 |
| ,, ,, ,, .. .. | Surfacing with crushed rock and sealing with bitumen .. .. .. | .. | ·11 |
| ,, ,, ,, .. .. | Reshaping and sealing with bitumen .. .. .. .. | .. | 1·43 |
| ,, ,, ,, .. .. | Resheeting waterbound macadam with crushed rock and sealing with bitumen .. | .. | ·81 |
| ,, ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 22·2 |
| Main South Road .. .. | Surfacing with crushed rock and sealing with bitumen .. .. .. | .. | ·3 |
| ,, ,, ,, .. .. | Resurfacing and reshaping, sand and waterbound macadam surfacing, and sealing with bitumen | .. | 1·4 |
| ,, ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 14·75 |
| Neerim East Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4 |
| Princes Highway .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·06 |
| Westernport Road .. .. | Reshaping waterbound macadam and sealing with bitumen .. .. .. | .. | 3 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8·25 |
| BUNGAREE SHIRE— | | | |
| Daylesford–Ballarat Road .. | Modified macadam surfacing 15 feet wide in four short sections between Ballarat City and Pootilla | .. | ·75 |
| ,, ,, ,, .. | Bitumen resealing .. .. .. .. .. .. .. | .. | 1·15 |
| ,, ,, ,, .. | Reconstruction of timber bridge 25 feet span and 22 feet wide at Gong Gong .. | .. | .. |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 7·7 |
| BUNINYONG SHIRE— | | | |
| Ballarat–Rokewood Road .. | Reconditioning south from Woodland's hotel .. .. .. .. | .. | 2·5 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Elaine–Mt. Mercer Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 5 |
| Geelong–Ballarat Road .. | General maintenance throughout, including repairs to bitumen surfaced sections .. | .. | 22·5 |
| CASTLEMAINE BOROUGH— | | | |
| Melbourne–Bendigo Road .. | Resealing .. .. .. .. .. .. .. .. | .. | 1·49 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | 3·9 |
| | Carried forward .. .. .. .. .. .. | 7·07 | 1272·44 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 7·07 | 1272·44 |
| CHARLTON SHIRE— | | | |
| Bendigo Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·75 |
| Donald Road .. .. | Gravelling near Lake Wooronook .. .. .. .. .. .. | 2·42 | .. |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 12·55 |
| St. Arnaud Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 15·45 |
| CHELSEA CITY— | | | |
| Point Nepean Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·66 |
| CHILTERN SHIRE— | | | |
| Barnawartha–Howlong Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 5·9 |
| Chiltern–Howlong Road .. | Sealing and patrol maintenance .. .. .. .. .. .. | .. | 7·1 |
| Sydney Road .. .. | Resealing, sheeting and sealing, placing pipe culverts and patrol maintenance .. | .. | 1·15 |
| CLUNES BOROUGH— | | | |
| Maryborough–Ballarat Road .. | General maintenance .. .. .. .. .. .. .. | .. | 2 |
| COHUNA SHIRE— | | | |
| Leitchville Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 10·69 |
| Murray River Valley Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·31 |
| COLAC SHIRE— | | | |
| Colac–Ballarat Road .. .. | Resealing with bitumen and screenings from 00 feet to 26,670 feet and from 48,700 feet to 57,000 feet | .. | 6·62 |
| ,, ,, ,, .. .. | Modified macadam surfacing between chainages 36,170 feet and 41,450 feet .. | .. | 1 |
| ,, ,, ,, .. .. | Widening and resheeting with fine crushed rock between chainages 78,119 feet and 85,300 feet | .. | 1·36 |
| ,, ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 21·15 |
| Colac–Beech Forest Road .. | General maintenance .. .. .. .. .. .. .. | .. | 11·25 |
| Colac–Forrest Road .. .. | Widening and resheeting with fine crushed rock between chainages 4,881 feet and 10,881 feet | .. | 1·14 |
| ,, ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 16·9 |
| Cororooke Road .. .. | Modified macadam surfacing north-westerly from Coragulac railway station .. | .. | ·95 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. .. | .. | 7·25 |
| Cressy–Inverleigh Road .. | General maintenance .. .. .. .. .. .. .. | .. | 8·7 |
| Princes Highway .. .. | General maintenance through township of Colac .. .. .. .. .. | .. | 2·44 |
| Swan Marsh Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 5·65 |
| CORIO SHIRE— | | | |
| Ballarat Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4·5 |
| Geelong–Bacchus Marsh Road .. | Tack coat and resealing .. .. .. .. .. .. .. | .. | 1 |
| ,, ,, ,, .. | Resealing with fluxed bitumen .. .. .. .. .. .. | .. | 10·36 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 20·2 |
| CORIO AND BACCHUS MARSH SHIRES (Joint Works)— | | | |
| Geelong–Bacchus Marsh Road .. | Resealing with fluxed bitumen .. .. .. .. .. .. | .. | 1 |
| CRANBOURNE SHIRE— | | | |
| Cranbourne–Frankston Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 7·5 |
| Koo-wee-rup–Longwarry Road | General maintenance throughout .. .. .. .. .. .. | .. | 6 |
| Koo-wee-rup–Pakenham Road | Modified macadam surfacing at Koo-wee-rup .. .. .. .. | .. | ·71 |
| ,, ,, ,, | General maintenance throughout .. .. .. .. .. .. | .. | 5·5 |
| Main Coast Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 8 |
| Westernport Road .. .. | Forming and gravelling near Heath Hill school .. .. .. .. | ·3 | .. |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 9 |
| CRESWICK BOROUGH— | | | |
| Castlemaine–Ballarat Road .. | General maintenance including resurfacing with bitural .. .. .. | .. | 2·33 |
| CRESWICK SHIRE— | | | |
| Castlemaine–Ballarat Road .. | Artificial surface gravel resheeting with mixed in place quartz tailings and loam near Smeaton township | .. | 1·7 |
| ,, ,, ,, .. | Resheeting quartz and gravel road with surface gravel between southern boundary of Creswick Borough and shire boundary | .. | 3·25 |
| ,, ,, ,, .. | Scarifying and resheeting with 2½-in. gauge basalt short sections throughout length of road | .. | ·87 |
| ,, ,, ,, .. | Patrol maintenance on gravel sections .. .. .. .. .. | .. | 6 |
| Daylesford–Ballarat Road .. | Resheeting metal road with pit gravel three sections at Dean, Newlyn North and Mt. Prospect | .. | 1·7 |
| ,, ,, ,, .. | Scarifying and resheeting with 2½-in. gauge basalt short sections throughout length of road | .. | ·51 |
| ,, ,, ,, .. | Patrol maintenance on gravel section .. .. .. .. .. | .. | 2 |
| DANDENONG SHIRE— | | | |
| Cheltenham Road .. .. | Resealing .. .. .. .. .. .. .. .. | .. | ·25 |
| ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| Dandenong–Frankston Road .. | Resealing .. .. .. .. .. .. .. .. | .. | ·25 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| ,, ,, ,, .. | Construction of bridge and approaches over Eumemmerring Creek .. .. | ·15 | .. |
| Princes Highway .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·9 |
| ,, ,, .. .. | Resealing .. .. .. .. .. .. .. .. | .. | ·4 |
| DAYLESFORD BOROUGH— | | | |
| Ballan Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·6 |
| Ballarat Road .. .. | Sheeting with fine crushed rock near borough boundary .. .. .. | .. | ·17 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·05 |
| Castlemaine Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·65 |
| Daylesford–Hepburn Road .. | Resealing, &c. .. .. .. .. .. .. .. | .. | 1·14 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·14 |
| Daylesford–Trentham Road .. | Sheeting with fine crushed rock .. .. .. .. .. .. | .. | ·17 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·9 |
| Malmsbury–Daylesford Road .. | Modified macadam surfacing easterly from railway station .. .. .. | .. | ·2 |
| ,, ,, ,, .. | Resealing, &c. .. .. .. .. .. .. .. | .. | ·4 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·42 |
| DEAKIN SHIRE— | | | |
| Kyabram–Nathalia Road .. | Construction on east and west section at Wyuna town, Parish of Taripta .. | ·8 | .. |
| DIMBOOLA SHIRE— | | | |
| Hopetoun–Rainbow Road .. | Resheeting with limestone metal 1 mile north of Rainbow .. .. .. | .. | ·24 |
| Warracknabeal Road .. | Forming, rubbling and gravelling about 7 miles north-east of Dimboola .. | ·38 | .. |
| ,, ,, .. | Rubbling, gravelling and surfacing with tar and bitumen between Dimboola and Clement's Hill | .. | ·29 |
| Rainbow Road .. .. | Reforming and sheeting with limestone rubble 2 miles north of Dimboola .. | .. | ·13 |
| ,, ,, .. .. | Forming and sheeting with limestone rubble west of Allotment 167, Parish of Dimboola | .. | ·5 |
| ,, ,, .. .. | Forming and sheeting with limestone rubble west of Allotment 136, Parish of Katyil | .. | ·19 |
| ,, ,, .. .. | Forming and sheeting with limestone rubble through Arkona township .. | .. | ·19 |
| ,, ,, .. .. | Constructing loam formations and metal inverts between Dimboola and Jeparit .. | .. | 3·5 |
| ,, ,, .. .. | Sheeting with rubble and gravel and surfacing with tar and bitumen through Jeparit township | .. | ·94 |
| DONALD SHIRE— | | | |
| Donald–Charlton Road .. | Reconstruction near Donald .. .. .. .. .. .. | .. | ·09 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Donald–Minyip Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2·5 |
| Marnoo–Donald Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 10·5 |
| St Arnaud–Birchip Road .. | Sandstone construction between Buloke and Litchfield .. .. .. | .. | ·1 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 28·5 |
| | Carried forward .. .. .. .. .. .. | 11·12 | 1597·85 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 11·12 | 1597·85 |
| DONCASTER AND TEMPLESTOWE SHIRE— | | | |
| Doncaster Road .. .. | Modified macadam surfacing .. .. .. .. .. .. | .. | 1·27 |
| ,, ,, .. .. | Resealing .. .. .. .. .. .. .. | .. | 2 |
| ,, ,, .. .. | General maintenance .. .. .. .. .. .. | .. | 6·27 |
| Heidelberg–Warrandyte Road .. | Modified macadam surfacing .. .. .. .. .. .. | .. | ·5 |
| ,, ,, ,, .. | Resealing .. .. .. .. .. .. .. | .. | 5 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. | .. | 4·7 |
| Warrandyte–Ringwood Road .. | Resealing .. .. .. .. .. .. .. | .. | 1 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. | .. | 4·7 |
| DUNDAS SHIRE— | | | |
| Hamilton–Dunkeld Road .. | Modified macadam surfacing opposite Allotments 13, 10 and 7, Section 4, Parish of South Hamilton and Allotment 127, Parish of Moutajup | .. | 1 |
| ,, ,, ,, .. | Resealing previously sealed macadam opposite Allotment 5, Section 5, Allotment 5, Section 7 and Allotment 9, Section 9, Parish of South Hamilton, Allotment 3, Section 21 and Allotment 9, Section 13, Parish of Warrayure and Allotments 127, 124, 125 and 126, Parish of Moutajup | .. | 2·13 |
| Hamilton–Horsham Road .. | Forming and gravelling opposite Allotments 4, 14, 30 and 31, Parish of Woohlpooer, Allotment 14, Parish of Geerak and Allotments 21, 20A, 20B, and 18, Parish of Bepcha | 2·81 | .. |
| ,, ,, ,, .. | Modified macadam surfacing opposite Allotments 1 and 3, Section 17, Parish of North Hamilton, Allotment 2, Section 15, and Allotments 3A, 3B and 4A, Section 14, Parish of Jerrywarook | .. | 1·71 |
| ,, ,, ,, .. | Resealing previously sealed macadam opposite Allotments 1 and 3, Section 20, Parish of North Hamilton and Allotment 4, Section 14, Parish of Jerrywarook | .. | ·89 |
| ,, ,, ,, .. | Resheeting with gravel, priming and sealing opposite Allotment 1, Section 1 and Kenilworth South P.R., Parish of Jerrywarook | .. | ·81 |
| ,, ,, ,, .. | Resheeting with gravel opposite Kenilworth South P.R., Parish of Jerrywarook .. | .. | ·75 |
| Hamilton–Mt. Gambier Road .. | Modified macadam surfacing opposite Allotments 14, 15, 18, 19, 20 and 22, Section 25, Parish of North Hamilton | .. | 1·37 |
| ,, ,, ,, .. | Resealing previously sealed macadam opposite Allotment 3, Section 16 and Allotments 2 and 3, Section 18, Parish of Bochara | .. | 1·25 |
| Hamilton–Port Fairy Road .. | Modified macadam surfacing opposite Allotments 1A, 1B, 2C, Section 17, Allotment 6, Section 10, Brisbane Hill P.R. and Allotment 1A, township of Byaduk, Allotment 3B, Section 2, Parish of Byaduk and Allotments 1A, 1B, 4A, 4B, 5A, 5B, Section 10A, Parish of Monivae | .. | 2·48 |
| ,, ,, ,, .. | Resealing previously sealed macadam opposite Allotment 1, Section 23, Parish of South Hamilton and Monivae P.R., Parish of Monivae, Allotment 4B, Section 17, and through the village of South Byaduk, Allotments 8A, 8B, Section 22, Parish of Byaduk, Allotments 4, 4A2, Section 11, and Allotments 1 and 3, Section 12, Parish of Warrabkook | .. | 1·84 |
| Hamilton–Portland Road .. | Modified macadam surfacing opposite Allotments 1, 2, 3, Section 8, Parish of Yulecart | .. | 1·13 |
| ,, ,, ,, .. | Resealing previously sealed macadam opposite Allotments 3, 4, 5, 6 and 7, Section 23, Parish of South Hamilton | .. | ·7 |
| Hamilton–Warrnambool Road .. | Modified macadam surfacing opposite Allotments 3 and 4, Section 3, Parish of South Hamilton | .. | ·25 |
| ,, ,, ,, .. | Resheeting previously sealed macadam opposite Allotment 1, Section 16, Parish of South Hamilton, Allotments C and G, Section 1, and Allotments 1 and 3, Section 7, Parish of Croxton West | .. | ·92 |
| DUNMUNKLE SHIRE— | | | |
| Horsham–Murtoa Road .. | Forming and gravelling with Great Western crushed gravel commencing 3 miles west of Murtoa | 2·33 | .. |
| ,, ,, ,, .. | Bitumen resealing west from Murtoa .. .. .. .. .. | .. | 2·88 |
| Minyip–Donald Road .. | Forming and metalling foundation course of local stone commencing 3 miles north-east of Minyip | ·58 | .. |
| Rupanyup–Murtoa Road .. | Bitumen resealing east from Murtoa .. .. .. .. .. | .. | 2·9 |
| Stawell–Warracknabeal Road .. | Forming and metalling foundation course of local stone commencing 3 miles north of Minyip | ·38 | .. |
| ,, ,, ,, .. | Bitumen resealing at Minyip .. .. .. .. .. .. | .. | 2 |
| ,, ,, ,, .. | Bitumen resealing north of Rupanyup .. .. .. .. .. | .. | ·4 |
| ,, ,, ,, .. | Bitumen resealing south of Rupanyup .. .. .. .. .. | .. | 1·3 |
| ,, ,, ,, .. | Double coat bitumen surfacing south of Rupanyup .. .. .. .. | .. | 4·42 |
| EAST LODDON SHIRE— | | | |
| Dingee Road .. .. | Reshaping and sanding in the parish of Pompapiel .. .. .. .. | .. | ·45 |
| Mitiamo Road .. .. | Boxing, shaping and gravelling in the parish of Hayanmi .. .. .. | ·28 | .. |
| Prairie Road .. .. | Gravelling and sanding formation in the parish of Dingee .. .. .. | .. | ·28 |
| ECHUCA BOROUGH— | | | |
| Echuca–Cornella Road .. | General maintenance throughout .. .. .. .. .. .. | .. | ·6 |
| Echuca West Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | ·3 |
| Echuca–Wyuna Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·2 |
| ELTHAM SHIRE— | | | |
| Eltham–Yarra Glen Road .. | Reforming, gravelling, sealing and resealing with bitumen, erecting guard fencing, installation of pipe culverts and general maintenance between Lower Plenty and Yarra Glen | .. | 21 |
| Hurstbridge–Kinglake Road .. | Reforming, widening, resheeting with gravel, resealing with bitumen, erecting guard fencing, installation of pipe culverts and general maintenance between Wattle Glen and Kinglake | .. | 16 |
| Yarra Glen–Glenburn Road .. | Resheeting with gravel and patrol maintenance between Yarra Glen and shire boundary | .. | 8 |
| EUROA SHIRE— | | | |
| Arcadia Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 4 |
| Avenel–Longwood Road .. | Construction of timber bridge near Nine Mile Creek .. .. .. .. | .. | .. |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | 3 |
| Euroa–Arcadia Road .. | Sealing gravelled section in township .. .. .. .. .. | .. | ·5 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 16 |
| Euroa–Mansfield Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 20 |
| Euroa–Strathbogie Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 18 |
| Murchison–Shepparton Road .. | General maintenance .. .. .. .. .. .. .. | .. | 7 |
| Murchison–Violet Town Road .. | Construction of two floodways, each 200 ft. x 16 ft. near Castle Creek .. .. | .. | .. |
| ,, ,, ,, .. | Forming and gravelling near Miepoll .. .. .. .. .. | .. | ·65 |
| FERNTREE GULLY SHIRE— | | | |
| Belgrave–Emerald Road .. | Widening pavement between Selby and Aura .. .. .. .. | .. | ·8 |
| ,, ,, ,, .. | Patrol maintenance and resealing portion of road .. .. .. .. | .. | 6·73 |
| Burwood Road .. .. | Raising portion subject to flooding near Dandenong Creek .. .. .. | .. | ·2 |
| ,, ,, .. .. | Patrol maintenance and resealing portion of road .. .. .. .. | .. | 4·25 |
| Emerald Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3·25 |
| Main Ferntree Gully Road .. | Widening pavement .. .. .. .. .. .. .. | .. | ·5 |
| ,, ,, ,, ,, .. | Patrol maintenance and resealing portion of road .. .. .. .. | .. | 10·81 |
| Monbulk Road .. .. | Patrol maintenance and resealing portion of road .. .. .. .. | .. | 5 |
| Olinda Road .. .. | Widening pavement between Tremont and Ferny Creek .. .. .. | .. | ·75 |
| ,, ,, .. .. | Patrol maintenance and resealing portion of road .. .. .. .. | .. | 6·25 |
| | Carried forward .. .. .. .. .. .. | 17·5 | 1809·94 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought froward .. .. .. .. .. .. | 17·5 | 1809·94 |
| FLINDERS SHIRE— | | | |
| Hastings–Flinders Road .. | Regrading, widening, and sheeting with crushed rock near Kennedy's Corner .. | .. | ·7 |
| " " " .. | Regrading, widening, and sheeting with crushed rock at Flinders .. .. | .. | ·87 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 17 |
| Mornington–Dromana Road .. | Widening to 16 feet and sheeting with granitic sand north of Tassells Creek .. | .. | ·41 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2·75 |
| Mornington–Flinders Road .. | Widening to 16 feet and sheeting with granitic sand and double coat sealing at White Hill | .. | 1 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12 |
| Point Nepean Road .. .. | Widening to 20 feet with granitic sand and double coat sealing at Rosebud .. | .. | ·9 |
| " " " .. .. | Scarifying and reshaping between Sorrento and Portsea .. .. .. | .. | 2·5 |
| " " " .. .. | Patrol maintenance throughout .. .. .. .. .. | .. | 21·5 |
| Red Hill Road .. .. | Widening to 16 feet and sheeting with crushed rock at Red Hill Station .. | .. | ·6 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·75 |
| Rosebud–Flinders Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 13·5 |
| Stony Point Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4 |
| FRANKSTON AND HASTINGS SHIRE— | | | |
| Cranbourne–Frankston Road .. | Resurfacing existing waterbound macadam 12 feet wide with modified macadam, and widening to 12 feet | .. | ·49 |
| " " " .. | General maintenance throughout .. .. .. .. .. .. | .. | 2·8 |
| Frankston–Dandenong Road .. | General maintenance throughout, including resealing various sections with fluxed bitumen | .. | 5·5 |
| Frankston–Flinders Road .. | General maintenance throughout, including resealing various sections with fluxed bitumen | .. | 14 |
| Mooroduc Road .. .. | General maintenance throughout, including priming and sealing a section of the road with cold tar and bitural respectively | .. | 3 |
| Point Nepean Road .. .. | General maintenance throughout, including resealing various sections with fluxed bitumen | .. | 7·5 |
| GLENLYON SHIRE— | | | |
| Ballan Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 4·45 |
| Ballarat Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 3·5 |
| Castlemaine–Daylesford Road .. | General maintenance .. .. .. .. .. .. .. | .. | 13 |
| Daylesford–Hepburn Road .. | Resealing .. .. .. .. .. .. .. | .. | ·18 |
| " " .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1 |
| Daylesford–Trentham Road .. | Reconditioning and sheeting in gravel .. .. .. .. .. | .. | 1·02 |
| " " .. .. | General maintenance .. .. .. .. .. .. | .. | 10 |
| Malmsbury–Daylesford Road .. | General maintenance .. .. .. .. .. .. | .. | 15·12 |
| GISBORNE SHIRE— | | | |
| Bacchus Marsh Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 9·7 |
| Gisborne Station Road .. | Seal coating throughout .. .. .. .. .. .. .. | .. | 2·2 |
| Mt. Macedon Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 7 |
| GLENELG SHIRE— | | | |
| Coleraine–Casterton Road .. | Modified macadam surfacing near Casterton .. .. .. .. | .. | ·46 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 7 |
| Dergholm Road .. .. | Forming and gravelling near Dergholm .. .. .. .. | ·15 | .. |
| " " .. .. | Modified macadam surfacing at Casterton .. .. .. .. .. | .. | ·3 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 22 |
| Mount Gambier Road .. | Modified macadam surfacing near Casterton .. .. .. .. .. | .. | ·91 |
| " " " .. | Modified macadam surfacing near Strathdownie .. .. .. .. | .. | ·4 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 30 |
| Portland–Casterton Road .. | Modified macadam surfacing near Casterton .. .. .. .. .. | .. | ·39 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 20 |
| Wando Vale Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·5 |
| GOULBURN SHIRE— | | | |
| Avenel–Longwood Road .. | Redecking bridge at Locksley .. .. .. .. .. .. | .. | — |
| Goulburn Valley Road .. | Forming and gravelling near Wahring .. .. .. .. .. | .. | 1·2 |
| GRENVILLE SHIRE— | | | |
| Ballarat–Hamilton Road .. | Modified macadam surfacing 14 feet wide through township of Smythesdale .. | .. | 1·5 |
| " " " .. | Modified macadm surfacing 14 feet wide west from township of Scarsdale .. | .. | 1·5 |
| " " " .. | Forming and gravelling deviation, Oldham Creek .. .. .. .. | .. | ·28 |
| " " " .. | Resealing west from borough of Sebastopol bonndary .. .. .. | .. | 2 |
| " " " .. | Resealing through township of Scarsdale .. .. .. .. .. | .. | 2 |
| " " " .. | Scarifying and reshaping existing gravel road north from Scarsdale .. .. | .. | 4 |
| Cressy Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·8 |
| Lismore Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 10 |
| Pitfield Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12·6 |
| HAMILTON TOWN— | | | |
| Ararat Road .. .. | Bitumen resealing .. .. .. .. .. .. .. | .. | ·53 |
| " " .. .. | Gravelling shoulders .. .. .. .. .. .. .. | .. | ·4 |
| " " .. .. | Erection of one 24-ft. x 12-in. diameter reinforced concrete pipe culvert .. | .. | .. |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·88 |
| Coleraine Road .. .. | Bitumen resealing .. .. .. .. .. .. .. | .. | ·47 |
| " " .. .. | Gravelling shoulders .. .. .. .. .. .. .. | .. | ·41 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·3 |
| Hamilton–Warrnambool Road | Bitumen resealing .. .. .. .. .. .. .. | .. | ·31 |
| " " " | Erection of one 24-ft. x 12-in. diameter reinforced concrete pipe culvert .. | .. | .. |
| " " " | Patrol maintenance .. .. .. .. .. .. .. | .. | ·5 |
| Port Fairy Road .. .. | Bitumen resealing .. .. .. .. .. .. .. | .. | ·13 |
| " " .. .. | Erection of 86-ft. x 12-in. diameter reinforced concrete pipe culverts .. .. | .. | .. |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·3 |
| Portland Road .. .. | Bitumen resealing .. .. .. .. .. .. .. | .. | ·5 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·5 |
| HAMPDEN SHIRE— | | | |
| Camperdown–Ballarat Road .. | Resheeting and modified macadam surfacing between Lismore and Skipton .. | .. | 7 |
| " " " .. | Resealing between Camperdown and Lismore .. .. .. .. | .. | 12 |
| " " " .. | Redecking culverts and patrol maintenance .. .. .. .. | .. | 32·72 |
| Caramut–Lismore Road .. | Resheeting and modified macadam surfacing between Derrinallum and Darlington | .. | 2·5 |
| " " " .. | Resealing between Derrinallum and Darlington .. .. .. .. | .. | 2 |
| " " " .. | General maintenance .. .. .. .. .. .. | .. | 11·5 |
| Cobden–Terang Road .. .. | Resheeting and modified macadam surfacing between Terang and Mount Emu Creek | .. | ·8 |
| " " " .. .. | Resealing between Terang and Mount Emu Creek .. .. .. .. | .. | 1·15 |
| " " " .. .. | General maintenance between Terang and Mount Emu Creek .. .. .. | .. | 1 |
| Lismore–Cressy Road .. | Resheeting and modified macadam surfacing between Duverney and Cressy .. | .. | 4 |
| " " " .. | Resealing through Lismore township .. .. .. .. .. | .. | 1·5 |
| " " " .. | General maintenance .. .. .. .. .. .. .. | .. | 13·2 |
| McKinnon's Bridge–Noorat Road | Reconstruction and sheeting between Boorcan and Noorat .. .. .. | .. | 3·1 |
| " " " " | General maintenance between Boorcan and Noorat .. .. .. .. | .. | ·75 |
| Prince's Highway .. .. | Surface mixed macadam in the township of Camperdown .. .. .. | .. | ·26 |
| " " .. .. | Resealing in the township of Camperdown .. .. .. .. .. | .. | ·14 |
| " " .. .. | Patrol maintenance in the townships of Terang and Camperdown .. .. | .. | 2·22 |
| Terang–Framlingham Road .. | Resheeting and modified macadam surfacing between Terang and shire boundary | .. | ·8 |
| " " " .. | Resealing and modified macadam surfacing between Terang and shire boundary.. | .. | ·4 |
| " " " .. | General maintenance between Terang and shire boundary .. .. .. | .. | 1·5 |
| Terang–Mortlake Road .. | Resealing near Noorat .. .. .. .. .. .. .. | .. | ·5 |
| " " " .. | General maintenance .. .. .. .. .. .. .. | .. | 7 |
| HEALESVILLE SHIRE— | | | |
| Healesville–Alexandra Road .. | Widening with crushed rock to 18 feet, and repairing pot holes in bitumen surface | .. | 1 |
| | Carried forward .. .. .. .. .. .. | 17·65 | 2237·69 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward | 17·65 | 2237·69 |
| HEIDELBERG SHIRE— | | | |
| Greensborough – Hurst Bridge Road | Sealing, 20 feet wide | .. | 3·9 |
| Heidelberg–Warrandyte Road | Sealing, 20 feet wide | .. | ·48 |
| Main Heidelberg–Eltham Road | Penetration macadam surfacing by penolithic method, 25 feet wide | .. | ·11 |
| " " " " | Modified macadam surfacing, 25 feet wide | .. | ·3 |
| " " " " | Sealing, 20 feet wide | .. | 2·48 |
| Main Whittlesea Road | Sealing, 20 feet wide | .. | 1·17 |
| HEYTESBURY SHIRE— | | | |
| Camperdown–Cobden Road | Modified macadam surfacing | .. | 1·5 |
| " " " | Resealing ·05 mile to ·25 mile, 1·85 miles to 1·95 miles, and 3 miles to 5 miles | .. | 2·3 |
| " " " | General maintenance throughout | .. | 5 |
| Cobden–Port Campbell–Princetown Road | Modified macadam surfacing 2 miles 60 chains to 3 miles 30 chains | .. | ·63 |
| " " " | Resealing 1 mile to 2 miles | .. | 1 |
| " " " | General maintenance 0 mile to 18·2 miles | .. | 18·2 |
| Cobden–Terang Road | General maintenance throughout | .. | 12 |
| Timboon–Nirranda Road | General maintenance throughout | .. | 8 |
| Timboon–Port Campbell Road | General maintenance throughout | .. | 5 |
| HORSHAM TOWN— | | | |
| Dimbool–Horsham Road | Modified macadam surfacing from town boundary towards Natimuk railway line | .. | ·37 |
| " " " | Sealing north-westerly from Dooen Road | .. | ·15 |
| Dooen Road | Sealing on north-east boundary | .. | ·3 |
| Hamilton Road | Sealing from Stawell Road to boundary | .. | ·37 |
| Western Highway | Modified macadam surfacing from Hamilton Road towards boundary | .. | ·37 |
| " " | Sealing from boundary towards Hamilton Road | .. | ·37 |
| HUNTLY SHIRE— | | | |
| Elmore–Heathcote Road | Seal coat, Elmore township | .. | ·8 |
| INGLEWOOD BOROUGH— | | | |
| Bendigo–Charlton Road | Gravelling from north boundary of municipality | .. | ·5 |
| " " " | General maintenance throughout | .. | 1·55 |
| KARA KARA SHIRE— | | | |
| Avoca–St. Arnaud Road | Construction of reinforced concrete bridge and approaches at Medlyn | ·14 | .. |
| " " " | Construction of reinforced concrete bridge and approaches at Carapooee West | .. | ·4 |
| " " " | Patrol maintenance throughout | .. | 23 |
| Charlton Road | Patrol maintenance throughout | .. | 10 |
| Navarre Road | Patrol maintenance throughout | .. | 22 |
| St. Arnaud–Donald Road | Forming and gravelling connecting sections at Cope Cope | 1·4 | .. |
| " " " | Resealing | .. | 8·62 |
| " " " | Double coat sealing | .. | ·29 |
| " " " | Patrol maintenance throughout | .. | 17 |
| KARKAROOC SHIRE— | | | |
| Hopetoun–Rainbow Road | Limestone construction near allotments 72, 73 and 49 and 50, Parish of Goyura | 1·08 | .. |
| " " " | Patrol maintenance | .. | 24 |
| Hopetoun–Warracknabeal Road | Patrol maintenance throughout and gravelling | .. | 20 |
| Hopetoun–Woomelang–Sea Lake Road | Ironstone construction between Allotments 13, 12 and 38, 39, Parish of Minapre | ·57 | .. |
| " " " | Limestone construction between Allotments 5 and 15, Parish of Nyallo | .. | ·17 |
| " " " | Patrol maintenance throughout and gravelling | .. | 24 |
| Rainbow–Beulah–Birchip Road | Limestone construction near Allotments 36, 37, 38, 10A, 11A, 7A, Parish of Kallery, and Allotments 2, 32, 33, 12A and 31, Parish of Beulah | .. | 1·8 |
| " " " | Patrol maintenance | .. | 24·5 |
| KARKAROOC AND BIRCHIP SHIRES— | | | |
| Rainbow–Beulah–Birchip Road | Limestone construction between Allotment 32, Parish of Kurdgweechee and Allotment 29, Parish of Kinahulla | .. | ·23 |
| KERANG SHIRE— | | | |
| Koondrook Road | Road mix sealing throughout | .. | 1 |
| KILMORE SHIRE— | | | |
| Heathcote Road | Resheeting sections between Hume Highway and Bower's | .. | ·62 |
| " " | Resheeting sections between Boran's and Boundary Flat | .. | ·52 |
| " " | Patrol maintenance | .. | 3·56 |
| Kilmore–Kilmore East Road | Resheeting with gravel from Hume Highway to Racecourse and north from Kilmore East Railway Station | .. | ·94 |
| " " " | Patrol maintenance | .. | 2·26 |
| Lancefield–Kilmore Road | Resheeting with gravel between railway and cemetery | .. | ·6 |
| " " " | Resheeting with gravel sections between Payne's Lane and Duyer's Creek | .. | ·62 |
| " " " | Patrol maintenance | .. | 1·29 |
| KILMORE AND PYALONG SHIRES (Joint Works)— | | | |
| Heathcote Road | Patrol maintenance | .. | 2·99 |
| KILMORE AND ROMSEY SHIRES (Joint Works)— | | | |
| Lancefield–Kilmore Road | Patrol maintenance | .. | 2·28 |
| KOROIT BOROUGH— | | | |
| Koroit–Warrnambool Road | Resealing | .. | 5·4 |
| KORONG SHIRE— | | | |
| Borung–Hurstwood Road | General maintenance throughout | .. | 7 |
| Calder Highway | General maintenance throughout | .. | 1·25 |
| Serpentine Road | General maintenance throughout | .. | 10·5 |
| KORUMBURRA SHIRE— | | | |
| Bena–Kongwak Road | Reconstruction and bitumen surfacing from chainage 10·75 to 11·5 | .. | ·75 |
| " " " | Reconstruction in crushed rock | .. | 1 |
| " " " | General maintenance | .. | 11·5 |
| Bena–Korumburra Road | Reconstruction and bitumen surfacing in Bena | .. | ·13 |
| " " | General maintenance | .. | 3·2 |
| Bena–Poowong Road | Reconstruction and bitumen surfacing near Bena | .. | 1 |
| " " " | General maintenance | .. | 6·01 |
| Fairbank Road | Resurfacing with gravel and general maintenance | .. | 5·4 |
| Kongwak–Inverloch Road | General maintenance | .. | 6·3 |
| Korumburra–Drouin Road | Reconstruction and bitumen surfacing two sections | .. | 1·38 |
| " " " | General maintenance | .. | 4·7 |
| Korumburra–Leongatha Road | General maintenance | .. | 4·84 |
| Korumburra–Warragul Road | Resealing with bitumen from chainage 12922 to 18422 | .. | 1·04 |
| " " " | Scarifying and gravel surfacing | .. | 6·52 |
| " " " | General maintenance | .. | 13 |
| Korumburra–Wonthaggi Road | Resealing two sections commencing at chainages 00 (Korumburra) and 31320 | .. | 1·51 |
| " " " | Reconstruction and bitumen surfacing two sections near Moyarra | .. | 2·22 |
| " " " | General maintenance | .. | 12·5 |
| Lang Lang–Nyora Road | Reconstruction and bitumen surfacing near Nyora | .. | ·5 |
| " " " | General maintenance | .. | 1·91 |
| Loch–Nyora Road | General maintenance | .. | 5 |
| Loch–Wonthaggi Road | Reconstruction and bitumen surfacing near Loch | .. | 1 |
| " " | General maintenance | .. | 4·64 |
| Nyora–Poowong Road | Reconstruction and bitumen surfacing near Nyora | .. | ·75 |
| " " " | General maintenance | .. | 6 |
| Poowong–Ranceby Road | Reconstruction and bitumen surfacing from Poowong factory towards Ranceby | .. | 1·41 |
| " " | General maintenance | .. | 4·15 |
| | Carried forward | 20·84 | 2630·04 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued*.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued*. | | |
| | Brought forward .. .. .. .. .. .. | 20·84 | 2630·04 |
| KOWREE SHIRE— | | | |
| Booroopki Road .. .. | Culverts and gravelling approaches .. .. .. .. .. | .. | ·07 |
| " " .. .. | Forming and grading .. .. .. .. .. .. .. | .. | ·1 |
| " " .. .. | Patrol maintenance throughout including scarifying and reshaping portion of road | .. | 13 |
| Booroopki–Frances Road .. | Forming and gravelling .. .. .. .. .. .. .. | 1·45 | .. |
| " " " .. | Patrol maintenance throughout including scarifying and reshaping portion of road | .. | 18 |
| Edenhope–Goroke Road .. | Forming and grading .. .. .. .. .. .. .. | .. | ·6 |
| " " .. .. | Patrol maintenance throughout including scarifying and reshaping portion of road | .. | 28 |
| Hamilton – Edenhope – Apsley Road | Culverts and gravelling approaches .. .. .. .. .. | ·22 | ·03 |
| " " " | Patrol maintenance throughout .. .. .. .. .. .. | .. | 41 |
| Little Desert Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Wombelano Road .. .. | Forming and gravelling .. .. .. .. .. .. .. | .. | 1·25 |
| " " .. .. | Patrol maintenance on portion of road .. .. .. .. .. | .. | 4 |
| KYNETON SHIRE— | | | |
| Daylesford Road | General maintenance .. .. .. .. .. .. .. | .. | ·7 |
| Daylesford–Trentham Road .. | General maintenance .. .. .. .. .. .. .. | .. | 2·45 |
| Melbourne–Bendigo Road .. | Resealing bitumen surface .. .. .. .. .. .. | .. | 1·5 |
| Redesdale Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 6·25 |
| Trentham Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 17 |
| Tylden–Woodend Road .. | Forming, grading and crushed rock surfacing .. .. .. .. .. | .. | ·31 |
| " " " .. | General maintenance .. .. .. .. .. .. .. | .. | 3 |
| LAWLOIT SHIRE— | | | |
| Broughton Road .. .. | Forming and metalling between 2·7 and 3·17 miles .. .. .. .. | .. | ·47 |
| " " .. .. | Resheeting with gravel between 3·25 and 3·8 miles .. .. .. .. | .. | ·55 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·9 |
| Little Desert Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12·1 |
| Nhill–Kaniva–Border Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·7 |
| Lillimur South Road .. | Forming and gravelling between 4·37 and 5·12 miles .. .. .. .. | .. | ·75 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·5 |
| Yearinga Road .. .. | Resheeting with limestone between 4·75 and 5 miles .. .. .. .. | .. | ·25 |
| " " .. .. | Forming and metalling between 7·25 and 7·51 miles .. .. .. .. | .. | ·26 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9.7 |
| LEIGH SHIRE— | | | |
| Ballarat–Rokewood Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 8 |
| Cressy–Inverleigh Road .. | Reconditioning east from shire boundary .. .. .. .. .. | .. | 2·75 |
| " " " .. | Erection of pipe culverts in lieu of four invert crossings .. .. .. | .. | .. |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 11·25 |
| Cressy–Rokewood Road .. | Reconditioning from Cressy–Inverleigh Road .. .. .. .. | .. | 1 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 11 |
| Inverleigh–Shelford Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| Rokewood–Shelford Road .. | Reconditioning near Rokewood .. .. .. .. .. .. | .. | 2·25 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 17 |
| Shelford–Bannockburn Road .. | Reconditioning between Teesdale and Shelford .. .. .. .. | .. | 3·25 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6·75 |
| Werneth Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3 |
| LEIGH AND COLAC SHIRES (Joint Works)— | | | |
| Cressy–Inverleigh Road .. | Reconditioning east of Cressy township .. .. .. .. .. | .. | 2 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 2·25 |
| LEXTON SHIRE— | | | |
| Avoca–Ararat Road .. .. | General maintenance from Amphitheatre to Elmhurst .. .. .. | .. | 7 |
| LILLYDALE SHIRE— | | | |
| Evelyn–Lillydale Road .. | Resealing .. .. .. .. .. .. .. .. | .. | 3 |
| Main Healesville Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1 |
| Monbulk Road .. .. | Reconstruction in crushed rock .. .. .. .. .. .. | .. | 2·12 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| Mount Dandenong Road .. | Resealing .. .. .. .. .. .. .. .. | .. | 6 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 11·8 |
| Yarra Glen Road .. .. | Resealing .. .. .. .. .. .. .. .. | .. | 1 |
| " " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3 |
| LOWAN SHIRE— | | | |
| Dimboola–Kaniva Road .. | Resealing bitumen, Nelson-street, Nhill .. .. .. .. .. | .. | ·12 |
| " " " .. | General maintenance, Nelson and Victoria streets, Nhill .. .. .. | .. | 2·2 |
| Goroke Road .. .. | Forming and gravelling between Allotments 26 and 24, Parish of Winiam .. | ·55 | .. |
| " " .. .. | Sealing bitumen between Allotments 9 and 10, Parish of Balrootan .. .. | .. | ·25 |
| " " .. .. | Resheeting gravel roadway between Allotments 8 and 11, Parish of Balrootan .. | .. | ·12 |
| " " .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 6.7 |
| Lorquon West Road .. .. | Forming and metalling between Allotments 129 and 130, Parish of Woorak .. | ·36 | .. |
| " " " .. .. | Forming and metalling between Allotments 133 and 132, Parish of Woorak .. | ·25 | .. |
| " " " .. .. | Resheeting gravel between Allotments 129 and 130 and 66 and 67, Parish of Woorak | .. | .35 |
| " " " .. .. | Resheeting gravel between Allotment 125, parish of Woorak, and Allotment 8, Parish of Lorquon | .. | .33 |
| " " " .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 19 |
| Yanac Road .. .. | Resealing bitumen between Allotments 166 and 273, Parish of Tarranginnie .. | .. | .25 |
| " " .. .. | Resheeting gravel between Allotments 137 and 135 and 68 and 91, Parish of Tarranginnie | .. | .5 |
| " " .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 18 |
| MAFFRA SHIRE— | | | |
| Boisdale–Briagolong Road .. | General maintenance . . . . . | . | 5 |
| Briagolong–Dargo Road .. | General maintenance . . . . . | . | 5 |
| Bushy Park–Valencia Creek Road | General maintenance . . . . . | .. | 7 |
| Licola Road .. .. | General maintenance .. .. .. .. .. .. | .. | 40 |
| Maffra–Newry Road .. .. | General maintenance and bitumen sealing .. .. .. .. .. | .. | 7 |
| Maffra–Sale Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 7 |
| Stratford–Maffra Road .. | General maintenance and bitumen sealing .. .. .. .. .. | .. | 3 |
| Tinamba–Boisdale Road .. | General maintenance .. .. .. .. .. .. .. | .. | 14 |
| Tinamba–Newry Road .. | General maintenance and bitumen sealing .. .. .. .. .. | .. | 3 |
| Traralgon–Maffra Road .. | General maintenance and bitumen sealing .. .. .. .. .. | .. | 7 |
| MALDON SHIRE— | | | |
| Baringhup Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| Castlemaine–Maldon Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 10 |
| Castlemaine–Newstead Road .. | Patrol maintenance and gravel sheeting .. .. .. .. .. | .. | ·75 |
| Maldon–Eddington Road .. | Resealing, town of Maldon .. .. .. .. .. .. | .. | ·5 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 15 |
| Newstead Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| MANSFIELD SHIRE— | | | |
| Mansfield Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 42·7 |
| Mansfield–Tolmie Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·75 |
| Euroa–Merton Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·4 |
| Mansfield–Woods Point Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 18·5 |
| Benalla–Mansfield Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 10·0 |
| Maindample–Benalla Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·5 |
| Merton–Strathbogie Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·06 |
| | Carried forward .. .. .. .. .. .. | 23·67 | 3212·88 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 23·67 | 3212·88 |
| MARONG SHIRE— | | | |
| Bendigo-Eddington Road .. | Resheeting with local metal at Lockwood .. .. .. .. .. | .. | 2·31 |
| " " " .. | Forming at West Woodstock .. .. .. .. .. .. | .. | 1·63 |
| Bendigo-Serpentine Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 8·5 |
| Bendigo-Bridgewater Road .. | Resealing .. .. .. .. .. .. .. .. | .. | 1·24 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·24 |
| MARYBOROUGH BOROUGH— | | | |
| Avoca Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·2 |
| Ballarat Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·25 |
| Castlemaine Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·6 |
| Eddington Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·2 |
| MELTON SHIRE— | | | |
| Toolern Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| The Gap Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·75 |
| METCALFE SHIRE— | | | |
| Kyneton-Redesdale Road .. | Gravelling and rebinding metalled roadway .. .. .. .. | .. | 12·25 |
| MILDURA TOWN— | | | |
| Deakin Avenue .. .. | Shoulders of metal widened 18 inches and bitumen penetrated .. .. | .. | 1 |
| Langtree Avenue .. .. | General maintenance of bitumen surface .. .. .. .. .. | .. | ·42 |
| Punt Road .. .. .. | Bitumen surfacing .. .. .. .. .. .. | .. | ·48 |
| MILDURA SHIRE— | | | |
| Melbourne Road .. .. | Bitumen sealing west of Red Cliffs township .. .. .. .. | .. | 1 |
| Wentworth Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 15 |
| " " .. | Limestone rubbling top course between 5th street and Abbotsford Bridge .. | 2·61 | .. |
| Irymple Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 4·87 |
| Deakin Avenue Road .. | Resealing and general maintenance between 14th and 15th streets .. .. | .. | ·81 |
| MINHAMITE SHIRE— | | | |
| Hamilton - Macarthur - Port Fairy Road | Bitumen resealing .. .. .. .. .. .. .. | .. | 1·89 |
| " " " | Patrol maintenance throughout .. .. .. .. .. .. | .. | 17 |
| Warrnambool-Hawkesdale-Penshurst Road | Bitumen resealing .. .. .. .. .. .. | .. | 4·81 |
| " " " | Patrol maintenance throughout .. .. .. .. .. .. | .. | 22 |
| Woolsthorpe-Bessiebelle Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 29 |
| MIRBOO SHIRE— | | | |
| Mirboo-Yarragon Road .. | Resealing with bitumen from Mirboo North to Leongatha Junction .. .. | .. | 1·8 |
| " " " .. | Bitumen sealing from Leongatha Junction to Dykes .. .. .. | .. | 3·5 |
| " " " .. | Resheeting and repairs near Touzel's .. .. .. .. .. | .. | ·2 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| Mirboo-Yarragon Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 6 |
| Mirboo-Leongatha Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| Mirboo South Road .. .. | Resealing with bitumen at Mirboo North township .. .. .. .. | .. | ·8 |
| " " " .. .. | Bitumen sealing from Nichols Road to Limonite .. .. .. .. | .. | 2·8 |
| " " " .. .. | Superelevation of curves and resheeting .. .. .. .. .. | .. | ·5 |
| " " " .. .. | Timber-mill trestle and repairs, Mirboo-Tarwin Bridge .. .. .. | .. | .. |
| " " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 9 |
| Mardan Road .. .. | Sealing with bitumen through Webbs .. .. .. .. .. | .. | ·6 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 5 |
| Morwell-Mirboo Road .. | Bitumen sealing at Mirboo North township .. .. .. .. .. | .. | ·3 |
| " " " .. | Sanding from township to Darlimurla Junction .. .. .. .. .. | ·98 | .. |
| " " " .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| MOORABBIN SHIRE— | | | |
| Centre Dandenong Road .. | Resealing with bitumen between the Point Nepean Road and Moorabbin Road .. | .. | ·88 |
| " " " .. | General maintenance throughout with the exception of the above section .. | .. | 2·05 |
| Point Nepean Road .. .. | Patching with screenings and emulsion and resealing with bitumen from 4 chains south of Moorabbin railway gates to Wickham Road | .. | ·75 |
| " " " .. .. | Maintenance of edges of road throughout with the exception of the above section, laying culverts at Park Road and Highett Road | .. | 2·48 |
| MORDIALLOC CITY— | | | |
| Point Nepean Road .. .. | Widening and resheeting, including concrete kerbing .. .. .. | .. | ·61 |
| " " " .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3 |
| MORNINGTON SHIRE— | | | |
| Point Nepean Road .. .. | Rounding off corners, Tyabb and Point Nepean Roads, and patrol maintenance.. | .. | 9·87 |
| MORTLAKE SHIRE— | | | |
| Caramut-Lismore Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 29 |
| Mortlake-Ararat Road .. | Double coat bitumen surfacing between 0 mile 23 chains and 3 miles 25 chains from Woorndoo towards Bolac | .. | 3·02 |
| " " " .. | Scarifying, grading, and resheeting with gravel between 3 miles 25 chains and 6 miles 25 chains from Woorndoo towards Bolac | .. | 3 |
| Mortlake-Warrnambool Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Terang-Framlingham Road .. | Resheeting with metal, 12 feet macadam road from Hampden shire boundary to 3 miles 14 chains from Terang | .. | ·6 |
| " " " .. | Resheeting with metal, 12 feet macadam road from 6 miles to 6 miles 65 chains from Terang | .. | ·81 |
| " " " .. | Resheeting with metal, 12 feet macadam road from south-west corner of Allotment D, Section 21, parish of Keilambete, westerly, northerly, and south-westerly | .. | 1·63 |
| " " " .. | Double coat bitumen surfacing between 7 miles 52 chains and 9 miles 29 chains from Terang | .. | 1·71 |
| Terang-Mortlake Road .. | Widening existing 12 feet bitumen road with scoria and gravel from 2 miles 55 chains to 7 miles 7 chains from Mortlake towards Terang | .. | 4·4 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 7 |
| MORWELL SHIRE— | | | |
| Jumbuk Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 7·25 |
| Jeeralang West Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 23·5 |
| Morwell-Mirboo Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 16 |
| Prince's Highway .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| MOUNT ROUSE SHIRE— | | | |
| Ballarat-Hamilton Road .. | Modified macadam surfacing near Glenthompson .. .. .. .. | .. | ·31 |
| " " " .. | Double coat bitumen surfacing on scarified and reformed macadam between Dunkeld and Glenthompson | .. | 1·58 |
| " " " .. | Resheeting with gravel between Glenthompson and Wickliffe .. .. .. | .. | ·56 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 21 |
| Hamilton-Dunkeld Road .. | Bitumen surfacing on scarified and reformed macadam near Dunkeld .. .. | .. | ·45 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4 |
| Hamilton-Penshurst Road .. | Modified macadam between Penshurst and 9-mile post .. .. .. | .. | 1·47 |
| " " " .. | Resealing bitumen between Penshurst and 9-mile post .. .. .. | .. | ·78 |
| " " " .. | Double coat bitumen surfacing on fine scoria between Penshurst and 3-mile post to Port Fairy | .. | ·35 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Maroona-Glenthompson Road .. | R.C. pipe culvert and patrol maintenance throughout .. .. .. | .. | 1 |
| Penshurst-Caramut Road .. | Modified macadam between Penshurst and the 9-mile post .. .. .. | .. | ·33 |
| " " " .. | Double coat bitumen surfacing on scarified and reformed macadam between Penshurst and the 9-mile post | .. | 2·84 |
| " " " .. | Resealing bitumen in Penshurst .. .. .. .. .. .. | .. | ·29 |
| " " " .. | Resheeting water bound macadam with 2½-in. coarse scoria between Penshurst and 9-mile post | .. | ·54 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 15 |
| | Carried forward .. .. .. .. .. .. | 27·26 | 3592·39 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 27·26 | 3592·39 |
| MULGRAVE SHIRE— | | | |
| Ferntree Gully Road .. .. | Reshaping and widening from Oakleigh boundary to chainage ¼ mile .. .. | .. | ·25 |
| " " " .. .. | Reshaping and widening from chainage 2½ miles to 3 miles .. .. .. | .. | ·50 |
| " " " .. .. | Seal coating, chainage 1½ miles to 2 miles .. .. .. .. .. | .. | ·75 |
| NARRACAN SHIRE— | | | |
| Allambee-Childers Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8·5 |
| Childers-Thorpdale Road .. | Patrol maintenance throughout, including sand sheeting .. .. .. | .. | 1·5 |
| Mirboo-Yarragon Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6 |
| Moe-Yallourn Road .. .. | Sand sheeting throughout .. .. .. .. .. .. | .. | 2 |
| " " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2 |
| Prince's Highway (East) .. | Resealing with bitumen throughout .. .. .. .. .. | .. | 1·5 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. | .. | 1·5 |
| Trafalgar-Thorpdale Road .. | Reshaping, sheeting, and sealing with bitumen from 0 mile to 1·37 miles .. | .. | 1·37 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. | .. | 9 |
| Walhalla Road .. .. | Patrol maintenance throughout, including sand sheeting, loam sheeting, and insertion of 400 feet of 12-in. diameter pipe culverts | .. | 32 |
| Willowgrove Road .. .. | Resheeting with sand and bitumen sealing from 0 mile to 2 miles .. .. | .. | 2 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 18 |
| Yarragon-Leongatha Road .. | Sealing waterbound macadam and reshaping surface from 0 mile to 2 miles .. | .. | 2 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9 |
| Yarragon-Shady Creek Road .. | Patrol maintenance throughout, including sand sheeting .. .. .. | .. | 4 |
| NEWHAM AND WOODEND SHIRE— | | | |
| Lancefield Road .. .. | Laying fourteen culverts to replace open crossings, and sheeting with crushed rock | .. | 9 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9 |
| Mount Macedon Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 3·5 |
| Tylden Road .. .. | Forming and surfacing with crushed rock on Harper's Hill .. .. .. | ·29 | .. |
| " " .. .. | Reconditioning with crushed rock .. .. .. .. .. .. | .. | ·57 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·20 |
| NEWHAM AND WOODEND AND KYNETON SHIRES (Joint Works— | | | |
| Tylden Road .. .. | Reconditioning with crushed rock .. .. .. .. .. .. | .. | ·53 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·20 |
| NEWSTEAD AND MOUNT ALEXANDER SHIRE— | | | |
| Castlemaine-Daylesford Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 8 |
| Creswick Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 10 |
| Maldon Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| NUMURKAH SHIRE— | | | |
| Echuca-Picola Road .. .. | Reforming and resheeting near Baxter's .. .. .. .. .. | .. | ·39 |
| Nathalia-Kyabram Road .. | Reforming and gravelling south from Dillon's Lane .. .. .. .. | .. | ·38 |
| Nathalia-Picola Road .. | Reforming and gravelling north from railway crossing, Nathalia .. .. | .. | ·19 |
| Numurkah-Nathalia Road .. | Reforming and gravelling three sections between Cowan and Moss .. .. | .. | ·24 |
| " " " .. | Forming and gravelling east of Tuckett's Pit .. .. .. .. | .. | ·28 |
| " " " .. | Forming and gravelling south from Leaf's deviation .. .. .. .. | .. | ·7 |
| Shepparton-Numurkah-Cobram Road | Construction of reinforced concrete bridge at Numurkah .. .. .. | — | .. |
| " " " | Reforming and gravelling six sections south of Strathmerton .. .. .. | .. | 1·76 |
| OAKLEIGH CITY— | | | |
| Ferntree Gully Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | ·48 |
| Prince's Highway .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·12 |
| OMEO SHIRE— | | | |
| Benambra Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 13 |
| Bright-Omeo Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 31 |
| Day Avenue .. .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·75 |
| Swift's Creek-Omeo Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 20 |
| ORBOST SHIRE— | | | |
| Combienbar Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 8·5 |
| Marlo Road .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 9 |
| Prince's Highway .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·32 |
| OTWAY SHIRE— | | | |
| Beech Forest-Apollo Bay Road | Patrol maintenance from Apollo Bay .. .. .. .. .. | .. | 8 |
| Colac-Beech Forest Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·05 |
| Gellibrand-Carlisle Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 11 |
| Laver's Hill-Glenaire Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| OXLEY SHIRE— | | | |
| Bright Road .. .. | Forming, gravelling and culverts at old racecourse .. .. .. .. | 1·1 | .. |
| " " .. .. | Forming, gravelling and culverts at Bonnie Doon .. .. .. .. | ·5 | .. |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 25 |
| Greta-Glenrowan Road .. | General maintenance throughout and gravelling .. .. .. .. | .. | 6·5 |
| Wangaratta-Whitfield Road .. | General maintenance throughout and gravelling .. .. .. .. | .. | 28 |
| PHILLIP ISLAND SHIRE— | | | |
| Newhaven Road .. .. | Gravelling .. .. .. .. .. .. .. .. | .. | ·89 |
| " " .. .. | Resheeting with gravel .. .. .. .. .. .. .. | .. | ·8 |
| " " .. .. | General maintenance .. .. .. .. .. .. .. | .. | 4·5 |
| Phillip Island Road .. .. | Resealing with bitumen .. .. .. .. .. .. .. | .. | ·03 |
| " " " .. .. | Surfacing with sand .. .. .. .. .. .. .. | .. | 1·25 |
| " " " .. .. | General maintenance .. .. .. .. .. .. .. | .. | 2·05 |
| Ventnor Road .. .. | General maintenance throughout and sanding metal road .. .. .. .. | .. | 4·5 |
| PORT FAIRY BOROUGH— | | | |
| Hamilton Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·4 |
| Princes Highway-Warrnambool Road | Widening, metalling and general maintenance .. .. .. .. .. | .. | 2·6 |
| Princes Highway-Portland Road | General maintenance .. .. .. .. .. .. .. | .. | 1·56 |
| PORTLAND SHIRE— | | | |
| Bridgewater Road .. .. | Reforming and sheeting .. .. .. .. .. .. .. | .. | 1·61 |
| Portland-Casterton Road .. | Deviating course of Stokes' River, easterly from Digby Bridge, 436 feet .. | .. | — |
| " " " .. | Gravel sheeting at Digby .. .. .. .. .. .. .. | .. | 1 |
| Portland-Hamilton Road .. | Gravel sheeting at Heywood .. .. .. .. .. .. .. | .. | 1 |
| PRESTON CITY— | | | |
| Whittlesea Road .. .. | Resealing between Tyler Street and Darebin Creek bridge .. .. .. | .. | 1·35 |
| " " .. .. | General maintenance of shoulders throughout .. .. .. .. | .. | 2·72 |
| PYALONG SHIRE— | | | |
| Kilmore - Heathcote - Bendigo Road | Patrol maintenance .. .. .. .. .. .. .. | .. | 11·34 |
| Lancefield-Tooborac Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 10·8 |
| PYALONG AND MOIVOR SHIRES (Joint Works)— | | | |
| Lancefield-Tooborac Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 2·44 |
| QUEENSCLIFFE BOROUGH— | | | |
| Geelong Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 3·5 |
| Point Lonsdale Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·25 |
| RINGWOOD BOROUGH— | | | |
| Main Healesville Road .. | Resealing .. .. .. .. .. .. .. .. | .. | 1 |
| " " " .. | Shouldering and general maintenance .. .. .. .. .. | .. | 3·24 |
| Mount Dandenong Road .. | Shouldering and general maintenance .. .. .. .. .. | .. | 1·75 |
| Ringwood-Warrandyte Road .. | Shouldering and general maintenance .. .. .. .. .. | .. | 1·5 |
| | Carried forward .. .. .. .. .. .. | 29·15 | 3981 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward | 29·15 | 3981 |
| RINGWOOD BOROUGH AND DONCASTER AND TEMPLESTOWE SHIRE (Joint Works)— | | | |
| Warrandyte Road | General maintenance | .. | ·57 |
| RIPON SHIRE— | | | |
| Ballarat Road | General maintenance throughout | .. | 1.4 |
| Ballarat–Hamilton Road | Bitumen sealing | .. | ·07 |
| ,, ,, ,, | Bitumen resealing westerly from 13.7 miles from Skipton | .. | 2·61 |
| ,, ,, ,, | Reshaping and sheeting with scoria westerly from 4.31 miles from Skipton | .. | ·93 |
| ,, ,, ,, | Reshaping and sheeting with scoria westerly from 7.1 miles from Skipton | .. | 3·16 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 16·3 |
| Skipton Road | Bitumen resealing southerly from Beaufort | .. | ·67 |
| ,, ,, | Bitumen resealing southerly from 4.5 miles from Beaufort | .. | ·75 |
| ,, ,, | Reshaping, gravelling and widening curves southerly from 2.72 miles from Beaufort | .. | 1·8 |
| ,, ,, | Reshaping, and sheeting with scoria southerly from 8.02 miles from Beaufort | .. | 1·04 |
| ,, ,, | Reshaping, and sheeting with scoria southerly from 11.12 miles from Beaufort | .. | 1·39 |
| ,, ,, | Reshaping, and sheeting with scoria southerly from 15.87 miles from Beaufort | .. | 1·32 |
| ,, ,, | Patrol maintenance throughout | .. | 18·69 |
| ROCHESTER SHIRE— | | | |
| Bendigo–Echuca Road | Sealing to north boundary of township of Rochester | .. | ·54 |
| Corop Road | Gravelling from west boundary of Allotment 4, Parish of Bonn to boundary of shire | 1·92 | .. |
| Rochester – Bamawm – Prairie Road | Construction from east boundary of Allotment 213, Parish of Wanuip, to shire boundary | 6·45 | .. |
| ,, ,, ,, | Construction in gravel between Allotments 10 and 21, Parish of Rochester West | .. | ·65 |
| ,, ,, ,, | Sealing from north boundary of Allotment 142 to north boundary of Allotment 201, Parish of Bamawm | .. | 1·75 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 27·5 |
| Timmering Road | Sealing from Campaspe bridge to Alotment 112, Parish of Nanneella | .. | 1 |
| ,, ,, | Patrol maintenance throughout | .. | 4·5 |
| RODNEY SHIRE— | | | |
| Kyabram–Nathalia Road | Bitumen resealing | .. | .81 |
| ,, ,, ,, | Patrol maintenance | .. | 1 |
| Kyabram–Tongala Road | Bitumen respraying Kyabram township | .. | ·26 |
| ,, ,, | Patrol maintenance | .. | 1 |
| Mooroopna–Undera Road | Patrol maintenance | .. | 8 |
| Shepparton–Tatura Road | Bitumen respraying west of Mooroopna | .. | 2·2 |
| ,, ,, ,, | Modified macadam reconstruction Langdon's Swamp | .. | ·95 |
| ,, ,, ,, | Patrol maintenance | .. | 10 |
| Tatura – Byrneside – Kyabram Road | Bitumen respraying Kyabram to Lancaster | .. | 2·35 |
| ,, ,, ,, | Scarifying and spraying Pitt's to Lilford's | .. | 1·31 |
| ,, ,, ,, | Bitumen respraying Byrneside to O'Halloran's | .. | 2·57 |
| ,, ,, ,, | Patrol maintenance | .. | 16·5 |
| Tatura–Murchison Road | Gravelling from McIntyre's to Hammond's | 4·68 | .. |
| ,, ,, ,, | Bitumen resealing Tatura | .. | ·14 |
| ,, ,, ,, | Double coat spraying on local gravel | .. | ·97 |
| ,, ,, ,, | Patrol maintenance | .. | 13 |
| RODNEY SHIRE AND SHEPPARTON BOROUGH (Joint Works)— | | | |
| Shepparton–Tatura Road | Patrol maintenance | .. | 1·8 |
| ROMSEY SHIRE— | | | |
| Lancefield–Kilmore Road | Reconditioning with gravel north of Allotment 1, Parish of Springfield | .. | ·3 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 9·71 |
| Lancefield–Tooborac Road | Reconditioning with gravel east of Sections 58 and 60, Parish of Lancefield | .. | ·42 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 4·31 |
| Melbourne–Lancefield Road | Reconditioning wth gravel north from Bolinda Creek | .. | ·4 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 15·85 |
| Woodend–Lancefield Road | Patrol maintenance throughout | .. | 5·62 |
| ROSEDALE SHIRE— | | | |
| Carrajung–Gormandale Road | Patrol maintenance | .. | ·75 |
| Princes Highway | Patrol maintenance throughout | .. | ·91 |
| Seaspray Road | Patrol maintenance, including repairs due to flood damage | .. | 14·9 |
| Traralgon–Gormandale Road | Patrol maintenance | .. | 4·53 |
| Traralgon–Maffra Road | Gravel sheeting near Latrobe River | .. | 1·33 |
| ,, ,, ,, | Bitumen surfacing near Heyfield | .. | 1·62 |
| ,, ,, ,, | Patrol maintenance | .. | 20 |
| Willung Road | Patrol maintenance and erection of new culvert | .. | 8 |
| RUTHERGLEN SHIRE— | | | |
| Barnawartha–Howlong Road | Patrol maintenance | .. | 1·59 |
| Chiltern–Howlong Road | Patrol maintenance | .. | 4·6 |
| Rutherglen–Wahgunyah Road | Forming and gravelling new turn at Wahgunyah | .. | ·08 |
| ,, ,, ,, | Patrol maintenance | .. | 5·99 |
| Springhurst–Rutherglen Road | Installation of two concrete box culverts, Rutherglen township | .. | — |
| ,, ,, ,, | Patrol maintenance | .. | 7·8 |
| Murray Valley Road | Patrol maintenance | .. | ·79 |
| SALE TOWN— | | | |
| Prince's Highway | General maintenance | .. | 1 |
| Sale–Longford Road | General maintenance | .. | 3 |
| SEBASTOPOL BOROUGH— | | | |
| Ballarat–Hamilton Road | Construction, priming, and sealing, commencing at Ballarat–Rokewood Road | .. | ·85 |
| SEYMOUR SHIRE— | | | |
| Avenel–Longwood Road | General maintenance and regrading and gravelling, with pipe culvert in the township of Avenel | .. | ·6 |
| Goulburn Valley Road | General maintenance | .. | 8·8 |
| Highlands Road | Patrol maintenance | .. | 16 |
| Seymour–Yea Road | Regrading and gravelling, with pipe culvert from Seymour to Racecourse Road | .. | 1·2 |
| ,, ,, ,, | General maintenance balance of road | .. | 5·8 |
| Upper Goulburn Road | Patrol maintenance | .. | 11·4 |
| SHEPPARTON SHIRE— | | | |
| Dookie–Nalinga Road | General maintenance | .. | 8 |
| Katandra Road | General maintenance | .. | 9 |
| Pine Lodge Road | General maintenance | .. | 4 |
| Shepparton–Nalinga Road | General maintenance | .. | ·3 |
| Shepparton–Nagambie Road | General maintenance | .. | 8 |
| Shepparton–Numurkah Road | General maintenance | .. | 12 |
| SHEPPARTON BOROUGH— | | | |
| Shepparton–Mooroopna Road | Patrol maintenance | .. | ·07 |
| Shepparton–Nagambie Road | Double coat sealing between railway line and Guthrie's Bridge | .. | ·84 |
| ,, ,, ,, | Single coat resealing south of High Street | .. | ·25 |
| ,, ,, ,, | Patrol maintenance | .. | 1·59 |
| Shepparton–Nalinga Road | Single coat resealing east of railway line | .. | ·25 |
| ,, ,, ,, | Patrol maintenance | .. | ·75 |
| Shepparton–Numurkah Road | Single coat sealing south of Balaclava Road | .. | ·26 |
| ,, ,, ,, | Patrol maintenance | .. | 1 |
| | Carried forward | 42·2 | 4334·96 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 42·2 | 4334·96 |
| SOUTH BARWON SHIRE— | | | |
| Barwon Heads Road .. .. | Bitumen resealing from the 8-mile post towards Geelong .. .. .. | .. | 3 |
| " " " .. .. | Widening existing 12-ft. road to 16-ft. in modified macadam from Barwon Heads township towards Geelong | .. | 1·62 |
| " " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12 |
| Prince's Highway .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·33 |
| Torquay Road .. .. | Modified macadam surfacing towards Geelong, commencing 2 miles from Torquay end of road | .. | 1·08 |
| " " .. .. | Modified macadam surfacing from the bridge over Waurn Ponds Creek towards Torquay | .. | ·9 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 11 |
| SOUTH GIPPSLAND SHIRE— | | | |
| Albert River–Welshpool Road.. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·7 |
| Boolarra–Foster Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12 |
| Boolarra–Welshpool Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 11·8 |
| Falls Road .. .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5 |
| Foster–Yarram Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 11·89 |
| " " " .. | Bitumen sealing .. .. .. .. .. .. | .. | 6·11 |
| Hazel Park Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·8 |
| Main South Gippsland Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·1 |
| " " " " .. | Bitumen sealing .. .. .. .. .. .. | .. | 4·9 |
| Stoney Creek–Dollar Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·1 |
| Toora–Gunyah Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9·9 |
| Toora–Wonyip Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5 |
| Turton's Creek Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5 |
| ST. ARNAUD BOROUGH— | | | |
| Avoca–St. Arnaud Road .. | Resealing throughout .. .. .. .. .. .. | .. | 1·6 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·6 |
| Charlton Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| Navarre Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| St. Arnaud–Donald Road .. | Resealing .. .. .. .. .. .. | .. | ·32 |
| " " " | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2·5 |
| STAWELL BOROUGH— | | | |
| Ararat–Stawell Road .. .. | General maintenance .. .. .. .. .. .. | .. | 1 |
| Glenorchy Road .. .. | General maintenance .. .. .. .. .. .. | .. | 1 |
| Stawell–Grampians Road .. | General maintenance .. .. .. .. .. .. | .. | ·5 |
| STAWELL SHIRE— | | | |
| Landsborough Road .. .. | General maintenance .. .. .. .. .. .. | .. | 5 |
| Marnoo Road .. .. | Gravelling, Richardson River to Marnoo .. .. .. .. | 6·5 | .. |
| " " .. .. | Gravel sheeting .. .. .. .. .. .. | .. | ·24 |
| " " .. .. | General maintenance .. .. .. .. .. .. | .. | 35 |
| Navarre Road .. .. | Gravel sheeting .. .. .. .. .. .. | .. | ·72 |
| " " .. .. | General maintenance .. .. .. .. .. .. | .. | 21·5 |
| Stawell–Warracknabeal Road .. | Gravelling, Glenorchy to shire boundary .. .. .. .. | 2·05 | .. |
| Stawell–Warracknabeal Road .. | General maintenance .. .. .. .. .. .. | .. | 7·5 |
| Stawell – Glenorchy – Horsham Road | General maintenance .. .. .. .. .. .. | .. | 21·5 |
| Stawell–Grampians Road .. | Sheeting .. .. .. .. .. .. | .. | 1·09 |
| " " " .. | General maintenance .. .. .. .. .. .. | .. | 18 |
| STRATHFIELDSAYE SHIRE— | | | |
| Heathcote–Bendigo Road .. | Scarifying and reshaping with gravel .. .. .. .. | .. | 5·46 |
| " " " .. | Patrol maintenance .. .. .. .. .. .. | .. | 13 |
| Mandurang Road .. .. | Scarifying and reshaping with gravel .. .. .. .. | .. | 3·5 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. | .. | 8 |
| Strathfieldsaye Road .. .. | Scarifying and reshaping with gravel .. .. .. .. | .. | 4·25 |
| " " .. .. | Priming and sealing existing gravel roadway .. .. .. | .. | ·65 |
| " " .. .. | Patrol maintenance .. .. .. .. .. .. | .. | 8 |
| SWAN HILL SHIRE— | | | |
| Euston Road .. .. | Reshaping and blinding with gravel .. .. .. .. .. | .. | ·84 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 2·22 |
| Nyah–Ouyen Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 49 |
| Piangil Station Road .. | Double coat bitumen sealing .. .. .. .. .. .. | .. | 1·02 |
| " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| Swan Hill Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| Tooleybuc Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| Ultima Road .. .. | Road mix sealing .. .. .. .. .. .. | .. | ·5 |
| " " .. .. | Sand clay surfacing .. .. .. .. .. .. | .. | 5·22 |
| " " .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 20 |
| Ultima–Sea Lake Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 19 |
| TALBOT SHIRE— | | | |
| Maryborough–Avoca Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| Maryborough–Ballarat Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6 |
| TAMBO SHIRE— | | | |
| Bairnsdale–Bruthen Road .. | General maintenance .. .. .. .. .. .. | .. | ·6 |
| Basin Road .. .. .. | General maintenance .. .. .. .. .. .. | .. | 10·2 |
| Bruthen–Omeo Road .. | General maintenance .. .. .. .. .. .. | .. | ·8 |
| Mossiface Road .. .. | General maintenance .. .. .. .. .. .. | .. | 2 |
| Nowa Nowa–Buchan–Gelantipy Road | Regrading, gravelling, and culverts .. .. .. .. .. | .. | ·24 |
| " " " | General maintenance .. .. .. .. .. .. | .. | 33 |
| TOWONG SHIRE— | | | |
| Murray Valley Road .. | Reconditioning and gravelling south of Allotment 5A, Section C, Parish of Talgarno | .. | ·47 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 20·3 |
| Omeo Road .. .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| TRARALGON SHIRE— | | | |
| Princes Highway .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·5 |
| Traralgon–Balook Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12·25 |
| Traralgon Creek Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·5 |
| Traralgon–Gormandale Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·9 |
| Traralgon–Jeeralang Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8 |
| Traralgon–Maffra Road .. | Reforming and gravelling .. .. .. .. .. .. | ·82 | .. |
| " " " .. | Double coat bituminous surfacing on gravel and sand road .. .. .. | .. | 1·8 |
| " " " .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·3 |
| Tyers Road .. .. | Reforming and gravelling .. .. .. .. .. .. | ·6 | .. |
| " " .. .. | Double coat bituminous surfacing on gravel road .. .. .. | .. | 1·71 |
| " " .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 7·75 |
| TULLAROOP SHIRE— | | | |
| Avoca Road .. .. | Double coat sealing .. .. .. .. .. .. | .. | 3 |
| Ballarat Road .. .. | Reconstruction throughout .. .. .. .. .. .. | .. | 3·1 |
| Castlemaine–Maryborough Road | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12 |
| Dunolly Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | ·75 |
| Eddington Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 12·3 |
| Maryborough–Dunolly Road .. | Reconstruction throughout .. .. .. .. .. .. | .. | 1·25 |
| Natte Yallock Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 7·25 |
| | Carried forward .. .. .. .. .. .. | 52·17 | 4888·39 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works. Constructed. | Maintenance Works. Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| TUNGAMAH SHIRE— | Brought forward .. .. .. .. .. .. | 52·17 | 4888·39 |
| Cobram–Katamatite Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·02 |
| Cobram South Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 4·36 |
| Katandra Road .. .. | Forming and gravelling .. .. .. .. .. .. .. | ·68 | .. |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 9·47 |
| Numurkah – Tungamah – Wilby Road | Forming and gravelling in the Parishes of Dunbulbalane and Naringaningalook .. | ·66 | .. |
| ,, ,, ,, | Forming, reforming and gravelling in the Parish of Katamatite .. .. | ·4 | .. |
| ,, ,, ,, | Patrol maintenance throughout .. .. .. .. .. .. | .. | 30·7 |
| St. James Road .. .. | Forming and sanding in the Parish of St. James .. .. .. | ·8 | .. |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 8·98 |
| Yarrawonga–Cobram Road .. | Forming and gravelling in the Parish of Cobram .. .. .. | ·64 | .. |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | 1·5 |
| UPPER MURRAY SHIRE— | | | |
| Corryong Road .. .. | Forming, grading and gravelling through Allotment A, Section 7, Parish of Towong | ·52 | .. |
| ,, ,, .. .. | Bitumen resealing through town of Corryong .. .. .. .. | .. | 1·09 |
| ,, ,, .. .. | Widening, reforming and surfacing north-west of Allotments 1 and 2, Section Y, Parish of Colac Colac | .. | ·76 |
| ,, ,, .. .. | Widening with gravel and surfacing with granitic sand tarred road from Colac bridge to Cudgewa | .. | 3·9 |
| ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. | .. | 16·75 |
| Tintaldra Road .. .. | Forming, grading and gravelling between Allotment 4A, 4B, Section 9, and Allotment 1, Section 11, Parish of Cudgewa | ·82 | .. |
| ,, ,, .. .. | Reforming and surfacing through township of Cudgewa .. .. .. | .. | ·62 |
| ,, ,, .. .. | Reforming and gravelling through township of Tintaldra .. .. .. | .. | ·5 |
| ,, ,, .. .. | Patrol maintenance .. .. .. .. .. .. | .. | 14·25 |
| UPPER YARRA SHIRE— | | | |
| Don Road .. .. | Resealing between north end of floodway and Dairy Road .. .. .. | .. | ·98 |
| ,, .. .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·15 |
| Little Yarra Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 10·2 |
| Warburton Road .. .. | Resealing between Wesburn and Scotchman's Creek at Warburton .. .. | .. | 2·78 |
| ,, ,, .. .. | Resealing at Warburton between Fire Brigade Station and Pocknee's corner .. | .. | ·53 |
| ,, ,, .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 16 |
| VIOLET TOWN SHIRE— | | | |
| Murchison–Violet Town Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 4 |
| Violet Town–Dookie Road .. | Forming and gravelling on Vincent's Hill .. .. .. .. .. | 5·16 | .. |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 20 |
| WALPEUP SHIRE— | | | |
| Mildura Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·5 |
| Ouyen–Pinnaroo Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 80 |
| WANGARATTA BOROUGH— | | | |
| Beechworth Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| Sydney Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·5 |
| WANGARATTA SHIRE— | | | |
| Beechworth Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 11 |
| Rutherglen Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 3·5 |
| Wangaratta–Myrtleford Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6·5 |
| Yarrawonga Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6 |
| WANGARATTA–BEECHWORTH SHIRES (Joint Works)— | | | |
| Beechworth Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1 |
| WANNON SHIRE— | | | |
| Coleraine–Harrow–Apsley Road | Patrol maintenance throughout .. .. .. .. .. .. | .. | 35 |
| Hamilton – Coleraine – Casterton Road | Patrol maintenance throughout .. .. .. .. .. .. | .. | 18 |
| ,, ,, ,, | Reforming and gravelling over metal road from railway crossing to racecourse .. | .. | 1·72 |
| Wannon Bridge Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6 |
| WARANGA SHIRE— | | | |
| Elmore–Colbinabbin Road .. | Resheeting with gravel binder .. .. .. .. .. .. | .. | ·4 |
| Heathcote–Elmore Road .. | Forming and gravelling .. .. .. .. .. .. .. | ·38 | .. |
| WARRAGUL SHIRE— | | | |
| Bloomfield Road .. .. | Surfacing with crushed rock and sealing with bitumen .. .. .. | .. | ·44 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8 |
| Brandy Creek Road .. .. | Sheeting with crushed rock and sealing with bitumen .. .. .. | .. | ·61 |
| ,, ,, ,, .. .. | Resealing with bitumen .. .. .. .. .. .. .. | .. | 2·87 |
| ,, ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8·20 |
| Darnum–Allambee Road .. | Resealing with bitumen .. .. .. .. .. .. .. | .. | 2·62 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 8 |
| Prince's Highway .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 1·05 |
| Warragul–Korumburra Road .. | Resealing with bitumen .. .. .. .. .. .. .. | .. | 3 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 15·5 |
| Warragul–Leongatha Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9 |
| WARRNAMBOOL SHIRE— | | | |
| Allansford–Nirranda Road .. | Inserting 4-ft. culvert with end walls in place of old wooden structure at Naylor's corner | .. | .. |
| ,, ,, ,, .. | Resealing with bitumen—Wallace's Road to Delaney's corner .. .. .. | .. | 8·5 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 17 |
| Caramut–Lismore Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 6 |
| Framlingham Road .. .. | Resheeting with metal binding and double coat sealing waterbound macadam road | .. | ·5 |
| ,, ,, .. .. | Resealing .. .. .. .. .. .. .. .. | .. | ·19 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 4·5 |
| Garvoc–Laang Road .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5 |
| Mortlake Road .. .. | Widening by 5 feet with metal and binding—between Warrnambool and Bushfield | ·5 | .. |
| ,, ,, .. .. | Resealing with bitumen—West of Purnim .. .. .. .. .. | .. | 3 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 16 |
| Peterborough Road .. .. | Clearing, forming and gravelling .. .. .. .. .. .. | 2·63 | .. |
| ,, ,, .. .. | Double coat spraying gravel road recently constructed near Peterborough .. | .. | 3 |
| ,, ,, .. .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 9 |
| Timboon–Nirranda Road .. | Reshaping and sheeting with scoria—easterly from Nullawarre .. .. | .. | 2 |
| ,, ,, ,, .. | Spraying with cold tar and bitural—easterly from Nullawarre .. .. | .. | 2 |
| ,, ,, ,, .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 5·25 |
| WERRIBEE SHIRE— | | | |
| Geelong–Bacchus Marsh Road .. | Patrol maintenance, grading in of shoulders and spreading crushed rock at Balliang East | .. | 2·37 |
| WHITTLESEA SHIRE— | | | |
| Epping Road .. .. | Resealing with bitural and general maintenance throughout .. .. .. | .. | 10 |
| Main Whittlesea Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 14 |
| Wallan Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 6 |
| Whittlesea–Kinglake Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 4 |
| WIMMERA SHIRE— | | | |
| Dooen Road .. .. | Modified macadam surfacing east of Allotments 20, 21, 23, Parish of Dooen .. | .. | ·85 |
| Horsham–Murtoa Road .. | Forming between Allotments 110 and 122, Parish of Jung .. .. .. | .. | ·15 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. .. | .. | 8·4 |
| Horsham–Wal Wal Road .. | Loaming south of Allotments 30, 31, 34, 35, Parish of Drung .. .. .. | .. | 1·53 |
| Natimuk Road .. .. | Spreading 2-in. gravel between Allotments 241 and 243, Parish of Vectis East .. | .. | 3·11 |
| ,, ,, .. .. | Gravelling and loaming between Allotments 245A and 227C, Parish of Vectis, and Allotments 16 and 21A, Parish of Quantong | .. | 1·38 |
| ,, .. .. | General maintenance between Allotments 16 and 21A, Parish of Quantong .. | .. | ·4 |
| | Carried forward .. .. .. .. .. .. | 65·36 | 5407·47 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | 65·36 | 5407·47 |
| WIMMERA AND ARAPILES SHIRES (Joint Works)— | | | |
| Horsham–Hamilton Road .. | General maintenance between Horsham town boundary and Bungalally .. | .. | 2·8 |
| WIMMERA AND ARAPILES SHIRES, AND HORSHAM TOWN (Joint Works)— | | | |
| Horsham–Hamilton Road .. | Resealing bitumen .. .. .. .. .. .. .. | .. | ·18 |
| WINCHELSEA SHIRE— | | | |
| Birregurra–Dean Marsh Road .. | Widening and resheeting with gravel eastwards from Birregurra–Forrest Road .. | .. | ·57 |
| ,, ,, ,, ,, .. | Gravelling through Allotment 1, Section XV., Parish of Whoorel .. .. | .. | ·33 |
| ,, ,, ,, ,, .. | Widening and resheeting with gravel through Allotment 3, Section X., Parish of Whoorel | .. | ·09 |
| ,, ,, ,, ,, .. | Gravelling near Whoorel Station .. .. .. .. .. .. | .. | ·37 |
| ,, ,, ,, ,, .. | Widening and resheeting with gravel near Allotment 65A, Parish of Whoorel .. | .. | ·15 |
| ,, ,, ,, ,, .. | Gravelling west and south of Allotments 68B, 67B, and 66B, Parish of Whoorel .. | .. | ·76 |
| ,, ,, ,, ,, .. | General maintenance throughout balance of road .. .. .. .. | .. | 5·23 |
| Birregurra–Forrest Road .. | Gravelling and resheeting near Allotment 2, Section XL., Parish of Whoorel .. | .. | ·63 |
| ,, ,, ,, .. | Resealing near Birregurra eastwards from Barwon Bridge .. .. .. | .. | ·45 |
| ,, ,, ,, .. | Resheeting with gravel near Barwon Downs .. .. .. .. | .. | ·47 |
| ,, ,, ,, .. | General maintenance throughout balance of road .. .. .. .. | .. | 8·45 |
| WODONGA SHIRE— | | | |
| Kiewa–Wodonga Road .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·1 |
| Sydney Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·4 |
| Tallangatta Road .. .. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·88 |
| Wodonga–Yackandandah Road | Construction of floodway and culvert at Middle Creek .. .. .. | .. | ·11 |
| ,, ,, ,, | Patrol maintenance .. .. .. .. .. .. .. | .. | 3·25 |
| WONTHAGGI BOROUGH— | | | |
| Loch–Wonthaggi Road .. | Resealing .. .. .. .. .. .. .. | .. | ·8 |
| Wonthaggi–Inverloch Road .. | Modified macadam surfacing and resealing .. .. .. .. .. | .. | 2·2 |
| Wonthaggi–Korumburra Road.. | Patrol maintenance .. .. .. .. .. .. .. | .. | ·8 |
| WOORAYL SHIRE— | | | |
| Fairbank Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 2·08 |
| Farmers Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 13·5 |
| Inverloch–Leongatha Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 16 |
| Inverloch–Wonthaggi Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 2·5 |
| Kongwak–Inverloch Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 2·16 |
| Leongatha–Mirboo Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 6·8 |
| Leongatha–Yarragon Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 13·75 |
| Lower Tarwin Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 12·5 |
| Main South Gippsland Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 17·5 |
| Mardan Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 10 |
| Turtons Creek Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 6·75 |
| Wild Dog Valley Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 9 |
| WYCHEPROOF SHIRE— | | | |
| Birchip–Sea Lake Road .. | Clearing, forming, boxing and limestoning .. .. .. .. .. | 1·03 | ·25 |
| Birchip–Wycheproof Road .. | Forming, boxing, limestoning and gravelling .. .. .. .. | 2·84 | .. |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 16 |
| Sea Lake–Ultima Road .. | Forming, boxing and limestoning .. .. .. .. .. .. | .. | 1·04 |
| Woomelang–Sea Lake Road .. | Clearing, forming and grading .. .. .. .. .. .. | .. | 1·99 |
| YACKANDANDAH SHIRE— | | | |
| Dederang Road .. .. | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 28 |
| Gundowring Road .. .. | Construction and gravelling along eastern boundary allotments 2 and 2A, Section A, and near Allotment 3B, Section VI, Parish of Gundowring | 1·10 | .. |
| ,, ,, .. .. | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 20·1 |
| Kergunyah South Road .. | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 11·2 |
| Kiewa East Road .. .. | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 3·2 |
| Kiewa–Wodonga Road .. | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 6 |
| Myrtleford–Yackandandah Road | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 5·4 |
| Yackandandah–Wodonga Road | Patrol maintenance, placing pipe culverts .. .. .. .. .. | .. | 15·75 |
| YARRAWONGA SHIRE— | | | |
| Tungamah–Welby Road .. | General maintenance .. .. .. .. .. .. .. | .. | 1·25 |
| Wangaratta–Yarrawonga Road | General maintenance .. .. .. .. .. .. .. | .. | 10·5 |
| Yarrawonga–Cobram Road .. | General maintenance .. .. .. .. .. .. .. | .. | ·5 |
| ,, ,, ,, .. | Reforming, metalling and bitumen surfacing .. .. .. .. | ·25 | .. |
| YEA SHIRE— | | | |
| Hylands Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | ·2 |
| Molesworth–Dropmore Road .. | Raising flood formation near Williamson's .. .. .. .. .. | .. | ·1 |
| ,, ,, ,, .. | Gravelling near Robinson's .. .. .. .. .. .. | .. | ·21 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | ·10 |
| Upper Goulburn Road .. | Forming, gravelling, construction of timber bridge and reinforced concrete box culvert | .. | ·14 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 23 |
| Whittlesea–Yea Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 30 |
| Yarra Glen–Glenburn Road .. | General maintenance throughout .. .. .. .. .. .. | .. | 11 |
| Yea–Glenburn Road .. .. | General maintenance throughout .. .. .. .. .. .. | .. | 18 |
| | Total .. .. .. .. .. .. .. | 70·58 | 5754·96 |
| | UNDER DIRECT SUPERVISION OF BOARD. | | |
| ALBERTON SHIRE— | | | |
| Boolarra–Welshpool Road .. | General maintenance from Ryton to Woorarra .. .. .. .. | — | 8·5 |
| BALLARAT SHIRE— | | | |
| Ballarat–Creswick Road .. | Re-sealing with bitumen at Ballarat City boundary .. .. .. .. | .. | 1·31 |
| BELLARINE SHIRE— | | | |
| Geelong–Queenscliff Road .. | Widening, regulating and re-sheeting with sand at Leopold Hill .. .. | .. | 1·1 |
| ,, ,, ,, .. | Re-sealing between Moolap and Leopold .. .. .. .. .. | .. | 2 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 17 |
| Geelong–Portarlington Road .. | Double coat sealing between Curlewis and Drysdale .. .. .. .. | .. | 3·2 |
| ,, ,, ,, .. | Double coat sealing in Portarlington township .. .. .. .. | .. | ·9 |
| ,, ,, ,, .. | Re-sealing between Moolap and Leopold .. .. .. .. .. | .. | 1·9 |
| ,, ,, ,, .. | Construction in modified macadam in Drysdale township .. .. .. | .. | 1·1 |
| ,, ,, ,, .. | Patrol maintenance .. .. .. .. .. .. .. | .. | 17 |
| Portarlington–St. Leonards Road | Regulating with salamander near Portarlington Township .. .. .. | .. | 2 |
| Barwon Heads–Ocean Grove Road | Patrol maintenance .. .. .. .. .. .. .. | .. | 1·5 |
| BERWICK SHIRE— | | | |
| Hallam–Emerald Road .. | Construction of reinforced concrete structure at junction of drain and Eumemmering Creek, near Green's Crossing | .. | ·02 |
| Woori Yallock–Pakenham–Koowee-rup Road | Patrol maintenance between Shepherd's Creek and Gembrook Road at Cockatoo .. | .. | 6 |
| BRAYBROOK SHIRE— | | | |
| Princes Highway .. .. | Widening railway crossing at Brooklyn, including provision of new culverts .. | .. | ·02 |
| | Carried forward .. .. .. .. .. | — | 63·55 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works. Constructed. | Maintenance Works. Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER DIRECT SUPERVISION OF BOARD—*continued.* | | |
| | Brought forward .. .. .. .. .. .. | — | 63·55 |
| BROADFORD SHIRE— | | | |
| Main Sydney Road .. .. | Re-sealing and general maintenance at Broadford .. .. .. .. | .. | 1·45 |
| BUNINYONG SHIRE— | | | |
| Ballarat–Rokewood Road .. | Re-sealing south of Sebastopol .. .. .. .. .. .. | .. | ·39 |
| COHUNA SHIRE— .. .. | | | |
| Murray Valley Road .. .. | General maintenance .. .. .. .. .. .. .. | .. | 1·34 |
| GISBORNE SHIRE— .. .. | | | |
| Melbourne–Bendigo Road .. | Re-sealing in Gisborne township .. .. .. .. .. | .. | 1·34 |
| GLENLYON SHIRE— | | | |
| Ballarat–Daylesford Road .. | Re-sealing at Eganstown .. .. .. .. .. .. | .. | 3·3 |
| Castlemaine–Daylesford Road .. | Re-sealing at Mt. Franklin .. .. .. .. .. .. | .. | 4 |
| HEALESVILLE SHIRE— | | | |
| Healesville–Woori Yallock Road | Clearing, reforming and loaming between Dairy and the River Yarra .. .. | .. | 1·86 |
| ,, ,, ,, ,, | Tightening up and painting trusses and treating stringers and piles on bridge over Yarra near Woori Yallock | .. | ·02 |
| HEIDELBERG AND ELTHAM SHIRES (Joint Works)— | | | |
| Heidelberg–Eltham Road .. | Strengthening Plenty River bridge by welding, about 3 miles from Heidelberg .. | .. | ·02 |
| HUNTLY SHIRE— | | | |
| Bendigo–Echuca Road .. | Scarifying, resheeting with gravel, priming and sealing at Huntly .. .. | .. | 1·08 |
| ,, ,, ,, .. | General maintenance .. .. .. .. .. .. | .. | 2·16 |
| KEILOR SHIRE— | | | |
| Melbourne–Bendigo Road .. | Shouldering in Keilor township .. .. .. .. .. .. | .. | ·91 |
| ,, ,, ,, .. | Re-sealing in Keilor township .. .. .. .. .. .. | .. | ·2 |
| KILMORE SHIRE— .. .. | | | |
| Main Sydney Road .. .. | General maintenance at Kilmore .. .. .. .. .. .. | .. | 1·63 |
| MORNINGTON SHIRE— | | | |
| Point Nepean Road .. .. | Reconstruction in fine crushed rock on Mt. Eliza south of Tower Road .. | .. | ·52 |
| MORWELL SHIRE— | | | |
| Boolarra–Foster Road .. | General maintenance from Boolarra to Boolarra South .. .. .. | .. | 6 |
| ORBOST SHIRE— | | | |
| Cann Valley Road .. .. | Patrol maintenance from Cann River to New South Wales border .. .. | .. | 29 |
| Genoa–Gipsy Point Road .. | Patrol maintenance throughout .. .. .. .. .. .. | .. | 7 |
| QUEENSCLIFF BOROUGH— | | | |
| Point Lonsdale Road .. | Double coat sealing throughout .. .. .. .. .. .. | .. | 1·55 |
| ,, ,, ,, .. | General maintenance throughout .. .. .. .. .. .. | .. | 1·55 |
| SEYMOUR SHIRE— | | | |
| Main Sydney Road .. .. | General maintenance at Seymour .. .. .. .. .. .. | .. | 1·56 |
| SALE TOWN— | | | |
| Princes Highway .. .. | Construction of a timber bridge over Flooding Creek 1 mile west of Sale Post Office | 0·02 | .. |
| SOUTH GIPPSLAND SHIRE— | | | |
| Boolarra–Foster Road .. | General maintenance from Gunyah to Turton's Creek turn off .. .. | .. | 8·75 |
| TAMBO SHIRE— | | | |
| Princes Highway .. .. | Patrol maintenance through Lakes Entrance township .. .. .. | .. | 2·37 |
| ,, ,, .. | Re-sealing between North Arm bridge and Club Hotel, Lakes Entrance .. | .. | 0·16 |
| TULLAROOP SHIRE— | | | |
| Castlemaine–Maryborough Road | General maintenance .. .. .. .. .. .. .. | .. | 13 |
| WINCHELSEA SHIRE— | | | |
| Princes Highway .. .. | Re-sealing in Winchelsea township .. .. .. .. .. | .. | 0·64 |
| | Total .. .. .. .. .. .. | ·02 | 155·35 |

# APPENDIX G.

# COUNTRY ROADS BOARD.

## DEVELOPMENTAL ROADS.

### STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928, DURING THE YEAR ENDED 30TH JUNE, 1933.

| Name of Municipality and Road. | Nature and Locality of Works. | Works Constructed. |
|---|---|---|
| | | Miles. |
| | UNDER MUNICIPALITIES. | |
| ALBERTON SHIRE— | | |
| Albert River Road | Clearing, forming and grading south of Allotment 55B, Parish of Binginwarri | ·1 |
| " " " | Forming and gravelling from C. Montgomery's to Hiawatha Hall | ·68 |
| " " " | Construction of two bridges near Allotment 17, Parish of Wonyip | .. |
| Gelliondale Road | Forming and gravelling from J. Barry's to Collis's Corner | 1·2 |
| Jenkin's Road | Reforming and gravelling from Boolarra–Welshpool Road near English's Corner to H. Johnson's | 1·15 |
| Tarra Valley Road | Forming and crushed rock surfacing from McKenzie's to Alford's | 1·55 |
| Whitelaw's Track Road | Earthworks along McLeod's Cutting, between Lower Whitelaw and J. Alford's | 1·15 |
| BAIRNSDALE SHIRE— | | |
| Bulumwaal–Tabberabbera Road | Forming and gravelling at Bulumwaal | ·62 |
| Glenaladale–Lindenow Road | Forming and gravelling at Woodglen | ·45 |
| Lindenow–Meerlieu Road | Forming and gravelling | 2·08 |
| BALLAN SHIRE— | | |
| Bungeeltap Road | Reforming and gravelling opposite Allotment 9, Section 17, Parish of Yaloak | ·27 |
| BENALLA SHIRE— | | |
| Molyullah–Tatong Road | Reforming and gravelling near Tatong | ·81 |
| BERWICK SHIRE— | | |
| Beaconsfield–Emerald Road | Reforming and sanding at Dewhurst | 1·3 |
| BIRCHIP SHIRE— | | |
| Berriwillock Road | Forming, boxing and gravelling | 1·02 |
| Curyo West Road | Forming and grading west of Curyo | 1·25 |
| Kinnabulla West Road | Forming and grading west of Kinnabulla | 2·1 |
| Watchupga Road | Forming and grading east and west of Watchupga | ·8 |
| BRIGHT SHIRE— | | |
| Buffalo River Road | Construction and gravelling through Section G, Town and Parish of Myrtleford | ·75 |
| Happy Valley Road | Construction and gravelling along north boundary of Allotment 2, Section 21, Parish of Barwidgee | ·24 |
| BULLA SHIRE— | | |
| Konagaderra Road | Forming and culverts and fencing from Konagderra through Section 5 north-westerly | 1·13 |
| Riddell Road | Forming, reforming and crushed rock surfacing | ·78 |
| BUNINYONG SHIRE— | | |
| Hennessy's Road | Construction at the east end of the road | ·43 |
| Murphy's Road | Construction at the south end of the road | ·36 |
| CHARLTON SHIRE— | | |
| Borung–Charlton Road | Forming and stone crossing | ·86 |
| Glenloth Road | Forming and pipe culverts from end of gravel to end of road | 1·88 |
| Lake Marmal Road | Gravelling and three stone crossings | ·22 |
| Teddywaddy Road | Forming, gravelling and stone crossing in the Parish of Teddywaddy | ·46 |
| Yeungroon Road | Forming and gravelling, Parish of Charlton East | ·43 |
| CORIO SHIRE— | | |
| Gilmore's Road | Forming and gravelling at Ripley | 1·98 |
| McArthur's Road | Forming and gravelling at Staughton Vale. | 1·23 |
| CRANBOURNE SHIRE— | | |
| Manks Road | Forming and gravelling from Tooradin Station Road to Muddy Gates | 1·09 |
| Pearcedale Road | Forming and gravelling near Bassett's | 1·21 |
| DEAKIN SHIRE— | | |
| Echuca East Road | Construction | ·76 |
| Girgarre East Road | Construction | ·6 |
| " North Road | Construction | ·43 |
| " West Road | Construction | ·19 |
| Strathallan East Road | Construction | ·38 |
| Taripta Road | Construction | 1·01 |
| Tongala East Road | Construction | ·38 |
| DIMBOOLA SHIRE— | | |
| Detpa–Hindmarsh Road | Forming, rubbling, &c. south of Lake Hindmarsh school | ·38 |
| Glenlee–Jeparit Road | Forming, rubbling, &c. between Jeparit and Glenlee | ·39 |
| DUNDAS SHIRE— | | |
| Melville Forest Road | Forming and gravelling opposite Allotment 4, Section 3, Allotments 5P, 1A, 4 and 5, Section 14, and Allotment 2, Section 4, Parish of Urangara | 1·18 1·18 |
| EUROA SHIRE— | | |
| Merton–Strathbogie Road | Reforming and gravellig between Strathbogie and Merton | 1·13 |
| Strathbogie Road | Reforming and gravelling between Strathbogie and Merton | 1·13 |
| FLINDERS SHIRE— | | |
| Brown's Road | Forming, loaming and fencing deviations | ·49 |
| Main Creek Road | Gravelling at Splitter's Creek | ·8 |
| GLENELG SHIRE— | | |
| Dergholm–Elderslie Road | Forming and gravelling | ·66 |
| GLENLYON SHIRE— | | |
| Daylesford–Trentham Road | Forming, grading, and gravelling, Daylesford–Musk section | 1·22 |
| GOULBURN SHIRE— | | |
| Longwood–Ruffy Road | Clearing, forming and gravelling near Eddy's, Hill's and Maygar's | 3 |
| GRENVILLE SHIRE— | | |
| Pittong Road | Forming and gravelling between chainages 24,400 and 29,765, southwards from 300 feet south of Ballarat–Hamilton Road | 1·01 |
| HAMPDEN SHIRE— | | |
| Cundare–Duverney Road | Forming and metalling at Poliah South | ·32 |
| " " " | Forming and crushed rock surfacing between Poliah South and Shire boundary at Junction Creek | ·89 |
| Foxhow Road | Forming and gravelling between Leslie Manor and Foxhow | 1·73 |
| " | Forming and gravelling near Foxhow | ·71 |
| | Carried forward | 49·55 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Names of Municipality and Road. | Nature and Locality of Works. | Works Constructed. |
|---|---|---|
| | | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | |
| | Brought forward .. .. .. .. .. .. | 49·55 |
| HEYTESBURY SHIRE— | | |
| Devil's Gully Road .. .. | Reforming and gravelling .. .. .. .. .. .. .. | 1·1 |
| South Ecklin Road .. .. | Forming and crushed rock surfacing .. .. .. .. .. .. | ·6 |
| Timboon–Cowley's Creek Road | Reforming and metalling .. .. .. .. .. .. .. | ·7 |
| Timboon–Scott's Creek Road .. | Reforming and gravelling .. .. .. .. .. .. .. | 1 |
| HUNTLY SHIRE— | | |
| Elmore–Raywood Road .. | Forming and gravelling with swamp cement .. .. .. .. .. | ·59 |
| ,, ,, ,, .. | Forming .. .. .. .. .. .. .. | ·44 |
| KARA KARA SHIRE— | | |
| Coonooer Road .. .. | Forming and gravelling at Coonooer West .. .. .. .. .. | ·81 |
| Marnoo–St. Arnaud Road .. | Forming and gravelling at Marnoo East .. .. .. .. .. .. | ·3 |
| Sandy Creek Road .. .. | Forming and gravelling at Rostron .. .. .. .. .. .. | ·56 |
| Swanwater Road .. .. | Forming and metalling north of Swanwater Railway Station .. .. .. .. | ·45 |
| KARKAROOC SHIRE— | | |
| Hopetoun–Lascelles Road .. | Reconstruction between Allotment 48, Parish of Cambacanya and Allotment 38, Parish of Goyura | ·21 |
| KERANG SHIRE— | | |
| Murrabit West Road .. .. | Crushed rock surfacing in the Parishes of Murrabit West and Benjeroop .. .. | 1·61 |
| Winlaton Road .. .. | Gravelling in the Parish of Boga .. .. .. .. .. .. | ·25 |
| ,, ,, .. .. | Sand clay construction in the Parish of Boga .. .. .. .. .. | 1·9 |
| KORONG SHIRE— | | |
| Emu–Logan Road .. .. | Gravelling adjoining Allotments 22, 25 and 27, Parish of Kooroc .. .. .. | ·63 |
| Kinypanial Road .. .. | Forming and construction of inverts adjoining Allotments 170, 171 and 173, Parish of Kinypanial | 1·94 |
| Kurting–Rheola Road .. | Gravelling adjoining Allotment C8, Parish of Glenalbyn .. .. .. .. | ·66 |
| Mysia East Road .. .. | Forming, gravelling, &c. adjoining Alloments 177 and 179, Parish of Mysia .. .. | 1·11 |
| Mysia West Road .. .. | Gravelling adjoining Allotment 148, Parish of Mysia .. .. .. .. | ·55 |
| Wedderburne–Spring Hill Road | Gravelling adjoining Allotment 49, Parish of Berrimal and Allotment 24, Parish of Kurraca | 1·19 |
| Wychitella North Road .. | Gravelling adjoining Allotments 50 and 57, Parish of Buckrabanyule .. .. .. | ·94 |
| KORUMBURRA SHIRE— | | |
| Korumburra South Road .. | Surfacing with gravel adjoining Allotments 34D and C, Parish of Kongwak .. .. | 1·06 |
| KOWREE SHIRE— | | |
| Edenhope–Natimuk Road .. | Forming and gravelling .. .. .. .. .. .. .. .. | ·17 |
| Elderslie Road .. .. | Forming and gravelling .. .. .. .. .. .. .. .. | ·4 |
| KYNETON SHIRE— | | |
| Baynton Road .. .. | Forming and gravelling .. .. .. .. .. .. .. .. | ·38 |
| LOWAN SHIRE— | | |
| Netherby Road .. .. | Forming and metalling between Allotments 26A, 26B and 27, Parish of Lorquon .. | ·89 |
| ,, ,, .. .. | Forming and metalling between Allotments 23 and 17, Parish of Lorquon .. .. | ·35 |
| Winiam Road .. .. | Forming and gravelling between Allotments 70 to 85 and 49 to 54, Parish of Winiam .. | 1·74 |
| Yanac South Road .. .. | Forming and gravelling near Allotments 23–29 and 49–92, Parish of Yanac .. .. | ·46 |
| MAFFRA SHIRE— | | |
| Bundalaguah Road .. .. | Construction of timber bridge 30 feet long .. .. .. .. .. | ·01 |
| MARONG SHIRE— | | |
| Newbridge–Shelbourne Road .. | Forming and gravelling at Shelbourne .. .. .. .. .. .. | ·64 |
| ,, ,, ,, .. | Forming and gravelling between Eastville and Jaanecoorie .. .. .. .. | ·6 |
| Yarraberb Road .. .. | Forming and gravelling easterly from railway line .. .. .. .. .. | ·61 |
| MILDURA SHIRE— | | |
| Colignan Road .. .. | Forming, grading and rubbling between the Melbourne–Mildura railway and the River Murray | 1·53 |
| Karween North Road .. .. | Forming, grading and rubbling north of Karween Station .. .. .. .. | ·4 |
| Red Cliffs West Road .. .. | Limestone metalling foundation course between Red Cliffs and Cardross .. .. | 1·7 |
| MINHAMITE SHIRE— | | |
| Condah–Macarthur Road .. | Forming and gravelling .. .. .. .. .. .. .. .. | 1·83 |
| MIRBOO SHIRE— | | |
| Allambee–Thorpdale Road .. | Sanding .. .. .. .. .. .. .. .. .. | ·45 |
| Nicholl's Road .. .. | Sanding .. .. .. .. .. .. .. .. .. | 1·03 |
| NARRACAN SHIRE— | | |
| Shady Creek Road .. .. | Reforming and sanding south of Crown Allotments 91, 92 and 87B, Parish of Darnum .. | 1·23 |
| NEWHAM AND WOODEND SHIRE— | | |
| Campaspe Road .. .. | Reforming and metalling on School Hill deviation and drainage works .. .. | ·16 |
| ,, ,, .. .. | Reforming and metalling on Connolly's deviation .. .. .. .. .. | ·14 |
| ORBOST SHIRE— | | |
| Bete Bolong–Waygara Road .. | Gravelling in three sections .. .. .. .. .. .. .. | ·78 |
| Jarrahmond Road .. .. | Gravelling in four sections .. .. .. .. .. .. .. | ·8 |
| OXLEY SHIRE— | | |
| Boggy Creek Road .. .. | Regrading, gravelling and culverts at Gibson's and Gayer's .. .. .. .. | 1·2 |
| Buffalo River Road .. .. | Regrading and gravelling at Fletcher's .. .. .. .. .. | ·5 |
| Carboor–Meadow Creek Road .. | Regrading, gravelling and culverts at Smith's and Fisher's .. .. .. .. | ·7 |
| Fifteen Mile Creek Road .. | Widening, regrading and gravelling at Forge's and School, Myrrhee .. .. .. | 1 |
| PORTLAND SHIRE— | | |
| Barehills Road .. .. | Forming and metalling .. .. .. .. .. .. .. | ·68 |
| Drik Drik–Winnap Road .. | Forming and metalling opposite Holme's .. .. .. .. .. .. | ·3 |
| Grubbed Road .. .. | Forming and gravelling at Beauglehole's and Beason's .. .. .. .. | 1·29 |
| ,, ,, .. .. | Forming and gravelling at Devlin's .. .. .. .. .. | ·25 |
| PYALONG SHIRE— | | |
| Lancefield–Tooborac Road .. | Grading, forming and culverts part Patterson's deviation .. .. .. .. | ·36 |
| ROCHESTER SHIRE— | | |
| Echuca West Road .. .. | Construction between Allotments 62, 63 and 64, 65, parish of Millewa .. .. | 1·24 |
| Kotta East Road .. .. | Construction south of Allotments 32 and 36, parish of Torrumbarry .. .. .. | 1·28 |
| RODNEY SHIRE— | | |
| Mooroopna–Undera Road .. | Sanding from Undera township to Fidge's corner .. .. .. .. .. | 1·24 |
| Tatura–Toolamba Road .. | Gravelling between Allotments 120, 120A, 120B, 45, 45B, 74, 65, 49, 37, 33, 21, 120E, 73, 69B, and 65, 35, 35A, parish of Toolamba | 1·94 |
| ,, ,, ,, .. | Forming between Allotments 37 and 21 and 120B and 65, parish of Toolamba .. .. | ·55 |
| ROMSEY SHIRE— | | |
| Baynton Road .. .. | Forming and gravelling adjoining Allotments 27, 66, 67, 82A and 87A, parish of Lancefield | 1·17 |
| SOUTH GIPPSLAND SHIRE— | | |
| Foster–Mount Best Road .. | Gravelling from Hurwood's to Mount Best .. .. .. .. .. | 2·15 |
| STAWELL SHIRE— | | |
| Marnoo–St. Arnaud Road .. | Gravelling east of Marnoo .. .. .. .. .. .. .. | 1·17 |
| Pomonal Road .. .. | Granite sanding, Stawell to Basin Creek and McLeod's .. .. .. .. | ·8 |
| TOWONG SHIRE— | | |
| Yabba Road .. .. | Gravelling northerly from south-west corner of Allotment 8, Section VII., parish of Yabba | ·18 |
| ,, ,, .. .. | Gravelling at north-west corner of Allotment 79, Section X., parish of Yabba .. .. | ·13 |
| ,, ,, .. .. | Gravelling through Allotment 5, Section XIV., parish of Yabba .. .. .. | ·66 |
| TRARALGON SHIRE— | | |
| Traralgon–Jeeralang Road .. | Widening, reforming and regrading through Allotments 22 and 23, parish of Callignee .. | ·66 |
| TUNGAMAH SHIRE— | | |
| Boweya Road .. .. | Forming and sanding in the parish of Karrabumet .. .. .. .. .. | ·96 |
| Katandra Road .. .. | Forming and gravelling in the parish of Katandra .. .. .. .. .. | 2·04 |
| Wunghnu–Youanmite Road .. | Forming and gravelling in the parish of Youanmite .. .. .. .. | ·36 |
| ,, ,, ,, .. | Forming and gravelling in the parish of Youanmite .. .. .. .. | ·53 |
| ,, ,, ,, .. | Forming and gravelling in the parish of Youanmite .. .. .. .. | ·74 |
| Yabba North Road .. .. | Forming and gravelling in the parishes of Waggarandall and Yabba .. .. .. | ·57 |
| Yabba South Road .. .. | Forming and gravelling in the parish of Yabba .. .. .. .. .. | ·96 |
| UPPER MURRAY SHIRE— | | |
| Benambra–Corryong Road .. | Construction of three span timber pile bridge and approaches over Nariel Creek at Hodgson's Crossing | ·12 |
| Murray Valley Road .. .. | Forming, grading and gravelling north of Allotment 7, Section 9 and Allotment 8, Section 8, parish of Tintaldra | ·35 |
| Thowgla Road .. .. | Forming, grading and loaming west of Allotments 18A, 19A, 23 and 28, parish of Thowgla .. | 1·27 |
| | Carried forward .. .. .. .. .. .. | 111·8 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Works Constructed. |
|---|---|---|
| | | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | |
| | Brought forward .. .. .. .. .. .. | 111·8 |
| VIOLET TOWN SHIRE— | | |
| Harry's Creek Road .. .. | Forming and gravelling near Hume Highway .. .. .. .. .. | ·93 |
| WANGARATTA SHIRE— | | |
| Peechelba Station Road .. | Forming, boxing and gravelling adjoining Allotments 75A1, 75A and 74, parish of Boorhaman | ·69 |
| WANNON SHIRE— | | |
| Melville Forest Road .. .. | Forming and gravelling Melville Forest to Vasey Railway Station .. .. .. | 2·04 |
| WARANGA SHIRE— | | |
| Mount Camel–Corop Road .. | Forming and gravelling .. .. .. .. .. .. .. | 1·35 |
| Mount Camel Estate Road .. | Forming and gravelling .. .. .. .. .. .. .. | ·79 |
| WARRNAMBOOL SHIRE— | | |
| Childers Cove Road .. .. | Forming and gravelling to complete road .. .. .. .. .. .. | 3·54 |
| Naringal Road .. .. | Clearing, forming and gravelling adjacent to previously constructed section .. .. | ·83 |
| Panmure Road .. .. | Clearing, forming and surfacing with crushed rock adjacent to previously constructed section | ·43 |
| WOORAYL SHIRE— | | |
| Canavan Road .. .. | Gravelling alongside J. H. McKean's .. .. .. .. .. .. | 1·12 |
| ,, ,, .. .. | Gravelling alongside Mt. Eccles South School .. .. .. .. .. | 1 |
| Dollar–Dumbalk Road .. | Metalling near Nicholas' and Henry's .. .. .. .. .. .. | ·53 |
| ,, ,, ,, .. | Metalling with crushed rock from Harris' to Cordery's .. .. .. .. | 1·48 |
| Dumbalk Road .. .. | Metalling from junction with Dollar–Dumbalk Road to near Day's .. .. .. | ·83 |
| ,, ,, .. .. | Gravelling about 1 mile east of the Dumbalk Butter Factory .. .. .. | ·16 |
| Mardan–Dumbalk Road .. | Gravelling alongside Nerrena East School .. .. .. .. .. .. | ·21 |
| ,, ,, ,, .. | Forming, grading and trimming near Nerrena East School .. .. .. .. | ·22 |
| ,, ,, ,, .. | Metalling from near Nerrena East School towards Mardan .. .. .. .. | ·78 |
| ,, ,, ,, .. | Metalling with crushed rock near Couper's .. .. .. .. .. | ·19 |
| Mecniyan–Nerrena Road .. | Grubbing, clearing, forming, grading and trimming .. .. .. .. | 2·8 |
| WYCHEPROOF SHIRE— | | |
| Berriwillock–Woomelang Road.. | Forming, boxing and limestoning .. .. .. .. .. .. | 1·74 |
| Culgoa–Lalbert Road .. | Forming, boxing and limestoning .. .. .. .. .. .. | 1·59 |
| Nullawil–Winston Road .. | Forming, boxing and gravelling .. .. .. .. .. .. .. | ·35 |
| YACKANDANDAH SHIRE— | | |
| Kergunyah Road .. .. | Construction of timber bridge and approaches on north boundary of Allotment 4, Section 1A, Parish of Tangambalanga | ·11 |
| Myrtleford–Yackandandah Road | Gravelling near north boundary of Allotment 9, Section 3, Parish of Bruarong .. .. | ·3 |
| Sandy Creek Road .. .. | Gravelling along east boundary of Allotments A3, A4 and 13, Section VI., Parish of Tangambalanga | ·3 |
| YEA SHIRE— | | |
| Flowerdale Road .. .. | Construction of bridge over Mattinson's Creek .. .. .. .. .. | .. |
| ,, ,, .. .. | Clearing, forming and gravelling near Fry's .. .. .. .. .. | ·22 |
| ,, ,, .. .. | Clearing, forming, grading and gravelling near Mattinson's .. .. .. .. | ·23 |
| | Total .. .. .. .. .. .. .. | 136·56 |
| | UNDER DIRECT SUPERVISION OF THE BOARD. | |
| HEYTESBURY SHIRE— | | |
| Eastern Creek Road .. .. | Reforming and surfacing with scoria easterly from its junction with Cobden–Port Campbell–Princetown Road | .28 |
| OTWAY SHIRE— | | |
| Gellibrand East Road .. | Grubbing, clearing, forming, grading, trimming and draining through Allotments 20C, 20F, and 33C, Parish of Yaugher. | .9 |
| | Total .. .. .. .. .. .. .. | 1·18 |

# APPENDIX H.

# COUNTRY ROADS BOARD.

## STATE HIGHWAYS.

### STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED AND MAINTAINED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928 DURING THE YEAR ENDED 30TH JUNE, 1933.

| Name of Highway and Section. | Nature and Locality of Work. | Works Reconstructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| **UNDER DIRECT SUPERVISION OF THE BOARD.** | | | |
| PRINCES HIGHWAY (WEST)— | | | |
| Section 1 | Sealing crushed rock west of Werribee, shire of Werribee. Day labour | 1·9 | |
| " | Improvement of alignment at Hovell's Creek, shire of Corio. Day labour | ·23 | |
| " | Resealing west of Moriac, shire of Barrarbool. Day labour | 2·9 | |
| " | General maintenance | | 52 |
| Section 2 | Redecking small culverts between 70 and 75 mile posts, shire of Winchelsea. Day labour | ·01 | |
| " | Resheeting with fine crushed rock west of Winchelsea, shire of Winchelsea. Day labour | 1 | |
| " | Repairs to pavement with crushed rock between Warncoort and Colac–Winchelsea shire boundary, shire of Colac. Day labour | 3·27 | |
| " | Realignment of curve at 81·5 mile post, shire of Colac. Day labour | ·1 | |
| " | Resealing between Warncoort and Colac–Winchelsea shire boundary, shire of Colac. Day labour | 3·37 | |
| " | Resealing penetration macadam between Pirron Yallock and Weerite, shires of Colac, Heytesbury and Hampden. Day labour | 13·71 | |
| " | General maintenance | | 48·81 |
| Section 3 | Resealing penetration macadam between Gnotuk and Boorcan, shire of Hampden. Day labour | 3·23 | |
| " | Construction of timber stock crossing over Mt. Emu Creek between Camperdown and Terang, shire of Hampden. Day labour | ·02 | |
| " | Resealing five sections of semi-penetration and modified macadam between Panmure and Allansford, shire of Warrnambool. Day labour | 5·39 | |
| " | Construction of reinforced concrete culvert at Allansford, shire of Warrnambool | ·01 | |
| " | Resealing waterbound macadam between Illowa and Tower Hill, shire of Warrnambool. Day labour | 2·63 | |
| " | Shouldering with scoria between Killarney and Rosebrook, shire of Belfast. Day labour | 3·86 | |
| " | General maintenance | | 52·38 |
| Section 4 | Forming, boxing and surfacing with fine crushed rock at 183-mile post between Port Fairy and Portland, shire of Belfast | ·2 | |
| " | Construction of five reinforced concrete cell culverts between 197 and 199 mile posts, shire of Belfast | ·05 | |
| " | Resheeting with gravel immediately west of Yambuk, shire of Belfast | 3·24 | |
| " | Replacing stone culvert at 183·6-mile peg between Port Fairy and Yambuk with pipe culvert and realigning approaches in crushed rock, shire of Belfast | ·22 | |
| " | Widening and resheeting in buckshot gravel between Carrol's Hill and Eumerella River, shire of Belfast. Day labour | 4·74 | |
| " | Double coat sealing buckshot gravel across Eumerella Flats between Eumerella River and Belfast–Portland shire boundary, shire of Belfast. Day labour | 4·12 | |
| " | Benching curve at 216-mile post near Surrey River bridge at Narrawong, shire of Portland. Day labour | ·02 | |
| " | Widening and resheeting in buckshot gravel between Narrawong and Allestree, shire of Portland. Day labour | 2·25 | |
| " | Resealing experimental sections at Heywood, shire of Portland. Day labour | ·24 | |
| " | General maintenance | | 49·8 |
| Section 5 | Construction of a new timber and steel bridge over Glenelg River at Dartmoor, shire of Portland | ·23 | |
| " | Surfacing with buckshot gravel between Winnap and Dartmoor, shire of Portland. Day labour | 2·79 | |
| " | Widening with limestone rubble and surfacing with limestone crushed rock between Dartmoor and South Australian border, shire of Portland. Day labour | 2·85 | |
| " | Resealing two sections of semi-penetration macadam between limestone ridge and South Australian border, shire of Portland. Day labour | 5·25 | |
| " | General maintenance | | 44·62 |
| PRINCES HIGHWAY (EAST)— | | | |
| Section 1 | Construction of a four-cell reinforced concrete culvert at Deep Creek at approximately 38-mile post, shire of Berwick | ·01 | |
| " | Surfacing shoulders with crushed rock Oakleigh to Springvale, shires of Mulgrave and Dandenong. Day labour | 3·6 | |
| " | Resealing in Berwick township, shire of Berwick. Day labour | ·8 | |
| " | Surfacing shoulders with salamander in Berwick township, Berwick shire. Day labour | ·8 | |
| " | Construction of reinforced concrete pipe culvert at Pakenham, shire of Berwick. Day labour | ·01 | |
| " | Resheeting with crushed rock and spraying at Officer, shire of Berwick. Day labour | 0·6 | |
| " | Road mix seal coat from Oakleigh to Springvale, at Hallam and Officer to Officedale, shires of Berwick, Dandenong and Mulgrave | 5·1 | |
| " | Construction of a three-cell reinforced concrete culvert at Deep Creek near Pakenham, shire of Berwick. Day labour | ·01 | |
| " | Resheeting with fine crushed rock west of Berwick, shire of Berwick. Day labour | ·8 | |
| " | Resheeting with fine crushed rock near Toomue Creek, Pakenham, shire of Berwick. Day labour | 0·6 | |
| " | Sanding shoulders of road between Longwarry and Drouin, shire of Buln Buln. Day labour | ·8 | |
| " | Construction and sanding of deviation at Longwarry, shire of Buln Buln. Day labour | ·25 | |
| " | Resheeting with fine crushed rock west of Dandenong, shire of Dandenong. Day labour | ·3 | |
| " | Replacing timber culvert with pipe culvert at Whiskey Creek, shire of Berwick | ·01 | |
| " | Sapping stringers and treatment of bridge and painting handrails, Bunyip River bridge, shire of Berwick | ·04 | |
| " | General maintenance | | 49·63 |
| Section 2 | Clearing, forming, grading, boxing and gravelling at Blind Joe's Creek deviation in Rosedale township, shire of Rosedale | ·65 | |
| " | Resheeting with fine crushed rock east of Warragul, shire of Warragul. Day labour | ·3 | |
| | Carried forward | 82·51 | 297·24 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Nature and Locality of Works. | Works Reconstructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER DIRECT SUPERVISION OF THE BOARD—*continued.* | | |
| | Brought forward .. .. .. .. .. | 82·51 | 297·24 |
| PRINCE'S HIGHWAY (EAST)—*continued.* | | | |
| Section 2—*continued.* .. .. | Resheeting with fine crushed rock and spraying east of Moe, shire of Narracan. Day labour | ·5 | .. |
| ,, .. .. .. | Resheeting with granitic sand and spraying from Haunted Hills to Moe River, shire of Narracan. Day labour | 4·8 | .. |
| ,, .. .. .. | Resealing from near Morwell River to Traralgon shire boundary, shire of Morwell. Day labour | 4·8 | .. |
| ,, .. .. .. | Roadmix seal from Yallourn turnoff to near Morwell River, shire of Morwell. Day labour | 2 | .. |
| ,, .. .. .. | Resealing east of Warragul, shire of Warragul. Day labour .. .. | ·4 | .. |
| ,, .. .. .. | Resealing between Traralgon township and Flynn's Creek, shire of Traralgon. Day labour | 5·01 | .. |
| ,, .. .. .. | Construction of two stock crossings east of Traralgon, shire of Traralgon. Day labour | ·1 | .. |
| ,, .. .. .. | Resealing between Flynn's Creek and Blind Joe's Creek, shire of Rosedale. Day labour | 3·22 | .. |
| ,, .. .. .. | Widening two culverts east of Traralgon, shire of Traralgon. Day labour .. | ·02 | .. |
| ,, .. .. .. | Replacing two old wooden culverts with reinforced concrete pipe culverts east of Rosedale, shire of Rosedale. Day labour | ·02 | .. |
| ,, .. .. .. | Replacing timber bridge with single line of reinforced concrete pipes at Kilmany, shire of Rosedale. Day labour | ·01 | .. |
| ,, .. .. .. | Resealing between Kilmany and Wurruk, shire of Rosedale. Day labour .. | 5·29 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. | .. | 63·28 |
| Section 3 .. .. | Construction of a three-span timber bridge over Nuntin Creek, together with approaches, about 2 miles on Melbourne side of Stratford, shire of Avon. Day labour | ·02 | .. |
| ,, .. .. .. | Resealing between Sale and Montgomery Railway Station, shire of Avon. Day labour | 3·52 | .. |
| ,, .. .. .. | Construction of five stock crossings between Sale and Stratford, shire of Avon. Day labour | ·05 | .. |
| ,, .. .. .. | Widening culverts between Stratford and Bairnsdale, shires of Avon and Bairnsdale. Day labour | ·03 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 38·08 |
| Section 4 .. .. | Forming, grading, trimming, draining, and gravelling west of Slaughter House Creek at Johnsonville, shire of Tambo | ·36 | .. |
| ,, .. .. .. | Reforming, trimming, and gravelling through Broome's Gully, near Johnsonville, shire of Tambo | ·36 | .. |
| ,, .. .. .. | Construction of two timber bridges at Salt Creek, about 10 miles east of Bairnsdale, together with approaches, shire of Tambo | ·1 | .. |
| ,, .. .. .. | Earth filling and gravelling approaches to Swan Reach Bridge over Tambo River, shire of Tambo | ·2 | .. |
| ,, .. .. .. | Resealing through Lucknow township, shire of Bairnsdale. Day labour .. | ·94 | .. |
| ,, .. .. .. | Reforming, reshaping, and sheeting between Bairnsdale and Nicholson, shire of Bairnsdale. Day labour | 5·58 | .. |
| ,, .. .. .. | Reforming, regrading, and gravelling between Swan Reach and Kalimna, shire of Tambo. Day labour | 5·12 | .. |
| ,, .. .. .. | Double coat sealing from Lucknow to Nicholson, and Swan Reach to Fitzclarence's deviation, shires of Bairnsdale and Tambo. Day labour | 9·03 | .. |
| ,, .. .. .. | Resealing from top of Jemmy's Point to North Arm Bridge, shire of Tambo. Day labour | ·62 | .. |
| ,, .. .. .. | Reforming, reshaping, and gravelling, Newmerella Hill to Snowy River Bridge, shire of Orbost. Day labour | 2 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 58·83 |
| Section 5 .. .. | Construction of two timber bridges and approaches at Brodribb River, shire of Orbost | 1·15 | .. |
| ,, .. .. .. | Grubbing, clearing, forming, grading, trimming, and draining between Eucre Creek and Storey's Creek, shire of Orbost | 1·63 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 57 |
| Section 6 .. .. | Re-alignment west from New South Wales border, shire of Orbost. Day labour | 3 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 42·8 |
| WESTERN HIGHWAY— | | | |
| Section 1 .. .. | Painting hand-rails of Pyke's Creek Bridge at 44-mile post, shire of Ballan. Day labour | ·05 | .. |
| ,, .. .. .. | Heavy patching, west of Melton, shire of Melton. Day labour .. .. | 2 | .. |
| ,, .. .. .. | Reconstruction of shoulders in salamander from Albion to Deer Park, shire of Braybrook. Day labour | 2·8 | .. |
| ,, .. .. .. | Resheeting with asphaltic macadam at Bungaree, shire of Bungaree. Day labour | ·45 | .. |
| ,, .. .. .. | Resheeting and shouldering at Deer Park, shire of Braybrook. Day labour.. | 1 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 55 |
| Section 2 .. .. | Resealing with bitumen, Cardigan to Burrumbeet, shire of Ballarat. Day labour | 5 | .. |
| ,, .. .. .. | Resealing with bitumen through Trawalla to Beaufort, shire of Ripon. Day labour | 6·47 | .. |
| ,, .. .. .. | Resealing with bitumen west of Beaufort, shire of Ripon. Day labour .. | 3·05 | .. |
| ,, .. .. .. | Erection of timber bridge over Green Hills Creek, east of Ararat, shire of Ararat. Day labour | ·01 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 50·3 |
| Section 3 .. .. | Resealing with bitumen from Armstrong through Great Western, shire of Stawell. Day labour | 6·02 | .. |
| ,, .. .. .. | Gravelling, priming, and sealing east of Stawell, shire of Stawell. Day labour | 3·44 | .. |
| ,, .. .. .. | Gravelling, priming, and sealing in Stawell borough. Day labour .. .. | ·61 | .. |
| ,, .. .. .. | Sealing and resealing with bitumen in Stawell borough. Day labour .. | 1·25 | .. |
| ,, .. .. .. | Resealing west of Stawell, shire of Stawell. Day labour .. .. .. | 3·5 | .. |
| ,, .. .. .. | Resealing through Dadswell's Bridge, shire of Stawell. Day labour .. | 16·75 | .. |
| ,, .. .. .. | Reconstruction of curve at Armstrongs, including regrading and gravelling, shire of Stawell. Day labour | ·1 | .. |
| ,, .. .. .. | Forming, reforming, and gravelling west of Wal Wal turnoff, shire of Wimmera. Day labour | 7·35 | .. |
| ,, .. .. .. | Construction in modified macadam east of Horsham, shire of Wimmera. Day labour | 1·45 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 52·36 |
| Section 4 .. .. | Forming, grading, and gravelling between Lochiel School and Kiata township, shire of Dimboola | 2 | .. |
| ,, .. .. .. | Resealing sand clay north-west of Horsham, shire of Wimmera. Day labour | 6·7 | .. |
| ,, .. .. .. | Priming and sealing gravel through Wail, shire of Wimmera. Day labour .. | 7·66 | .. |
| ,, .. .. .. | Resealing gravel and sand clay formation east of Dimboola, shire of Dimboola. Day labour | 2·32 | .. |
| ,, .. .. .. | Reshaping metal east of Dimboola, shire of Dimboola. Day labour .. | ·4 | .. |
| ,, .. .. .. | Priming and sealing metal east of Dimboola, shire of Dimboola. Day labour | ·91 | .. |
| ,, .. .. .. | Re-alignment and construction of curve east of Dimboola, shire of Dimboola. Day labour | ·01 | .. |
| ,, .. .. .. | Gravelling between Wail and Dimboola, shire of Dimboola. Day labour .. | 2·5 | .. |
| ,, .. .. .. | Construction and surfacing with limestone through Lochiel, shire of Dimboola. Day labour | 6·05 | .. |
| ,, .. .. .. | Construction of curve at Salisbury, shire of Dimboola. Day labour .. | ·19 | .. |
| ,, .. .. .. | Construction and surfacing with limestone gravel at Salisbury, shire of Dimboola. Day labour | 1·33 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. .. | .. | 42·62 |
| | Carried forward .. .. .. .. .. .. | 233·76 | 757·51 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Nature and Locality of Works. | Works Reconstructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER DIRECT SUPERVISION OF THE BOARD—*continued.* | | |
| | Brought forward .. .. .. .. .. | 233·76 | 757·51 |
| CALDER HIGHWAY— | | | |
| Section 1 .. .. .. | Road mix sealing at Holden, shire of Bulla. Day labour .. .. .. | 3 | .. |
| ,, .. .. .. | Heavy patching at Adeney's Hill, shire of Gisborne. Day labour .. .. | 2 | .. |
| ,, .. .. .. | Redecking bridge over Maribyrnong River, shire of Keilor. Day labour .. | ·02 | .. |
| ,, .. .. .. | Rendering pavement non-skid at Black Forest, shires of Gisborne and Newham and Woodend. Day labour | 8 | .. |
| ,, .. .. .. | Sheeting shoulders with crushed rock at Keilor, shire of Keilor. Day labour .. | ·5 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 59·87 |
| Section 2 .. .. .. | Road mix seal near Derby, shire of Marong. Day labour .. .. .. | 2·12 | .. |
| ,, .. .. .. | Resealing east of Derby Railway Station, shire of Marong. Day labour .. | ·19 | .. |
| ,, .. .. .. | Beaching scours from Bendigo to Inglewood, shire of Marong. Day labour .. | ·2 | .. |
| ,, .. .. .. | Priming and sealing gravel of south approach to Bridgewater Bridge, shire of Marong. Day labour | ·1 | .. |
| ,, .. .. .. | Rescaling from Bendigo to Marong, shire of Marong. Day labour .. .. | 5·1 | .. |
| ,, .. .. .. | Resheeting with granitic sand north of Harcourt, shire of Marong. Day labour | 2·07 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 43·09 |
| Section 3 .. .. .. | Erection of timber bridge over Nardoo Creek, together with approaches and cutting new channel ¾ mile from Wedderburn, shire of Korong | ·02 | .. |
| ,, .. .. .. | Reconditioning, priming, and sealing, Wedderburn to Woosang, shire of Korong. Day labour | 3·02 | .. |
| ,, .. .. .. | Regrading, re-alignment, and gravelling north of Glenalbyn and north of Wedderburn, shire of Korong. Day labour | ·53 | .. |
| ,, .. .. .. | Rescaling north of Wedderburn, shire of Korong. Day labour .. .. | 4·18 | .. |
| ,, .. .. .. | Road mix seal near Glenalbyn and south of Wedderburn, shire of Korong. Day labour | 3·22 | .. |
| ,, .. .. .. | Construction of timber bridge at Kurting, shire of Korong .. .. | ·02 | .. |
| ,, .. .. .. | Resheeting with crushed rock, Barrakee Hill to Charlton, shire of Charlton. Day labour | 2·81 | .. |
| ,, .. .. .. | Resheeting with gravel northerly from Charlton, shire of Charlton .. .. | 2·6 | .. |
| ,, .. .. .. | Reconditioning, priming, and sealing, Charlton to Teddywaddy, shire of Charlton. Day labour | 4·35 | .. |
| ,, .. .. .. | Reconditioning, priming, and sealing, Fairview to Wycheproof, shire of Charlton. Day labour | 7·05 | .. |
| ,, .. .. .. | Construction of culvert south of Charlton, shire of Charlton .. .. | ·01 | .. |
| ,, .. .. .. | Resealing south of Wycheproof, shire of Wycheproof. Day labour .. | 1·16 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 51·48 |
| Section 5 .. .. .. | Forming and reforming, Mittyack to Ouyen, shire of Walpeup. Day labour .. | 5·7 | .. |
| ,, .. .. .. | Re-alignment, forming, and limestoning west of Mittyack, shire of Walpeup. Day labour | ·23 | .. |
| ,, .. .. .. | Forming and limestoning bad sections, Mittyack to Ouyen, shire of Walpeup. Day labour | 1 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 44·74 |
| Section 6 .. .. .. | Forming and reforming between Ouyen and Trinita, shire of Walpeup. Day labour | 2 | .. |
| ,, .. .. .. | Forming and limestoning bad sections between Ouyen and Trinita, shire of Walpeup. Day labour | 1 | .. |
| ,, .. .. .. | Forming and limestoning at the Big Mallee between Trinita and Hattah, shire of Mildura. Day labour | 1 | .. |
| ,, .. .. .. | Forming and limestoning at patrol hut, Hattah, shire of Mildura. Day labour | 1·35 | .. |
| ,, .. .. .. | Forming and limestoning south of Nowingi, shire of Mildura. Day labour .. | ·75 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 40·22 |
| NORTHERN HIGHWAY— | | | |
| Section 1 .. .. .. | Forming, grading, boxing, trimming and gravelling between Epsom and Huntly, near southern boundary of Huntly township, shire of Huntly | 1·1 | .. |
| ,, .. .. .. | Scarifying, reshaping, trimming and gravelling at southern boundary of Elmore township, shire of Huntly | ·27 | .. |
| ,, .. .. .. | Resheeting with gravel northerly from Epsom, shire of Huntly. Day labour | ·76 | .. |
| ,, .. .. .. | Construction of a bridge at Huntly at the 104-mile post, shire of Huntly .. | ·01 | .. |
| ,, .. .. .. | Resheeting with gravel, reconditioning, priming and sealing at Huntly township, shire of Huntly. Day labour | 2·33 | .. |
| ,, .. .. .. | Resealing lengths previously sealed between Bagshot and Elmore, shires of Huntly and Rochester. Day labour | 12·05 | .. |
| ,, .. .. .. | Reconditioning, priming and sealing lengths previously unsealed, Bagshot to Elmore, Huntly shire. Day labour | .. | 5·72 |
| ,, .. .. .. | Resheeting with gravel from Rochester to Bamawm turnoff, shire of Rochester. Day labour | ·98 | .. |
| ,, .. .. .. | Reconditioning, priming and sealing from Rochester to Strathallan, shire of Rochester. Day labour | 4·04 | .. |
| ,, .. .. .. | Widening bridge over Waranga channel at 139-mile post, shire of Rochester. Day labour | ·02 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 48·39 |
| HUME HIGHWAY— | | | |
| Section 1 .. .. .. | Reconstruction of bridge over Goulburn River at Seymour, shire of Seymour .. | ·02 | .. |
| ,, .. .. .. | Improving waterway of Dry Creek bridge near Broadford, shire of Broadford. Day labour | ·02 | .. |
| ,, .. .. .. | Resealing at Somerton, Donnybrook to Wallan, south of Broadford, and Broadford to Tallarook, shires of Seymour, Broadford, Kilmore and Broadmeadows. Day labour | 17·2 | .. |
| ,, .. .. .. | Redecking culvert at Green's Pinch near Kilmore, shire of Kilmore. Day labour | ·01 | .. |
| ,, .. .. .. | Surfacing at Sunday Creek with modified macadam, shire of Seymour. Day labour | ·2 | .. |
| ,, .. .. .. | Resheeting with fine crushed rock north of Kilmore, shire of Kilmore. Day labour | 1·15 | .. |
| ,, .. .. .. | Forming and gravelling bridge approaches near Goulburn River, Seymour, shire of Seymour. Day labour | ·1 | .. |
| ,, .. .. .. | Heavy patching with crushed rock between Craigieburn and Donnybrook, shire of Broadmeadows. Day labour | ·2 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 48·32 |
| Section 2 .. .. .. | Construction of reinforced concrete bridge between Baddaginnie and Benalla at approximately 116·5-mile post, shire of Benalla | ·02 | .. |
| ,, .. .. .. | Construction of a three-cell culvert at approximately 114-mile post, shire of Benalla | ·01 | .. |
| ,, .. .. .. | Construction and lengthening eight culverts between Euroa and Violet Town, together with approaches, shires of Euroa and Violet Town | ·01 | .. |
| ,, .. .. .. | Widening and resheeting between Faithful's Creek Bridge and Violet Town township, shires of Euroa and Violet Town. Day labour | 3·35 | .. |
| ,, .. .. .. | Priming and sealing between Faithful's Creek bridge and Violet Town, shires of Euroa and Violet Town. Day labour | 7·14 | .. |
| ,, .. .. .. | Resealing between Seymour and Avenel, shire of Seymour. Day labour .. | ·57 | .. |
| ,, .. .. .. | Resealing between Old Longwood and Euroa, shires of Goulburn and Euroa. Day labour | 9·15 | .. |
| ,, .. .. .. | Resealing between Baddaginnie and Benalla, shire of Benalla. Day labour .. | 1·77 | .. |
| ,, .. .. .. | Widening and resheeting with gravel between Baddaginnie and Benalla, shire of Benalla. Day labour | 3·76 | .. |
| ,, .. .. .. | General maintenance .. .. .. .. .. .. | .. | 55·66 |
| | Carried forward .. .. .. .. .. .. | 365·3 | 1155 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Nature and Locality of Works. | Works Re-Constructed. | Maintenance Works Carried Out |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER DIRECT SUPERVISION OF THE BOARD—*continued.* | | |
| | Brought forward | 365·3 | 1155 |
| HUME HIGHWAY—*continued.* | | | |
| Section 3 | Forming, grading and gravelling from Chiltern to Barnawartha, shire of Chiltern. | ·7 | .. |
| ,, | Reforming and resheeting with gravel from Chiltern to Barnawartha, shire of Chiltern | 1·13 | .. |
| ,, | Construction of a five-span reinforced concrete bridge over a backwater of the Murray River, together with approaches about 600 feet west of Murray River bridge, shire of Wodonga | ·02 | .. |
| ,, | Construction of a reinforced concrete culvert between Glenrowan and Wangaratta, shire of Benalla. Day labour | ·01 | .. |
| ,, | Widening and resheeting between Glenrowan and South Wangaratta, shires of Benalla and Wangaratta. Day labour | ·47 | .. |
| ,, | Priming and sealing between Glenrowan and South Wangaratta, shires of Benalla and Wangaratta. Day labour | 5·93 | .. |
| ,, | Priming and sealing between Bowser and Springhurst, shire of Wangaratta. Day labour | 4·31 | .. |
| ,, | Priming and sealing between railway crossing south of Chiltern and Barnawartha subway, shire of Dimboola. Day labour | 6·12 | .. |
| ,, | Rescaling between Winton and Glenrowan, shire of Benalla. Day labour | 9·44 | .. |
| ,, | Priming and sealing between Springhurst and railway crossing south of Springhurst, shires of Wangaratta and Chiltern. Day labour | 5·24 | .. |
| ,, | Reforming and resheeting between Bowser and Springhurst, shire of Wangaratta. Day labour | ·21 | .. |
| ,, | Resealing between Bowser and Springhurst, shire of Wangaratta. Day labour | 1·62 | .. |
| ,, | Construction of culverts and approaches between Bowser and Springhurst, shire of Wangaratta. Day labour | ·05 | .. |
| ,, | Resealing experimental section north of Barnawartha, shire of Chiltern, Day labour | 8·14 | .. |
| ,, | General maintenance | .. | 60·56 |
| OMEO HIGHWAY— | | | |
| Section 1 | Resealing through township of Lucknow, shire of Bairnsdale. Day labour | 1·11 | .. |
| ,, | Reconditioning and widening bridge over Nicholson River at Sarsfield, shires of Bairnsdale and Tambo. Day labour | ·02 | .. |
| ,, | General maintenance | .. | 13·79 |
| Section 4 | Construction of three timber bridges, together with approaches across Kiewa River 5 miles east of Wodonga, shire of Wodonga. Day labour | ·6 | .. |
| MURRAY VALLEY HIGHWAY— | | | |
| Section 1 | Regrading and widening near Burrowye Homestead, shire of Towong. Day labour | 1·44 | |
| Section 2 | Road mix seal near High-street, Echuca, borough of Echuca. Day labour | ·46 | .. |
| ,, | General maintenance | .. | 139·5 |
| Section 3 | Forming and gravelling from Northern Highway, borough of Echuca | ·83 | .. |
| ,, | Reforming west of Echuca, shire of Rochester | ·98 | .. |
| ,, | Reforming and resheeting west of Echuca, shire of Rochester | 2·74 | .. |
| ,, | Light sheeting short lengths at Wharparilla and Turrumberry, shire of Rochester. Day labour | 1·24 | .. |
| ,, | Reshaping and light resheeting east of Cohuna, shire of Cohuna. Day labour | 7 | .. |
| ,, | Drainage work east of Cohuna, shire of Cohuna. Day labour | 2 | .. |
| ,, | Construction of culvert at Barr's Creek, shire of Cohuna. Day labour | ·01 | .. |
| ,, | Forming, grading and sheeting with crushed rock from Pyramid Creek to Tresco, shire of Kerang. Day labour | 19·29 | .. |
| ,, | General maintenance | .. | 83·15 |
| Section 4 | General maintenance | .. | 38 |
| MIDLAND HIGHWAY— | | | |
| Section 1 | Widening and regulating with gravel at Williamson's Creek, shire of Buninyong. Day labour | 8 | .. |
| ,, | Light sheeting with fine crushed rock Lethbridge to Bannockburn, shire of Bannockburn. Day labour | 5 | .. |
| ,, | Light sheeting with ironstone gravel at Bannockburn, shire of Bannockburn. Day labour | 4·5 | .. |
| ,, | Light sheeting with ironstone gravel, Bannockburn to Batesford, shire of Bannockburn. Day labour. | 4 | .. |
| ,, | Regulating and resheeting with gravel, Letbbridge to Meredith, shire of Bannockburn. Day labour | 3 | .. |
| ,, | Regulating and resheeting with fine crushed rock, Bannockburn to Lethbridge, shire of Bannockburn. Day labour | 3·5 | .. |
| ,, | General maintenance | .. | 48·6 |
| Section 4 | Forming, trimming, draining, and gravelling westerly from Goorambat Road junction | 1·11 | .. |
| ,, | Priming and sealing between Pine Lodge and Nalinga, shire of Shepparton. Day labour | 6 | .. |
| ,, | Reconstruction of floodways at Emu Plains, shire of Benalla. Day labour | ·32 | .. |
| ,, | Widening and resheeting in modified macadam between Shepparton and Pine Lodge, shire of Shepparton. Day labour | ·49 | .. |
| ,, | Widening and resheeting between Benalla and Casey's Weir, shire of Benalla. Day labour | 3·1 | .. |
| ,, | General maintenance | .. | 38 |
| Section 5 | Resheeting south of Benalla, shire of Benalla. Day labour | 3·13 | .. |
| ,, | General maintenance | .. | 28 |
| BONANG HIGHWAY— | | | |
| Section 1 | Construction of a timber bridge and approaches near the 43-mile tree, near Goongerrah, shire of Orbost | ·02 | .. |
| ,, | Reforming, superelating curves, widening, and sheeting clay sections between Little Bill and Delegate River, shire of Orbost. Day labour | 22·6 | .. |
| ,, | General maintenance | .. | 72·6 |
| | Total | 511·18 | 1677·2 |
| | UNDER MUNICIPALITIES. | | |
| ALBERTON SHIRE— | | | |
| South Gippsland Highway—Section 3 | Patrol maintenance and sheeting between Monkey Creek and Carpenter's Bridge, Yarram | .. | 27·1 |
| ,, ,, ,, ,, | Construction of timber bridge near Darriman, at chainage 57,780 | .. | .. |
| ,, ,, ,, ,, | Resealing black road from Yarram–Won Wron Road turnoff to Carpenter's Bridge near Yarram, from chainage 138,000 to chainage 143,270 | .. | 1 |
| CHILTERN SHIRE— | | | |
| Murray Valley Highway—Section 2 | Placing pipe culvert and patrol maintenance | .. | 6·5 |
| CRANBOURNE SHIRE— | | | |
| South Gippsland Highway—Section 1 | Forming and surfacing with crushed rock from catch drain to Tooradin township bridge | 1·63 | .. |
| ,, ,, ,, ,, | Seal coat maintenance work on sections between Dandenong shire boundary and junction | .. | 10·37 |
| ,, ,, ,, ,, | Patrol maintenance throughout | .. | 34·17 |
| KERANG SHIRE— | | | |
| Murray Valley Highway—Section 3 | Gravelling south of Kerang | ·94 | .. |
| KORUMBURRA SHIRE— | | | |
| South Gippsland Highway—Section 1 | General maintenance | .. | 3·09 |
| | Carried forward | 2·57 | 82·23 |

STATEMENT SHOWING, MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Name and Locality of Works. | Works Re-Constructed. | Maintenance Works Carried Out. |
|---|---|---|---|
| | | Miles. | Miles. |
| | UNDER MUNICIPALITIES—*continued.* | | |
| | Brought forward | 2·57 | 82·23 |
| LAWLOIT SHIRE— | | | |
| Western Highway—Section 5 | Forming and metalling 264·4 miles to 264·87 miles | ·47 | .. |
| ,, ,, ,, | Resheeting with gravel 270·09 miles to 271·01 miles | ·92 | .. |
| ,, ,, ,, | Reshaping two sections of limestone 259·76 miles to 260·4 miles, and 262·91 miles to 263·48 miles | 1·21 | .. |
| ,, ,, ,, | Resealing with bitumen 257·1 miles to 257·59 miles | .. | ·49 |
| ,, ,, ,, | Sealing waterbound macadam with bitumen 263·49 miles to 264·39 miles | .. | ·9 |
| ,, ,, ,, | Patrol maintenance and preparation of side tracks throughout, repairs to shoulders 266·28 miles to 266·5 miles, 266·87 miles to 267·2 miles, and 268·65 miles to 268·91 miles | .. | 29·2 |
| LOWAN SHIRE— | | | |
| Western Highway—Section 4 | Resealing gravel between chainages 1,210,148 and 1,214,000 | .. | ·73 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 3·86 |
| ,, ,, Section 5 | Resealing gravel between chainages 1,245,848 and 1,274,848 | .. | ·38 |
| ,, ,, ,, | Patrol maintenance throughout | .. | 9·98 |
| MILDURA SHIRE— | | | |
| Calder Highway—Section 6 | Limestone rubbling between Carwarp and the Coligan Developmental Road | 1·72 | .. |
| ,, ,, ,, | General maintenance between Irymple and Nowingi | .. | 23 |
| Murray Valley Highway—Section 5 | Limestone rubble sheeting north of parish of Merrinee | .. | ·26 |
| ,, ,, ,, | General maintenance throughout | .. | 63 |
| OMEO SHIRE— | | | |
| Omeo Highway—Section 1 | Patrol maintenance throughout | .. | 17 |
| ,, ,, Section 2 | Patrol maintenance throughout | .. | 46 |
| ,, ,, ,, | Construction of new bridge and deviation at Black Camp, 3½ miles from Omeo | ·51 | .. |
| ,, ,, ,, | Repairs to bridge at Doctor's Flat, 23 miles from Omeo | .. | .. |
| ,, ,, ,, | Repairs to bridge at 28 miles from Omeo | .. | .. |
| ,, ,, ,, | Construction of new bridge and culvert at Running Creek, 34 miles from Omeo | .. | .. |
| ,, ,, Section 3 | Patrol maintenance throughout | .. | 55 |
| ROSEDALE SHIRE— | | | |
| South Gippsland Highway—Section 3 | Patrol maintenance throughout | .. | 13·8 |
| RUTHERGLEN SHIRE— | | | |
| Murray Valley Highway—Section 2 | Forming and gravelling in four sections opposite Allotments 5A1, 5A, and 6, Section J., Allotment 5, Section 1, and Allotments 5 and 6, Section E., parish of Brimin | .. | ·65 |
| ,, ,, ,, ,, | Forming opposite Allotment 9, Section D, parish of Brimin | .. | ·18 |
| ,, ,, ,, ,, | Patrol maintenance | .. | 25·45 |
| SWAN HILL SHIRE— | | | |
| Murray Valley Highway—Section 4 | Road mix sealing | 2·75 | .. |
| ,, ,, ,, | Patrol maintenance throughout | .. | 85 |
| TOWONG SHIRE— | | | |
| Omeo Highway—Section 3 | Forming and gravelling from the south-west corner of Allotment 9, Section 8, parish of Tallandoon, to the south-west corner of the township of Eskdale | ·38 | .. |
| ,, ,, ,, | Patrol maintenance | .. | 25·3 |
| ,, ,, Section 4 | Forming, gravelling, and culverts from the south-west corner of township of Eskdale to the westerly corner of Allotment 4A, Section 8, parish of Tallandoon | ·78 | .. |
| ,, ,, ,, | Construction of bridge and approaches over Little Scrubby Creek | ·54 | .. |
| ,, ,, ,, | Forming and gravelling at Tatonga trucking yards, Allotment 12, Section 1., to Allotment 3D, parish of Bolga | ·18 | .. |
| ,, ,, ,, | Forming and gravelling from the most northerly corner of Allotment 5, Section X., to south of Allotment 3, Section XI., parish of Bethang | ·40 | .. |
| ,, ,, ,, | Sealing gravel on Gundowring Road west of Allotment 16, Section X., parish of Tangambalanga to the north-east corner of Allotment 6, Section VIA., parish of Bethang | .. | 3·97 |
| ,, ,, ,, | Sealing gravel from eastern boundary of Allotment 1, Section II., parish of Bethang to end of deviation at Allotment 4, Section V., parish of Bethang | .. | 3·29 |
| ,, ,, ,, | Patrol maintenance | .. | 42·4 |
| Murray Valley Highway—Section 1 | Three culverts and approaches at Allotment A5M7, Section VI., parish of Walwa | ·41 | .. |
| ,, ,, ,, ,, | Sixty-nine pipe culverts between Allotment 7, Section VI., parish of Walwa, and Allotment 8, Section A., parish of Thologolong | .. | .. |
| ,, ,, ,, ,, | Forming and gravelling from the north-east corner of Allotment 7, to the north-east corner of Allotment 6, Section IV., parish of Walwa | ·83 | .. |
| ,, ,, ,, ,, | Improvement of rocky turn at the south-east corner of Allotment 3, Section IV., parish of Walwa | ·1 | .. |
| ,, ,, ,, ,, | Timber bridge and approaches south-west corner of Allotment 10, Section A., parish of Thologolong | ·09 | .. |
| ,, ,, ,, ,, | Patrol maintenance | .. | 61 |
| TUNGAMAH SHIRE— | | | |
| Murray Valley Highway—Section 2 | Reforming, forming, gravelling, and sanding in the pasish of Boosey | ·38 | .. |
| ,, ,, ,, ,, | Reforming, forming, gravelling, and sanding in the parish of Cobram | ·34 | .. |
| ,, ,, ,, ,, | Reforming, forming, gravelling, and sanding in the parish of Yarraweyah | 1·31 | .. |
| ,, ,, ,, ,, | Patrol maintenance | .. | 20·92 |
| UPPER MURRAY SHIRE— | | | |
| Murray Valley Highway—Section 1 | Reforming, widening, and surfacing old gravel road with granitic sand from start of highway to bridge over Thowgla Creek at butter factory | 2·10 | .. |
| ,, ,, ,, ,, | Forming, grading, and gravelling approaching bridge over Jerimal Creek | ·46 | .. |
| ,, ,, ,, ,, | Regravelling floodway over flats on Cudgewa Creek | ·25 | .. |
| ,, ,, ,, ,, | Surfacing metalled road with granitic sand on the Tallangatta side of Cudgewa Creek | ·75 | .. |
| ,, ,, ,, ,, | Patrol maintenance | .. | 14·4 |
| WODONGA SHIRE— | | | |
| Omeo Highway—Section 4 | Forming, gravelling, and culverts south of Ebden | 1·29 | .. |
| ,, ,, ,, | Forming and gravelling westerly from the commencement of the deviation north of Allotment 34, Section VIII., parish of Bonegilla, to existing sealed road | 1·3 | .. |
| ,, ,, ,, | Sealing westerly from the south-west corner of Allotment 24, Section VIII., parish of Bonegilla | .. | ·15 |
| ,, ,, ,, | Sealing deviation at Ebden north of Allotment 34, to south-west corner of Allotment 73, Section VIII., parish of Bonegilla | .. | 1·38 |
| ,, ,, ,, | Sealing deviation eastern boundary of Allotment 1, Section II., parish of Bethang northerly to end of deviation at the south-east corner of Allotment 84, parish of Bonegilla | .. | 1·29 |
| ,, ,, ,, | Patrol maintenance | .. | 11·5 |
| WYCHEPROOF SHIRE— | | | |
| Calder Highway—Section 4 | Forming, boxing, and limestoning in sections between Sea Lake and Boigbeat | 2·5 | .. |
| ,, ,, ,, | Forming, boxing, and limestoning 2 miles north of Sea Lake | ·25 | .. |
| YARRAWONGA SHIRE— | | | |
| Murray Valley Highway—Section 2 | General maintenance, surfacing with gravel | .. | 22·5 |
| | Total | 24·79 | 665·21 |

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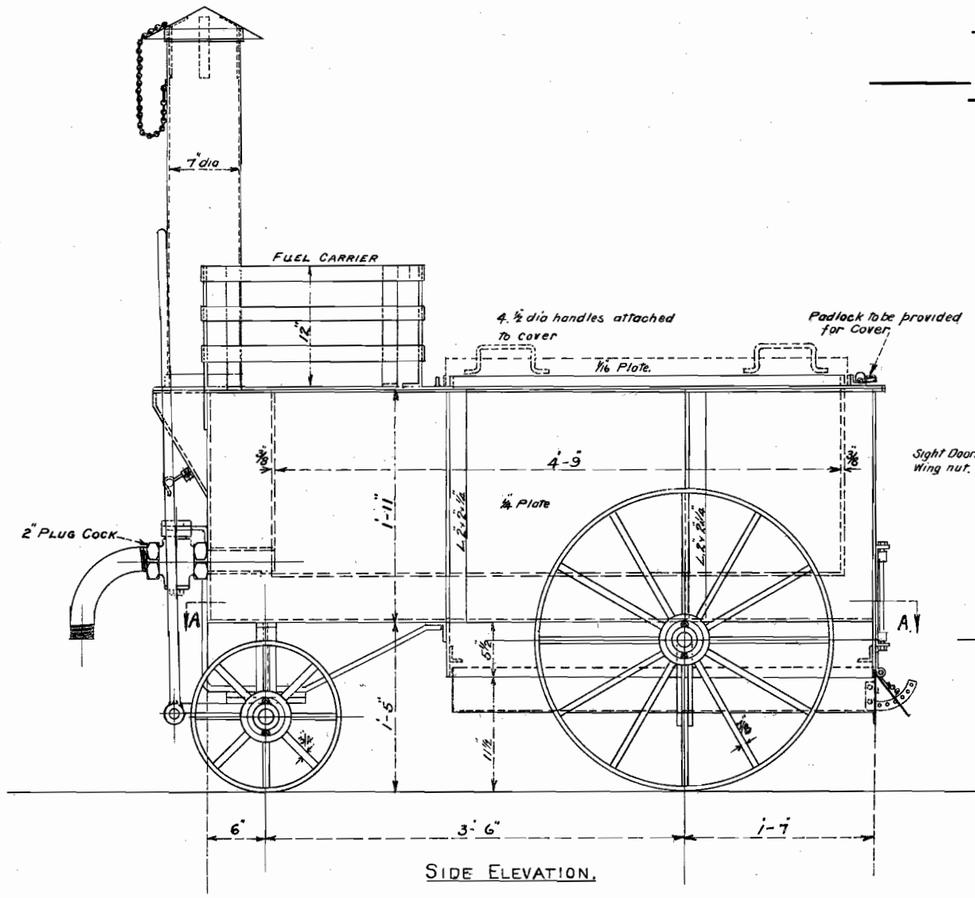
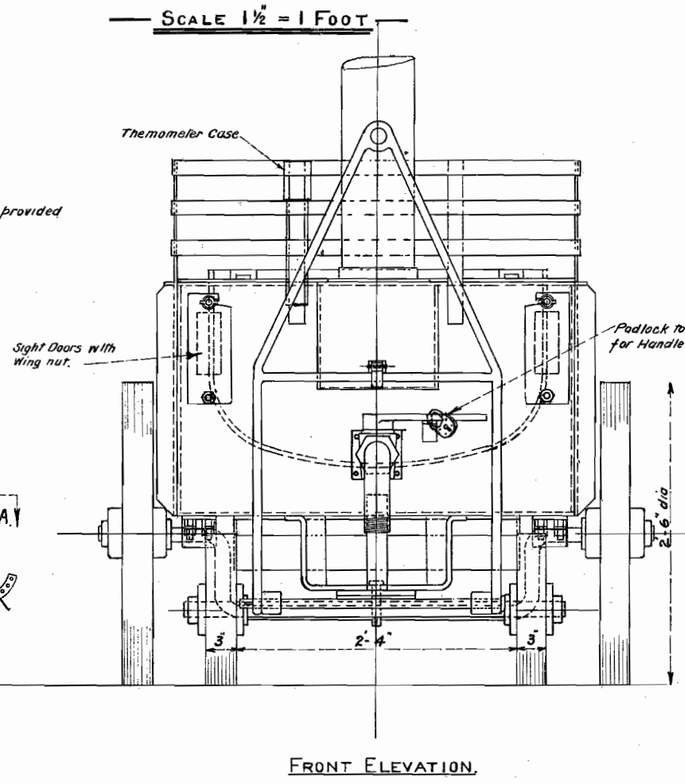
# C. R. B.

## 80 GALLON HEATER

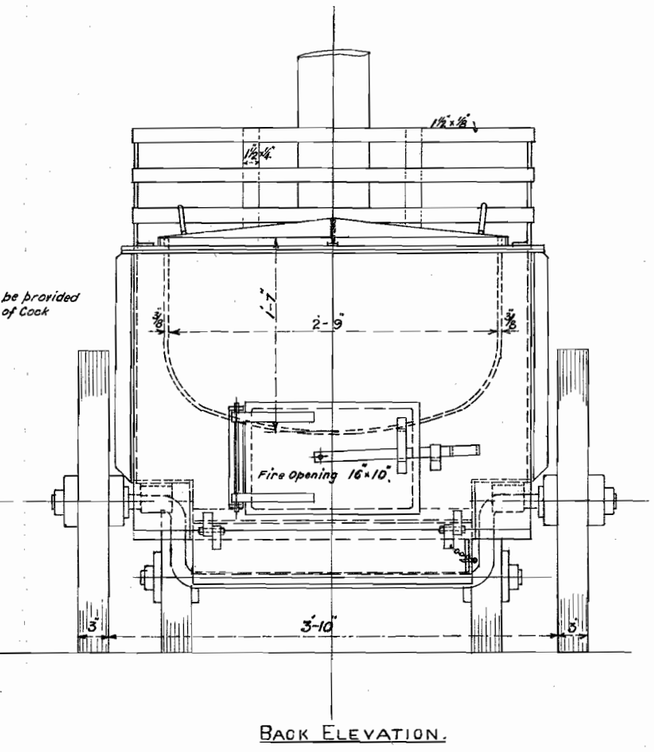
SCALE 1½" = 1 FOOT



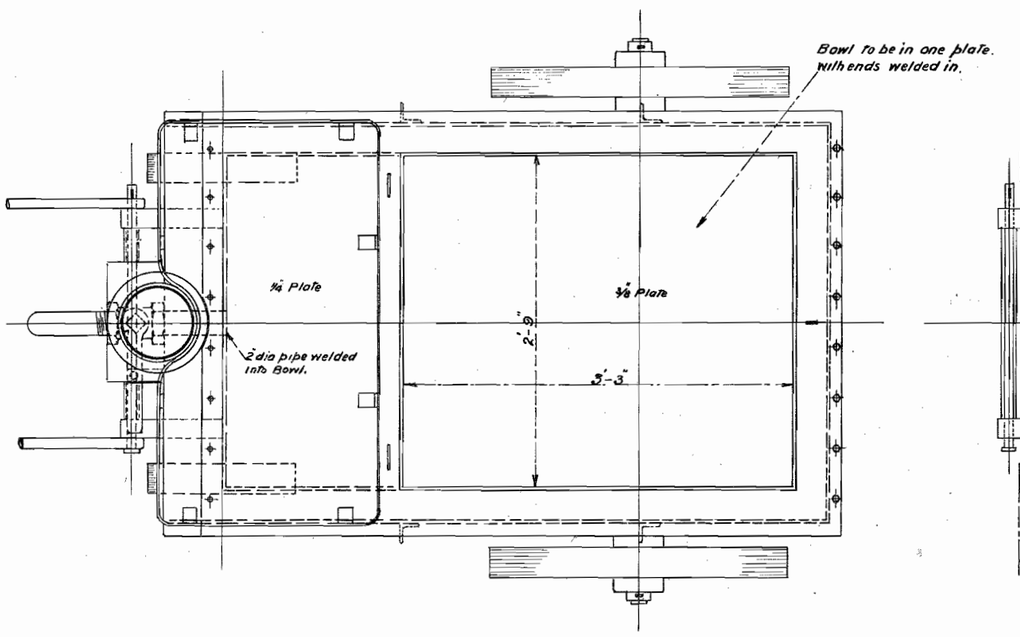

SIDE ELEVATION.



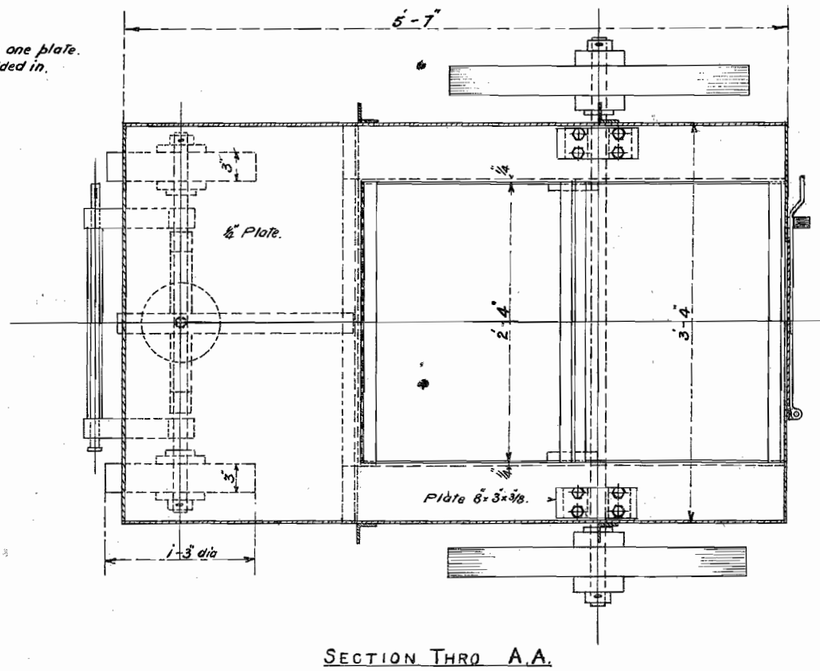

FRONT ELEVATION.




BACK ELEVATION.




PLAN.




SECTION THRO A.A.

Note

Welds to be throughout

5/16" Fillet Weld for ⅜" plate

⅜" " " ½" " and members

½" " " ⅝ "

Fig. 1A.

# C. R. B.

## DETAILS FOR 80 GALLON HEATER.

SCALE 1" = 1½" TO A FOOT.

Fig. 1B.

# C . R . B.

## MIXED IN PLACE MACHINE

SCALE 1" 1½+3" = 1 FOOT.

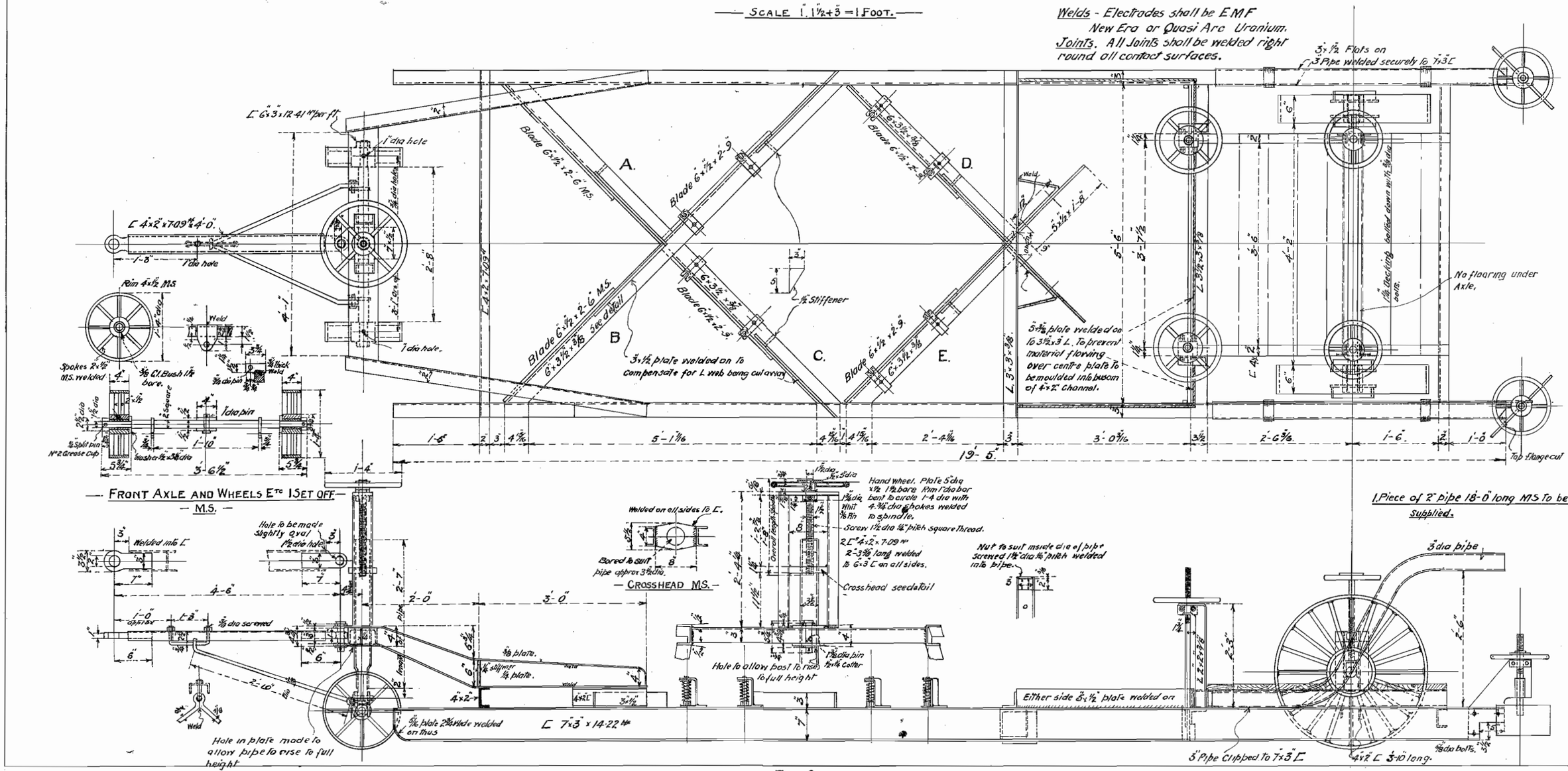



Fig. 2.

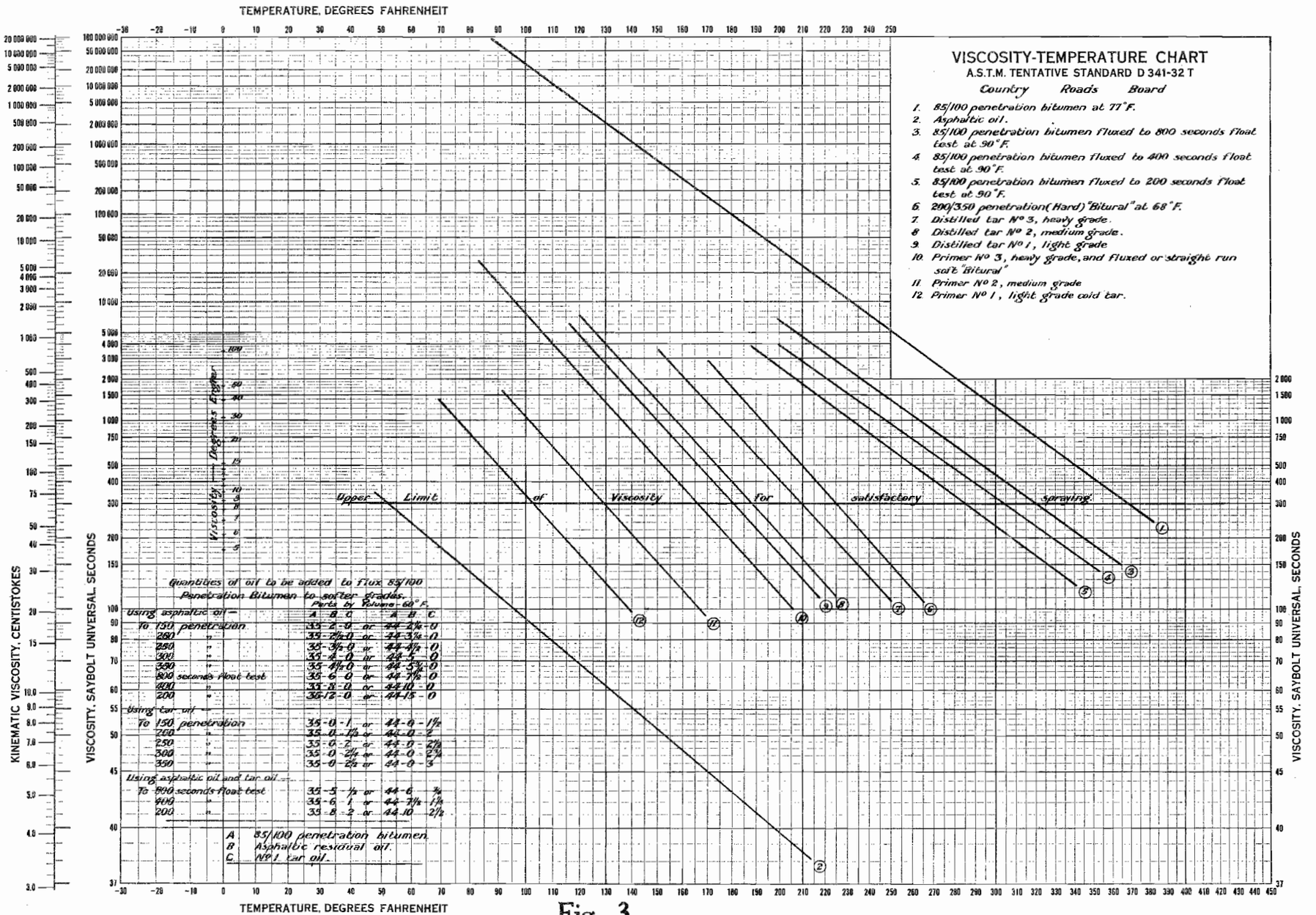

TEMPERATURE, DEGREES FAHRENHEIT
VISCOSITY-TEMPERATURE CHART
A.S.T.M. TENTATIVE STANDARD D 341-32 T
Country Roads Board
1. 85/100 penetration bitumen at 77°F.
2. Asphaltic oil.
3. 85/100 penetration bitumen fluxed to 800 seconds float test at 90°F.
4. 85/100 penetration bitumen fluxed to 400 seconds float test at 90°F.
5. 85/100 penetration bitumen fluxed to 200 seconds float test at 90°F.
6. 200/350 penetration (Hard) "Bitural" at 68°F.
7. Distilled tar No 3, heavy grade.
8. Distilled tar No 2, medium grade.
9. Distilled tar No 1, light grade
10. Primer No 3, heavy grade, and fluxed or straight run soft "Bitural"
11. Primer No 2, medium grade
12. Primer No 1, light grade cold tar.
Upper Limit of Viscosity for satisfactory spraying.
Viscosity in Degrees Engler
Quantities of oil to be added to flux 85/100 Penetration Bitumen to softer grades.
Parts by Volume - 60°F.
A B C A B C
Using asphaltic oil —
To 150 penetration 35-2-0 or 44-2¼-0
260 " 35-2½-0 or 44-3⅛-0
250 " 35-3½-0 or 44-4⅜-0
300 " 35-4-0 or 44-5-0
350 " 35-4½-0 or 44-5⅝-0
800 seconds Float test 35-6-0 or 44-7½-0
400 " 35-8-0 or 44-10-0
200 " 35-12-0 or 44-15-0
Using tar oil —
To 150 penetration 35-0-1 or 44-0-1½
260 " 35-0-1½ or 44-0-2
250 " 35-0-2 or 44-0-2½
300 " 35-0-2½ or 44-0-3
350 " 35-0-2½ or 44-0-3
Using asphaltic oil and tar oil —
To 800 seconds float test 35-5-½ or 44-6-¾
400 " 35-6-1 or 44-7½-1½
200 " 35-8-2 or 44-10-2½
A 85/100 penetration bitumen.
B Asphaltic residual oil.
C No 1 tar oil.
KINEMATIC VISCOSITY, CENTISTOKES
VISCOSITY, SAYBOLT UNIVERSAL SECONDS
VISCOSITY, SAYBOLT UNIVERSAL, SECONDS
TEMPERATURE, DEGREES FAHRENHEIT

Fig. 3.

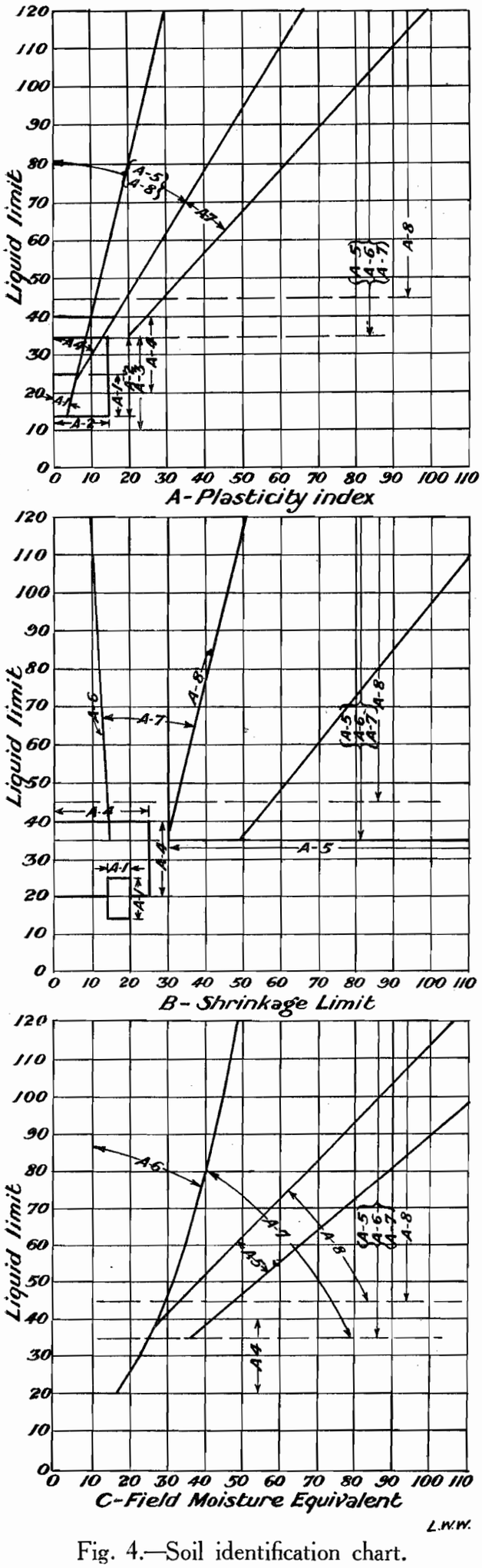
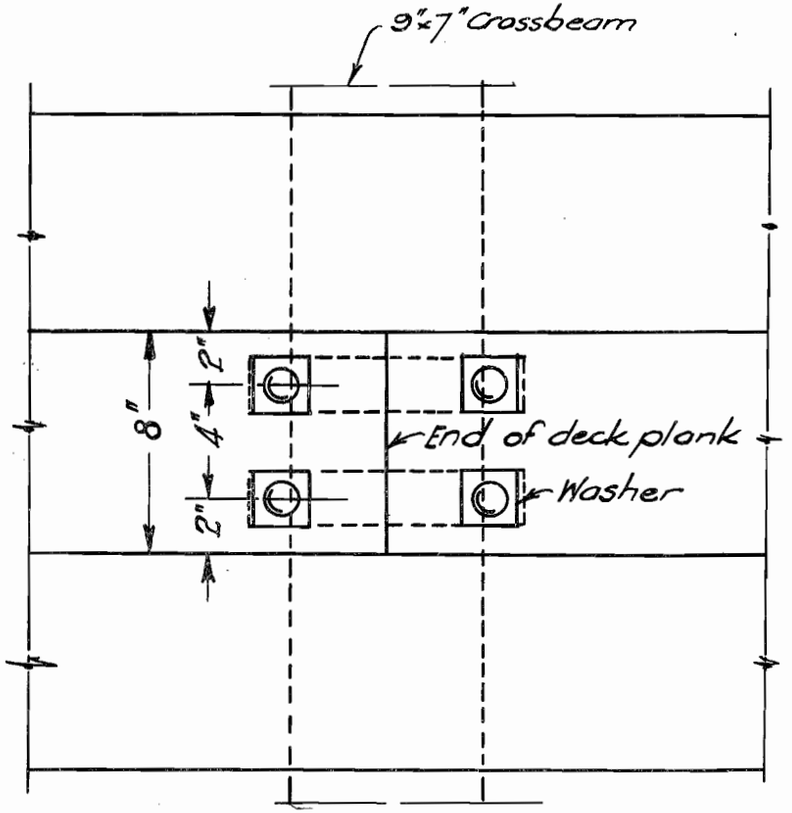



Fig. 4.—Soil identification chart.

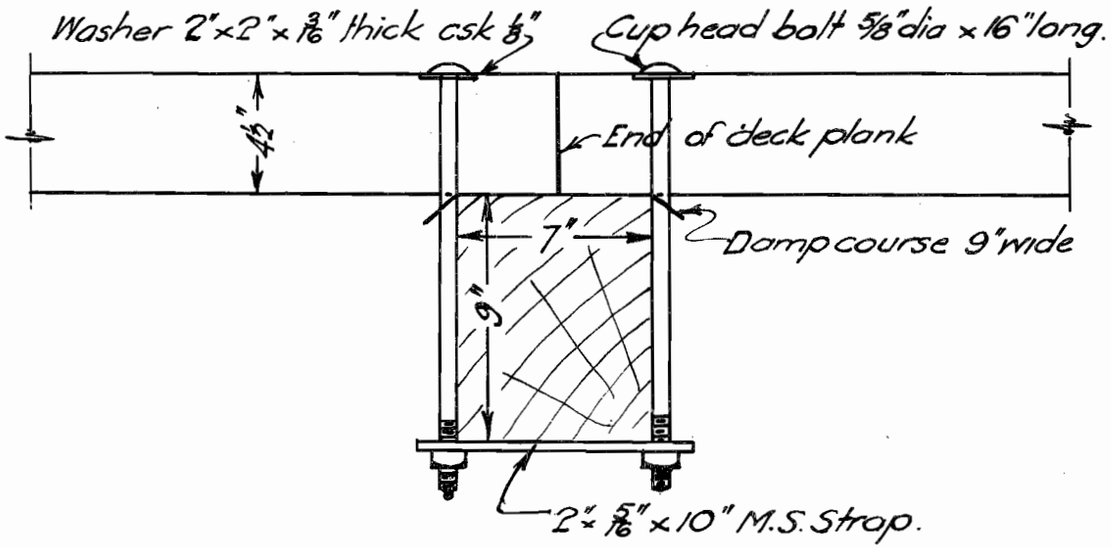
# COUNTRY ROADS BOARD

## TIMBER BRIDGE DECK FASTENING DETAIL

Scale 2"-1'




PLAN OVER DECK.




SECTION THROUGH DECK.

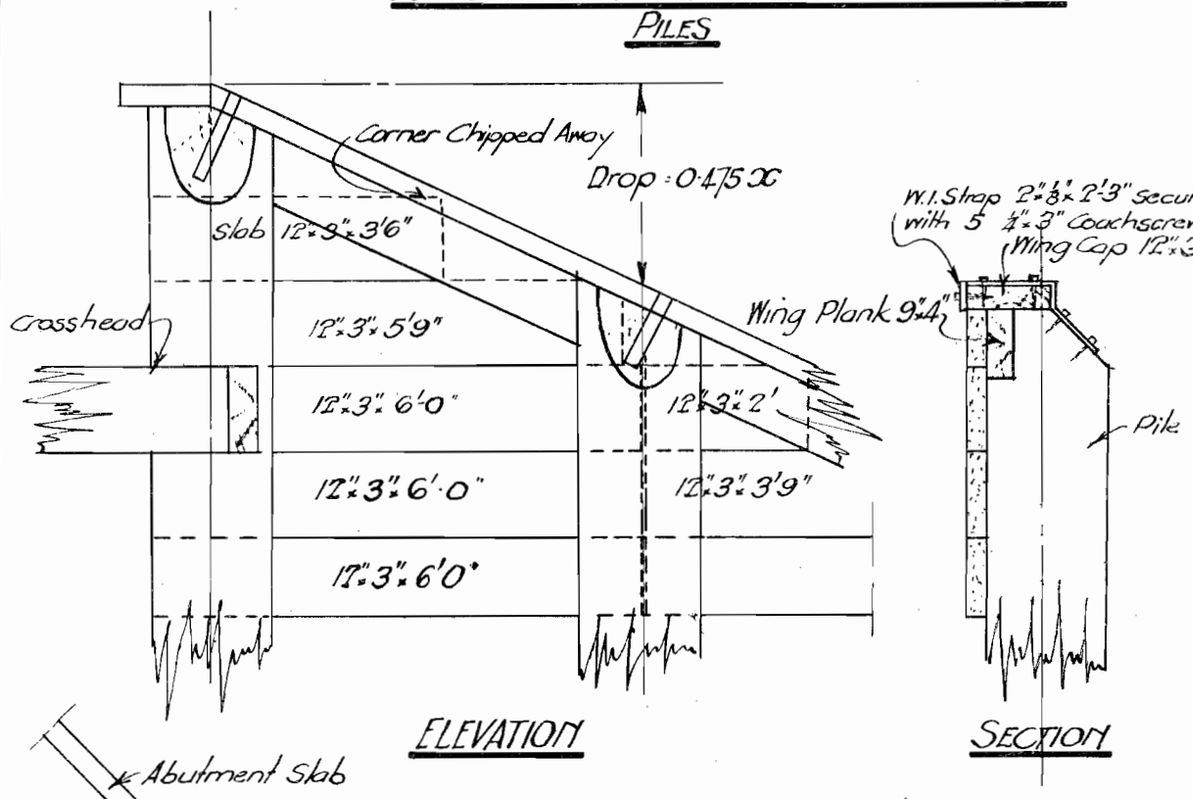
NOTE Where deck plank occurs above stringers, bolts must be substituted with 5/8" dia x 9" coachscrews. 2" from end of plank, with round washers under head, countersunk flush with deck surface.

R.A.M. 5/12/33.

Fig. 5.

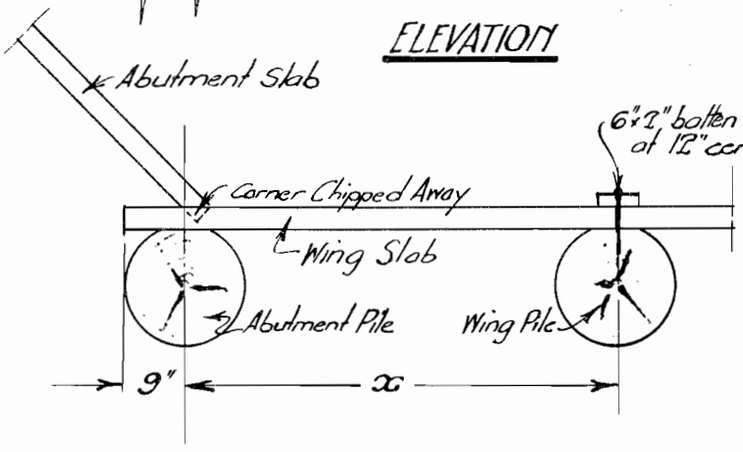
# COUNTRY ROADS BOARD

## WING WALL DETAILS FOR 45° WINGS USING PRECAST R.C. SLABS AND TIMBER PILES




ELEVATION

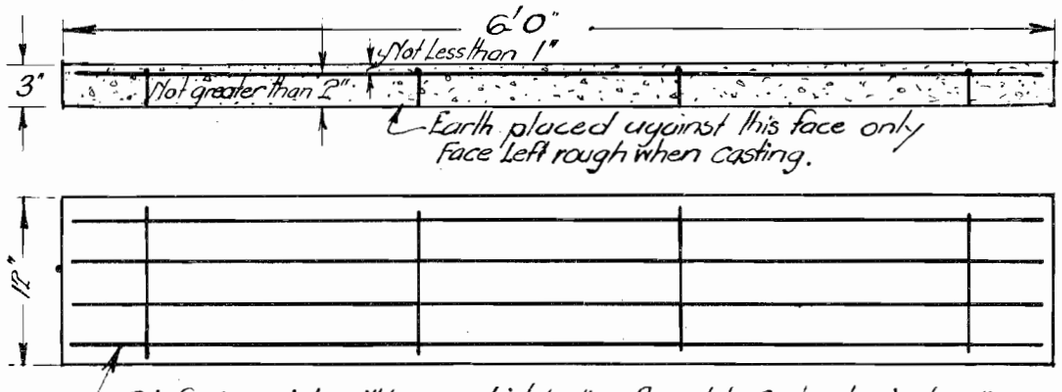
SECTION




### NOTE RE-DISTANCE "x"

The distance "x" represents the measurement of the first Wing Pile from the abutment pile. If the wings are one pile only this distance = 5'3" if two piles -5'3" and the next pile is 6' further out, if more than two piles x = 5'3" and subsequent piles are 6'0" apart.

## SECTIONAL PLAN




Reinforcing grids will be supplied by the Board to Contractor in lengths of 6'9". They will be used full length for single wings and end bays of wings or where shown elsewhere on the plans. For 6'0" standard and other lengths they shall be cut as desired.

## STANDARD 6'0" R.C. SLAB.

R.A. Millidge 20/2/33

Fig. 6.

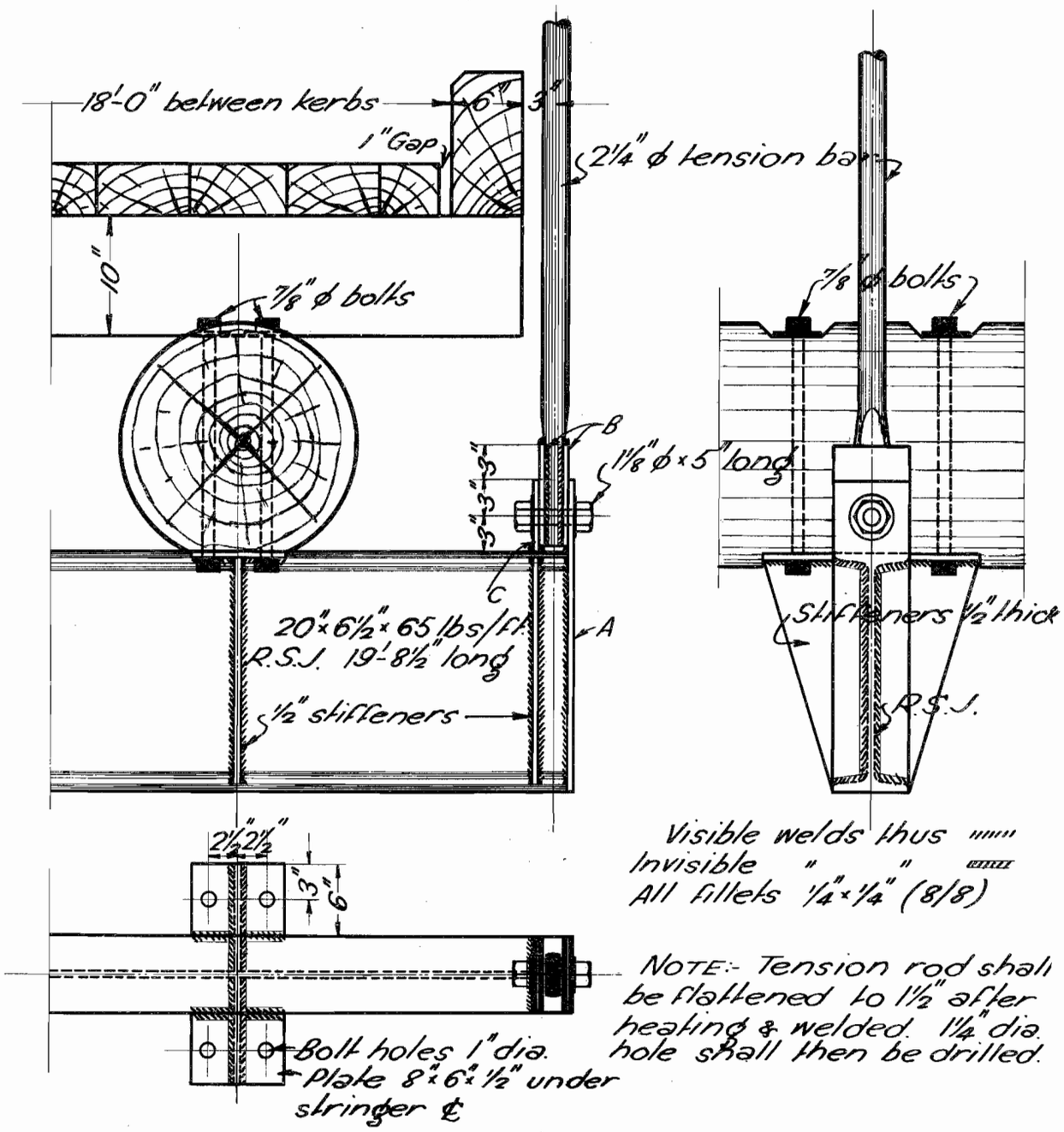



Fig. 7.

Detail of Suspension for "A" Frame.