Nellie and James streets, at Altona West, to the Kororoit Creek Road at the Geelong Railway. (See plans, Sheets Nos. 5 and 7.) After crossing the railway and Kororoit Creek Road, it follows the northern side of the railway reserve, absorbing existing planned streets in places, to the intersection of Miller's road and Ross-road. From this point the road would lead north-easterly direct to the intersection of Bay View-avenue and the Melbourne-Williamstown-road at Spotswood, where it joins Arterial Route No. 2 at the gyratory centre planned, where six arterial and main roads converge. (See plan, Sheet No. 1.) It then follows No. 2 Route to Melbourne.

Except for the Government Road between Point Cook and the Explosives Reserve, which is retained 66 feet wide, the road has been planned 84 feet wide throughout its 9 miles length to its junction with No. 2 Route at Spotswood. That part of it between Point Cook and the intersection of Miller's and Ross roads presents practically no difficulty, except for a small section which would have to pass through a vacant subdivision west of Altona. The balance of the route has been given a good deal of attention.

The plan, Sheet No. 5 shows the position of this arterial route in relation to both existing and proposed conditions. Certain estates along its route had been subdivided just about the time the Commission made known its intentions in this locality. The public-spirited action of the land subdividers concerned enabled the Commission to obtain the replanning of subdivisions which previously had been approved, and sealed by the Werribee Council. This replanning incorporated over one mile of this highway of the desired width of 84 feet, and provided for new frontages to the route, with co-ordinated treatment of the lands in its vicinity. Two other existing subdivisions which are not yet built upon will need to be remodelled in a similar manner to that carried out voluntarily by other subdividers, in order to provide the necessary road reserve.

War Service Homes Area at Spotswood.—The continuation of this roadway between the Newport—Sunshine Railway and its proposed junction with Arterial Route No. 2 at the Melbourne—Williamstown-road at Spotswood is planned to pass through a subdivision owned by the War Service Homes Commission. The scheme is shown on the plan, Sheet No. 1. Before the road scheme was determined upon, information was obtained from the War Service Homes Commission as to the allotments in the estate which had been disposed of in any way. This was in March, 1926. An endeavour was made to obtain the road in this section while the allotments affected were vacant and under the control of a public authority. It was demonstrated to the War Service Homes Commission in April, 1926, that a resubdivision of the affected area would entail a loss of only five allotments of low value, in securing a main road of such benefit to the community. Quite apart from this, the cost of construction of a main drain, now partly constructed, along the reserve thus provided would be less to the extent of about £1,600 than the cost of providing the same services on the existing street system. It would occupy too much space to report in detail the negotiations which have been conducted for over three years. Considerable opposition has been shown by the War Service Homes Commission and the Minister for Works and Railways, who, however, four times re-opened consideration of the matter after protests have been made against decisions. As soon as an objection was raised by the War Service Homes Commission it was convincingly answered by this Commission, until in one letter this Commission stated:—

"With all due respect to the views of the Hon. the Minister and the War Service Homes Commission, my Commission considers that if a spirit of helpfulness instead of antagonism had been displayed, much time, labour and feeling could have been avoided to the distinct and lasting advantage of the general community."

This small section of roadway is the key to the whole thoroughfare. Not one bespoken allotment was affected when the road was first planned and submitted to the War Service Homes Commission. It was the duty of this Commission to take advantage of the opportunity available, and to determine the route of a highway through these unbuilt-on lands to serve the considerable population which will in due course frequent and reside in the Altona district. In conjunction with portion of Route No. 3 this road would bring Altona within 83 miles of Melbourne, which is a saving of 3 miles in comparison with the existing route. This Commission has felt justified in attempting with such persistence to secure this road or to ensure that its provision would not be rendered unnecessarily costly simply because a Commonwealth Department was not concerned in proper community development, or with a scheme which it could, with apparent warrant, avoid assisting. The action of this public department is in marked contrast to that of the private subdividers referred to earlier.
This Commission emphasized that it did not desire that any additional expense should be made a charge upon the returned soldiers who were purchasing homes on the estate. Instead, the Minister was asked, in the public interest, to set aside the small amount of perhaps £400, which at the time was estimated as sufficient to enable the provision of 2,000 feet of road reserve. Although the Minister regarded this as a State matter and one to be dealt with by a town-planning authority, he was aware that no such authority existed.

At one stage in the proceedings this Commission was advised that no blocks would be disposed of which were affected by the proposed road until all other available blocks had been allotted. This was not adhered to with the result that it has been found necessary to plan a deviation in the road through this area to avoid the houses recently erected. The Minister (Hon. T. Paterson) has since given a promise that the War Service Homes Commission will in the first place dispose of blocks which are not upon the alternative route for this area. As there are quite a large number of blocks available for allotment other than those affected by the new arterial road scheme this decision should postpone further encroachments for some months at least.

The size of the file of correspondence will bear testimony to the efforts of the Commission to obtain this desirable improvement at the most opportune time. The Commission urges once again that immediate action be taken to secure its provision.

**Route No. 4—Sunshine to Melbourne.**

The principal route from the City to Sunshine at present is via Ballarat and Hampshire Roads. It is unnecessarily devious. Sunshine is a developing industrial centre, and the vacant areas in the vicinity of Tottenham ultimately will be built upon. This Commission has recommended in other reports that the whole of the activities associated with the metropolitan live-stock markets, abattoirs, &c., should be located at a site in the proximity of Sunshine. Industrial development has taken place between Sunshine and Deer Park to such an extent that a new railway station, Ardeer, has just been opened.

The traffic created by this industrialized area will require much better direct communication with the metropolis than now exists. The Commission considers that Sunbury-street, between Sunshine and West Footscray, and Napier Street, Footscray, should form the nucleus of a direct arterial route which, in conjunction with the new Footscray-road (now under construction) would supply a route independent of Ballarat-road.

This new route is shown on the plans, Sheets Nos. 5 and 1. Most of the elements already exist. Commencing at Sunshine on the western side of the railway reserve, as an extension of Derby-road, and passing through a reserve where it would intersect with other new roads leading to a subway under the railway line, it is continued to join Sunbury-street just east of the Stony Creek, as shown on plan, Sheet No. 5. Sunbury-street is then followed to its intersection with Grainger's-road, and it should be widened to 100 feet throughout by the setting back of building lines on the south side. There are practically no buildings at present obstructing this route and action taken now should, later, be of great value. Proceeding easterly from Grainger's-road, the arterial road would be diverted into Irving-street, and, in order to maintain the width of 100 feet, this street would need to be widened on its southern side as far as Geelong-road (see plan, Sheet No. 1).

In order to secure connexion with Buckley-street, Footscray, and to maintain directness of route, it will be necessary to resume about 15 houses, nearly all old wooden structures, between Geelong-road and Margaret-street. Between John-street and Victoria-street, Buckley-street would be widened to 100 feet on the south side. Twenty-four houses would require to be demolished or moved back, nearly all of which are wooden. In almost every case there would still remain sufficient depths to the allotments to permit of the houses being moved back to accord with the new alignment. Between Victoria-street and Nicholson-street, Buckley-street is shown widened on the northern side. Approximately 30 properties would be materially affected in this sector.

The arterial route would then connect with Napier-street, but in the very short section between Nicholson-street and the railway crossing a slight adjustment of the existing route is recommended. When the present level crossing at Napier-street is abolished, it is understood that the width of roadway, 99 feet, will not be curtailed. Napier-street, between the railway line and the Maribyrnong River, is 99 feet wide, so that no alteration in its width is recommended. The present Napier-street swing bridge is only 45 feet wide. In due time, when it is rebuilt, it should be made 99 feet wide.
The remaining section of the existing route to Melbourne is being abandoned and a new
direct road between the Napier-street Bridge and Dudley-street is being constructed. This work
was authorized by the Melbourne to Footscray Road Act 1927. It passes through Crown lands the
whole way and is to be 165 feet wide with a special form of construction and cross-section to suit
this unusual width. The Bill, when introduced to Parliament, made provision for a 99-feet
reservation for roadway purposes notwithstanding recommendations by various expert authorities
in favour of 198 feet. The Commission and the Footscray Council vigorously opposed the
99-feet layout, which was sponsored by the Melbourne City Council and supported by the
Government of the day. The Commission is pleased to record that the Bill, when passed, was
amended to provide for a width of 165 feet, or within 33 feet of the width it had so strongly
advocated.

Entrances to Melbourne City from this highway would be given via either Dudley-street
or Flinders-street extension. It is destined to be one of the principal heavy traffic routes in the
metropolitan area. It is planned to give access to many important centres of great activity, and
the Commission’s main roads scheme shows numerous feeder routes leading into and across this
highway.

**Harbour Trusts Compound Wall Scheme.**—The proposal of the Melbourne Harbour Trust
Commissioners to erect a compound wall, which would have caused the diversion of the whole of
the traffic from the New Footscray Road into the Flinders-street- Spencer-street intersection
was brought to the notice of the Commission recently. In view of the substantial amount of this
traffic which would require to use the new Batman Bridge and the intersection referred to under
that scheme, the Commission made strong representations to the Trust and to the Government
urging a modification of the proposals to allow of an additional and direct route for traffic between
the New Footscray Road and the bridge being maintained. Although the Commission’s proposal
that this direct route should enter at the bridgehead opposite the existing road along the north
bank of the river on the eastern side of Spencer-street, was not accepted, an alternative giving
access via Siddeley-street direct into Spencer-street was approved. Whilst this will assist to,
overcome the difficulties of traffic movement in this area, and is preferable to the original scheme,
it is regretted that the Commission’s proposal was not adopted.

**Route No. 5—Ballarat-road—Dynon-road.**

The metropolitan section of the main highway leading to Bacchus Marsh, Ballarat and
beyond is not only indirect, but it has other disabilities which should be remedied when laying
down a future arterial roads plan. The route for this arterial road, as shown on plans, Sheets
Nos. 6 and 1, is recommended by the Commission for development as the future through road
between Melbourne and the country served by Ballarat-road.

The Commission’s plans show the commencement of this road in its metropolitan section
at Deer Park. From McIntyre and Anderson roads and as far east as Westmoreland-road, the
Ballarat-road is 132 feet in width and is regarded as sufficient for the traffic it is designed to
carry. Between Westmoreland-road and Duke-street, Ballarat-road is only 66 feet wide. The
Commission recommends the widening to 132 feet of this section by setting back the northern
side.

The subdivision of the old town of Braybrook made more generous provision for street
widths and Ballarat-road, between Duke-street (or Boundary-road) and Lyons-street (or Ashley-
street) is 99 feet wide. The Ballarat-road in this section forms the northern boundary of the
Maidstone Replanning Scheme which is dealt with on page 251. Provision is made in the latter
scheme for the widening of Ballarat-road to 132 feet by cutting back the southern side. The
Maidstone Replanning Scheme also incorporates that part of Ballarat-road between Ashley-street
and Summerhill-road, but the road is only 66 feet wide in this section at present. The scheme
makes provision for widening it to 132 feet by setting back the northern side.

From Summerhill-road to the eastern end of the Footscray Park on the bank of the
Maribyrnong River, the Commission recommends, as an urgent work, the setting back of the
present 66 feet wide Ballarat-road on its northern side to 132 feet. This section of the widening
scheme would involve the removal of 50 weatherboard houses and the demolition of eleven brick
buildings. Fifteen of the former are owned by Messrs. Geo. Kinnear and Sons Pty. Ltd., whose
rope works are situated on the same block between Gordon-street and Wearing-street. It is
considered that it would not be necessary to resubdivide the remainder portion of these lands
because it is presumed that these houses could be removed to new sites in the vicinity of the
works. Excluding the lands and property of Messrs. Kinnear and Sons, 39 new allotments could be subdivided to the new road on which the remaining 35 weatherboard buildings could be located in much better conditions than exist at present. Between Dawson-street and Nicholson-street the setting back of the Ballarat-road involves only two buildings. Details as to the estimated costs of this part of the scheme are included in the Urgent Works Schedule on page 149.

The Ballarat-road at present crosses the Maribyrnong River and connects with Smithfield-road and thus enters the City via Racecourse-road, Flemington-road, &c. So that the traffic from this artery shall enter the City at a point separate from other arteries from the north and north-west, a connexion between Ballarat-road and Dynon-road as shown on the Plan-Sheet No. 4, is recommended. This connexion would overcome the necessity for the use, by through traffic, of the existing route from Ballarat-road into Dynon-road via Droop-street and Hopkins-street at Footscray. They are comparatively narrow business streets with a double line of tramway in Droop-street and a steep grade in Hopkins-street. After investigation it was found that by the most economical scheme of widening of Droop and Hopkins streets, approximately 190 buildings would be affected, many of which are factories, shops, and stores, constructed of brick and similar durable materials, whilst a wider bridge over the Maribyrnong at Hopkins-street would be necessitated. The improvement of the existing route would thus be far more costly and offer less advantages that the route recommended. The proposed new connexion between the Ballarat and Dynon roads provides for a 132-feet road across the unbuilt-on lands to the east of the works of Messrs. W. Angliss and Co. Pty. Ltd., thence under the Melbourne-Footscray Railway (which is on an embankment) to a new bridge to be constructed over the Maribyrnong at the point shown on the plan. The road would connect direct into Dynon-road at its intersection with Highton-street. This would involve the removal of one or two galvanized iron hide and skin stores. The bridge at Hopkins-street would cost a large sum of money to put into efficient service commensurate with the requirements of such a highway. The widening of Ballarat-road to 132 feet by excising portion of the adjacent Footscray Park would cause a replacement of the strip of reserve by roadway plantations, and the Municipalities indicated their preference for this scheme when the alternatives were placed before them.

Dynon-road is regarded by the Commission as of the utmost importance because it forms part of a practically continuous thoroughfare by-passing the City proper on the north side. It is at present 99 feet wide. Its frequent state of disrepair is attributable to a variety of reasons, the chief of which is that for some years the Railways Commissioners have desired to close the eastern end of the highway in order to secure easier working in the Melbourne railway goods yards. This Commission has persistently opposed any action which is likely to result in a blockage of the directness of travel along the present route of Dynon-road. Full reasons for the
Commission's actions in this matter are contained on page 45 of the First Report. Suggestions have been made and considered for the provision of a direct connexion between Miller-street and Dynon-road by means of a viaduct over the railway yards. The Commission has stated that it has no objection to such a scheme being carried out so long as it is effected prior to the closing of the existing route.

The Commission recommends that Dynon-road be widened to 132 feet throughout its length, and on the southern side. It passes through Crown lands for the greater part of its length and there are no substantial buildings which would be affected. On the other hand, the plans of the Railway Department for remodelling the Melbourne yards by the absorption of this section of the road would need to be re-arranged. The lines immediately adjacent to Dynon-road on the south side are used for the assembling and washing of live-stock trucks and any scheme for the removal of the sale-yards, when adopted, will obviate the necessity for retaining these sidings for this purpose. The bridge over the Moonee Ponds Creek would need to be reconstructed to conform with the new road.

The only remaining part of this arterial route to be dealt with is between the bridge over the railway station at North Melbourne and a connexion with Victoria-street, North Melbourne. The bridge is much too narrow at the present time, and unless some alternative scheme such as is referred to above is carried out, it should be widened to 99 feet, and the alignment of it amended to give improved connexions. A photograph showing the congestion on this bridge, which is an hourly occurrence, is shown below.

Congested traffic on Dynon-road bridge, over North Melbourne Station.

It is important that there should be better connexion between the overhead bridge at Dynon-road and Victoria-street. The Commission considers that the best way of achieving this is to cut a new roadway 99 feet wide, through the properties between Ireland-street and Spencer-street, as shown on plan, Sheet No. 4. The properties which would be affected are of a very poor type, and by acquiring frontages to the proposed link road, and the inclusion of portions of Stawell and Dryburgh streets for resale, a considerable sum should be obtained as an offset against the cost of resumptions. The estimated costs are given in the schedule of urgent works (page 149). Some slight readjustment of the existing small reserves at the intersections of Miller and Spencer streets, and at the junction of Miller and Curzon, Hawke and Victoria streets, would be advisable, and the plan shows the proposed treatment.

Route No. 6—North-western (Calder) Highway—Keilor to Melbourne.

This highway, which is the route from Mildura, Bendigo and intervening north-western centres, to Melbourne, is planned to commence its metropolitan section at the Maribyrnong River at Keilor. There is a very steep grade to be surmounted immediately after crossing the bridge at Keilor on the approach to Melbourne, and the existing road reserve known as Keilor-road varies in width but is mainly 66 feet to 99 feet wide. In view of the nature of the road between the river and the crest of the hill it should not be necessary to widen the road reserve.
Except for a small section of the Keilor-road north of the Keilor cemetery, where it is 198 feet wide, the whole of the road from that point, as far as its junction with the Mount Alexander-road, north of Essendon, is 66 feet wide. The Commission recommends the widening of this part of the highway to 132 feet. The plan, Sheet No. 6, shows the proposal, with, the widening as far east as the intersection with Treadwell-road, to be carried out mainly by cutting back the northern side. There is less subdivisional development on the northern side of the road, and there are no buildings in this lengthy section, so that where there are allotments which would be affected, a remodelling is all that would be involved. From opposite Deakin-street (just east of Treadwell-road) the widening is gradually transferred to the southern side as far as opposite Gilles-street. This causes less interference with subdivided land and housing development, and avoids the North Essendon State School. East of Gilles-street the widening is again gradually transferred to the northern side, the main consideration in this case being to avoid the Melbourne and Metropolitan Board of Works' Reservoir. This section has been well built up during the last few years, and a tramway route from the City has its terminus there. Keilor-road joins Mount Alexander-road and its connexion through to the City via that road is dealt with in the description of Arterial Route No. 7.

Route No. 7—Lancefield Highway—Bulla, Mount Alexander, and Flemington roads.

For the purposes of this Report it is considered to be sufficient to regard the commencement of the metropolitan section of this highway as the point where the Electricity Commission's transmission line crosses Bulla-road. The Bulla-road is only 66 feet wide in this section, but it opens out to 198 feet at Treadwell-road, near North Essendon. It is recommended that the width of 198 feet be made uniform by widening on its northern side the section of Bulla-road between Treadwell-road and the electricity transmission line. The proposed widening is shown on the plans, Sheets Nos. 6 and 7. There is no building development at present on any part of the road where the widening is advocated. Plans, Sheets Nos. 7 and 4, show that Mount Alexander-road is 198 feet wide to its connexion with Arterial Route No. 6 at the intersection with Keilor-road, and as far as the Moonee Ponds Junction. The present layout of this part of Mount Alexander-road practically agrees with a cross-section as shown on page 61, which provides for a side road 30 feet wide on either side of a central plantation, in which the tramway is located. The present subway under the railway just north of Essendon Station should be correspondingly altered, and the fire station building in the reserve at that point removed elsewhere.

That section of Mount Alexander-road between the Moonee Ponds Junction and the Moonee Ponds Creek at Flemington Bridge Railway Station has caused the Commission a great deal of concern, and various schemes have been worked out in detail for its improvement. It is reduced between these points from 198 feet to 66 feet in width and carries a double line of electric tramway which serves large and growing areas. The scheme for cutting a new 198 feet road through the built-up parts to the immediate east of the present thoroughfare, as shown on the plan, Sheet No. 4, is recommended, after an exhaustive review of the following rejected proposals:—

1. Widening Mount Alexander-road on eastern side and not interfering with the western side (beyond Wellington-street).
2. Widening Mount Alexander-road on eastern side and resuming the western side properties for resale for residential purposes.
3. Widening Mount Alexander-road by 66 feet on each side.
4. Improving Ascot Vale-road so as to divert the vehicular traffic into other thoroughfares.

Owing to the large areas served and to be served by this route, it is obvious that Mount Alexander-road in its narrow section will not be able to accommodate the traffic from its vicinity, and from the many important feeder roads it is so satisfactorily located to serve. Even at the present time no metropolitan road west of Sydney-road carries as much traffic as Mount Alexander-road.

The scheme adopted is less expensive than any of the proposals considered above, and was estimated, in 1928, to cost approximately £270,000, exclusive of road construction.

When race meetings are held at the Moonee Valley Racecourse much congestion is caused on Mount Alexander-road and great inconvenience is suffered by local residents desiring to use that thoroughfare and the tram service along it. A distinct advantage of the new road scheme
over all other schemes is that it enables considerable improvement to be effected in the present unsatisfactory access by road and tramway to the racecourse. The scheme of improvement as shown on the plan, Sheet No. 4, incorporates a widening of McNae-street so that a circuit is created for both vehicular and tramway traffic.

Another merit of the new road scheme is that it does not cause any interference with the extensive depot owned by the Melbourne and Metropolitan Tramways Board on Mount Alexander-road and of other important buildings and shops along that thoroughfare. Not only are the alternative schemes more expensive to the extent of between £30,000 and £90,000, but these figures do not include any estimate in respect of the cost of resumption and replacement of the tramway depot.

One of the other most favorable features of the proposal is that it will permit of the retention of the present tramway for the greater part of its length.

The new road follows along the crest of the surrounding land, will have a better grade and will be more picturesque. The cross-section favoured for this roadway is the same as that recommended for the section beyond the Moonee Ponds Junction.

The total length of the proposed new roadway from Pascoe Vale-road to Moonee Ponds Creek is 8,350 feet. The length of the existing part of the road which would be retained is 6,150 feet. Calculating on the basis of the cost of the recent reconstruction in asphaltic concrete of a section of this thoroughfare, the cost of its complete construction would be £41,000. Annual charges for maintenance and repayment of a fifteen years' loan would probably not exceed £2,665. This amount should not be regarded as a charge on the new road scheme, because it is entirely offset by the fact that the latter involves the absorption of 6,210 feet of existing roads which become unnecessary and whose maintenance is therefore saved.

The Melbourne City Council owns that part of the land between Hornsley-street and Moonee Ponds Creek through which the new road is planned to pass.

Three hundred and ninety-two buildings are affected by the scheme, made up of—

- Dwellings, 336; shops and dwellings combined, 25; shops only, 23; hotels, 2;
- bank, 1; noxious trade, 1; miscellaneous, 4.

The population which would be dispossessed by the property resumptions is 1,579, but 790 could be rehoused on the allotments with new frontages which the scheme would create.

Notwithstanding the fact that this part of the scheme, including the cost of road and plantation construction, is estimated to cost £400,000, the Commission strongly urges its adoption. The necessities of the future will demand greatly improved road transport facilities between Essendon and beyond and Melbourne, and this highway is the direct route. The longer action is delayed, the greater will be the cost. A tree-planted residential 198 feet road leading from Melbourne towards Tullamarine and Bulla would greatly improve the whole neighbourhood through which it passes, and it would materially enhance the value of property along, and for a considerable distance on either side of, the whole length of the road.

Alterations to the subway under the railway at Flemington Bridge Railway Station and to the bridge crossing over the Moonee Ponds Creek would be necessary, but they are common to any scheme.

The balance of the route of the highway to the City is via Flemington-road, which is already 198 feet wide and has recently been thoroughly and well reconstructed.

A scheme for remodelling the "Haymarket" Junction where Flemington road enters the City proper and connects with Arterial Route No. 10 is dealt with on page 270.

Route No. 8—Hume (North-Eastern) Highway.

The large area between the Moonee Ponds and Merri Creeks has been badly planned in respect of suitable through north and south roads. The only continuous route to and from the City serving the municipalities of Brunswick, Coburg, and part of Broadmeadows is Sydney-road. Of the greater part of its length it is only 66 feet wide, and it carries a double line of tramway. It has developed as a busy shopping street in the municipalities of Brunswick and Coburg. On page 31 the Commission stated that Sydney-road
is the busiest 66-ft. road in the metropolitan area, and the diagram on page 31 indicates that a large proportion of the traffic which is now compelled to use Sydney-road would take advantage of a suitable through route if one were located to the west of the present thoroughfare. There is little doubt that if Sydney-road were called upon to accommodate the traffic which must increase as development proceeds in the suburban areas in its vicinity, as well as the assured growth in country and interstate traffic via this road, a greater width of road will be required. The Commission has investigated schemes for giving greater road facilities in this area, and has considered not only the widening of Sydney-road, but several by-pass road schemes immediately adjacent. The great cost that would obviously be entailed in any scheme for increasing the capacity of the present thoroughfare by widening, or the provision of parallel roads close to it, led to the consideration of other proposals. The planning of an entirely new route so located as to intercept the traffic which, for lack of other routes, is forced into Sydney-road, appeared the most satisfactory and economical solution of the difficulty. In order to overcome these disabilities and to cater for the development of West Brunswick, West Coburg, &c., the Commission recommends the adoption of Arterial Route No. 8 which is diverted from Sydney-road near Campbellfield and connects with Abbotsford-street at North Melbourne, as shown on the plans, Sheets Nos. 7 and 4. The details of the route are—

Commencing at Sydney-road immediately south of the electricity transmission line crossing, thence across unsubdivided land and the Somerton railway to join Brushfield-crescent and Liston-road (which have since been laid out to a width of 80 feet in conformity with the scheme), thence following East-street which it is proposed to widen to 80 feet for its whole width. From the junction of East and South streets an 80-ft. road is planned across a small unbuilt-on subdivision to connect with Derby-road at the boundary of the Broadmeadows and Coburg municipalities. The route then follows Derby-road for its whole length. This road has been widened to 80 feet by the Coburg Council since the scheme was formulated. From the intersection of Derby-road and O’Hea-street another short diagonal cut is planned to connect Derby-road with Imperial-avenue. The latter has also been widened by the Coburg Council to 80 feet. Between Reynard-street and Woodlands-avenue a subdivision has been laid out which incorporates the direct connexion desired between Imperial-avenue and Melville-road, along which latter the route then follows. The Brunswick Council has already affected the widening of part of Melville-road to 80 feet, and at present only one or two small sections require similar treatment. The route then leaves Melville-road at its junction with Smith-street and runs diagonally across the built-up area to Park-street at Grantham-street. The road is designed to be 100 feet wide in this latter section. The present route followed by the tramway in this part of West Brunswick is circuitous, and although the diagonal cut recommended would interfere with 36 houses and temporarily dispossess 120 people, it is recommended as an urgent work (see page 149), as the great future importance of the road demands a reasonably direct route. The road would then proceed across Royal Park approximately along the route of the present tramway to join Abbotsford-street at Flemington-road, North Melbourne, and thence into Spencer-street.

The municipalities of Broadmeadows, Coburg, and Brunswick have materially assisted the Commission in securing most of this route by including it in plans of new land subdivisions and in effecting widenings to existing streets. The lengths of the route included in new plans of subdivision have been obtained without any cost to the community, whilst the councils concerned have met with similar success with respect to the widened streets.

The section of this route through Royal Park, in addition to forming an essential part of a main traffic route, would provide a pleasant parkway drive and improve the access to this large and valuable reservation, many parts of which are comparatively little used. It should be tree planted for the full length through the park so that in time it would become a most picturesque thoroughfare. Royal Park was included in the very early plans of Melbourne, but unfortunately a number of excisions have been made from it for various institutions and other purposes, though no criticism is offered at the location of the Zoological Gardens. The municipalities which this road would serve have been pressing for it for a long time, and the Commission agrees that it has become a matter of urgency.

The linking of this route with Abbotsford-street, North Melbourne, which in turn leads directly into Spencer-street (and the bridge over the Yarra now under construction), will form a continuous thoroughfare from Sydney-road and the northern suburbs to those on the south of
the Yarra. It will not only give traffic the choice of a route more attractive than Sydney-road, but will also relieve Swanston and Elizabeth streets of the through north-south traffic that now uses both of these congested roadways.

The Hume Highway.—The Sydney-road between Melbourne and Sydney was named in 1928 "Hume Highway" in honour of Hamilton Hume, who, with Hovell, first explored an overland route between Sydney and Melbourne. In view of the fact that the highway scheme just dealt with, will undoubtedly take the place of Sydney-road as the principal through route, the Commission recommended to the Hon. the Minister of Public Works, in a letter dated 1st October, 1928, that the re-naming should apply to the proposed new arterial road.

Aerial view of Sydney-road at Brunswick, showing the extensive shopping development.

Photos.—"Airety" Shaw Aviation Co.

Aerial view of Sydney-road, showing the contraction from 198 to 66 feet in width at the Melbourne-Brunswick municipal boundary.

Route No. 9—To Locality of Broadmeadows Military Camp.

The very sparsely settled area north of Bell-street, lying between the north-eastern railway line and the arterial road just referred to (Route No. 8), is likely to be extensively built upon in the near future. It is practically midway between the Broadmeadows and Fawkner railways, and some form of street passenger service will be required. In order to enable proper segregation of services and vehicular traffic in a location that is likely to serve
both needs, the Commission has planned an arterial road as shown on the plan, Sheet No. 7, to commence in the vicinity of the Broadmeadows Military Camp at the Broadmeadows-Campbellfield-road passing southerly through unsubdivided lands, or lands which are subdivided but on which very little development has taken place. The road is 120 feet wide and is connected with Arterial Route No. 8 at a point midway between Essex-road and Gaffney-street. Advantage is taken of a street which is laid out, named Justin-avenue, for providing portion of this highway, but it will need to be widened to conform with the remainder of the scheme. Only three existing weatherboard houses would have to be removed throughout the whole length of this route, which is slightly over 3 miles long. A re-adjustment of certain subdivisions would also be necessary, and although 66 allotments would be absorbed by the new road, it would enable the closing of 41 chains of private streets as against the opening of 22 chains.

There are practically no difficulties to hamper the construction of this road, which would be of great value in the future. Steps must be taken promptly, however, in order to ensure that no development takes place counter to the scheme.

**Route No. 10—Sydney-road.**

The remarks made in respect of Arterial Route No. 8 should be read in conjunction with this paragraph. A new arterial road west of Sydney-road will offer advantages to through traffic. Sydney-road, however, is the direct route to the centre of the City for a considerable area. It is certain that it will always carry traffic up to the limit of its capacity. The fact that this road is one of the busiest in the metropolitan area, and that it serves as a direct route between the City and the interior of the State, amply warrants its classification as an arterial route.

Commencing at the same point as Route No. 8, immediately south of the crossing of the electricity transmission line (see plan, Sheet No. 7), it is recommended that the present 66 feet of width should be increased to 84 feet as far as its intersection with O’Hea’s and Champ streets. There are only seventeen buildings in the whole length which would have to be removed, if the widening as far south as Fawkner-avenue were carried out on the west side, and thence to its intersection with O’Hea’s-street on the east side. There should be no difficulty in securing the necessary excision from the Fawkner Cemetery lands, which would provide the widening for about one-third of the distance. Sydney-road between O’Hea’s-street and Bell-street is 99 feet wide, but it is only a very short section of 19 chains. It is considered that advantage should be taken of the opportunity of sparse development to widen the section beyond O’Hea’s-street to 84 feet in order to facilitate traffic. The greater part of the 84-ft. road scheme is within the Shire of Broadmeadows. That municipality adopted the scheme in 1927, and undertook to do as much as possible to secure sufficient setting back of buildings, &c., to assist the ultimate widening.

Between Bell-street and Brunswick-road, Sydney-road is only 66 feet wide (see plan, Sheet No. 4). In addition to the provision of the western by-pass route described as Arterial Route No. 8, an eastern by-pass route via the Merri Creek Parkway is included in the main roads schedule, to connect Sydney-road at Batman with Nicholson-street, East Coburg. This would supply another direct route to the City. These by-pass roads should obviate the necessity for expending enormous sums of money in widening the narrow section of Sydney-road.

From Brunswick-road to the Haymarket at the northern gateway to the City proper, Sydney-road is 198 feet wide.

**Route No. 11—St. George’s Road—Epping-road.**

Although the road system which has developed between the Merri and Darebin Creeks makes more provision for north-south traffic than in the sector west of it, the Commission considers that by improved connexions as set out in this Report the present streets can be made of greater value for the future. St. George’s-road is the widest existing north-south road in this area, and although partly curtailed by the pipe track conveying the main water supply to Melbourne, it is capable of decidedly improved development.

Commencing in Epping-road at the crossing of the electricity transmission line, as shown on plan, Sheet No. 8, it is proposed to utilize this road as the arterial connexion from the country which lies to the north. Epping-road is 66 feet wide, and is parallel with and close to
the railway line. It is unlikely to be used for tramways in the future and is considered adequate in width for all other requirements. Epping-road connects into High-street at the municipal boundary at Mahoney’s road—see plan, Sheet No. 7. High-street between Mahoney’s-road and the level crossing just north of Reservoir Station, with a width of 66 feet, forms part of this proposed arterial road.

South of Reservoir Station the traffic from High-street now crosses the railway at the level crossing referred to and continues southerly along High-street, which is only 66 feet wide, through Preston and Northcote. It carries a double line of tramway and is the busiest shopping and traffic street in the municipalities of Preston and Northcote. Unless the traffic from the developing areas beyond this point is diverted from this street, it will soon become a congested thoroughfare. The following route, shown on the plan, Sheet No. 7, is recommended as the principal vehicular road in this area.

Instead of crossing the railway on the level at Reservoir Station, the Commission recommends that the traffic be diverted via Spring-street. For a short length near its junction with High-street, Spring-street is 100 feet wide, though for most of the balance of its length it is 55 feet, but in view of its use solely for vehicular traffic, this is considered adequate. A section of Spring-street between Berwick-street and Powell-street, and another section between Regent-street and Mitchell-street, are less than 66 feet wide, but the latter width should be attained by setting back the existing frontages, which will not involve any serious re-arrangement of properties. Spring-street should then be connected directly with St. George’s-road at Murray-road, as shown on the plan, Sheet No. 7.

For the greater part of its length, between Murray-road and Miller-street, St. George’s-road reserve needs only small forecourt excisions to allow 30-ft. roadways to be provided on either side of the pipe track. Between Showers-street and Miller (or Dundas)-street, however, the reserve narrows considerably. The workshops and property of the Melbourne and Metropolitan Tramways Board are located on either side of the road at this point and they abut on the eastern side of the pipe track reserve, whilst on the western side further buildings occupy most of the area, exclusive of a 50-ft. street. The available width between these buildings, including the pipe track reserve, is therefore reduced to 116 feet. The buildings on the eastern side are so designed that any interference would cause an expensive remodelling of the workshops. In order to secure one-way traffic routes on either side of the pipe track as far as Miller (or Dundas-street), it is believed that little difficulty would be experienced in providing a conduit for the pipes under the roadway at this point, or alternatively, excising from the tramway depot on the western side such land as may be necessary. A length of 1,000 feet of roadway would require to be so treated. From Miller-street southwards to the Merri Creek, St. George’s-road is of varying widths, but there is ample room for 30-ft. roadways on either side of the pipe track central reserve, as well as for the location of one “parked” tram line between the roads and the pipe track reservation as shown by the cross-section below—

Cross section for St. George’s-road at Northcote.

At the present time, both tramway tracks are constructed on the western side roadway, but the Commission considers that one track should be located on the other side at the first favorable opportunity. Some slight excisions of forecourts would be necessary, but in no case would any building resumptions be involved.

Although it would be unwise to plant trees along the pipe track reserve, it is considered that the ornamental treatment of the central reserve of St. Georges-road now being carried out north of the Merri Creek could be effectively and safely carried out in the northern extensions of the route by planting lawns and surface rooting shrubs.
At its junction with Merri Creek, the St. George's-road traffic would have two alternative routes to the City and southern suburbs. One is via the Fitzroy section of St. George's-road, thence along Nicholson, Prince's, Neill, and Lygon streets to Victoria-street, all of which are good wide roads. The other route would be via the proposed 100-ft. wide parkway on the eastern side of Merri Creek, of which Merri-parade forms the nucleus, to the bridge at High-street. After crossing the bridge and passing through the subway under the railway, the existing 198 feet route of Queen's-parade (Arterial Route No. 14) would be available. (See plan, Sheet No. 4.) This latter connexion would give access to Hoddle-street, which is regarded by the Commission as an extremely important thoroughfare in relation to the general scheme of traffic circulation and distribution on the eastern outskirts of the City business area.

**Route No. 12—Fairfield and East Preston Highway.**

The large and sparsely developed area between the Clifton Hill–Whittlesea railway and Darebin Creek is not provided with a north-south route direct to the City, excepting for High-street, which is adjacent to the railway and which, for reasons stated previously, is likely to become a congested thoroughfare. By taking advantage of the present sparse development and of existing streets, it has been found practicable to plan a north-south arterial road to serve this area, following the route indicated below.

For the purposes of this Report, it is proposed that this highway should commence at the Electricity Commission's transmission line, at the point where it crosses the Maroondah water supply aqueduct, as shown on the plan, Sheet No. 8. A road 66 feet in width is proposed parallel with the aqueduct reserve on its southern side to a point 70 chains south-westerly, where it continues through the subdivided but unbuilt-on land, and generally absorbing Argyle-street as far as St. Vigeon's-road. Argyle-street would need to be widened to 80 feet. A new road of 80 feet width is continued southerly to link with the northern end of Boldrewood-parade at Crookston-road. Boldrewood-parade is then continued southerly from Plenty-road 100 feet wide through subdivided but sparsely built-on lands as far as Wood-street, where it connects with Kathleen-street, which also needs widening to conform. From Kathleen-street, a southerly extension by a new road would enable Albert-street to be reached at Gower-street. Albert-street is also shown widened to 100 feet, as far south as Alamein-street. The balance of the highway is shown on the plan, Sheet No. 3. A new 100-ft. street would be required to connect Albert-street with Station-street, which is already 80 feet wide for the whole distance to the railway at Fairfield Station. By setting back the building lines 30 feet along Station-street as far south as the shopping area, it would be widened to 100 feet in due course. That part of Station-street between the railway and Heidelberg-road would have to be widened, probably on the eastern side, from 66 feet to 80 feet. Station-street crosses the Heidelberg Railway line on the level, and some means would need to be found for separating the grades. At Heidelberg-road the highway would continue to the City via Arterial Route No. 14, which is described later.

**Route No. 13—Ivanhoe–Bundoora–Whittlesea Highway (Waterdale-road and Extensions).**

There is a large area between the Darebin Creek and that part of the Greensborough railway which connects Ivanhoe and Watsonia which is only partially and sparsely developed and which will in due course need an arterial route to the City. At the present time Waterdale-road provides the only north-south through communication as far as the northern boundary of the Shire of Heidelberg, but it is only between 33 and 50 feet wide. Waterdale-road is ideally situated as an arterial road in this sector of the metropolis. It feeds directly into Arterial Route No. 14. Although it is not selected as a tramway route in the Tramway Board's general scheme its location is such that some means of public transport will be necessary in the future. In addition to the effective service this road would render through the area which it traverses, it would serve as an extremely useful by-pass for the present traffic route between Melbourne and the districts beyond Bundoora, viz., Mernda, Whittlesea, Kinglake, &c. That traffic is now required to use High-street, Northcote, and Plenty-road, Preston, both of which are only 66 feet wide and carry tramways, whilst for the greater part of their length they are busy commercial thoroughfares. The details of this arterial route are outlined below and are shown on the plans, Sheets Nos. 8 and 3.

Entering the area of planning, via Upper Plenty-road, a new road 120 feet wide is then proposed southerly from its intersection with Bundoora-road, through the vacant private land as far as the Mount Park Asylum Reserve lands, thence continued directly south through that reservation, where no buildings would be affected, to connect with Waterdale-road at the boundary of the Municipalities of Preston and Heidelberg. This 1½ miles of the road reserve should be
available at no cost to the community. From this point, Waterdale-road would be used throughout its whole length. It should be widened to 120 feet and, as far south as Haig-street, this could be done more economically on the eastern side, because the subdivisional development fronting the road on this side is not so far advanced. Between Haig-street and Bell-street, it would be more economical to carry out the widening on both sides, although the western side resumptions would affect forecourts only of allotments on which homes are erected. South of Bell-street to Acacia-street, widening on the eastern side is favoured because the land is unsub-divided. Between Acacia-street and Banksia-street, only forecourt resumptions on both sides of Waterdale-road are necessary. From Banksia-street southwards, the widening would be more easily effected on the western side, as far south as Ailsa-grove, because the opposite side is fully built up. Throughout the whole length of Waterdale-road from the Mont Park Asylum boundary to Bond-street (which is just north of Ford-street—see plan, Sheet No. 3), only two buildings would need to be resumed in securing a road 120 feet wide. Between Bond-street and Ailsa-grove (which is half-way between Ford-street and Livingstone-street—see same plan), about sixteen houses would need demolition. For 700 feet between Ailsa-grove and Heidelberg-road, a widening of Waterdale-road to 84 feet by resumptions on both sides would suffice, as this section is zoned as a business area. Central plantations would not be constructed in the business centre, thus leaving sufficient constructed roadway.

This arterial road would then join Arterial Route No. 14 at Upper Heidelberg-road near the Ivanhoe Railway Station.

**Route No. 14—Melbourne, Heidelberg, and Greensborough Highway.**

This highway is at present the main road between Melbourne, Heidelberg, Greensborough, Eltham, and the hilly country north of the Yarra River. Apart from its ordinary utility it is one of the favorite scenic motoring routes. For the purposes of this Report, the metropolitan section of the highway commences on Greensborough-road at the circumferential road at Watsonia. In view of other proposals in the Heidelberg district which, when provided, will obviate the use of this highway by much of the traffic that at present has no other suitable route, there should be little need for increasing the width of the Greensborough, Lower Plenty, or Upper Heidelberg roads, as far as Waterdale-road, especially as they are not contemplated as tramway routes. The Lower Plenty-road joins Plenty-road at Waiora-road and the highway connects into Upper Heidelberg-road at Bell-street, west of Heidelberg Station. The route is shown on the plan, Sheet No. 8. At Waterdale-road, just west of Ivanhoe Station, Arterial Route No. 13 from Bundoora joins this highway. It is considered that between this point and the City a wider road is essential, and the following scheme of improvements is recommended. (See also plan, Sheet No. 3.)

Between Waterdale-road and the bridge over the railway, Upper Heidelberg-road should be widened to 84 feet by resuming a strip on the eastern side. This would involve the demolition of buildings for a distance of about 500 feet, but in the remaining distance to the railway bridge, the widening would cause very little interference with buildings. The forecourts of a few properties on the eastern side of Lower Heidelberg-road, opposite the railway bridge, would require some small adjustments. Immediately after crossing the railway at this point, Upper Heidelberg-road is joined by Lower Heidelberg-road, and, on account of the further quantity of traffic to be accommodated on the one road, a width of 120 feet should be aimed at. It is considered that if the boundary of the railway reserve were adopted as the north-western alinement of the highway, a sufficient width would be obtained until 120 feet was attained south of Darebin Station. At the Darebin Station, the widening proposed would render necessary the resumption of a few shops and excisions from some shop allotments, many of which would still have sufficient depth, but only forecourts would be affected farther south to Kingsley-street in attaining the 120-ft. width, which width is then continued. The present bridge over Darebin Creek should be widened, and the approaches on either side made to conform to the 120-feet scheme.

That section of Heidelberg-road between the Darebin Creek and the existing park lands of which Bond-street (just west of and opposite Rathmines-street) forms the eastern boundary is only 66 feet wide. At Station-street, Arterial Route No. 12 from East Preston is planned to connect into Heidelberg-road, and westerly from this point and along Station-street a tramway route is projected. The Commission therefore recommends that this 66-feet wide section of Heidelberg-road between the Darebin Creek and Bond-street be widened on the northern side as follows:—

Between Darebin Creek and Station-street to 120 feet.

Between Station-street and the municipal boundary at Bond-street to 132 feet.
Although this widening would involve the demolition of about 45 buildings and the excision of forecourts of others, there are many unbuilt-on allotments in this section of the road. The allotments in nearly all cases have adequate depths, thus permitting this work to be carried out without much interference with blocks at the rear.

At the Station-street, Fairfield, intersection on the day of census, about 2,500 vehicles used Heidelberg-road, but on fine Sundays and public holidays this number is greatly augmented by tourist traffic. Having regard to the potential importance of this highway and the others which are tributaries of it, the improvements recommended will become imperative.

Between the level crossing at Clifton Hill and the Northcote–Heidelberg municipal boundary, the Heidelberg-road, through Fairfield Park, is about 132 feet wide, but the road reservation, part of which is now included in the park, is 198 feet.

The level crossing at the Clifton Hill Railway Station has been the subject of a special report by the Commission, and a scheme for treating Heidelberg-road at this point is referred to in detail under the heading of Level Crossings—page 138. Heidelberg-road enters Queen’s-parade at this railway crossing, the latter being 198 feet wide.

The plan, Sheet No. 4, shows the remainder of this route. Queen’s-parade enters Alexandra-parade at Fitzroy, and it is proposed that the highway should only follow Alexandra-parade (which is 198 feet wide) as far as Nicholson-street, at which point it joins Arterial Route No. 11 (St. George’s-road, &c). Although various alternative roads of approach to the City are available from this vicinity, that via Canning, Barkly, and Rathdown streets to Exhibition-street is recommended for development as the vehicular route, because it would not involve the use of tramline streets.

Route No. 15.—East Kew to Templestowe Highway.

From East Kew to Templestowe, there is a large area of sparsely settled country which has been subdivided for the greater part of the distance, especially in the vicinity of the Bulleen–Templestowe roads. This route is direct, with reasonably good grades throughout, and the Commission favours its development as the arterial road to and from the township of Templestowe.

For the purposes of this report it is recommended that the outer end of this highway be at the south-western corner of the township where Templestowe-road joins Foote-street, Bulleen-road, and Union-street. This point is shown on the plans, Sheets Nos. 8 and 9. Immediately south of this junction there is a large unsubdivided area through which Templestowe-road runs, and there should be no difficulty, when plans of subdivision come forward, in securing, at no cost, the necessary adjacent land to enable the present 66-ft. road to be widened to 100 feet. The sides upon which the widening is recommended are shown on the plan, Sheet No. 9. Templestowe-road passes diagonally through the subdivided lands north of Koonung Creek.

The widening of this road to 84 feet on its northern side through the subdivisions north of the creek has already been incorporated in the plans of subdivision at the instance of this Commission, and it is recommended that the allotments fronting this road should have any buildings set back sufficiently far to permit of additional width being acquired if a tramway is ever constructed. Any new subdivisions along this road should allow for a width of 100 feet. The Templestowe-road crosses the Koonung Creek and a short distance farther southwards joins Bulleen-road. As the land north of the Templestowe-road at this point has not been subdivided it should not be difficult to obtain the 34 feet required. Bulleen-road widens out sufficiently in the vicinity of Hillview-road (see plan, Sheet No. 9) to provide the desired uniformity of width, but for the balance of the distance to its connexion with Doncaster-road the widening will be necessary. It is recommended that 17 feet be obtained from each side by setting back the building lines and excising that amount of forecourts.

This arterial route joins Arterial Route No. 16 at Doncaster–Bulleen roads junction.

Route No. 16.—Fairfield to Doncaster Highway.

In deciding upon the route to be recommended for arterial roads leading from the City to the large areas east and south of the Yarra River and north of Whitehorse-road, the Commission found it essential to avoid, as far as possible, using the present main eastern arteries which serve the lands on either side of the Kew and Box Hill railway lines. Reference to Map No. 2 (see page 26) shows that the existing routes via Victoria-street, Bridge-road, and Swan-street are all carrying heavy volumes of traffic at present, whilst the comments on pages 30 and 33 set out the relation of this scheme to the traffic census results. The areas served by those roads are capable of very much greater development, whilst the provision of main road
communication between those areas and the City is a matter of some difficulty, even if other routes be provided for the immense amount of traffic which will in due time be generated by the closer settlement of such attractive lands north of Whitehorse-road. Incidentally, the proposal to build a railway from Kew to Doncaster suggests that more rapid and closer housing development may be expected in the North Kew to Doncaster locality.

In its Special Report dealing with the area to be served by the Darling to Glen Waverley Railway, issued under date 6th May, 1927, the Commission emphasized the above statements and recommended that the North and East Kew to Doncaster area should be served by an arterial route as set out in detail below. By following the route recommended, which avoids the eastern tramline approaches to the City, this traffic is given better right of way than is possible via Victoria-street, &c., and the distance to and from the City is the same.

Commencing on Doncaster-road at the boundary of the area of planning (see plan, Sheet No. 9), a widening of it to 100 feet throughout its whole length to its junction with Burke-road is recommended. The side on which the widening should be carried out, in this instance, would vary according to the existing state of subdivisional conditions and the opportunities which future development afford. The route is then via Kilby-road, which is already 100 feet wide, and it follows that road as shown on the plan, Sheet No. 3, thence via other existing and new streets (White-avenue, Park-terrace, &c.), which would need to be widened to 100 feet, thence across the Kew Asylum Reserve to the unused Outer Circle Railway Reserve, and the existing railway bridge over the Yarra at Fairfield. This section is not at all likely to be used again for railway purposes, nor is the unused bridge over the Yarra which previously formed part of the railway route between Fairfield Park and Deepelene. The adjoining municipalities have been endeavouring to get this bridge opened for road traffic for some considerable time, but there has been difficulty in reaching agreement as to terms. Its use for road purposes is strongly urged by the Commission.

After crossing the Yarra a small section of new road would be necessary to give connexion, as shown on the plan, Sheet No. 3, with other arterial roads at Heidelberg-road near the Northcote-Heidelberg municipal boundary. Park-crescent will assist in providing this section of the roadway, and its widening and the remainder of the section would necessitate resumptions of private property. Less than twenty buildings would be affected, however, of which not more than six are of brick or stone.

The relief that would be given to the other routes leading from the eastern suburbs to the inner areas by the adoption and provision of this direct artery would be very substantial. Its cost would be very small in comparison with other measures of improvements to existing routes, such as would become imperative if the present opportunity were not utilized.

Route No. 17.—Melbourne—Canterbury—Montrose Highway.

The present main roads of approach to the central business area from the east, in the sections passing through the industrial and densely built-on Municipality of Richmond, are all carrying a double line of tramway on roads of 66 feet in width. Not one of the existing bridges over the Yarra serving these roads can be regarded as at all effective. East of the Yarra the existing main roads running due east are in no instance more than 66 feet wide until the 8-mile radius line is reached, and then Whitehorse-road alone widens out.

Reference to the Density of Development Map, on page 24, shows that the area served by these routes, and lying south and east of the Yarra and north of Gardiner’s Creek, as far east as the area of planning adopted, is only built up more or less fully in a few small sectors along the various suburban railway routes. Assuming that these eastern suburbs become housed to a population density averaging not more than twenty persons per acre, by a tapering development along the railway lines, existing and proposed, this stretch of country within the confines of the area of planning adopted for this Report would accommodate 650,000 people. There are only about 90,000 people in the same area at present. The eastern suburbs are so suitable for residential development that it is quite impossible to forecast the limits of expansion in this direction.

In the Special Report dealing with the area to be served by the Darling to Glen Waverley Railway the Commission made some observations on this subject (pages 9 and 10), and the First Report issued in 1925 included various recommendations, now incorporated herein, for assisting in making the necessary provision for arterial road improvements.

It is considered that, by diverting the arterial road traffic generated by the East Kew, Doncaster, and Templestowe regions over the Yarra at Fairfield via Arterial Routes Nos. 14 (part), 15, and 16, very definite relief from ultimate congestion along the existing routes would
be achieved. A further scheme to serve the southern portion of this vast area is submitted by Arterial Route No. 18, and this, too, would prove of incalculable value not only to the area it will serve, but by obviating, in due time, the use of the present routes by such a large volume of traffic. Notwithstanding these diversions, the enormous future development which is to be expected in the eastern suburbs could not be provided with adequate through road facilities by the three roads now passing through Richmond, or by the 96-feet wide tramline streets in the Municipalities of Hawthorn, Kew, Camberwell, and Box Hill. To improve these existing through routes sufficiently to accommodate this ultimate traffic would involve a series of street widenings where the most intense development has already taken place. This costly method of improving the conditions is one which should not be generally favoured until other less expensive measures have been examined. Therefore, the Commission submits that, by providing the new arterial routes referred to, by the connexion of Canterbury-road with Barker's-road, and the improvement of the through route from the City as outlined below, the road access will be ample for a long time. Canterbury-road is unlikely ever to carry a tramway, and, if connected with Barker's-road, its traffic capacity should be very great. It is so located in relation to the districts to be served (see the Diagrammatic Plan on page 62) that it affords an opportunity to provide one of the most effective routes in the metropolitan area. It is shown to give excellent east-west communication across the metropolitan area skirting the City proper by the connexion in Victoria-street, City, with Arterial Route No. 5 (Dynon-road, &c.). Details of this arterial route, No. 17, follow:

It commences, as shown on the plan, Sheet No. 15, at the eastern boundary of the area of planning at Heatherdale-road at Vermont. Canterbury-road at this point is 132 feet wide, which continues until a point about 220 yards west of Springvale-road is reached. For the remainder of the route, as shown on the plans, Sheets Nos. 15 and 10, to its intersection with Burke-road, Canterbury road is 66 feet wide and, for reasons already given, is regarded as of adequate width. It will be seen by the plan, Sheet No. 2, that Canterbury-road runs into Rathmines-road after crossing Burke-road. Rathmines-road is also 66 feet wide, but it ends at Auburn-road. There is a continuation westerly via Liddiard-street, but this street, which ends at Glenferrie-road, is only 33 feet wide, and the same difficulty of westerly continuation is again met with should any scheme for its improvement be considered.

Rathmines-road to Barker's-road—New Connecting Link.—The Commission therefore recommends that a new road 84 feet wide be cut through the built-up area to give direct connexion from Rathmines-road, to join Barker's-road opposite Rossfield-avenue, just west of
Haines-street. The aerial view shows the route of and existing conditions along this proposed link. This link is regarded as of an urgent nature, and is included in the urgent works programme in Part III. of this Report. The scheme adopted by the Commission involves the demolition of 39 buildings, comprising 22 brick and 16 weatherboard houses and 1 shop. The number of persons dispossessed would be 175. The estimated cost of these resumptions is £70,380. The resale of frontages to the new road which could be resubdivided is estimated to yield £25,790. Road construction is estimated to cost £15,400, bringing the total cost of the scheme to £59,990. The new allotments, when built upon, would rehouse about 70 people.

Barker's-road Widening.—The arterial road is then planned to follow Barker's-road to the Yarra at Victoria Bridge. Barker’s-road, between Rossfield-avenue and High-street south, is recommended for widening to 84 feet by setting back the northern alinement 18 feet. For a considerable distance this setting-back should not materially affect the abutting properties, especially those of Xavier College and the Methodist Ladies’ College. In a very few instances only does a widening on the northern side by 18 feet necessitate interference with buildings.

West of the intersection with High and Church streets, Barker's-road carries a double track tramline, and High-street is shown by the traffic census map on page 26 to be an extensively used route. It is therefore recommended that the part of Barker's-road between High-street south and the Yarra should be widened on the north side to 100 feet. A scheme to give effect to this was submitted in detail in the Commission’s First Report—page 42 and Plate XXIII. See also the plans, Sheets Nos. 2 and 3, of this Report.

Victoria Bridge, Victoria-street, Victoria-parade.—The balance of this arterial route, No. 17, via Victoria Bridge, Victoria-street, and Victoria-parade to the City was dealt with by the Commission in detail in its First Report, pages 39 to 41 and various accompanying plans. This section of the route is also regarded as urgent and is included in the schedule of such undertakings in Part III. of this Report. The scheme includes the reconstruction of Victoria Bridge to a width of 89 feet, the widening of Victoria-street to 198 feet, and the replanning of the adjacent lands on the south side in accordance with recognized town planning treatment.

The Melbourne and Metropolitan Board of Works has been authorized to undertake the rebuilding of the Victoria Bridge, and the Commission trusts that the width and alinement recommended by it will be adopted.

The plans, Sheets Nos. 2 and 3, show the scheme as far as the junction of Victoria-street with Victoria Parade at North Richmond. Victoria-parade (231 feet wide) is shown on the plan, Sheet No. 4.

Route No. 18.—Melbourne, Ashburton, and Ferntree Gully Highway.

In its comments dealing with Arterial Routes Nos. 16 and 17, the Commission emphasized the necessity for providing new and improved means of arterial road communication for the eastern suburbs. Analysis of the traffic census also showed the urgency for special consideration of this matter. (See, specially, pages 30 and 33). It was shown that, in two and a half years, the traffic entering and leaving the city area had increased by 31 percent. (see page 37). The traffic on the eastern outlets of the City, however, increased in the same period by 37½ per cent.

The railway extension from Darling to Glen Waverley which is being built and is already partly opened will foster settlement in those parts. Having regard to the extensive use to which the present approach roads to the city from the east and south-east will be put, it is essential that these existing and indirect routes should not be further congested by the additional traffic which will result from this new development.

When the Commission was planning the area to be served by that new suburban railway, provision was made in the Special Report submitted under date 6th May, 1927 (page 10), for a new arterial road, 120 feet wide, to carry the increased traffic anticipated from these districts. Its construction would have a far-reaching effect on the areas through which it passes. It is practically a completely new route, designed to pass through unbuilt-on and, in the main, unsubdivided areas for the greater part of its length.

It is planned to commence at the junction of the Burwood–Ferntree Gully and Bayswater roads, just east of Dandenong Creek. After crossing Dandenong Creek at North Boundary-road, practically midway between North Boundary–Highbury roads and High Street-road (see plan, Sheet No. 14), it crosses Gardiner’s Creek just north of High-street road and then crosses Boundary-road along the alinement of Baker-street (see plan, Sheet No. 10). It then follows
the valley of the tributary stream to Back Creek, taking advantage of Flowerdale-road and other existing streets. At Glen Iris-road, the route follows Gardiner-parade and continues along the southern side of Back Creek, crossing it just before its confluence with Gardiner’s Creek, thence along the northern side of Gardiner’s Creek, continuing across Burke-road (see plans, Sheets Nos. 10 and 2), Toorak-road, Auburn-road, and Glenferrie-road, thence continuing along the north side of the creek through the Scotch College Grounds, over the Yarra River and into Richmond Park. The road then follows the north bank of the Yarra River through the Municipality of Richmond, until it connects with Harcourt-parade at Church-street. The details of the scheme along the valley of Gardiner’s Creek are shown more clearly on the plans of the Gardiner’s Creek parkway scheme published on page 220. A scheme for improving the part of this arterial road which follows Harcourt-parade, Richmond (see plan, Sheet No. 1), was submitted in the First Report of the Commission (page 26). That part of the scheme along the Yarra Valley is also dealt with in connexion with the Yarra Boulevard, of which it forms part—see page 212.

After following along Harcourt-parade to Punt-road, the undermentioned alternative routes to the City are available (see plan, Sheet No. 1)—

1. Via Batman-avenue to Swanston-street direct.
2. Via Batman-avenue to the point of its connexion with Swan-street, thence across the proposed bridge over the Yarra in line with Swan-street to join Alexandra-avenue, underneath St. Kilda-road, and into the City via any of the several routes as shown on the plans.
3. Via Punt-road, widened on the park side to 100 feet, thence along the proposed Yarra Park-road, Wellington-parade, Wellington-parade South, and Flinders-street.

The last route is described in greater detail in the Main Roads Schedule as Route No. 37 (see page 99).

This artery would effectively handle the road traffic between the City and the newly developing areas in the Ashburton and Glen Waverley regions and at the same time provide an attractive and direct route for the extensive tourist traffic to the Dandenong Ranges. The various roads planned in the undeveloped areas that will feed this road will encourage through traffic to use it in preference to the tramline streets in the eastern suburbs, many of which even at present are uncomfortably crowded. This road has great possibilities as a future trunk highway, and its location is such that the cross movement from less important streets should not cause interruption to the traffic in the main road. If the volume of traffic on this road becomes greater than anticipated, further relief could be obtained by the construction of subways and/or bridges at its intersection with other important cross routes, because its location renders it particularly adaptable to a series of grade separations, which would allow of higher speeds and greater safety.

The contour maps of the areas through which this road is planned show that it would have grades considerably more favorable to traffic than the existing routes, as it has been planned to conform with the contours. Its provision is considered to be of vital importance in the general scheme, and in the section between Gardiner’s Creek and Warrigal-road it would create a considerable enhancement in value of the land, bringing districts which are comparatively inaccessible into direct connexion with the City.

Several small sections of this road have already been included in the plans of subdivision since the issue of the Special Report dealing with the area to be served by the Darling to Glen Waverley Railway. If the procedure recommended on page 229 is followed, it is considered that the greater part of the route through areas not yet subdivided should be obtained at no cost to the community. That part of the scheme which runs through these areas is included in the programme of urgent works—see Map No. 5.

The only portions of the whole length of this route which would involve the resumptions of buildings are as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Glen Iris-road and Great Valley-road</td>
<td>14 houses</td>
</tr>
<tr>
<td>Between Great Valley-road and Burke-road</td>
<td>12 houses</td>
</tr>
<tr>
<td>Between Toorak-road and Tooronga-road</td>
<td>14 houses</td>
</tr>
<tr>
<td>Between Tooronga-road and Burke-road</td>
<td>Lime kilns</td>
</tr>
<tr>
<td>Frontages to Harcourt-parade, Richmond</td>
<td>See First Report for details</td>
</tr>
</tbody>
</table>
Route No. 19.—Prince's Highway (Dandenong-road and Road through Prahran Valley).

One of the finest roads leading into Melbourne is Dandenong-road. Not only is it the arterial route from Gippsland, but it is fed by many tributary roads from many other parts of the State. It also forms the first part of the favorite overland route to Canberra and Sydney. In the inner suburban area of Melbourne, however, the existing road, which is 198 feet wide, is impaired in its effectiveness because of the narrow section, known as Wellington-street, which connects it and St. Kilda-road. Its value in the section between the Malvern and Caulfield Railway Stations is also lessened to some extent by reason of the fact that portion of its width has been taken over for railway purposes.

Analysis of South-Eastern Suburbs Traffic flow.—In analysing the suburban traffic census, the Commission drew attention to the destinations of traffic leaving the City via St. Kilda-road, and pointed out the obvious necessity for intercepting that which proceeds to and from the south-eastern suburbs, and diverting it into the City by routes other than those existing through the Municipality of Prahran. (See page 30 and the Suburban Traffic Flow Chart, Map No. 2, on page 26). Wellington-street (which connects directly with Dandenong-road), High-street, Commercial-road, Malvern-road, and Toorak-road are the only through roads leading easterly from St. Kilda-road. In each case they are only 66 feet wide east of Punt-road, and carry a double line of electric tramway. There are extensive business areas in all these roads excepting Wellington-street, which is only short by comparison, and the Traffic Flow Map shows how busy these streets are even now. The Commission therefore deemed it essential to find some way of supplying the arterial road requirements between the City, the south-eastern suburbs and the country beyond so that such traffic could be diverted away from the tramline thoroughfares.

Chapel-street, Prahran, Traffic.—The Traffic Flow Map also shows that Chapel-street, Prahran, another 66 ft. tramway route and a very important business street, which forms part of an alternative route to St. Kilda-road, is congested by reason of the movements of traffic to and from the east-west cross streets just referred to. The Commission has given considerable attention to schemes which would relieve this congestion, and many proposals for widening and/or providing parallel by-pass routes were investigated. The Commission is, however, of the opinion that the provision of the new arterial route along the Prahran Valley, in conjunction with the combined improvements recommended later in regard to Punt-road (Main Routes Nos. 34 and 79) and Williams-road (Main Routes Nos. 83 and 36), would avoid the necessity for the widening of Chapel-street or of providing by-pass routes immediately adjacent to it.

Prahran Valley Road Scheme.—The route for this highway in the inner area, as shown by the diagrammatic plan, is located so as to follow a course along the valley of the northern side of the railway between South Yarra and Armadale Stations and it would thus intercept practically all of the east and west roads which feed St. Kilda-road. It would encourage a greater use of north-south streets such as Kooyong-road and Williams-road, which it intercepts, and in many instances it would provide a shorter distance of travel to the city. The detailed description of this route within the area of planning adopted is as follows:

Commencing on Dandenong-road, which is 198 feet wide, at its intersection with North-road (see plan, Sheet No. 11) and continuing along that road through Oakleigh and Caulfield (see plan, Sheet No. 12) to the railway embankment, thence by the roads parallel with and on either side of the railway to near Malvern Station (see plan, Sheet No. 2), and thence continuing along the Dandenong-road to Kooyong-road. The route is then via Kooyong-road as far as the bridge over the railway line at Armadale Station. This road is only 66 feet wide, but as it will not be utilized as a tramway route, there is little fear of it becoming a congested thoroughfare. Up to this point no alteration to the existing conditions is proposed. A new road 132 feet wide is then proposed through the Prahran Valley practically parallel to and on the northern side of the railway to South Yarra, giving connexion with Alexandra-avenue just east of Darling-street via a subway under the railway embankment (see plan, Sheet No. 2). This route is planned to connect with Arterial Route No. 1 by means of a subway under St. Kilda-road where it is at present intersected by Alexandra-avenue.

Alexandra-avenue is already sufficiently wide to accommodate large volumes of traffic. It is proposed, as stated in the Commission’s First Report, that its present restricted use as a park road should be revoked, so that all traffic desiring to use it may do so.

The route selected as referred to above follows a depression which has many drainage easements and reserves along it, and which have not attracted a type of development in harmony with the immediate surroundings. The properties affected are in nearly all cases inferior to those
on the higher elevations. This fact, together with the unsatisfactory existing street system in the vicinity, provides an excellent opportunity for planning this road in a situation that would supply a most important arterial link. By parkway treatment, the road would further enhance the value of all of the surrounding property. A number of small existing streets, the most important of which are Northcote-road, Lambert-road, Gordon-street, Norman-avenue, and Dunalbo-avenue, are absorbed in the scheme.

In order to avoid excessive interference with the sports ground of the Boys' High School at Forrest Hill between the railway line and Chapel-street, the road is planned to pass under the railway embankment immediately north of the South Yarra Railway Station, and thence to join Alexandra-avenue alongside Darling-street.

If the proposed new road had been planned to connect direct into Dandenong-road instead of via Kooyong-road, it would have involved an extra mile of new road passing across Glenferrie-road and along Station-street, Malvern. This would cause the demolition of many valuable shops. As only 15 chains in distance would be saved, and having regard to the fact that Kooyong-road is not likely to become a tramway route, a direct connexion with Dandenong-road could not be justified.

Nearly 400 houses would be demolished in the 2½ miles of new roadway, but at the same time many excellent building sites with frontages to the new road would become available. The resale of these sites would yield a considerable sum, whilst the imposition of a betterment rate, which could equitably be applied in such a case as this, should materially assist in defraying the expenses involved.

If this road is not constructed, there is little doubt that the widening of the feeder roads to St. Kilda-road, which are only 66 feet wide and carry trams, will have to be faced in the near future. Likewise, some means of providing greater facilities for Chapel-street traffic will be imperative. The great cost of these alternatives makes the new road proposal outlined herein relatively a very economical scheme. It would not only overcome the congestion of the thoroughfares now leading through Prahran, but it would encourage through motor traffic, thus relieving the tramline streets and giving quicker and safer travel to both forms of transport.
Route No. 20.—Mornington Peninsula Highway.

The Mornington Peninsula provides a delightful combination of beaches and mountains, which are extremely popular tourist resorts. The Peninsula is developing fast and in due time will have a large population, especially during the summer months.

Point Nepean-road is the through route between the metropolis and this extensive area, and there is no route in Victoria which carries more traffic. On many occasions 60 to 70 vehicles per minute have passed along Point Nepean-road at Mordialloc. The Shire of Frankston and Hastings conducted special checks of the traffic at Frankston on 26th and 27th December, 1926, and 2nd January, 1927, for 11 hours on each of the two former days and for 10 hours on the latter occasion. The respective average numbers of vehicles per hour on each day passing the selected point were 663, 773, and 718, with a maximum of 1,247. As Frankston is 27 miles from Melbourne, these figures give some indication of the extent of the Point Nepean-road traffic nearer the City on such occasions.

Apart from its importance as a tourist road, it is the main trunk road to the whole of the southern municipalities of the metropolis, within which a greatly increased population will be housed in the future.

For the purposes of this Report, the metropolitan section of the highway is taken as comprising the following:

- From Mordialloc to the intersection with Glenhuntly-road at Elsternwick.
- To the intersection with Carlisle-street at St. Kilda.
- To St. Kilda Junction.
- To Prince's-bridge, Melbourne.

Widening of High-street, St. Kilda, and Point Nepean-road.—Although St. Kilda-road and Brighton-road, and those portions of Point Nepean-road between Glenhuntly-road and Cochrane-street and between South-road and Mordialloc Creek, are 198 feet wide, High-street and the remaining portion of Point Nepean-road which comprise the smaller section of the highway are bottle-necked to a width of 66 feet. These narrow portions have destroyed the effectiveness and marred the beauty of the greater portion of the highway. The Commission has ascertained from the municipalities concerned the valuations of properties fronting these narrow sections so that the most economical schemes for widening these two stretches of roadway could be put forward. These widenings are regarded as works of an urgent nature, and they are therefore included in the schedule of urgent works submitted under Part III of this Report. The estimates of costs, &c, and the scheme suggested for financing these undertakings are included in the same part of the Report.

High-street, St. Kilda.—Reference to the Suburban Traffic Flow Map published on page 26 shows what an important link High-street is in the St. Kilda-road–Brighton-road route. High-street carries more traffic than Brighton-road, which is three times its width. 26·8 per cent. of the traffic entering and leaving St. Kilda Junction is from and to High-street, whilst 59·5 per cent. of the St. Kilda-road traffic connects with High-street.

High-street has been built on largely for shopping purposes, but, except for a few isolated shops, it cannot be regarded as a good business area. Nearly all the premises are of an inferior type, and a large proportion of the shops are either vacant or merely occupied because of the dwelling accommodation attached. The photographs on next page indicate the class of property referred to. As these dilapidated buildings exist on both sides of the street, the Commission recommends that, in widening the thoroughfares so as to conform with the widths of St. Kilda and Brighton roads, the whole of the properties on both sides are resumed and demolished. It is considered that it would be extremely unwise to widen High-street on one side and allow the depreciating conditions of the opposite side to remain. The value of property fronting both St. Kilda and Brighton roads is very high, and as High-street runs over the crest of a hill by gentle slopes, the resale value of residential allotments facing a new 198-ft. road would greatly reduce the net cost of the widening. Moreover, there would be a general enhancement created through the whole neighbourhood by such a scheme, upon which a betterment rate could be levied. No shops should be allowed along the new 198-ft. road, as such roads are quite unsuitable for business purposes. The shopping areas as defined in later pages will adequately serve the locality.
The Commission recommends that the widening itself be effected on the western side of High-street as shown on the plans, Sheets Nos. 1 and 2. This scheme would give more directness of travel, cause less interference with property and adjacent streets and be more economical than by widening on the eastern side, or on both sides, all of which have been fully investigated.

Point Nepean-road Widening.—Point Nepean-road, in the metropolitan area, is 198 feet wide except for the section between Cochrane-street, Elsternwick, and South-road, Moorabbin, which is only 66 feet wide. This narrow section is approximately 3½ miles long. The scheme for the widening of it is shown on the plan, Sheet No. 12, and the estimated cost is given in the schedule of urgent works, page 149. It is based upon a proposal to acquire sufficient property on the sides on which the widening is to be effected to admit of the resale of new frontages to the widened road, and to enable the full benefits of the widening to be reflected on adjacent property and street alinements by avoiding unsuitable and remnant allotments.

The widening would commence on the western side of Point Nepean-road just north of Cochrane-street to avoid interference with the eastern side of the road, and to maintain directness of travel. The scheme continues the widening on the western side as far as Hampton-street. It is then much more economical under existing conditions to transfer the widening to the eastern side of Point Nepean-road, and in giving effect to it a scheme is proposed for the special treatment of the intersecting streets at this point, as shown on the plan, which should materially assist the regulated movement of the traffic converging at this centre. From this point the widening is continued on the eastern side to South-road at Moorabbin. The plan also shows a treatment proposed at the intersection of Point Nepean-road with Marriage-road, Brewster-road, and Thomas-street, which will give the Point Nepean-road traffic a clear crossing, if this junction becomes very busy.