

ELANOR INVESTORS GROUP

TRANSPORT ASPECTS OF  
PLANNING PROPOSAL  
FOR RESIDENTIAL AND  
RETAIL DEVELOPMENT,  
43 – 65 COWPER STREET,  
WARRAWONG

SEPTEMBER 2023

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Appendix A - Wollongong cycle routes

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Appendix C - Northcliffe Drive traffic signals concept

## I. INTRODUCTION

- I.1 Colston Budd Rogers and Kafes Pty Ltd has been commissioned by Elanor Investors Group to review the transport aspects of a planning proposal for a mixed use residential and retail development at 43-65 Cowper Street, Warrawong. The site is the Warrawong Mall site which has frontage to King Street, Cowper Street and Northcliffe Drive, as shown in Figure I.
- I.2 The existing shopping centre provides some 44,000m<sup>2</sup> and has access from these three streets. The site has been identified under the Department of Planning's Rezoning Pathways Program for a state-assessed planning proposal pilot.
- I.3 It is proposed to redevelop the site to provide some 1,300 residential apartments, plus a reconstructed shopping centre of some 55,000m<sup>2</sup>, including other uses such as education, specialty offices, health/wellness centre, child care centre, pub and cinemas. Vehicular access would be provided from Cowper Street and Northcliffe Drive.
- I.4 The transport aspects of the proposed development are reviewed through the following chapters:
- Chapter 2: describing the existing site context;
  - Chapter 3: describing the planning proposal;
  - Chapter 4: outlining the consultation which has occurred with authorities;
  - Chapter 5: providing an assessment against the local planning directions and broader planning policies;
  - Chapter 6: reviewing parking provision;
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- Chapter 7: describing access, servicing and internal layout arrangements;
- Chapter 8: reviewing traffic generation;
- Chapter 9: making recommendations in relation to the planning proposal;  
and
- Chapter 10: providing conclusions in relation to the planning proposal.



## 2. EXISTING SITE CONTEXT

### Site Location and Road Network

- 2.1 The site is at 43-65 Cowper Street at Warrawong, as shown in Figure 1. It is occupied by Warrawong Mall which provides some 44,000m<sup>2</sup>. Vehicular access to the centre is provided from Cowper Street, King Street and Northcliffe Drive.
- 2.2 The site forms part of the Warrawong town centre which is generally bounded by Greene Street and Montgomery Avenue to the north, Northcliffe Drive to the south, Taurus Avenue and Warrawong Plaza to the east and First Avenue to the west. King Street and Cowper Street run through the town centre in north-south and east-west directions respectively.
- 2.3 Surrounding land use is generally residential to the east, north and west. There are areas of open space south of Northcliffe Drive.
- 2.4 King Street forms part of the Princes Highway which connects Wollongong with Shellharbour. In the vicinity of the site it provides a four to six lane divided carriageway with two or three traffic lanes in each direction, a central median and 60 kilometre per hour speed limit. King Street forms part of a bus route, with bus stops on both sides of the road, adjacent to the site. King Street has signalised intersections with Northcliffe Drive and Cowper Street. The intersection of King Street with Greene Street and Montgomery Avenue is being signalised in association with the development of the community centre and library.

- 2.5 Northcliffe Drive provides an east-west connection between Port Kembla in the east and the Princes Motorway and Princes Highway in the west, along the northern side of Lake Illawarra. In the vicinity of the site it provides three traffic lanes in each direction with a central median. The main access to the shopping centre is provided by a seagull intersection at the eastern end of the site, with other access points for service vehicles. Northcliffe Drive forms part of a bus route, including bus stops adjacent to the site. The intersection of Northcliffe Drive with King Street is controlled by traffic signals, with all turns permitted. Additional lanes are provided at the intersection for turning traffic.
- 2.6 Cowper Street intersects King Street at a signalised intersection adjacent to the site. Cowper Street provides for one traffic lane and one parking lane in each direction, clear of intersections. It has a central median and 40 kilometre per hour speed limit, due to high pedestrian activity in the town centre. Cowper Street forms part of a bus route, including bus stops adjacent to the site. There is a taxi rank adjacent to the shopping centre. Major access to the shopping centre is provided at the western end of the site, with lesser accesses also provided.
- 2.7 North of the site, Greene Street and Montgomery Avenue provide an east-west connection in the northern part of the town centre. They provide for one traffic lane and one parking lane in each direction, clear of intersections.

#### Public Transport

- 2.8 As previously noted, the site is well served by buses, with services operating along King Street, Northcliffe Drive and Cowper Street, adjacent to the site. Local bus services are provided by Premier Illawarra. Services include:
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- route 34: Wollongong to Warrawong via Unanderra;
- route 43: Port Kembla to Dapto;
- route 51: Oak Flats to Wollongong via Stockland Shellharbour;
- route 53: Wollongong to Shellharbour via Warrawong and Shell Cove;
- route 57: Wollongong to Shellharbour via Warrawong; and
- route 65: North Wollongong to Port Kembla.

2.9 As previously noted, there is a taxi rank on Cowper Street, adjacent to the site.

#### Active Transport

2.10 There are good pedestrian links in the area, with the traffic signals on King Street at both Northcliffe Drive and Cowper Street providing signalized crossings on each approach. The new traffic signals at King Street/Greene Street/Mongomery Street will also provide signalized pedestrian crossings on each approach. New pedestrian crossings and wider footpaths are being provided on Cowper Street, including adjacent to the site.

2.11 There are off-road shared bicycle paths along Northcliffe Drive and King Street, south of the site. Cycle routes in the area are shown in Appendix A.

#### Policy Context

- Illawarra Shoalhaven Regional Plan 2041

2.12 The Illawarra Shoalhaven Regional Plan 2041 has been prepared to guide development of the region to 2041. It identifies opportunities for future employment, recreation and housing, including 45,000 jobs and 38,000 homes.

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- 2.13 Warrawong is identified as a strategic centre. The plan includes a priority of providing new housing in strategic centres.
- Illawarra-Shoalhaven Regional Transport Plan
- 2.14 The Illawarra-Shoalhaven Regional Transport Plan identifies the infrastructure, services and policy required to achieve the objectives of the Illawarra Shoalhaven Regional Plan 2041. It has goals to increase the proportion of trips made by walking, cycling and public transport, and to increase the population within a 30 minute public transport trip of a regionally significant centre, including Metro Wollongong and Shellharbour City Centre.
- 2.15 The transport plan identifies a series of initiatives to improve transport efficiency, safety and capacity across the road, rail, pedestrian and bicycle networks.
- Warrawong Town Centre Master Plan
- 2.16 The council has previously prepared the Warrawong Town Centre Master Plan. The master plan notes that *“Warrawong Town Centre will be a key cultural destination. Its location, retail offer and unique character provide the opportunity to bring people together by creating comfortable public places, attractive destinations catering to the daily needs of its culturally rich community.”*
- 2.17 One of the opportunities identified in the master plan is to *“divert traffic away from key pedestrian links in the town centre to make it comfortable to walk around and enjoy the town centre. Redirecting traffic movements away from Cowper Street, reducing the number of vehicle lanes and designing streets to better cater for people, will improve safety and amenity for pedestrians.”* The master plan includes identifies Shellharbour Road, Cowper Street (east), Taurus Avenue, Montgomery Avenue, Greene Street and First
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Avenue as a potential ring road around the town centre. This will reduce traffic in the town centre, particularly along the central part of Cowper Street, close to King Street.

#### Other Development in the Area

- Community Centre and Library

2.18 Wollongong Council is developing a community centre and library north of the site on the corner of King Street and Greene Street. In association with this development, a number of road and transport works will occur. These works include:

- installing traffic signals at the intersection of King Street and Greene Street/Montgomery Avenue;
- removing the right turns from Cowper Street into King Street (with exemptions for buses);
- footpath widening in Cowper Street;
- pedestrian crossings in Cowper Street, east and west of King Street; and
- introducing a right turn from Cowper Street into Taurus Avenue.

2.19 These works are identified and consistent with the master plan for the town centre and are expected to be completed by the end of 2026.

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- Former Bunnings site

2.20 The former Bunnings building west of King Street is being replaced with a number of large format retail tenancies. These tenancies will have significantly lower traffic generations than Bunnings.

- Port Kembla Hospital

2.21 The hospital, on Cowper Steet west of King Street, is being closed in stages in association with the development of the new Shellharbour Hospital at Dunmore, upgrades to Wollongong Hospital, additional aged care beds being provided in Bulli and a new health care facility which will be provided in Warrawong.

### 3. PLANNING PROPOSAL

3.1 The planning proposal would allow for the proposed redevelopment of the site to provide some 1,300 residential apartments, plus a reconstructed shopping centre of some 55,000m<sup>2</sup>, including other uses such as education, specialty offices, health/wellness centre, child care centre, pub and cinemas. Vehicular access would be provided from Cowper Street and Northcliffe Drive.

3.2 The planning proposal seeks consent for:

- An amendment to the land use zoning of the Site (clause 2.1) from E2 Commercial Centre to MUI Mixed Use.
- An increase in the Height of Building Development Standard from 24 metres up to 75 metres (variable between 24m to 75m).
- An amendment to the Key Sites Map to identify 43-65 Cowper Street, Warrawong as “Area 11”.
- The introduction of specific additional ‘Local Provisions’ in Part 7 of the WLEP 2009, through a Site-specific LEP clause 7.24 to allow for the mixed-use redevelopment of the existing retail centre at 43-65 Cowper Street, Warrawong, and references “Area 11” on the Key Sites Map.

3.3 The proposal will retain a minimum of 50,000m<sup>2</sup> of Gross Floor Area for non-residential land uses, and provide a public open space area with a minimum area of 3,000m<sup>2</sup>. The development will deliver approximately 1,300 dwellings.

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## 4. CONSULTATION

4.1 A meeting was held with officers of Wollongong Council on 7 August in relation to the proposal. Matters discussed included:

- the new traffic signals being provided at King Street/Greene Street/Montgomery Avenue in association with the library and community centre;
- the footpath widening and streetscape improvements in Cowper Street being undertaken by the council;
- the modifications being implemented at the King Street/Cowper Street intersection in association with these changes; and
- the modifications being undertaken by the council at the intersection of Cowper Street/Taurus Avenue.

4.2 A meeting was also held with officers of Transport for NSW on 22 August. Matters additional to those discussed above with the council (which were also discussed with TfNSW) included:

- how pedestrians would be directed into and out of the centre and to and from nearby crossing points;
  - the potential to improve bus facilities on King Street and Northcliffe Drive, including stands, shelters and pedestrian connections;
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- the potential to retain provision for taxis in Cowper Street;
- the design of appropriate access from Cowper Street, taking into account the town centre modifications being undertaken by the council;
- the potential to improve pedestrian connections to and from areas to the south, including the playing fields south of Northcliffe Drive;
- the retention of appropriate vehicular access to the centre, including Cowper Steet and Northcliffe Drive;
- TfNSW had a preference to not provide access to the site from King Street;
- the potential for improved access from Northcliffe Drive, including new traffic signals;
- the potential for appropriate connections to existing bicycle paths close to the site on Northcliffe Drive and King Street; and
- the potential to provide reduced rates of car parking, where appropriate, for the non-retail components of the development, commensurate with the location of the site in the Warrawong town centre and the mix of uses in the redeveloped site.

4.3 The matters discussed with both authorities are reflected in the planning proposal reference scheme. A diagram indicating these matters is shown in Appendix B.

5. LOCAL PLANNING DIRECTIONS

5.1 Section 5.1 of the Local Planning Directions (Integrating land use and transport) includes the following objectives:

- (a) *improving access to housing, jobs and services by walking, cycling and public transport, and*
- (b) *increasing the choice of available transport and reducing dependence on cars, and*
- (c) *reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and*
- (d) *supporting the efficient and viable operation of public transport services.*

5.2 Direction 5.1 notes that a planning proposal must include provisions that give effect to and are consistent with the aims, objectives and principles of:

- *Improving Transport Choice – Guidelines for planning and development (DUAP 2001); and*
- *The Right Place for Business and Services – Planning Policy (DUAP 2001).*

5.3 *Improving Transport Choice – Guidelines for planning and development* aims to better integrate land use and transport planning and development, and provide transport choice and manage travel demand to improve the environment, accessibility and livability. Specifically, the guidelines aim to reduce growth in the number and length of private car journeys, and make walking, cycling and public transport use more attractive.

5.4 Similarly, *The Right Place for Business and Services – Planning Policy* has the following objectives:

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- *locate trip-generating development which provides important services in places that:*
  - *help reduce reliance on cars and moderate the demand for car travel*
  - *encourage multi-purpose trips*
  - *encourage people to travel on public transport, walk or cycle*
  - *provide people with equitable and efficient access*
- *minimise dispersed trip-generating development that can only be accessed by cars*
- *ensure that a network of viable, mixed use centres closely aligned with the public transport system accommodates and creates opportunities for business growth and service delivery*
- *protect and maximise community investment in centres, and in transport infrastructure and facilities*
- *encourage continuing private and public investment in centres, and ensure that they are well designed, managed and maintained*
- *foster growth, competition, innovation and investment confidence in centres, especially in the retail and entertainment sectors, through consistent and responsive decision making.*

5.5 The proposed development will include improved pedestrian links to and through the site. There will also be an opportunity to provide improved facilities for buses and taxis. These measures will support and enhance the measures identified and being undertaken in the master plan for the town centre.

5.6 The proposed development would increase residential densities and continue to provide employment, retail and service densities close to existing public transport services. To support accessibility by bicycles, appropriate bicycle parking will be provided. Connections will also be provided to existing bicycle routes to the south.

5.7 The proposed development will therefore satisfy the Local Planning Directions, including Improving Transport Choice – Guidelines for planning and development and The Right Place for Business and Services – Planning Policy, as well as the objectives of the Illawarra Shoalhaven Regional Plan 2041, the Illawarra Shoalhaven Regional Transport Plan and the Warrawong Town Centre Master Plan, by:

- enabling residents, commuters and customers to readily access buses close to the site;
- providing an appropriate level of on-site parking, with reference to appropriate council and TfNSW requirements, to encourage greater public transport use and increase the proportion of trips by public and active transport;
- providing a mixed use development, including retail and residential in the town centre, close to other commercial and retail facilities to reduce the need for travel;
- being located close to other major employment, health and education centres in Wollongong and Shellharbour; and
- improving pedestrian connectivity in and through the town centre.

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## 6. PARKING PROVISION

6.1 Chapter E3 of the Wollongong Development Control Plan 2009 (Car Parking, Access, Servicing/Loading Facilities and Traffic Management) includes the following parking rates for development:

- one parking space per apartment smaller than 70m<sup>2</sup>;
- 1.5 spaces per apartment between 70m<sup>2</sup> and 110m<sup>2</sup>;
- two spaces per apartment larger than 110m<sup>2</sup>;
- 0.2 spaces per apartment for visitors;
- one space per 25m<sup>2</sup> GFA for retail;
- one space per 25m<sup>2</sup> GFA for food and drink premises;
- one space per 40m<sup>2</sup> GFA for office premises.

6.2 By comparison, the TfNSW “Guide to Traffic Generating Developments” suggests the following parking requirements:

- one space per one bedroom apartment;
- 1.2 spaces per two bedroom apartment;
- 1.5 spaces per three bedroom apartment;
- one visitor space per five to seven dwellings;
- one space per 40m<sup>2</sup> for offices (unconstrained);
- 4.2 spaces per 100m<sup>2</sup> for supermarkets; and
- 4.5 spaces per 100m<sup>2</sup> for specialty shops.

6.3 Finally, State Environmental Planning Policy (Housing) 2021 includes the following parking rates for affordable housing:

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- 0.5 spaces per one bedroom dwelling;
  - one parking space per two bedroom dwelling; and
  - 1.5 spaces per dwelling with three or more bedrooms.

6.4 Parking provision will be determined at the development application stage, having regard to the above rates. We note that the residential DCP parking rates for development within the Wollongong DCP are lower than the above rates. It may be appropriate, bearing in mind the town centre location and mix of uses proposed, to also provide lower rates of parking in the proposed development, consistent with the principles in the Apartment Design Guide.

6.5 The DCP includes the following bicycle parking requirements:

- one bicycle space per three apartments for residents;
- one bicycle space per 12 apartments for visitors;
- one bicycle space per 750m<sup>2</sup> retail GFA for employees plus one space per 1,000m<sup>2</sup> GFA for customers; and
- one bicycle space per 200m<sup>2</sup> commercial GFA for employees plus one space per 750m<sup>2</sup> GFA for visitors.

6.6 The DCP also includes the following parking requirements for motorcycles:

- one space per 15 apartments; and
- one space per 25 car spaces for commercial and retail uses.

6.7 Appropriate parking for bicycles and motorcycles will be provided based on the above.

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## 7. ACCESS, SERVICING AND INTERNAL LAYOUT

- 7.1 Vehicular access to the site would be provided from Northcliffe Drive and Cowper Street. The main accesses will continue to be provided from these streets at the eastern ends of the site.
- 7.2 As discussed in the following chapter, the proposed development would result in a relatively modest traffic generation, as residential development in town centres has a low generation. To provide appropriate access to the centre, and due to the other traffic changes in Warrawong, particularly in Cowper Street, improved access to the development is proposed from Northcliffe Drive. A new signalised access to the development is proposed in this location. A concept layout for this access is provided as Appendix C.
- 7.3 Access from Cowper Street will be provided near the eastern end of the site. This access location will ensure that traffic exiting the centre is able to access Taurus Avenue and Montgomery Avenue to head north.
- 7.4 The access points to the car park and loading areas would be provided in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street car parking and Part 2: Off-street commercial vehicle facilities), AS 2890.1:2004 and AS 2890.2 – 2002.
- 7.5 Car parking would be provided in two basement levels. Loading areas would be provided on the ground level. Loading bays would provide for semi-trailers and rigid trucks to service the various components of the development. Service vehicles will be able to enter and exit in a forward direction.
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- 7.6 Within parking areas, parking space dimensions, aisle widths, ramp grades, transitions, column locations and height clearances would be provided in accordance with AS 2890.1:2004 and AS 2890.2:2018.



## 8. TRAFFIC GENERATION

- 8.1 Traffic generated by the proposed development will have its greatest effects during weekday afternoon and Saturday peak periods when it combines with other traffic on the surrounding road network.
- 8.2 Surveys undertaken by TfNSW have found two-way (sum of both directions) peak hour traffic generation rates of 0.19 to 0.29 vehicles per hour per apartment for high density residential development in town centres.
- 8.3 Due to the location of the development in the town centre, its accessibility by existing and future improved public transport services and the mix of uses which will be on the site, traffic generation would be towards the lower end of this range. People living in the development would comprise a proportion of the customer base for the centre and these people will not generate traffic when using other facilities within the centre. The residential units would therefore generate some 250 vehicles per hour, two-way.
- 8.4 The redeveloped centre will include additional uses such as education, specialty offices, health/wellness centre, child care centre, pub and cinemas.
- 8.5 These uses will have significantly lower traffic generations than the other retail uses. The peak times for some of these components, such as the cinemas and pub, will occur during the evenings, at times when the shopping centre is less busy. Some of the uses, such as the education facility, offices and child care centre, would not generally be open on weekends.
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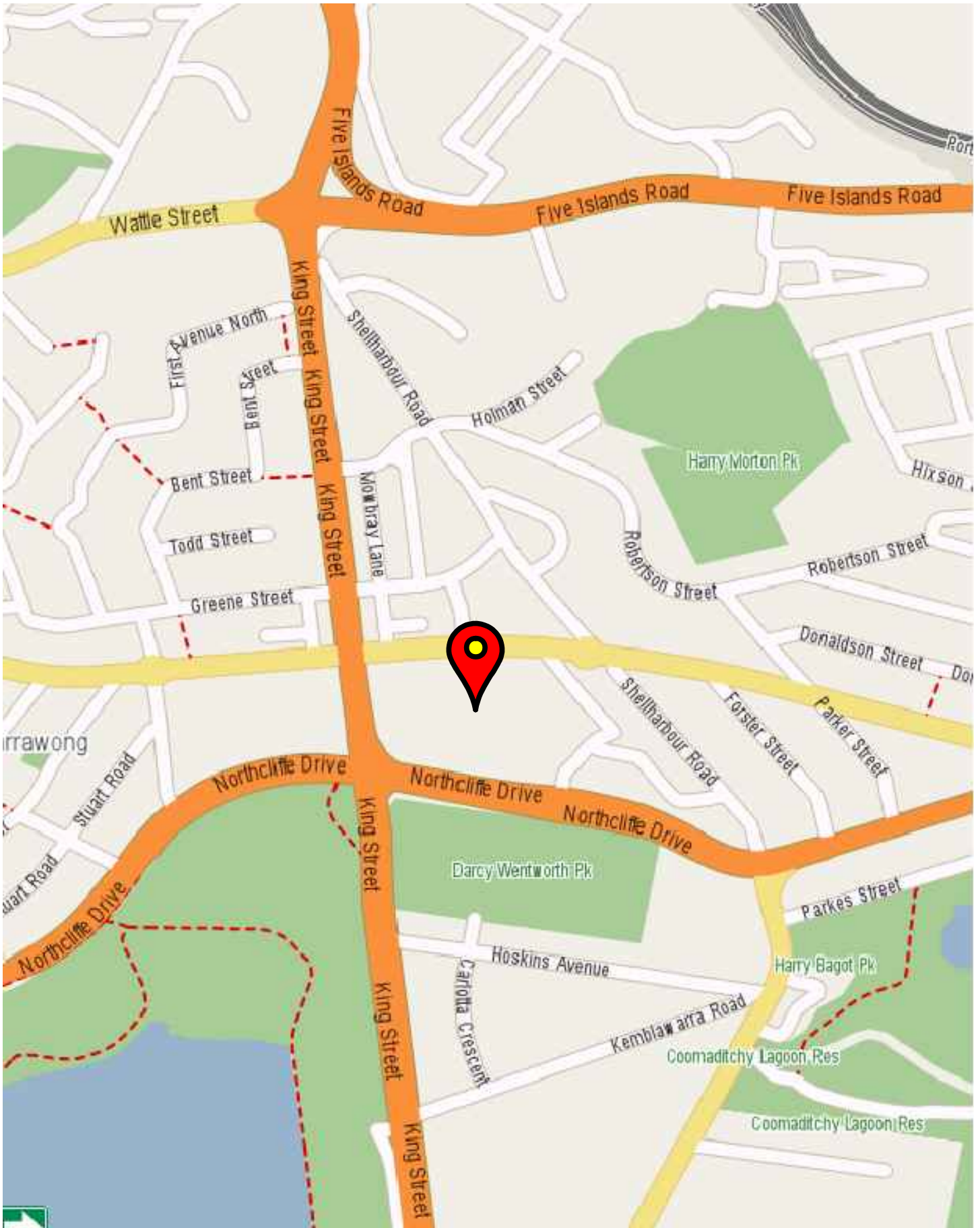
- 8.6 Taking these factors into account, the non-residential component of the development would result in a traffic generation of some 50 to 100 vehicles per hour at peak times.
- 8.7 Therefore, the proposed 1,300 residential units plus the additional non-retail uses would have a traffic generation of some 300 to 350 vehicles per hour two-way at peak times. This compares to the existing traffic generation of the shopping centre of some 2,000 to 2,500 vehicles per hour two-way.
- 8.8 New traffic signals are likely to be required on Northcliffe Drive at the major centre access. A concept layout for the proposed traffic signals is provided in Appendix C. The traffic will spread out on the external road network, with some 50 vehicles per hour using Cowper Street and King Street. These modest traffic flows should not result in a requirement for additional road works.

## 9. CONCLUSION

9.1 In summary, the main points relating to transport aspects are as follows:

- i) the planning proposal would allow for the proposed redevelopment of the site to provide some 1,300 residential apartments, plus a reconstructed shopping centre of some 55,000m<sup>2</sup>;
  - ii) the development is consistent with the planning for the area, including the Illawarra Shoalhaven Regional Plan 2041, the Illawarra-Shoalhaven Regional Transport Plan and the Warrawong Town Centre Masterplan;
  - iii) a number of road and traffic works are being implemented in the town centre in association with the development of the community centre and library;
  - iv) the development provides an opportunity to complement and enhance the town centre master plan by improving pedestrian links and its other urban design principles;
  - v) the development would increase residential densities and continue to provide employment, retail and services close to existing public transport services. It is consistent with government objectives to reduce private car travel and encourage public transport use;
  - vi) the development will improve connections to public transport and improve pedestrian connectivity in the town centre;
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- vii) appropriate on-site parking for cars, bicycles and motorcycles will be provided;
- viii) access, internal circulation and layout will be provided in accordance with Australian Standards;
- ix) the proposed residential units plus the additional uses would have a traffic generation of some 300 to 350 vehicles per hour two-way at peak times;
- x) a new signalised intersection is proposed for access to the site on Northcliffe Drive; and
- xi) no other road works should be required to cater for the traffic generation of the proposed development.



**Location Plan**

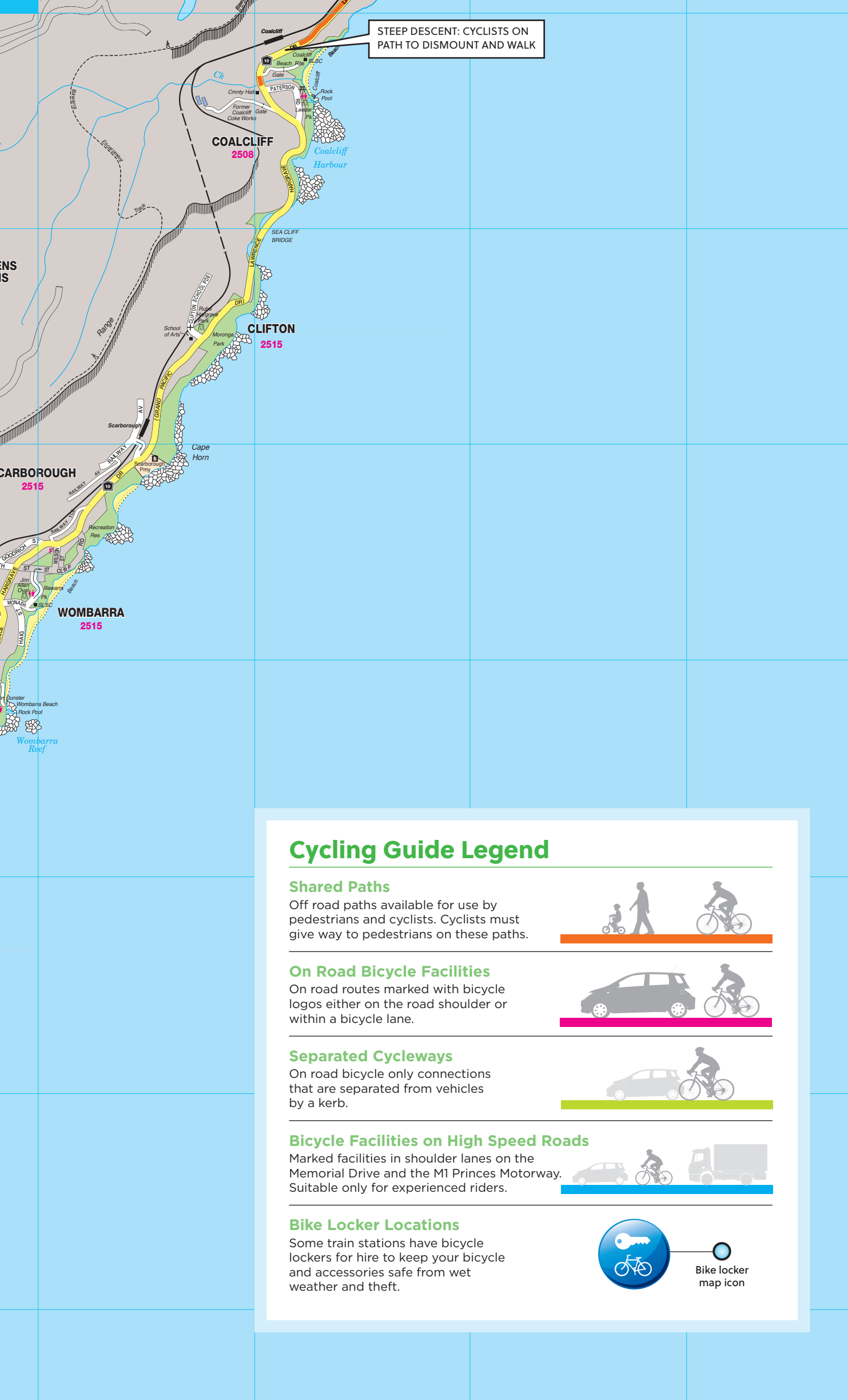
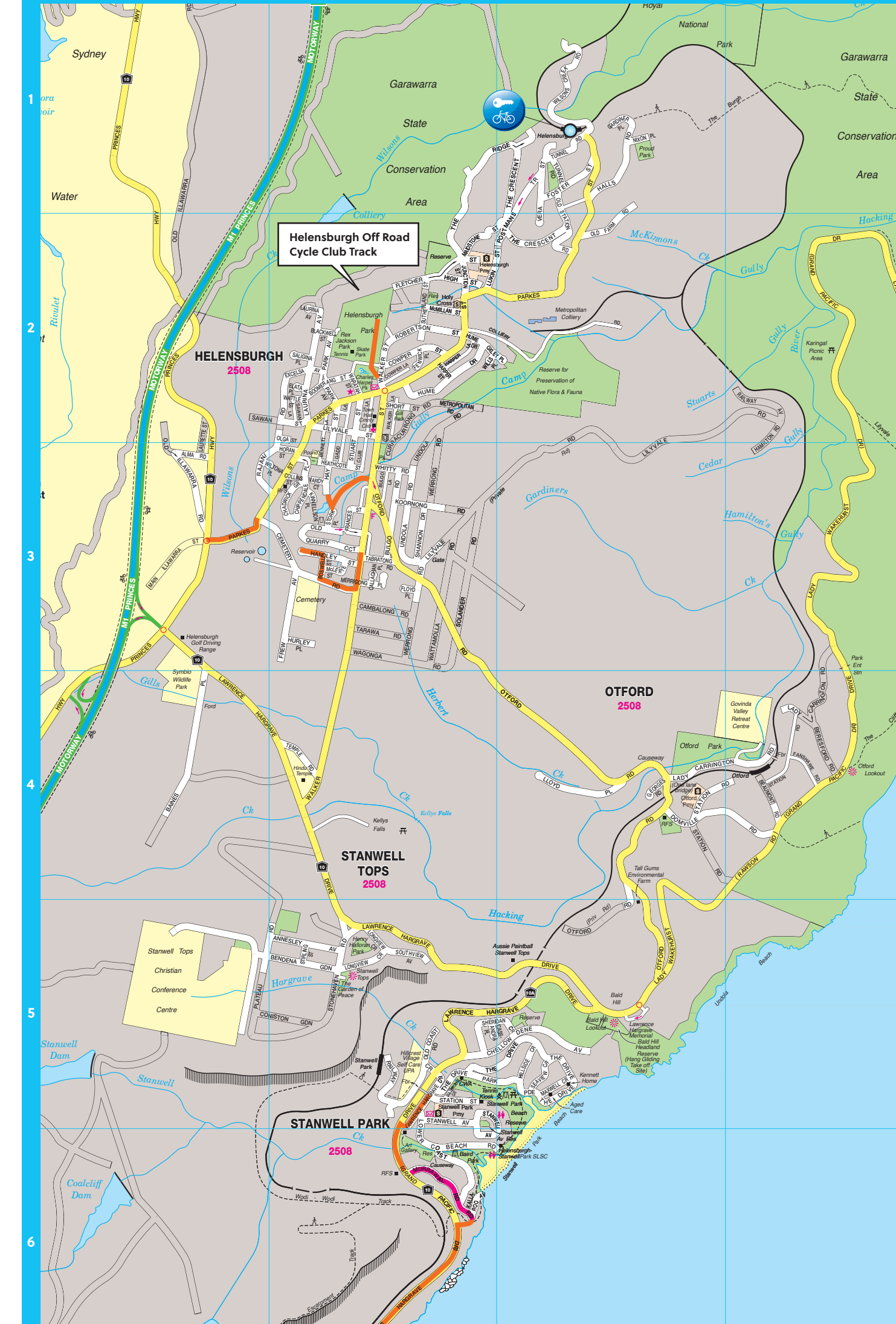
APPENDIX A

WOLLONGONG CYCLE ROUTES

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**Produced by Custom Mapping Services**  
 Universal Publishers Pty Ltd  
 10/100 GARRIBONE ROAD, WOLLONGONG NSW 2520  
 02 4227 7111

**Explanation of Map Symbols**

Freeway	Alternate Traffic Route	Tramway	Tram Stop
Trafficable and Un-trafficable Road	Traffic Light, Red Light Camera & Roundabout	Road and Railway Bridges	One-way Traffic Route & Level Crossing
National, State and Met Road Route Numbers	Railway Line and Station	Suburb Name	Local Government - Name
Local Government - Name	Boundary	Walking Track and Horse Track	Car, Passenger Ferry
Park, Reserve, Golf Course, etc	School or Hospital	Caravan Park, Cemetery, Shopping Centre, etc	Mail, Plaza
Ambulance Station	Lookout	Barbecue	Monument
Boat Ramp	Monument	Bowling Club	Motel
Caravan Park	Picnic Area	Car Park	Place of Worship
College - Private	Point of Interest	State	Playground
Council Office	Post Office	Court House	Police Station
Fire Station	School - Private	Golf Course	School - Public
Guide	Scouts	Hall	Shopping Centre
Hospital	State Emergency Service	Hotel	Swimming Pool
Information Centre	Telephone	Kindergarten	Toilets
Library	Weightbridge		

**Local Bike Track: Bulli Park, Bulli**

**MAP CONTINUES SOUTH OVERLEAF**

**RULES FOR RIDING**

To see more detailed rules, visit [wollongong.nsw.gov.au/bike-city](http://wollongong.nsw.gov.au/bike-city)

**Riding on shared paths**  
 Shared paths are for everyone, including bike riders and pedestrians.

Give way to pedestrians

Keep left

Don't block the path

Use a bell or your voice near others

Wear a helmet

**Riding on roads**  
 Cyclists need to follow the same rules as cars, plus some extra rules when riding on roads.  
 Search online for 'Road rules for bicycle riders NSW' for details.

**BIKES AND PUBLIC TRANSPORT**  
 Bikes are not allowed on buses, but you can take your bike on the train for no extra cost!  
 Many local train stations also have bike lockers. To find locations and see timetable info, visit [transportnsw.info](http://transportnsw.info)

**MORE WAYS TO RIDE**

We've been creating more places for you to ride, build your bike skills and enjoy different riding experiences.  
 Check out these options to find your next cycling adventure.

**Cringila Hills Mountain Bike Park**  
 Explore almost 12 kilometres of trails for riders from beginners to advanced. There's also a jumps park, asphalt pump track and bike skills playground!

**Local bike tracks**  
 These dirt-based tracks are perfect to build your riding skills, or challenge yourself with jumps! We have several local bike tracks in neighbourhoods across the Wollongong area.

**Illawarra Criterium Track**  
 This closed-loop course at Unanderra is great for bike riders of all levels – and even scooters or rollerblades. Build up your speed and endurance, or just enjoy some leisurely laps.

**Unanderra Velodrome**  
 Right next to the Illawarra Criterium Track you'll find our city's velodrome, great for training or recreation.

**WOLLONGONG. BETTER CYCLING FOR ALL OUR COMMUNITY**

**FREE**

**WOLLONGONG CYCLING GUIDE + MAP**

There are so many things to do in Wollongong, on and off your bike! Check out [visitwollongong.com.au](http://visitwollongong.com.au) to find local attractions, adventures, events, accommodation, places to eat and more!

**Local groups and bike stores**  
 From road riders to mountain bikes, there are lots of cycling groups in Wollongong you can join to share rides and knowledge. Search online for 'cycling groups Wollongong' or visit [wollongong.nsw.gov.au/bike-city](http://wollongong.nsw.gov.au/bike-city) to find a group.

There are also plenty of stores across our area that offer bikes, equipment, repairs and advice. Search online for 'bike stores Wollongong' to find a local business.

**Report an issue**  
 Found a path, road or public equipment that needs attention? Report it to Council by visiting [wollongong.nsw.gov.au](http://wollongong.nsw.gov.au) or call us on (02) 4227 7111.

[wollongong.nsw.gov.au/bike-city](http://wollongong.nsw.gov.au/bike-city)

Updated September 2022

Wollongong has been globally recognised by the UCI, the World Governing Body for Cycling, for its commitment to making cycling better. It's easy to get involved at: [wollongong.nsw.gov.au/bike-city](http://wollongong.nsw.gov.au/bike-city)





WOLLONGONG CBD NORTH

WOLLONGONG CBD WEST

**Explanation of Map Symbols**

Freeway	Alternate Traffic Route	Traffic Light, Red Light Camera & Roundabout	Road and Railway Bridges	One-way Traffic Route & Level Crossing	National, State and Met Road Route Numbers	Railway Line and Station	Suburb Name	Local Government Name	Walking Track, and Horse Track	Car, Passenger Ferry	Car, Reserve, Golf Course, etc.	School or Hospital	Casuar Park, Cemetery, Shopping Centre, etc.	Mall, Plaza	Ambulance Station	Barbecue	Boat Ramp	Bowling Club	Casuar Park	Car Park	College - Private	College - State	Council Office	Court House	Fire Station	Golf Course	Hospital	Hotel	Information Centre	Kindergarten	Library	Lookout	Masonic Centre	Monument	Motel	Picnic Area	Place of Worship	Point of Interest	Playground	Police Station	Post Office	School - Private	School - State	State Emergency Services	Swimming Pool	Telephone	Toilets	Weightbridge
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**Cycling Guide Legend**

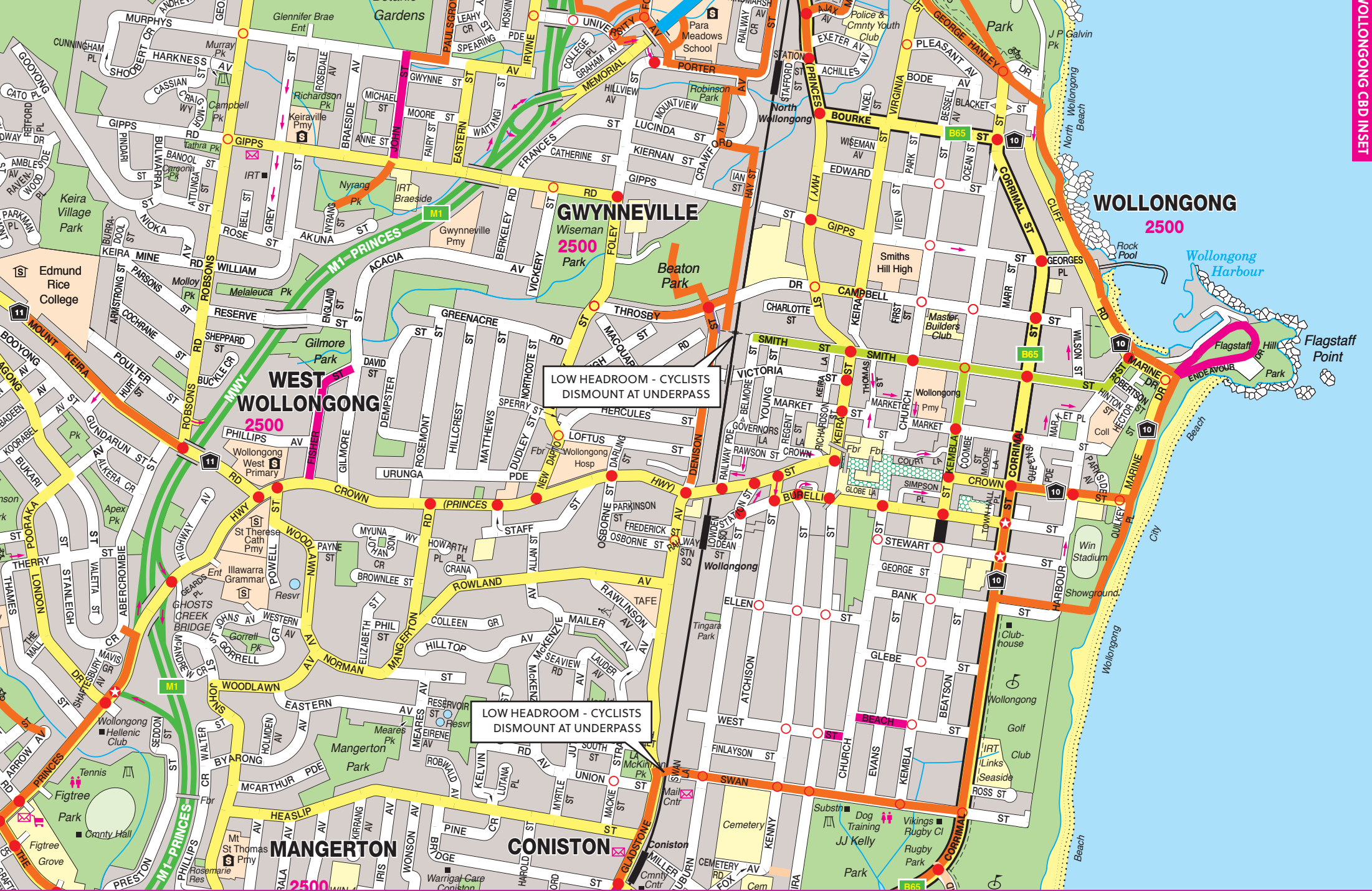
**Shared Paths**  
Off road paths available for use by pedestrians and cyclists. Cyclists must give way to pedestrians on these paths.

**On Road Bicycle Facilities**  
On road routes marked with bicycle logos either on the road shoulder or within a bicycle lane.

**Separated Cycleways**  
On road bicycle only connections that are separated from vehicles by a kerb.

**Bicycle Facilities on High Speed Roads**  
Marked facilities in shoulder lanes on the Memorial Drive and the M1 Princes Motorway. Suitable only for experienced riders.

**Bike Locker Locations**  
Some train stations have bicycle lockers for hire to keep your bicycle and accessories safe from wet weather and theft.



NO CYCLEWAY ON BRIDGE - CYCLISTS DISMOUNT AND USE FOOTPATH

LOW HEADROOM - CYCLISTS DISMOUNT AT UNDERPASS

LOW HEADROOM - CYCLISTS DISMOUNT AT UNDERPASS

LOW HEADROOM - CYCLISTS DISMOUNT AT UNDERPASS

Local Bike Track: Harry Graham Park, Figtree

Cringila Hills Mountain Bike Park

Local Bike Track: Diamond Bros Reserve, Horsley

Illawarra Criterium Track & Unanderra Velodrome

Local Bike Track: Anama Street Reserve, Fairy Meadow

Produced by Custom Mapping Services  
Universal Publishers Pty Ltd



APPENDIX B

PLANNING PROPOSAL TRANSPORT MEASURES







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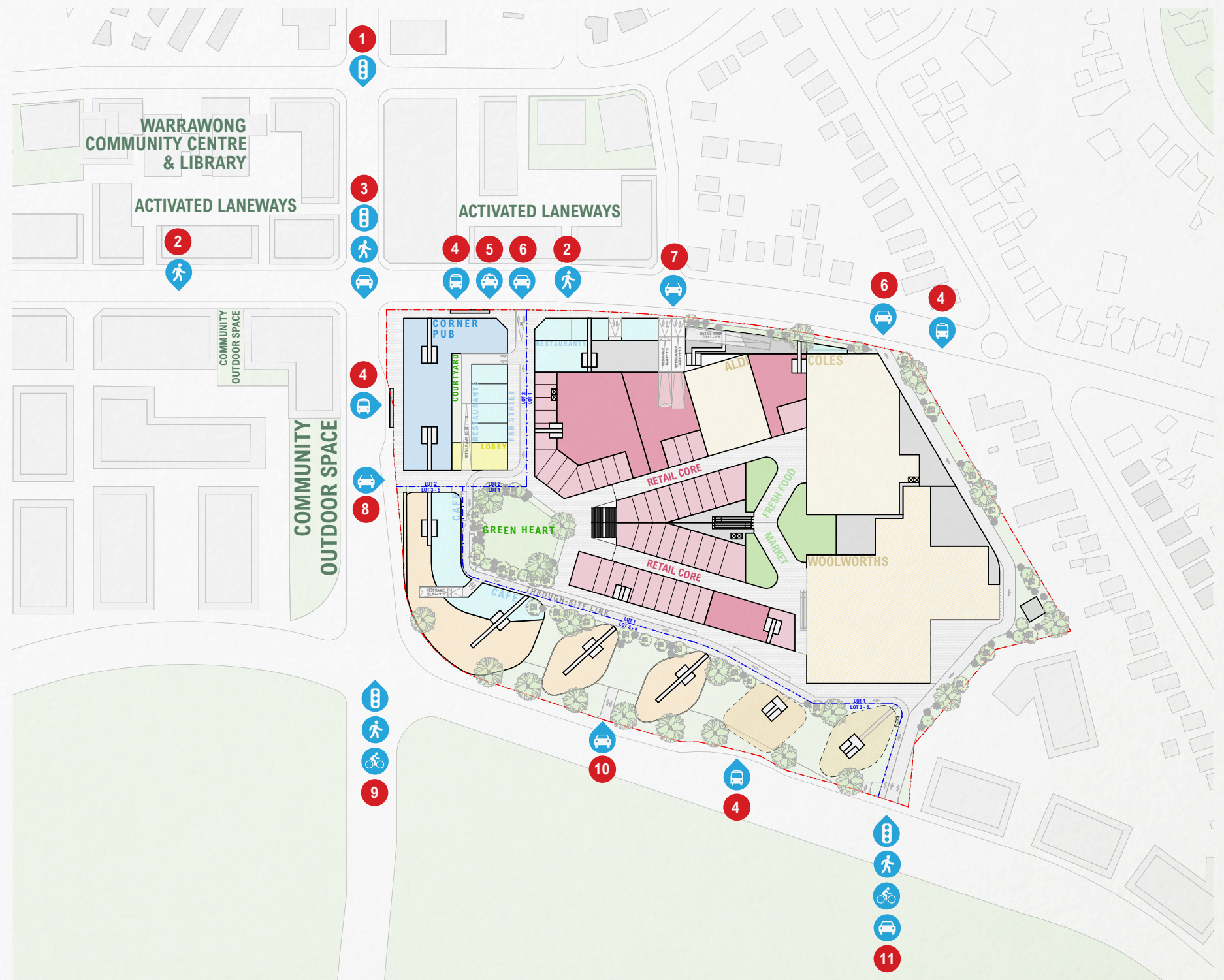
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# Traffic & Transport Advice

01. Signalisation of King Street/Greene Street/Montgomery Avenue by Wollongong Council in association with the community centre/library development.
02. Improvements to Cowper Street by Wollongong Council, including footpath widening and pedestrian crossings (see attached plan)
03. Modifications to King Street/Cowper Street intersection by Wollongong Council, including removing right turns from Cowper Street into King Street (buses excepted). Also improvements direct pedestrians to and from existing and future traffic signals and crossing points.
04. Improve bus facilities on King Street and Northcliffe Drive, including stands, shelters and pedestrian connections.
05. Improve provisions for taxis in Cowper Street
06. Retain appropriate vehicular access to the site from Cowper Street.
07. Modifications to the Cowper Street/Taurus Avenue intersection by Wollongong Council, to allow right turns into Taurus Avenue. Also retain appropriate vehicular access to the site from Cowper Street.
08. Alternative entry into site on King St rather than Cowper Street. This is to maximise pedestrian friendliness of Cowper Street and minimise vehicular crossovers. This is in-line with the Wollongong Council's master plan for Cowper Street to be high/main street with proposed upgrades/renewals.
09. Improve pedestrian connections to and from areas to the south, including the playing fields south of Northcliffe Drive; Provide appropriate connections to existing bicycle paths close to the site on Northcliffe Drive and King Street (see attached bicycle map).
10. Retain appropriate vehicular access to the site from Northcliffe Drive.
11. Proposed signalised intersection to improve pedestrian access to parks and cycle paths as well as vehicular access.

-  NEW TRAFFIC SIGNALS
-  IMPROVED PEDESTRIAN CONNECTIONS
-  IMPROVED CONNECTIONS TO EXISTING BICYCLE PATHS
-  IMPROVED BUS STANDS
-  IMPROVED TAXI STANDS
-  IMPROVED VEHICLE ACCESS



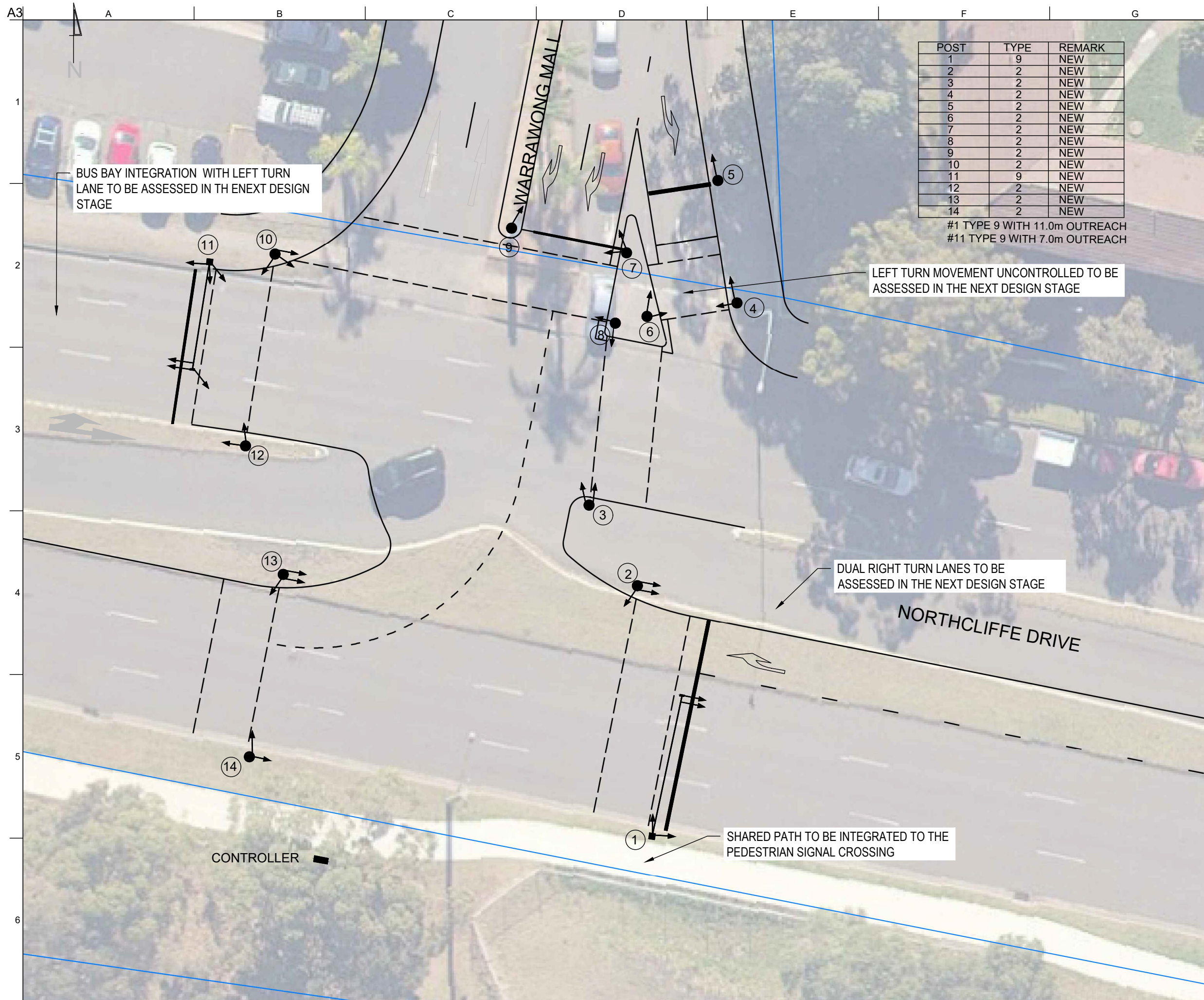


APPENDIX C

NORTHCLIFFE DRIVE TRAFFIC SIGNALS CONCEPT

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POST	TYPE	REMARK
1	9	NEW
2	2	NEW
3	2	NEW
4	2	NEW
5	2	NEW
6	2	NEW
7	2	NEW
8	2	NEW
9	2	NEW
10	2	NEW
11	9	NEW
12	2	NEW
13	2	NEW
14	2	NEW

#1 TYPE 9 WITH 11.0m OUTREACH  
 #11 TYPE 9 WITH 7.0m OUTREACH

**NOTES:**

- REFER TO CHROFI ARCHITECTURAL DRAWINGS FOR DETAILS.
- TRAFFIC INTERSECTION ASSESSMENT TO BE CONDUCTED AT NEXT DESIGN STAGE.
- INDICATIVE TRAFFIC CONTROL SIGNALS (TCS) AT INTERSECTION FOR INFORMATION ONLY.
- INTERSECTION PERFORMANCE TO OPERATE AT EXISTING LEVEL OF SERVICE (LoS OF 'D') AT OPENING YEAR (2036).
- (TCS) SUBJECT TO TRAFFIC SIGNALS WARRANTS ASSESSMENT.
- (TCS) SUBJECT TO TNSW APPROVALS.
- DESIGN VEHICLE - ARTICULATED VEHICLE (AV) 19m LENGTH.
- REFER TO CBR&K 'TRANSPORT ASPECTS PROPOSAL REPORT' FOR DETAILS OF TRAFFIC OPERATIONS.
- EXISTING SPEED LIMIT TO BE RETAINED.
- EXISTING SCHOOL ZONE SPEED LIMIT TO BE RETAINED.
- SIGNAL PHASING OPTIMIZATION AND INTEGRATION WITH SHARED PATH TO BE ASSESSED IN THE NEXT DESIGN STAGE.
- KERB RAMPS TO BE CONSTRUCTED AT ALL PEDESTRIAN CROSSING PATH TO BE ASSESSED IN THE NEXT DESIGN STAGE.
- POWER SUPPLY TO BE DETERMINED BY ACCREDITED LEVEL 2/3 SERVICE PROVIDER.
- SIGNAL TIMING TO BE COORDINATED WITH ADJACENT EXISTING SIGNALISED INTERSECTIONS AT NORTHCLIFFE DRIVE - KINGS STREET AND NORTHCLIFFE DRIVE - SHELLHARBOUR ROAD.
- (TCS) TO BE IN ACCORDANCE WITH TNSW TRAFFIC SIGNAL GUIDES
- (TCS) CONTROLLER LOCATION AND OFFSETS TO BE DETERMINED IN THE NEXT DESIGN STAGE.

Issue	Date	By	Chkd	Appd
B	14/09/23	MJ	AV	AV
A	13/09/23	MJ	AV	AV

For information

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Client  
**ELANOR INVESTORS GROUP**

Job Title  
**WARRAGONG PLAZA REDEVELOPMENT**

Drawing Title  
**PRELIMINARY CONCEPT DESIGN SIGNALISED INTERSECTION NORTHCLIFFE DRIVE - WARRAWONG MALL ACCESS**

Scale at A3  
 NOT TO SCALE

Discipline  
 TRAFFIC

Drawing Status  
**Draft**

Job No <b>296838-00</b>	Drawing No <b>SKT001</b>	Issue <b>B</b>
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