ALEXANDER URBANISM

A PEDESTRIAN HEART FOR CAMBERWELL

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Introduction

Camberwell Junction is a distinctive major traffic intersection at one end of Camberwell's town centre.

Alexander Urbanism, working in collaboration with the Martyn Group, transport planners, has developed a design idea to significantly improve the function and quality of the Junction. We propose to convert Camberwell Road on either side of the Junction into pedestrian space, leaving a simpler four-way intersection for motorists. Camberwell Road north of the intersection would become a quality social space and a new pedestrian heart for the town centre. It would be the place to go in Camberwell to meet friends and to enjoy a meal. Camberwell Road south of the intersection would be a tram superstop. The changes would provide safety and access improvements for people on foot, on bicycle, in trams and in private motor vehicles.

Our proposal is a proof-of-concept to encourage discussion; to take this further will require detailed design work and cost estimates.

Figure 1: Existing view of Camberwell Road looking north from the Junction.

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Figure 2: Artist's impression of the proposed plaza in Camberwell Road, viewed from Camberwell Junction.

Figure 3: Aerial photo of Camberwell town centre. This shows the Lilydale rail line (orange), the major roads, and retail buildings (yellow).

The Junction's context and evolution

Camberwell is an affluent suburb in Melbourne's inner east. Camberwell's town centre is an important strip shopping centre in Melbourne, identified in state planning policy as an activity centre. It is the City of Boroondara's most important shopping centre and designated as its Principle Activity Centre. The centre extends north along Burke Road up the hill from Camberwell Junction, over the rail cutting to just past the top of the hill. The centre contains over four hundred shops, selling a great range of goods and services. It is well serviced by roads, on- and off-street car parking, a rail line and three tram lines.

The footpaths on the major roads in the town centre, such as Burke Street, are less than four metres wide. This is sufficient width for pedestrian movement, but leaves little space for alfresco dining or comfortable gatherings of more than a few people. It has large open areas behind the shops on either side of Burke Road, but these are car parks.

The high volume of motor vehicle traffic on Burke Road has an detrimental impact on local amenity - the traffic noise makes conversation difficult, and crossing the street can be difficult and dangerous. Riversdale Road and Camberwell Road have similar conditions.

Metropolitan Melbourne has only a few main road intersections with more than four legs. As one of only a few six-way intersections, the Junction is a highly distinctive public place. This is reinforced by it being the low point between two hills on Burke Road.

The Junction is also a major traffic hub. It handles approximately 20,000 motor vehicles a day on Burke Road, 9,400 a day on Riversdale Road and 8,900 a day on Camberwell Road. 1700 tram passengers a day boarde or alight there using routes 70, 72 and 75. Pedestrian movements across the Junction number approximately 15,000 per day. (Camberwell Junction Access Plan 2014)

The Junction is operating near or at capacity during peak periods, with congestion and queuing of motor vehicles and trams in the morning and afternoon peaks.

The Rivoli Cinemas are approximately 100 m north-west of the Junction on the south side of Camberwell Road.

The Junction marks the southern end of the town centre. Although some retailing has recently developed on the south of the Junction, the vast majority is on the north side.

The Junction has evolved over time. When Melbourne was founded, government surveyors planned roads extending into the countryside from Hoddle's Melbourne grid to facilitate settlement and agricultural development. After the surveying came the expensive and arduous task of constructing the roads and bridges. The first bridge across the Yarra to the east of Melbourne was at the end of Richmond's Bridge Road. That bridge led to Burwood Road and on to Burke Road.

At the time there was no bridge across the Yarra at Riversdale Road, and an extensive marsh where Toorak Road now crosses Gardiner's Creek. Camberwell Road was created to connect Toorak Road and Riversdale Road with the one bridge that could get people to and from Melbourne. That created the Junction. The passing trade on the three main roads made the Junction an attractive location for shops.

What is now the Lilydale rail line extended from Flinders Street to Camberwell in 1882. Retailing soon extended from the Junction up to the rail station. Over the decades since, the retailing as grown in all directions, mostly to the north.

Figure 4: Camberwell Junction circa 1920, looking south-east. The building on the left has been demolished. The building on the right is the ES&A Bank, recently restored.

The issues

Lack of quality pedestrian space

Although Camberwell is a vibrant centre that continues to attract new investment in offices, shops and housing, it suffers from a lack of quality pedestrian space. Currently, the footpaths are the only social space in the centre, and those on Bourke road are not generous and offer little amenity. There is nowhere for groups of people to gather socially or to hold events such as an outdoor fashion parade or a festival.

No clear heart

The town centre has no heart, the obvious place to go to wait for a friend, and to see and be seen. People are hard-pressed to identify the heart of the centre. While the Junction is clearly the busiest intersection, the heart is perhaps the intersection of Burke and Prospect Hill Roads – a very unprepossessing space, and not pleasant for pedestrians.

Peak period traffic congestion

The Junction is congested during peak periods. Long queues form on each approach road, especially Burke Road and Riversdale Road. Despite the bypass roads around the Junction, congestion at the Junction causes motorists and tram passengers long delays.

Difficult and dangerous for pedestrians and tram users

Pedestrians face long delays in crossing the intersection, and the crossings are somewhat indirect. People seeking to board or disembark from trams have no protection from passing motorists.

Flooding

The Junction is a low point, with stormwater being channelled down at least four of the roadways that meet there. Camberwell Road between the Junction and the Rivoli has a history of flooding after heavy rain.

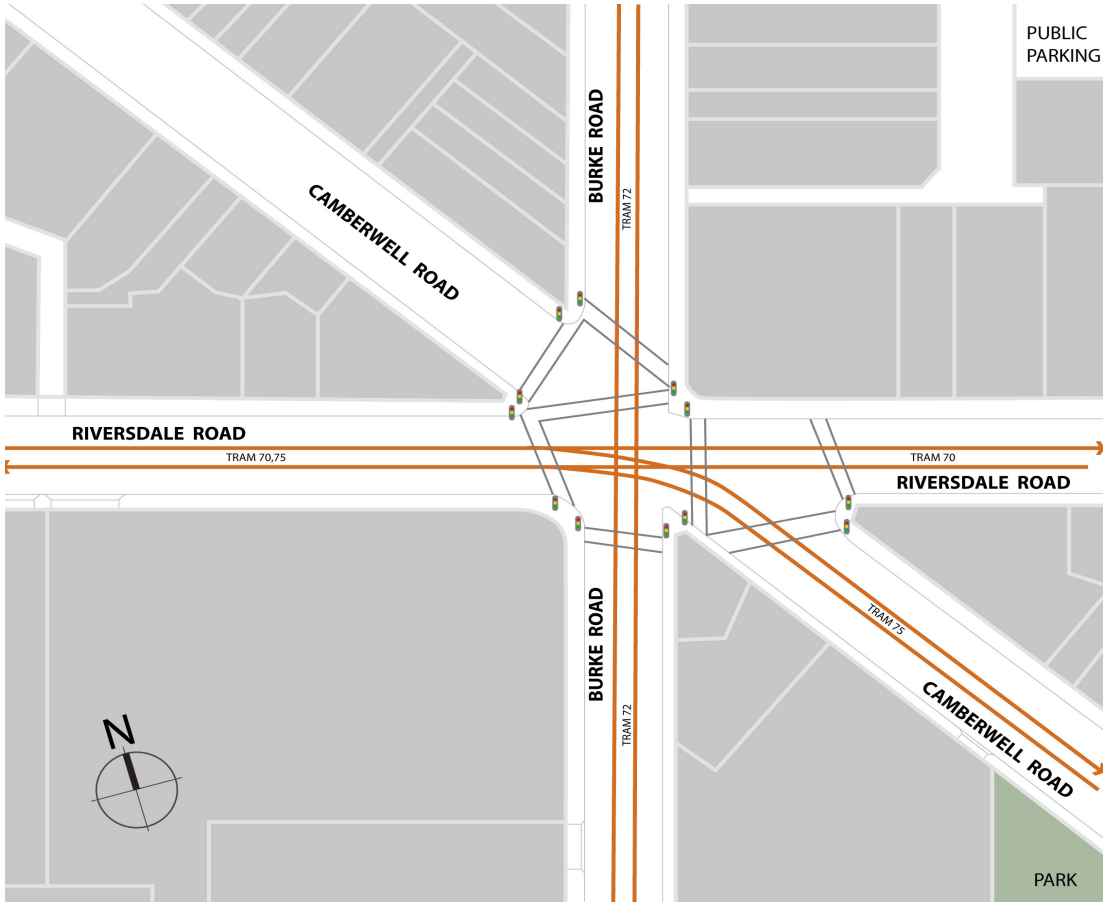

Figure 5: Plan of Camberwell Junction. Note the indirect routes for pedestrians caused by the locations of the pedestrian crossings.

Figure 6: Flooding in Riversdale Road, February 2011.

Figure 7: Camberwell town centre is mostly a long strip with no clear heart.

The opportunity

Two high-quality public spaces could be created in Camberwell Road immediately adjoining the Junction. This would require approximately 50 m of Camberwell Road from the Junction to the first lane north, and approximately 60 m of Camberwell Road from the Junction to the first driveway. The remaining four legs of the Junction, those of Burke and Riversdale Roads, can become a standard four-way intersection.

This would:

- create a pedestrian plaza that would be the 'heart' of the town centre
- ease congestion by increasing motor vehicle capacity
- encourage trips by tram and on foot
- provide more stormwater storage capacity.

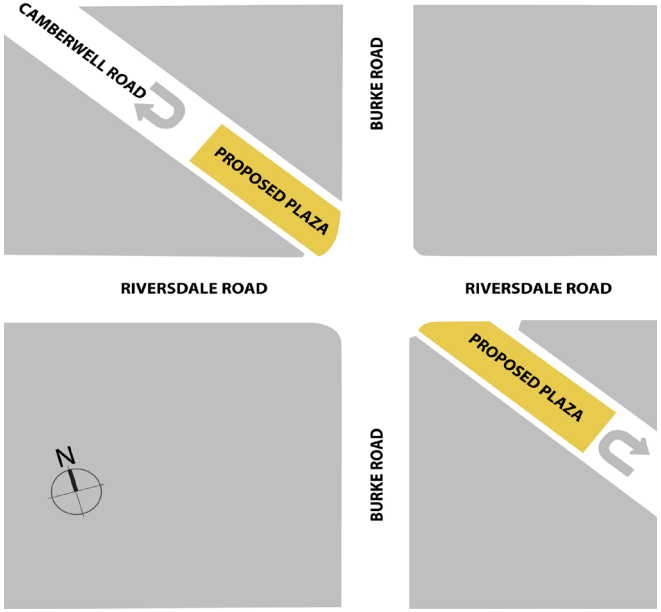

Figure 8: Concept to convert Camberwell Junction into a four-way intersection with two abutting plazas in Camberwell Road.

An analogy: Times Square

Most of Manhattan Island, New York, has a street pattern laid out as a very regular grid. Broadway is a road that predates the grid and cuts diagonally across it. Where Broadway crosses 7th Avenue and 45th Street it creates a six-legged intersection similar to Camberwell Junction.

Beginning in 2010, the 'bowtie' space from 43rd Street to 47th Street has been transformed from an area dominated by roadway to a largely pedestrian space. Prior to the tranformation 89 percent or the area was road space and 11 percent people space, even though 90 percent of users were pedestrians. Now it is reversed - 33 percent road space and 67 percent people space. 13,000m2 of new pedestrian space has been added, with an average of 400,000 pedestrians using thiespace every day. Traffic-related injuries have fallen by a third.

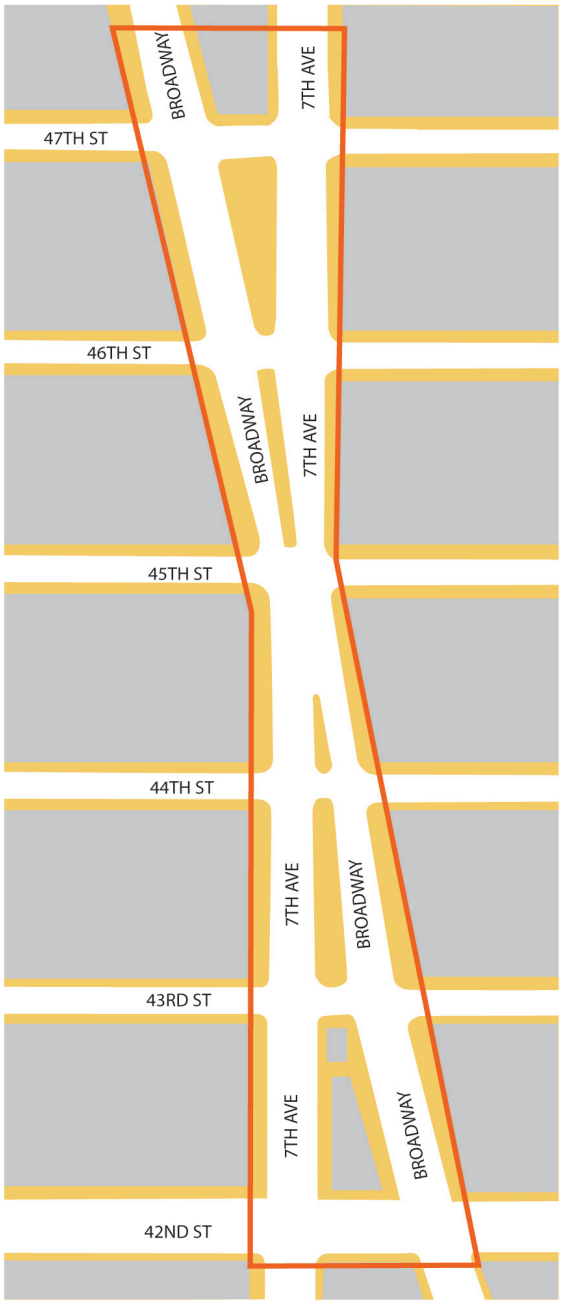

Figure 9: Plan of Times Square: in 2010.

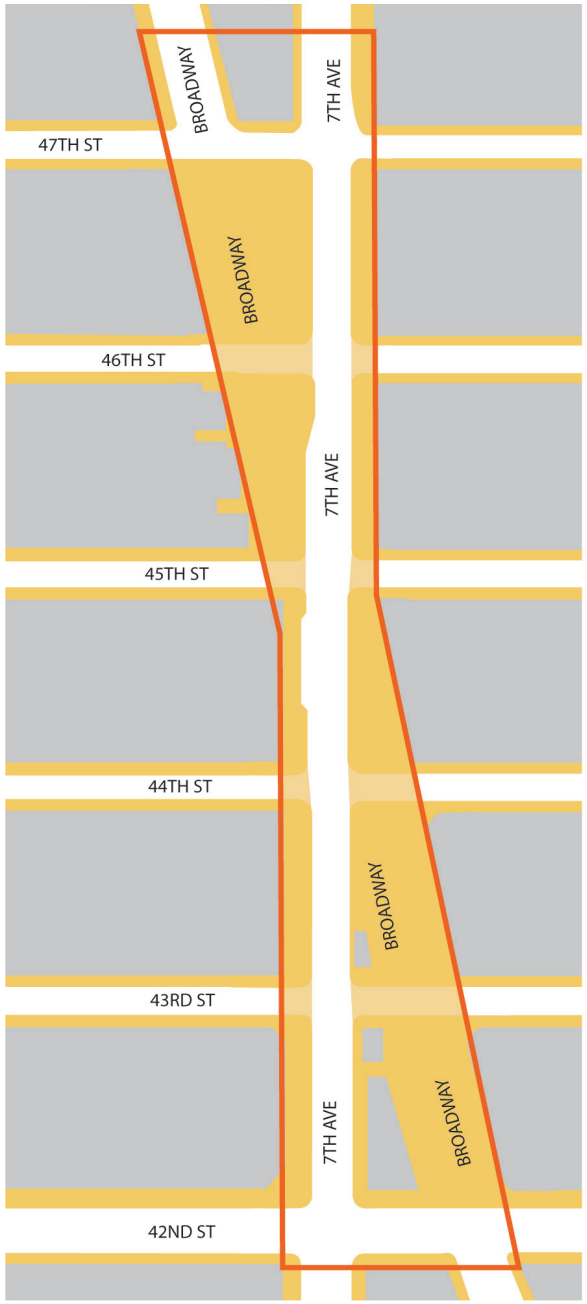

Figure 10: Plan of Times Square in 2016.

Figure 11: Artist's impression of the new Times Square, looking north from 43rd Street.

The basis for redesign of the Junction

Alexander Urbanism proposes the following objectives to be met by any design:

1. To be a place people want to spend time in
2. To maintain or increase the existing traffic capacity
3. To increase land values
4. To improve the ease and safety of green transport modes
5. To recognise and respond to the constraints and op portunities provided by the site
6. To use public funds efficiently and effectively.

Based on the objectives, Alexander Urbanism proposes the following design brief:

1. Increase or maintain through-capacity for private motor vehicles and trams
2. Provide pedestrian routes that are direct
3. Reduce the average waiting time at traffic signals for pedestrians
4. Provide more space for passengers at tram stops
5. Provide universal access at tram stops
6. Create a plaza for events with standing capacity for at least 200 people
7. Provide a pleasant area for alfresco dining
8. Provide play opportunities for children
9. Provide more greenery
10. Increase stormwater drainage capacity.

Based on the brief, Alexander Urbanism proposes the following six spatial principles to be used in any design:

1. Place the plaza next to the busiest pedestrian route
2. Place alfresco areas in a sunny area
3. Place children's play opportunities at a safe distance from traffic
4. Provide direct routes for pedestrians
5. Maintain through movement for bicyclists along Camberwell Road
6. Ensure motorists can see very clear visual signals that the pedestrian areas are not roadways.

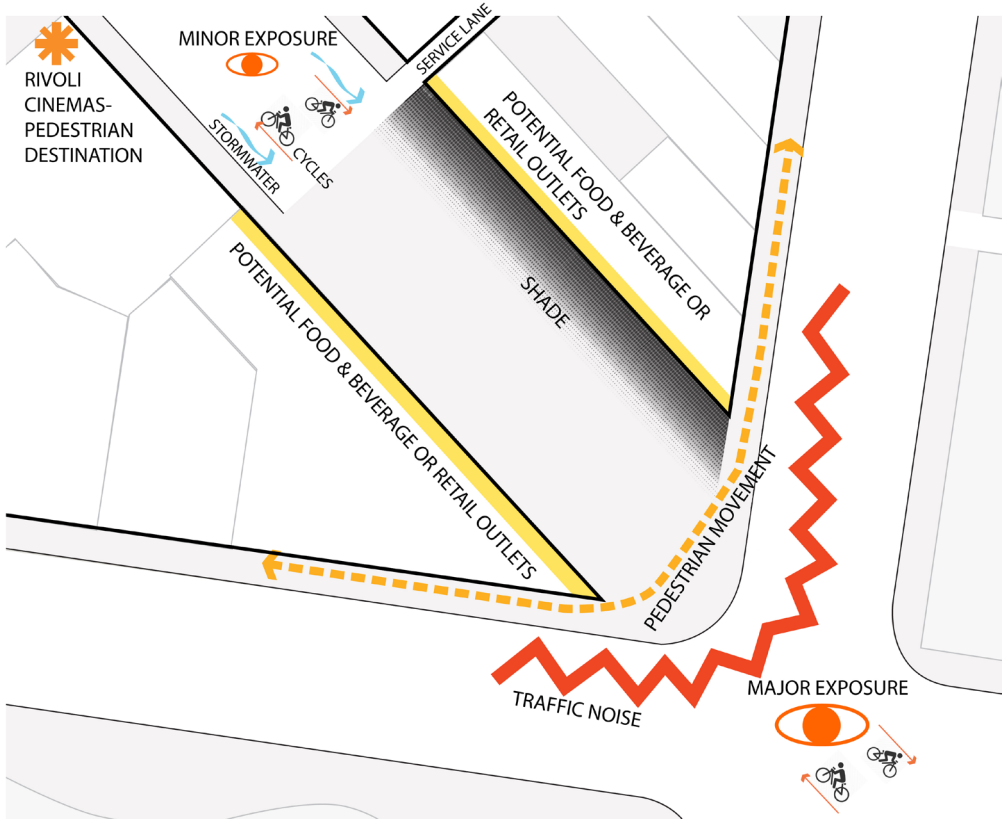

Figure 12: Opportunities and constraints in the northern space.

Figure 13: Any reconfiguration of the Junction should facilitate easy movement of pedestrians and cyclists. Pedestrian desire lines are shown in orange, Camberwell road cycle movement in magenta.

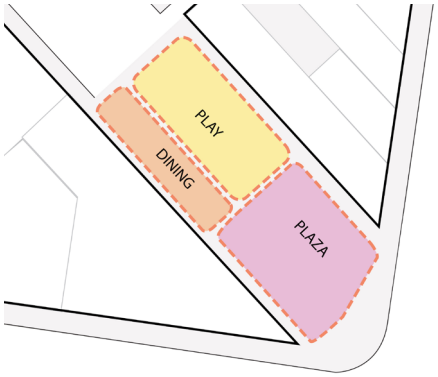

Figure 14: Conceptual distribution of land uses in the northern space based on the design principles.

Figure 15: Multiple design options were explored for the northern plaza. Two are shown above.

Figure 16: Indicative design of the northern plaza, showing a gathering area, alfresco dining, cycle path, planning and playground.

The design of the spaces

The designs explained below are based on the objectives, design brief and spatial principles set out above. The proposal aligns with Victorian Government and City of Boroondara policies to encourage active transport and quality pedestrian environments.

Access would not be blocked to any private parking areas. Goods deliveries to properties fronting the plazas, and vehicles for trades people servicing these properties, would occur at night and early morning, or by permit during the day. Approximately eight on-street parking spaces would be removed from Camberwell Road.

The northern section

Camberwell Road immediately north of the Junction for approximately 50 m would become a pedestrian street with a plaza, trees, water feature, play space, cycle path and alfresco dining. The large plaza would be used for community events such as outdoor art shows, fashion parades, and public meetings. Close to the Rivoli cinema, the area would be the natural place to go before or after watching a movie to enjoy a drink or a meal. It would be an attractive location for cafes and restaurants, and over time could become the 'eat street' for the town centre. This would be the place to meet your friends, to eat a great meal, to enjoy the sun at lunchtime. It would make Camberwell more attractive, and keep it competitive with other shopping centres.

The pedestrian area would only extend north of the Junction to the first lane t, with vehicle access maintained to that lane.

This space could be formed into a shallow detention basin, with the surfaces falling from the edges to a decorative pond in the low point. Some stormwater storage capacity could also be constructed below the surface.

The southern section

Camberwell Road immediately south of the Junction for approximately 60 m would be able to accommodate a tram superstop, providing universal access. It would also contain trees and a cycle path.

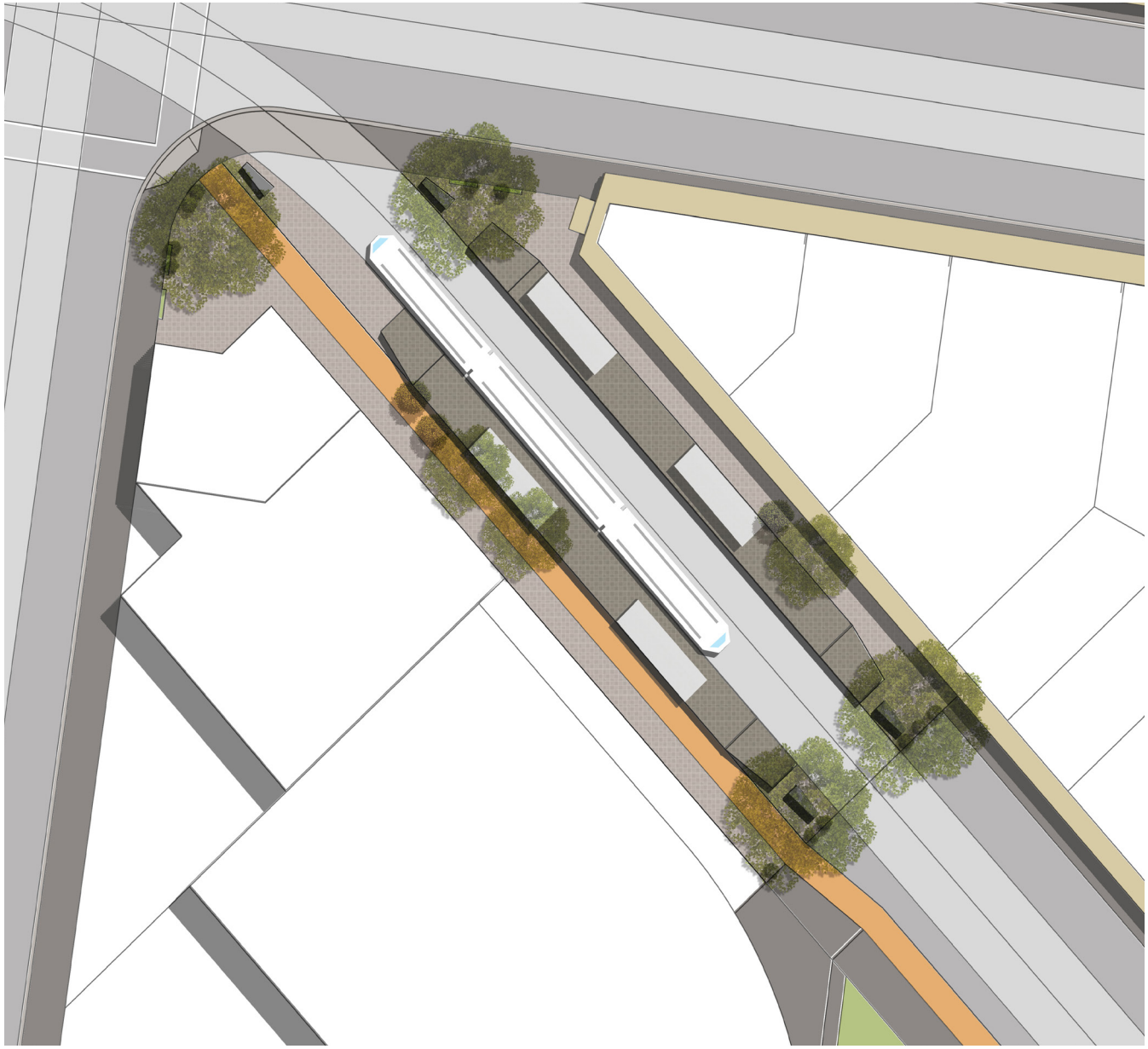

Figure 17: Indicative design of the southern plaza, showing the superstop for tram route 75.

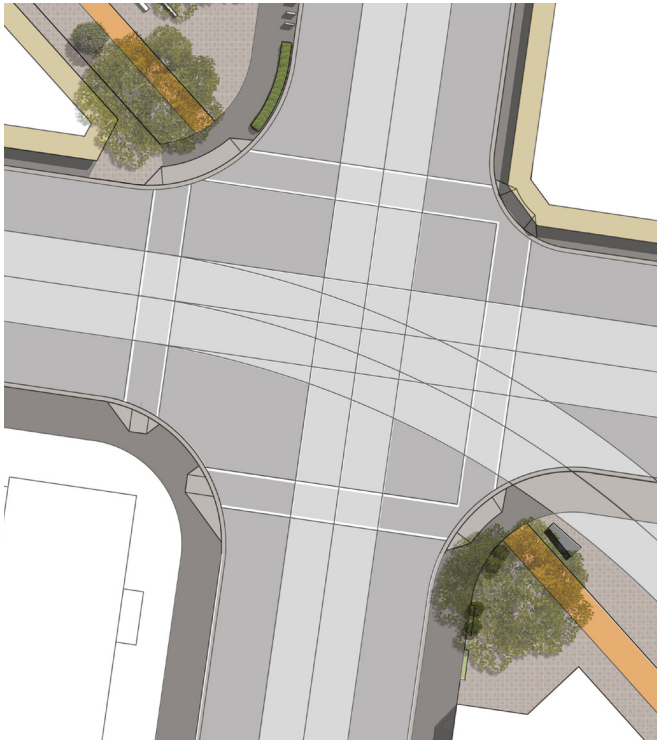

Figure 18: Indicative design of the southern plaza, showing the superstop for tram route 75.

The pedestrian area would extend south of the Junction only to the first crossover.

The intersection

Pedestrians crossing the intersection would have much more direct routes than at present.

The Junction would become a simple four-way intersection for motorists. By simplifying the intersection's layout, the two remaining intersecting roads, Burke Road and Riversdale Road, would in total have more green signal time than the three intersecting roads have now, providing in total an increase in motor traffic capacity.

Alternative traffic routes

Camberwell Road would be closed to through traffic either side of the Junction. All other traffic movements that currently occur would not be affected.

For local traffic travelling south on Camberwell Road towards the Junction, Harold Street and Redfern Road provide alternative routes. Likewise traffic travelling north on Camberwell Road may divert onto Seymour Grove and Trafalgar Road. These alternative routes may become more congested.

Traffic with origins and destinations outside the area does not need to use Camberwell Road. For example, a motorist travelling along Toorak Road towards central Melbourne can currently turn into Camberwell Road, pass through the Junction, then continue on Burwood Road and Bridge Road to the city. If Camberwell Road is no longer a through route, this motorist could instead turn north onto Warrigal Road, then left into Riversdale Road and onwards to the city. Alternatively the motorist could continue along Toorak Road, turn north at Burke Road or other main roads further west, then turn west into Riversdale Road to access the city.

Further traffic analysis will be required to determine the local network capacity and impacts of the proposed closure of this part of Camberwell Road to through traffic. However, given the range of alternative access options, we consider this proposal worth detailed consideration by the City of Boroondara.

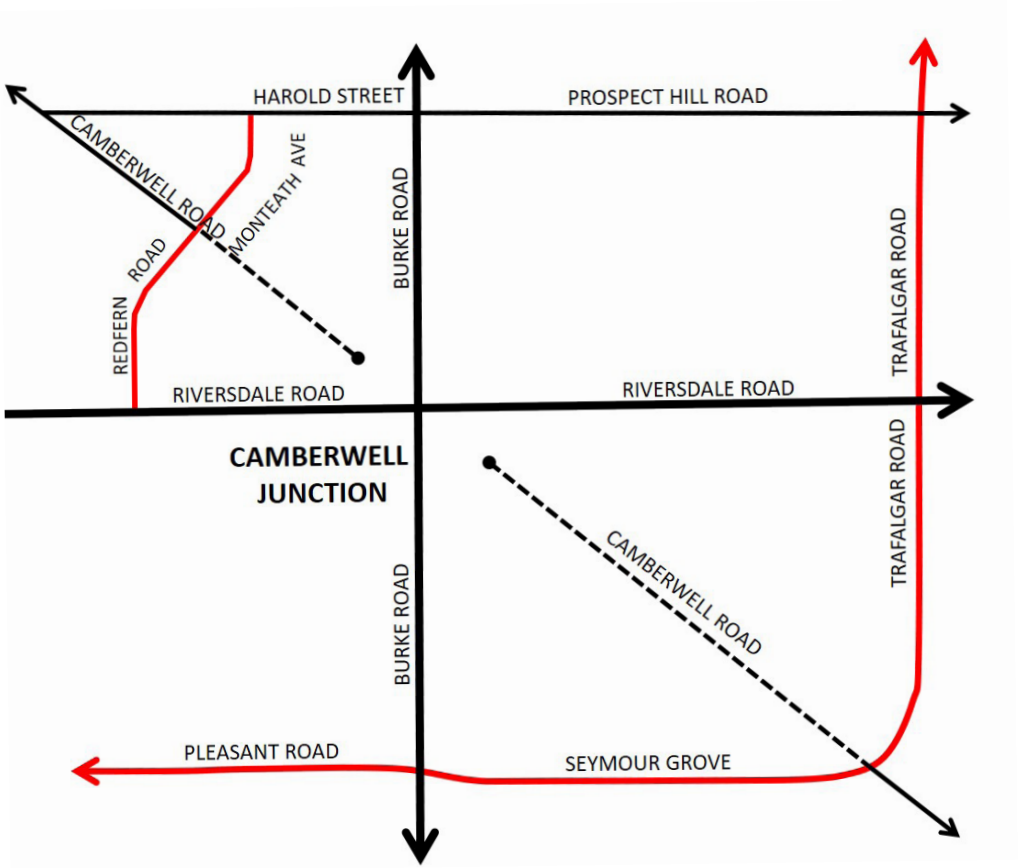

Figure 19: The local road network around Camberwell Junction, showing in red the routes for local traffic diverted from Camberwell Road.

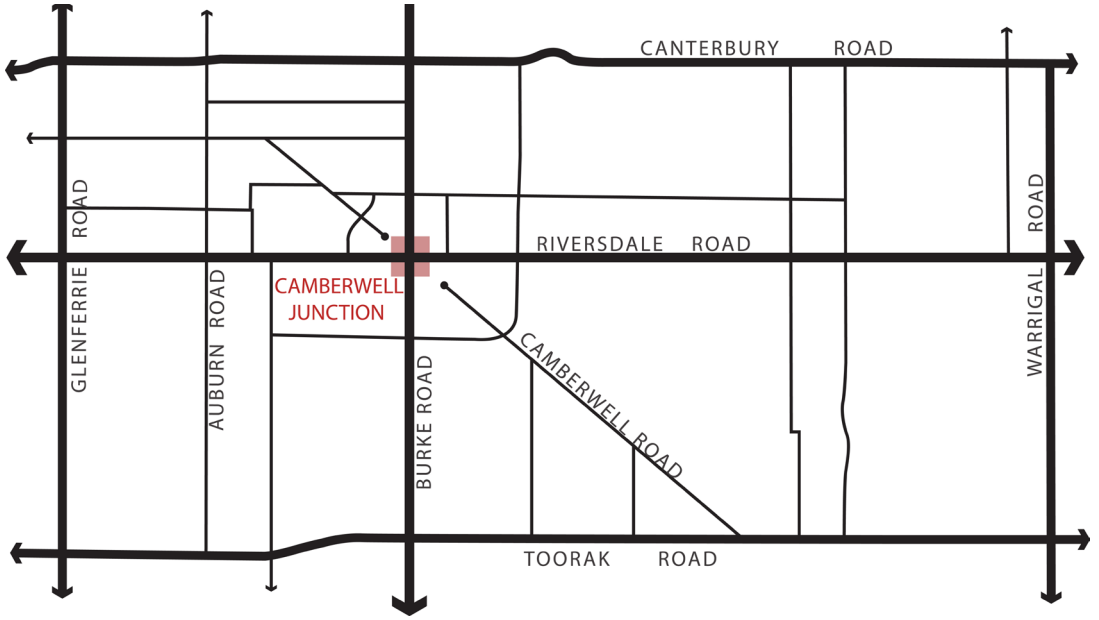

Figure 20: Major road network around Camberwell Junction, showing the nearest alternative main road routes for traffic with origins and destinations outside the local area.

Benefits

Visitors to the town centre would enjoy the added amenity of the northern plaza, a large dedicated pedestrian space available for socializing, gathering and cultural activities. Motorists using the Junction would experience reduced travel time due to the simplified intersection and the longer green signal time. Tram users would enjoy the southern plaza's super stop, with improved comfort and safety. Bicyclists would gain a safer bicycle route along Camberwell Road.

Shopkeepers along Camberwell Road north of the Junction would suffer less risk of flooding due to the northern plaza's stormwater detention capacity.

Commercial property owners in the town centre would gain increased property values by:

- creating a loved 'heart' in the town centre, which would boost overall visitation to the centre and so improve the rental value of the shops in the centre and the sale value of retail property there.
- increasing the passing pedestrian trade and so increasing turnover to retailers adjacent to both spaces. The retailers adjacent to the southern space would trade off the tram users, while the retailers adjacent to the northern space would trade off the plaza users. The northern space would be likely to become the preferred location in the town centre for cafes and restaurants, with the potential to significantly increase each premise's seating capacity by the use of the alfresco seating areas.

Costs

The northern plaza is approximately 990 m2, the southern one 1190 m2. A rough estimate of the cost of rebuilding these spaces with high quality finishes, including paving, lighting, furniture and drainage, is $2.6m. Remodelling of the intersection's traffic signals is estimated to cost approximately $500,000. The estimated cost for the total works is thus $3.1m.

Conclusion

The transformation of two short sections of Camberwell Road into two high quality pedestrian spaces is an opportunity to significantly improve both the user amenity of the area and its traffic conditions. Camberwell's town centre would gain a pedestrian heart, a place for people to gather, socialise, and use for cultural activity. In addition, the Junction would work better for motorists, pedestrians and tram users.

With great benefits and few disadvantages, what's not to like?

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