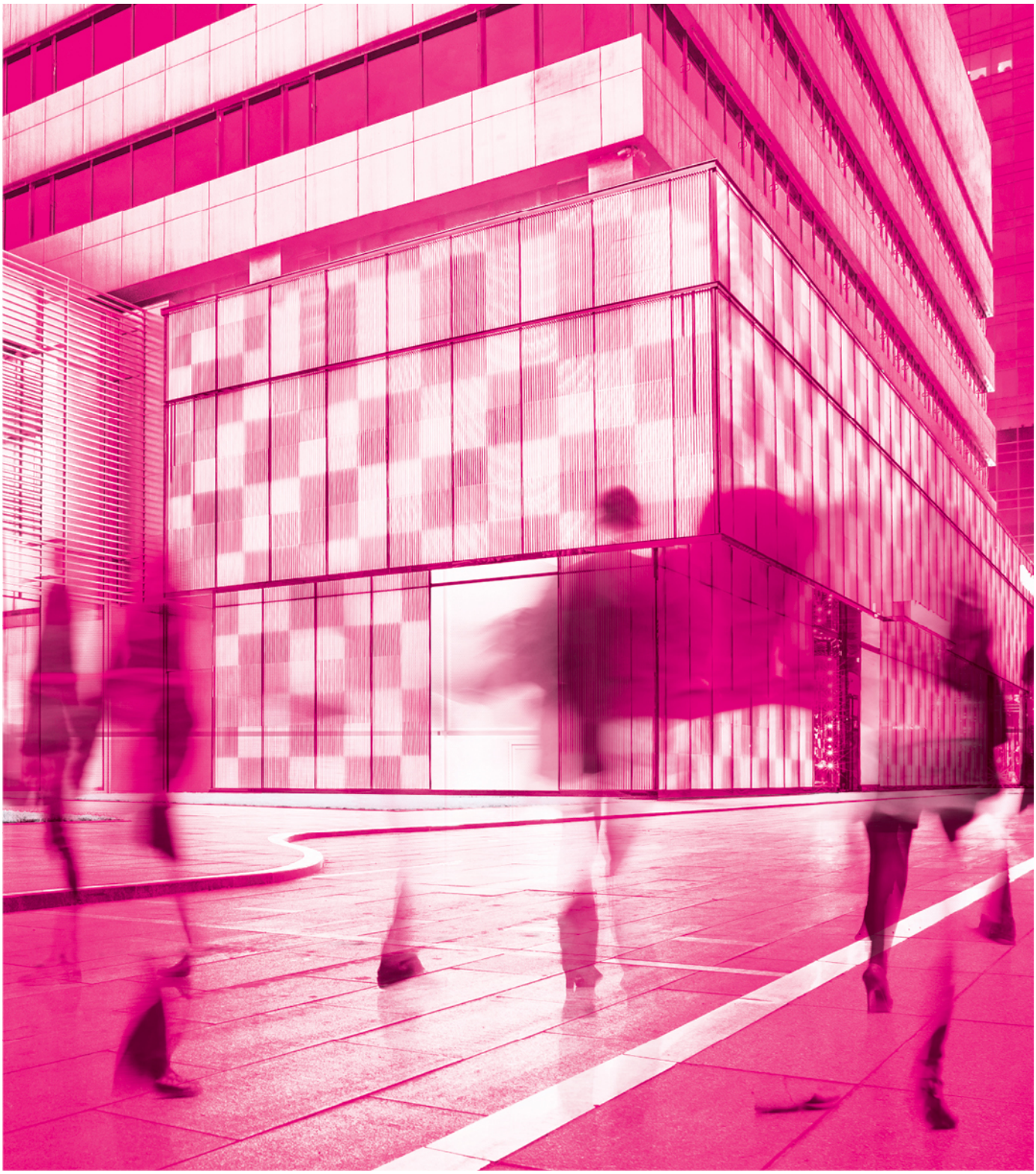

Responses to RTS Traffic

Royal Randwick Racecourse Night Racing

For Australian Turf Club

November 2021

parking;
traffic;
civil design;
wayfinding;
ptc.

Document Control

Royal Randwick Racecourse Night Racing, Transport Management Plan

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	23/11/2021	Draft	JM, DK	DB	Hayden Kegg
2	25/11/2021	Final	JM, DK	DB	Hayden Kegg

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Contents

1 Introduction

1.1 Project Summary

ptc. have been engaged by the Australian Turf Club (ATC) to provide responses to the traffic and transport related comments within the Response to Submissions for the proposed Night Racing at Royal Randwick Racecourse (SSD 8706).

ptc. previously prepared a Transport Impact Assessment (TIA) accompanying the SSDA and addressing transport impacts in response to the Secretary's Environmental Assessment Requirements (SEARs).

This document provides responses to the traffic related issues raised in the Response to Submissions.

The location of the subject site is shown in Figure 1.

Figure 1: Royal Randwick Racecourse

2 Responses to Traffic Related Submissions

ptc. has reviewed the Response to Submissions and for the purpose of providing complete, additional information where required, as well as responding to the comments, specific transport related issues have been isolated in this report. In total, there were 22 submissions (18 public, 2 organisations, 2 authority) related to traffic and public/active transport impacts.

2.1 Public and Organisation Comments

Within the public and organisation submissions, many comments were general, esoteric, personal or not related to the proposal. Therefore, relevant traffic related comments have been interpolated from these 20 submissions and can generally be categorised into the following concerns:

- "Increased traffic" added to existing congestion (8 comments)
- Existing lack of parking in local streets exacerbated (7 comments)
- Existing congestion along Doncaster Avenue during peaks (6 comments)
- Congestion along Doncaster Avenue on race days (1 comments)
- Increased pedestrian activity during events (3 comments)
- Public transport capacity/frequency (1 comment)

2.1.1 "Increased traffic" added to existing congestion

There is a general concern from the community that the current level of congestion on the local road network is frustrating and that additional traffic from the event will exacerbate the problem.

The consensus that current background traffic exceeds capacity when there are no events on at the racecourse suggests that the network is exceeding capacity at some intersections due to non-racecourse related traffic. This is corroborated by the analysis results shown in Table 1.

Table 1: Road Network Analysis (Existing PM Peak)

Location	LoS	Delay (sec) [1]	Highest DoS	Highest Q95% (Veh) [2]
Anzac Parade / Alison Road / Dacey Avenue	F	110.5	1.804	81.5
Alison Road / Doncaster Avenue	F	81.2	1.210	62.6
Alison Road / Racecourse, Gate 1	F	116.9	1.190	58.1
Alison Road / Darley Road	F	213.6	1.882	82.9
High Street / Racecourse, Gate 13 – UNSW	B	24.2	0.911	11.5
Anzac Parade / High Street	B	15.4	0.704	15.4
Anzac Parade / Doncaster Avenue	E	64.0	1.041	104.8
Doncaster Avenue / Ascot Street	D	48.5	0.4	1.0

[1] Council advised that removal of the roundabout at Doncaster Avenue / Ascot Street will be completed in 2021. Therefore, the new geometry has been used as the existing base for the intersection modelling.

[2] Resulting 95th percentile queue reported for the approach exhibiting the greatest vehicle queuing.

2.1.2 Exacerbation of existing lack of parking in local streets

The comments received are comparing events and situations that are not related or comparable to the proposal. For example, existing parking issues are identified outside of event hours or with reference to weekend events, not necessarily at RRR.

Notwithstanding, an assessment of the parking provisions indicates that there is a parking demand of 1,876 spaces based on mode share surveys. This demand is adequately accommodated by the combined on-site parking provision of 4,074 spaces as indicated in the exhibited TIA and in Section 6.10 on the TTMP.

2.1.3 Existing congestion along Doncaster Avenue during peaks (6 comments)

With reference to Table 1, the consensus that current background traffic exceeds capacity when there are no events on at the racecourse suggests that the network is exceeding capacity at some intersections due to non-racecourse related traffic. This is corroborated by the analysis results shown in Table 1.

The fact that congestion occurs in this major urban area without the impact of planned and unplanned incidents, and special events, demonstrates a failure to accommodate and integrate land use developments identified in the Local Environmental Plan into the road network.

If authorities cannot fund appropriate infrastructure projects to accommodate forecast growth, then the burden is placed on developers to make non-car, transport alternatives more attractive so as not to add to a network that is at/exceeding capacity. ATC is taking on that responsibility by facilitating active and public transport initiatives and travel demand management through the Traffic and Transport Management Plan (TTMP).

2.1.4 Congestion along Doncaster Avenue on race days (1 comments)

From site observations during an Everest day-time event, it was noted that current performance at the Doncaster Avenue and Ascot Street intersection experiences congestion due to taxis queuing through the intersection during the peak arrival time, which coincides with Saturday's peak midday network peak. It is expected that these conditions will be improved significantly during night racing events due to the comparative reduction of patrons from maximum 35,000 to a maximum of15,000. Nevertheless, high traffic activity is expected where arrivals will coincide with the evening commuter peak.

These associated impacts particularly relate to Class 3 events (<10,000 people), which is anticipated to be sustained for 1-2 hours, up to 12 events per year. In order to mitigate congestion within the road network, it is recommended that the available public transport options be promoted and encouraged as a means of reducing the number of patrons opting to drive to these events.

This issue is recognised and ATC currently implements TTMPs associated with racing events. A revised, draft version has been developed as part of this response and is included in Attachment 1.

It is also noted that the impacts of the Class 3 and Class 2 events on the upgraded priority intersection of Doncaster Avenue / Ascot Street are significant with worse delays and queues. This is particularly due to the high flow of vehicles along Ascot Street during the events and the vehicles entering the Racecourse from the western approach now being required to stop and give-way to all vehicles travelling along Doncaster Avenue as well as pedestrians and cyclists. Allowing the taxis/uber to enter and exit the site via Gate 1 (Scenario 2) improves the performance of the intersection significantly.

2.1.5 Increased pedestrian activity during events (3 comments)

There is a general concern from the community that the increased pedestrian activity during the event bump-ins and bump-outs will cause a public disturbance. There is particular concern given this may occur during the evening (6pm to 10pm) and night-time periods (after 10pm as people leave the venue). The main locations of concern are Doncaster Avenue and Ascot Street, Kensington.

The impacts of patrons and vehicles exiting the site following night racing events at the site is addressed in the proposed operational management of the events and is included in the TTMP. Based on a finishing time of 10pm, it is noted that patrons and vehicles exiting the site may extend beyond 10pm. As such, it was determined that the following entry/exit points were to be utilised by patrons exiting on foot to minimise impacts on the surrounding community:

- Gate 1 (Alison Road)– pedestrians and vehicles
- Gate A and B (Alison Road) – pedestrians using buses

These entry/exit points are shown in Figure 3.

Figure 2: Overview of Internal Site Access Arrangements

Measures to improve conditions, specifically along Doncaster Avenue include:

- Allowing the taxis / uber to enter and exit via Gate 1 to reduce the delays and queues at the Doncaster Avenue / Ascot Street intersection (modelling Scenario 2).
- Undertaking a taxi management study to review alternative access arrangements and management measures to significantly reduce impacts along Doncaster Avenue.
- Provide point duty Police at the Doncaster Avenue /Ascot Street intersection, to release queued traffic when required as part of event management and discourage illegal driver behaviour.

2.1.6 Public transport capacity/frequency (1 comment)

The comment received specifically related to service (bus) frequency. However, a review of the existing public transport infrastructure services and frequency indicates that the Racecourse is readily accessible in terms of public transport with regular bus services and the South East Light Rail (CSELR) providing a regular connection between the CBD and the Racecourse.

Further, it is understood that RRR and TfNSW monitor patronage to determine if additional services are required to accommodate increased event patronage and react accordingly.

2.2 Authority Comments

Responses were only received from City of Randwick Council and The Greater Sydney Division of Transport for NSW Transport and replies to each transport related comment are provided below.

2.3 City of Randwick Council

Issue 16

Concerns are raised regarding the impact of private vehicle usage on the local street network. Council is aware that some patrons who drive to the RRR currently park in local streets and do not utilise the infield car park due to the time it takes to exit the car park at the conclusion of events. This leads to traffic and parking congestion in local streets surrounding the RRR. The submitted EIS and supporting documentation does not adequately address this issue. An assessment of parking impacts on the local road network should be undertaken to assess the impact of patrons parking in local streets.

Response

This is a generalisation without substantiation that appears to be related to local parking controls and enforcement issues more than the effects of the proposal. An assessment of the parking provisions has been undertaken and shows that the parking demand of 1,876 spaces is adequately accommodated by the combined on-site parking provision of 4,074 spaces.

Therefore, without evidence of any perceived on-street parking by patrons, it is recommended that the approach to managing this issue be with consideration of enforcement of residential parking permits, particularly KN1, KN2, RA1, RA2, RA3, RA4 and RA5. The ATC can complement this approach by continuing to provide ample capacity for parking on-site and awareness campaigns to encourage parking on site or using public transport. These measures are detailed in the TTMP.

Issue 17

The signposting and enforcement of parking restrictions for (seemingly) random night-time race events will be very challenging. Council's previous experience with parking restrictions on 'Race Days Only' produced

significant issues, as most Sydney residents do not know when race events are being held at RRR, nor should they be expected to. This has resulted in non-event motorists being issued with Parking Infringement Notices in the past.

Response

The events will be planned well in advance with appropriate notification via several media. Therefore, the implication of randomisation of events is unsubstantiated. Comments from local residents indicate that there are existing non-race related parking issues in the LGA and again, demand can be adequately accommodated by the site's parking provision. Therefore, a proactive and collaborative approach to developing solutions should be instigated and managed by Council.

Various mitigation measures are being implemented by ATC to reduce private vehicle trip generation include:

- Establishing event-specific sustainable (green) travel plans in the lead up to events.
- Staggering arrivals by promoting early-bird parking prior to 5:00pm. Incentives may include premium parking, discounts on drinks, food or future tickets, etc.
- Promotion of car-pooling, with Premium parking for vehicles with 3+ passengers.
- Integration of free public transport services with pre-purchased tickets.
- Seeking to increase mode share of cyclists, providing improved on-site cyclist parking facilities, including bike-share facilities.
- Supporting increased shuttle services between hotels.
- Monitoring via patron surveys, to track travel trends and identify barriers and opportunities in public and active travel access.
- Regularly updating the website and wayfinding to incorporate changes in local travel infrastructure and timetables and seek opportunities to promote them.
- Continue organising additional event bus services and light rails services, to be coordinated within the MEOG.

Issue 18

If residents or their visitors are not aware of night race events, they are likely to park in local streets, even if the street is signposted as '2P Residents Excepted, Race Days/Nights'. Additionally, Council considers night time parking restrictions imposed upon communities as an unacceptable burden, as it shifts the responsibility of parking management to individual residents and their visitors, rather than the venue operator. Further, the management of overflow night-time parking on local streets creates resourcing challenges for Council to manage night time restrictions.

Response

The imposition of existing parking restriction sign posting on residential streets is outside of the Applicant's control. The Applicant also has no access to information to support Council's comments. Notwithstanding, The TIA specifies the following mitigation measures to maximise notification and planning for local residents:

- Provide notification to local residents prior to events, with details of the events, and contact details for enquiries.

- Promotion of Night Racing as public transport events in the media, via the Transport Management Centre, VMS etc and facilitate this with Travel Access Guide information available on appropriate websites.

Refer to Issue 16 response regarding parking demand.

Issue 19

There are strong concerns about the traffic impacts of the proposals. These concerns are supported by the SIDRA modelling contained within the submitted Traffic Impact Assessment. All of the key indicators arising from the modelling of Class 2 (up to 15,000 patrons) and Class 3 (up to 10,000 patrons) events under both operating scenarios result in significant increases in each of the critical SIDRA indicators, including major increases in Delays, Degree of Saturation and 95th Percentile Back of Queue Distances.

Response

The SIDRA modelling does not support strong concerns about the traffic impacts of the proposal. It clearly demonstrates that some intersections are currently operating at capacity—due to background, no-event related traffic. Consultation with TFNSW confirms that background traffic conditions for the road network are operating at or above capacity without impact from the proposal. As such, the proposal will require specific traffic control/management and/or the management of the mode share through the provision of additional transport options as a result.

Intersections that are at or exceeding capacity due to background traffic are universally considered the responsibility of the local authorities to upgrade in line with Local Environmental Plans.

Issue 20

Such major increases in these SIDRA indicators, in a neighbourhood where many of the existing intersections are currently performing with a Level of Service of F, is unacceptable. The overlay of the additional event traffic onto a neighbourhood with traffic flows currently performing poorly, will create major delays, congestion and subsequent frustration for the event and non-event community.

Response

Refer to Issue 19 response and Table 1.

Issue 21

The acceptance within the Traffic Impact Assessment (page 37) that modelling shows extension to delays in the network around the majority of intersections surrounding the RRR is particularly concerning, especially within a local network already under traffic stress.

Response

If the existing intersections are at/exceeding capacity due to existing background traffic, then it is logical to assume an extension of the associated delays will occur if more traffic is added.

Refer to Issue 19 response and Table 1.

Issue 22

Additionally, it is noted that the Traffic Impact Assessment advises that high traffic activity is expected 'where arrivals will coincide with the evening commuter peak. These associated impacts particularly relate to Class 3 events which is anticipated to be sustained for 1-2 hours, up to 12 events per year.' Such high traffic impacts for 1-2 hours is unacceptable for the local road system. Council therefore recommends that the number of scheduled events on Thursday and Friday evenings are minimised and Thursdays should be discouraged.

Response

If the local road system is currently experiencing traffic related impacts without the events associated with the proposal, then the priority and responsibility of the relevant authorities must be to rectify this first instead of simply denying any further development.

As acknowledged by Council, restriction of scheduled events will not rectify the current, non-event related traffic issues.

Issue 23

The preparation of Pedestrian, Transport and Traffic Management Plans, Traffic Control Plans, a taxi management study and consultation with MEOG are all supported. As is notifying residents and promoting public transport. It is noted that shifting taxis/Ubers to Gate 1 appears to create traffic problems along Alison Road, which should be addressed. Measures such as staggering arrivals, promoting car-pooling, seeking to increase mode share of cyclists, supporting increased shuttle services between hotels are also supported. However, undertaking continued patron surveys and regularly updating the website seem to be of limited value regarding car travel mitigation.

Response

Noted and incorporated in the TTMP in Attachment 1.

Issue 24

To address the 1-2 hours of traffic impacts the Traffic Impact Assessment recommends that "the available public transport options be promoted and encouraged as a means of reducing the number of patrons opting to drive to these events." The encouragement of public transport options is very much supported by Council, however, that approach will not address the traffic congestion problem.

Response

Noted and incorporated in the TTMP in Attachment 1. Refer to Issue 19 response and Table 1.

Issue 25

A further concern, along Doncaster Avenue, is the interaction between bike riders on the soon to be constructed two-way cycleway and motorists, particularly at the Doncaster I Ascot Street intersection. The Traffic Impact Assessment rejects the need for traffic signals at the Doncaster I Ascot Street intersection, however Council recommends that signals should be installed. Signals will clarify for all road users, the priority at this intersection, which would be very important from a road safety perspective - especially during night time events.

Response

The Applicant has no evidence to support the installation of traffic signals as the analysis demonstrates that the signalisation of the Doncaster Avenue / Ascot Street intersection is not warranted. Reference is made to the Roads and Traffic Authority (RTA) *Traffic Signal Design – Section 2 Warrants*. *Section 2.3 (a) Traffic demand* applies to this intersection as speed, sight distance, pedestrian safety and crashes are not an issue at this location. Therefore, where the major road is Doncaster Avenue and the minor road is Ascot Street, a signalised intersection may be considered if:

(a) Traffic demand:
For each of four on-hour periods of an average day:
(i) the major road flow exceeds 600 vehicles/hour in each direction; and
(ii) the minor road flow exceeds 200 vehicles/hour in one direction.

The traffic flow on the minor road (Ascot Street) is less than 200 veh/hr under normal circumstances, i.e. during hours outside of events. Hence, the warrants for signals are not met for Doncaster Avenue / Ascot Street intersection.

It is unlikely that TfNSW would approve the installation of traffic signals and assume the ongoing asset maintenance of an unwarranted asset. Therefore, it is recommended that traffic management along Doncaster Avenue / Ascot Street intersection be provided during the events to prioritise the flow of vehicles entering and existing via Ascot Street.

Issue 26

In summary, Council has significant concerns about the indicated traffic and parking effects. It is recommended that the number of proposed night racing events be reduced, with events on Thursday and Friday evenings discouraged. It is also recommended that all tickets to night time events must be pre-ordered and must include integrated ticketing. In other words, every ticket purchased must include free public transport to and from the venue. Additionally, a clearer explanation of how the traffic will be managed on surrounding streets, so as to not have the indicated 1-2 hours of high traffic impact, must be prepared and submitted to Transport for NSW and Council for assessment.

Response

Refer to responses to Issues 16-25.

2.4 Transport for NSW – Greater Sydney Division

TfNSW submission relates to the requirement of a detailed Transport and Pedestrian Management Plan to manage general traffic and public transport operation and safety of pedestrians and cyclists accessing the subject site as well as in the vicinity of the Racecourse and recommends that ATC:

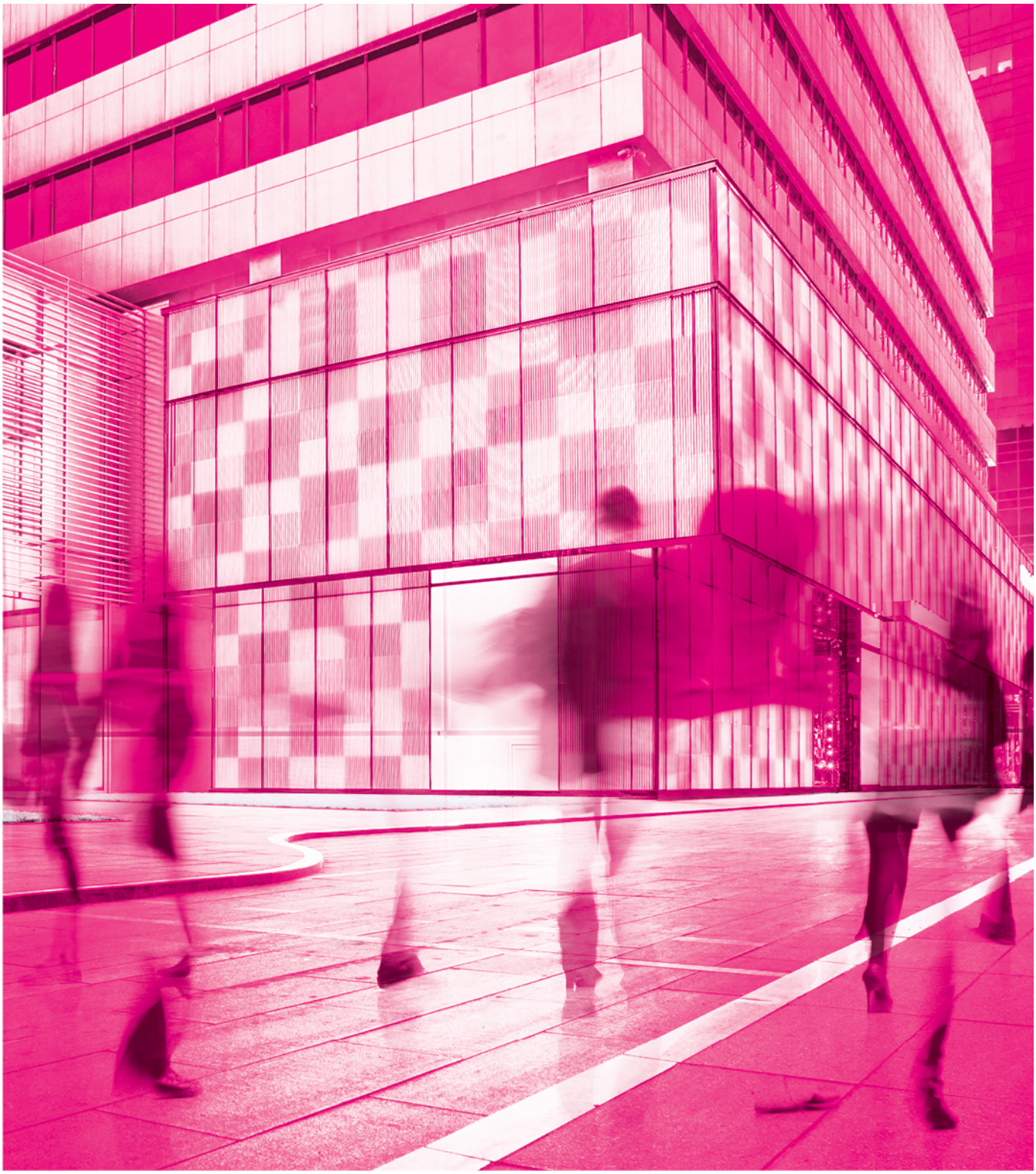
- Investigate the need delay commencement of race meetings outside of afternoon peak period (e.g. commence from 7pm) on weekdays to help manage transport demand and to minimise the impact on traffic and transport operations within the Randwick Precinct.
- Provide details of traffic management measures to ensure no impact on the light rail depot exit and entry of light rail vehicles; and

- Consult with TfNSW, the Sydney Light Operator and Sydney Trains to confirm that existing and future transport services would be able to accommodate the demand generated by the night time racing.

Further, TfNSW recommends that the applicant be conditioned to prepare a detailed Transport and Pedestrian Management Plan in consultation with TfNSW and the Sydney Light Rail Operator and submit the final Plan for TfNSW endorsement, prior to the issue of the Construction Certificate.

Since this submission, the applicant has undertaken consultation with the stakeholders as recommended and it was agreed that a delayed commencement of the events would not be viable. Additionally, with a view to compliance with a pending condition, the applicant has commissioned the development of the draft TTMP contained in Attachment 1.

Attachment 1 Traffic and Transport Management Plan



Traffic and Transport Management Plan

Royal Randwick Racecourse Night Racing

For Australian Turf Club

November 2021

parking;
traffic;
civil design;
wayfinding;
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Document Control

Royal Randwick Racecourse Night Racing, Traffic and Transport Management Plan

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1	18/11/2021	Draft	JM, DK	DB	Hayden Kegg
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Contents

List of Figures

List of Tables

1 Introduction

1.1 Project Summary

ptc. have been engaged by the Australian Turf Club (ATC) to prepare a Traffic and Transport Management Plan (TTMP) to inform the management of the night racing events at the Royal Randwick Racecourse, proposed under the State Significant Development (SSD) application to the NSW Dept of Planning, Industry and Environment (DPIE), reference SSD 8706.

As described in the Environmental Impact Statement prepared by Urbis, the scope of the proposal subject to the SSD application includes the following:

- Consent for 16 night racing events per annum (concentrated between October and April), broken into:
  - 12 minor race events per annum (up to 10,000 patrons)
  - 4 medium race events per annum (10,001 to 15,000 patrons)

This TTMP has been prepared in response to a recommendation in DPIE's Independent Transport Assessment dated 29 June 2021.

It is recognised that the local Randwick area is rapidly transforming with respect to the implementation of the CBD and South East Light Rail (CSELR) project. Additionally, the urban landscape will always be subject to change over time and as such, this TTMP shall be regularly reviewed and updated, to ensure that it maintains relevance over time. This process shall be undertaken in consultation with the existing body, known as the Moore Park Event Operations Group (MEOG), consisting of key local stakeholders and authorities, including Randwick Council, City of Sydney, Transport Agencies (STA, TMC), ATC, Fox Studios, Centennial Parklands, NSW Police, SCG/SFS Trust.

The location of the subject site is shown in Figure 1.

Figure 1: Royal Randwick Racecourse

2 Event Categorisation

2.1 Categorisation Overview

Events held at the Royal Randwick Racecourse may be categorised under three classes in accordance with the RMS Guide to Traffic and Transport Management for Special Events (2006). Simply, these categories are summarised below, along with the proposed number of respective events:

Table 1: Event Summary

Event Classification	Crowd	Events per Year
Class 1	35,000	1
Class 2	10,000 - 35,000	5 (approx.)
Class 3	< 10,000	10 (approx.)

- Class 1 - Large Event (35,000 attendees)
- Class 2 - Medium Event (10,000 to 35,000 attendees)
- Class 3 - Small Event (less than 10,000 attendees)

Most of the proposed night racing events will typically fall within the Class 3, small event category, with approximately 4 of the 16 events falling into the category of Class 2. The categorisation system is provided as a guide, which has been adapted and shared amongst the MOEG, which holds monthly meetings to establish event calendars (avoiding event overlap), and the appropriate level of management.

2.2 Class 1: Large Events

Features common to all Class 1 special events are that the event:

- Impacts major traffic and transport systems
- Disrupts the non-event community over a wide area
- Requires the involvement of Police, one or more Councils and the TfNSW
- Requires a detailed Transport Management Plan
- Requires advertising the event's traffic aspects to a wide audience.

Other features of a Class 1 special event are that it may:

- Be conducted on-road or in its own venue
- Involve trusts and authorities when using facilities managed by them
- Involve the TfNSW Major Events Coordination Unit
- Involve the State Rail and State Transit Authorities
- Involve private bus and coach organisations

- Impact the road transport industry
- Require the TfNSW to implement special event clearways
- Require the TfNSW to provide heavy vehicle detour routes
- Require the TfNSW to adjust traffic signals
- Require the RTA to manage messages on Variable Message Signs

The events that fall under the description of a Class 1 special event involve:

- A crowd of 35,000; and
- Parking within the site is limited, i.e. the event is held within the infield and the use of public transport is promoted intensely prior to the event.

It is anticipated that none of the racing events at night will fall into the Class 1 category.

2.3 Class 2: Medium Events

Features common to all Class 2 special events are that the event:

- Impacts local traffic and transport systems but does not impact major traffic and transport systems
- Disrupts the non-event community in the area around the event but not over a wide area
- Requires the involvement of Police and Local Council
- Requires a detailed Transport Management Plan; and
- Requires advertising the event's traffic aspects to the local community.

Other features of a Class 2 special event are that it may:

- Be conducted on-road or in its own venue
- Involve trusts and authorities when using facilities managed by them
- Involve State Rail and the State Transit Authority
- Involve private bus and coach organisations

The events that fall under the description of a Class 2 special event involve:

- 10,000 to 35,000 attendees; and
- Parking is available within the infield car park and out-field areas. This is typical of events hosted predominantly within the permanent venues.

As with all large events, the use of public transport is promoted in order to limit the traffic activity generated by the event, however the use of the infield with the associated permanent access provisions lessens the degree of temporary traffic management within the road network.

Appendix C of this report provides an overview TMP that would be applicable to Medium Events.

2.4 Class 3: Small Events

Features common to all Class 3 special events are that the event:

- Does not impact local or major traffic and transport systems or classified road
- Disrupts the non-event community in the immediate area only
- Requires Local Council and Police consent
- Is conducted on-street in a very low traffic area such as a dead-end or cul-de-sac; and

Other features of a Class 3 special event are that it:

- May, depending on Local Council policy, require a simplified Transport Management Plan
- Depend on each Council's Special Events Policy and is not available in all Council areas
- May not require advertising the event's traffic aspects to the community

The events that fall under the description of a Class 3 special event involve:

- Less than 10,000 attendees
- Parking is available within the infield car park and outfield areas
- Events hosted predominantly within the permanent venues

These events potentially generate insufficient traffic activity to cause a notable impact on the operation of the road network, i.e. slightly increased volumes at intersections etc, but not sufficient activity to warrant temporary traffic controls.

The night racing proposal indicated that the majority (80%) of events will fall within this small event category, but will not have more 15,000 patrons. Appendix C of this report provides an overview TMP that would be applicable to Medium Events.

2.5 Considerations

The L2 Randwick Line and L3 Kingsford Line are Sydney's newest passenger routes on the Sydney light rail network. L2 Randwick Line services commenced on 14 December 2019, while L3 Kingsford Line services commenced operations on 3 April 2020. These dates very closely correlate with the timing of the COVID-19 Public Health Orders and restrictions. Therefore, this document should be reviewed once restrictions are lifted and public transport patterns return to what is considered the "new normal".

2.6 Transport Management Plan Objectives

The pedestrian, traffic and transport management measures presented within this report have been prepared in accordance with the requirements of the Guide to Traffic and Transport Management for Special Events, which is published on the TfNSW website.

The guide presents the following four primary objectives:

- Ensure the safe separation of event patrons, participants and volunteers from traffic
- Manage the reduced capacity of the road system
- Minimise the traffic impact on the non-event community and the emergency services
- Minimise costs

To achieve the above objectives, the Pedestrian and Traffic Management Plan will:

- Ensure that delays and traffic congestion are kept to a minimum and within acceptable levels

- Encourage the use of public transport to the precinct and major events
- Deliver a better customer experience
- Ensure that all needs of road users, motorists, pedestrians, cyclists, public transport passengers and people with disabilities are accommodated.

3 Site Context

3.1 Randwick Locality

Randwick is located 4 kilometres south-east of Sydney CBD and is bounded by Kensington to the west and Clovelly and Coogee to the east. Major landmarks within the vicinity include the Royal Randwick Racecourse, Centennial Park, Moore Park, the Prince of Wales Hospital and the University of New South Wales Kensington Campus.

Major redevelopment occurred in the 1960s and 1970s with the construction of blocks of residential apartments, which greatly influenced the character of the suburb. Randwick is unusual in its housing mix, with a significant proportion of multi-storey apartment and unit buildings and high levels of private rentals. Approximately 60 per cent of all private dwellings in Randwick are units or apartments.

When compared with all other suburbs within Randwick City Council, Randwick has greater numbers of people aged between 25 and 34 years, fewer children and higher proportions of university students (Source: Randwick City Council).

Bus and light rail services operate on the major roads in Randwick, providing good links to Sydney CBD. It is estimated that only 15% of people commuting from Randwick use public transport, while 57% use cars (Source: Randwick City Council, September 2009).

3.2 Royal Randwick Racecourse

The Racecourse occupies an area of 80Ha and is located with frontages to Alison Road, Wansey Road and High Street, and is also bounded by properties fronting Doncaster Avenue.

The Racecourse has been operated and managed by ATC (formerly Australian Jockey Club) since 1863. Today, the Racecourse is a major event venue, hosting over 40 race events a year, in addition to various other non-race related events including university examinations, festivals, and various other functions.

Royal Randwick Racecourse is a racecourse for horse racing located in the Eastern Suburbs of Sydney, New South Wales. Randwick Racecourse is Crown Land leased to the Australian Turf Club and known to many Sydney racegoers as headquarters. The racecourse is located about six kilometres from the Sydney Central Business District in the suburb of Randwick. The course proper has a circumference of 2,224m with a home straight of 410m.

On occasion, the Royal Randwick Racecourse may hold concerts or music festivals which do not fit the typical race day event. These events may have a different demographic of patrons and larger crowds, with origin points widely spread across Sydney. Concerts or music festivals will usually have a set start time, meaning crowd arrival will be concentrated. This differs from a typical race day where arrival times may be spread across the day.

Bound by Avoca Street to the East, Alison Road to the North, High Street to the south and Anzac Parade running North South through its core, the precinct is well serviced by the road network.

Vehicular entry points to the Randwick Racecourse precinct are located on Alison Road, Ascot Street, High Street and Wansey Road.

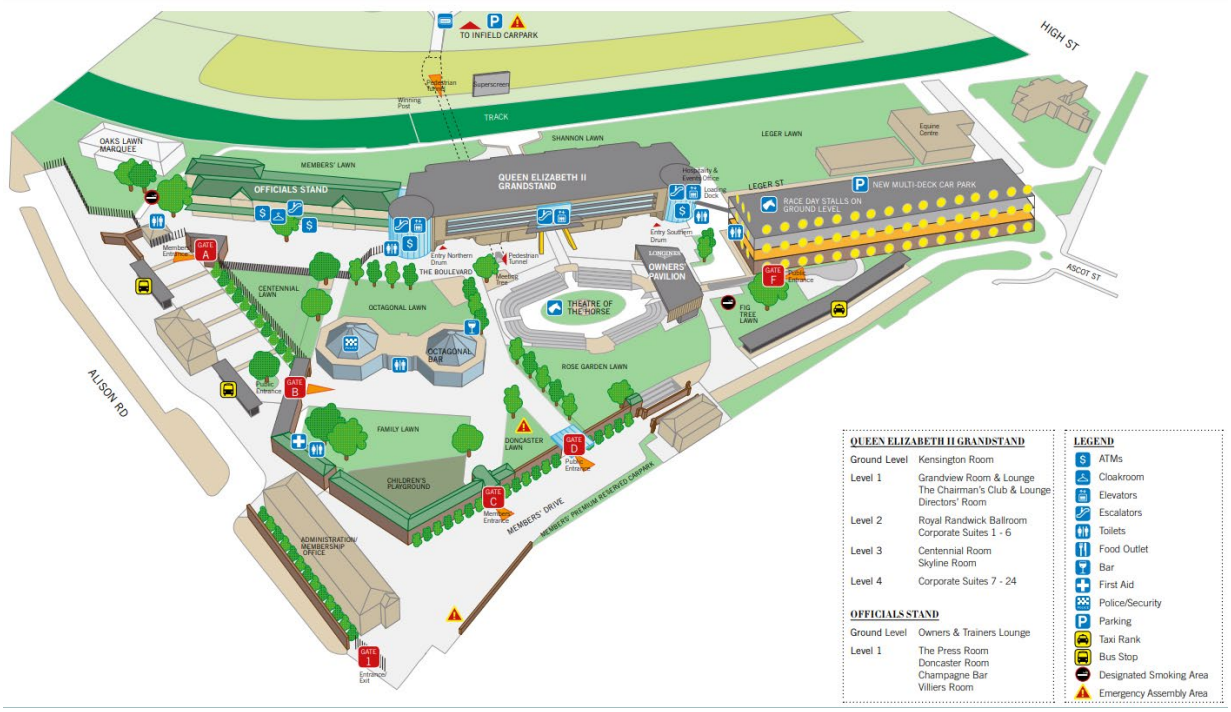

Figure 2: Royal Randwick Racecourse Precinct Map

3.3 Site Capacity

The event precinct provides a variety of event spaces including permanent venues and large flexible external areas, including the infield. The capacity of the Royal Randwick Racecourse varies according to the type of event being held, while a Stage 1 Works approval granted in 2008, which included a package of works to cater for the World Youth Day, made provision for a capacity of up to 55,000 persons.

Other than the World Youth Day mass, the largest non-race day event held within the Royal Randwick Racecourse in recent times was the Future Music festival, which is no longer held at the Royal Randwick Racecourse. The 2013 festival attracted 50,000 attendees, which was the largest attendance for this particular festival. During the lead up to events of this scale, the relevant authorities are consulted in order to prepare managements plans, in particular relation to traffic, transport and the movement of pedestrians.

3.4 Site Access

The Racecourse accommodates a wide range of internal transport facilities. The facilities that will be available for the purposes of night racing are summarised below.

Gate 1, Alison Road: Gate 1 is a prominent access into the Racecourse. This Gate is the primary entrance/exit point for pedestrians moving between the Racecourse and the Alison Road Light Rail station.

Bus Layby, Alison Road: Access to this layby is integrated into the signalised intersection of Alison Road and Darley Road. This layby is a drive-through arrangement (one-way) accommodating 11 bus stands and is the major drop-off hub and pick-up for public transport users.

Gate 10, Wansey Road is primarily used for access to race-day stables, and rarely used during events. If required it may serve as a secondary infield car park exit.

Gate 13, High Street: Gate 13 is integrated into the signalised intersection between High Street and UNSW. This gate provides direct visitor (general admission and members) access to the infield car park located in the centre of the Racecourse. This parking area accommodates approximately 3,500 spaces.

Gate 18, Ascot Street: Gate 18 may be accessed via the roundabout intersection between Ascot Street and Doncaster Avenue, located towards the western side of the Racecourse. This gate currently provides access to the primary taxi (and car share) drop-off facility for events and is subject to heavy traffic volumes during these event periods. A multi-storey Members Car Park accommodating 574 spaces can also be accessed via this Gate.

Figure 3 shows an overview of the internal transport facilities provided within the Royal Randwick. Key features include:

- The in-field car park situated in the centre of the site for private vehicle and hire car parking.
- Multi deck car park accessible via Gate 18 on the western site frontage, comprising approximately 574 spaces for member parking.
- Taxi drop-off/pick-up area and back-of-house servicing.

Figure 3: Overview of Internal Site Arrangements

3.4.1 Bus Layby

The Royal Randwick Racecourse includes an internal bus rank, accommodating 11 bus stops, the arrangement of which is outlined in Figure 4. This rank is utilised by special bus services provided by STA during events.

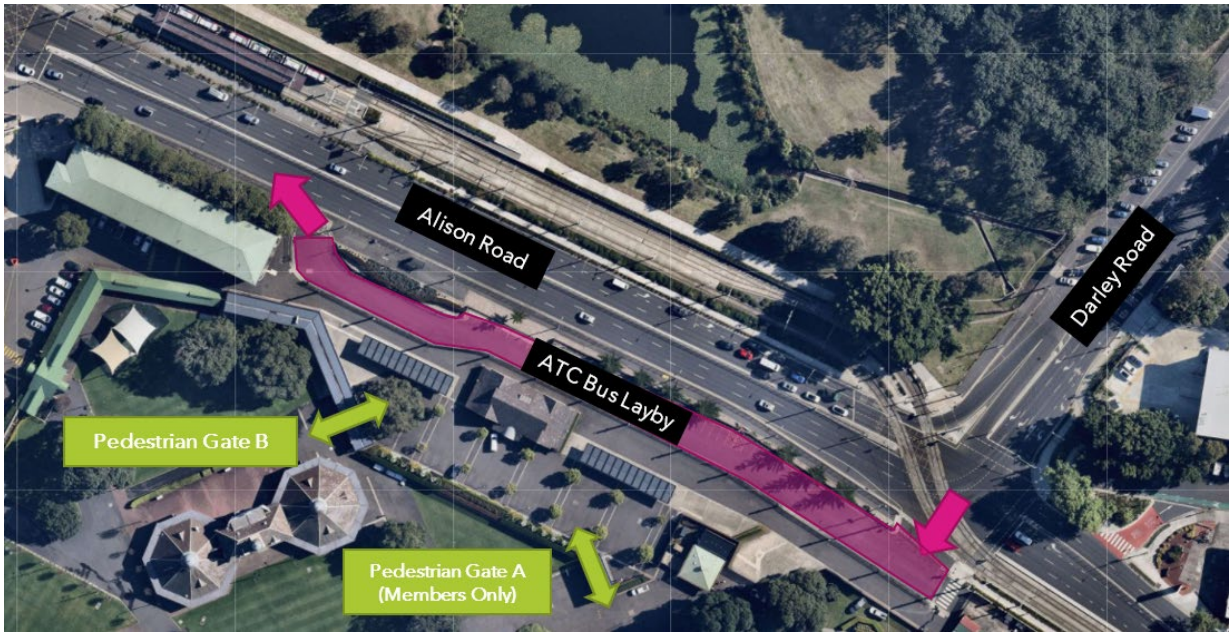

Figure 4: ATC Bus Layby

3.4.2 Taxi Rank

Arrangements for the on-site taxi rank are outlined below. The head-of-rank and subsequent queue may hold a total of 48 vehicles before queueing on Ascot Street.

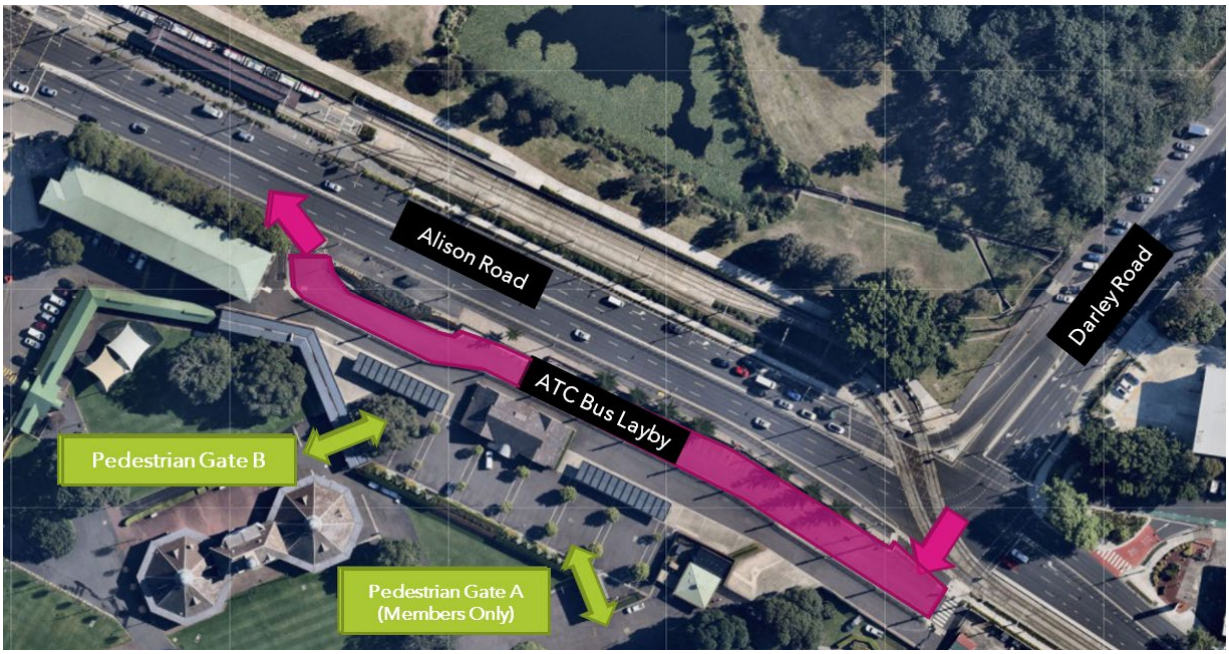

Figure 5: Taxi Rank Arrangement

3.4.3 Pedestrian Facilities and Wayfinding

Pedestrian facilities are located throughout and around the Royal Randwick Racecourse site. Within the property, pedestrian footpaths provide access to the buildings and various facilities, while marked crossings are provided over parts of the internal car parks and circulation roadways. A tunnel provides a connection between the infield parking area and the Spectator Precinct.

The road network surrounding the Royal Randwick Racecourse includes footpaths adjacent to all road frontages and signal controlled crossings are located at the intersections of Alison Road with Doncaster Avenue, Darley Road and Cowper Street. As part of the CSELR works, a signalised crossing was provided at the intersection of Alison Road with Gate 1, allowing pedestrians to cross Gate 1 or Alison Road, towards the light rail station.

During medium and large events, NSW police are positioned around the site to monitor the pedestrian activity at sensitive locations.

4 Transport Facilities

4.1 Road Hierarchy

Royal Randwick Racecourse is situated amongst a number of state and regional-controlled roads, providing excellent accessibility within the Greater Sydney Region. The surrounding road network is shown in Figure 6.

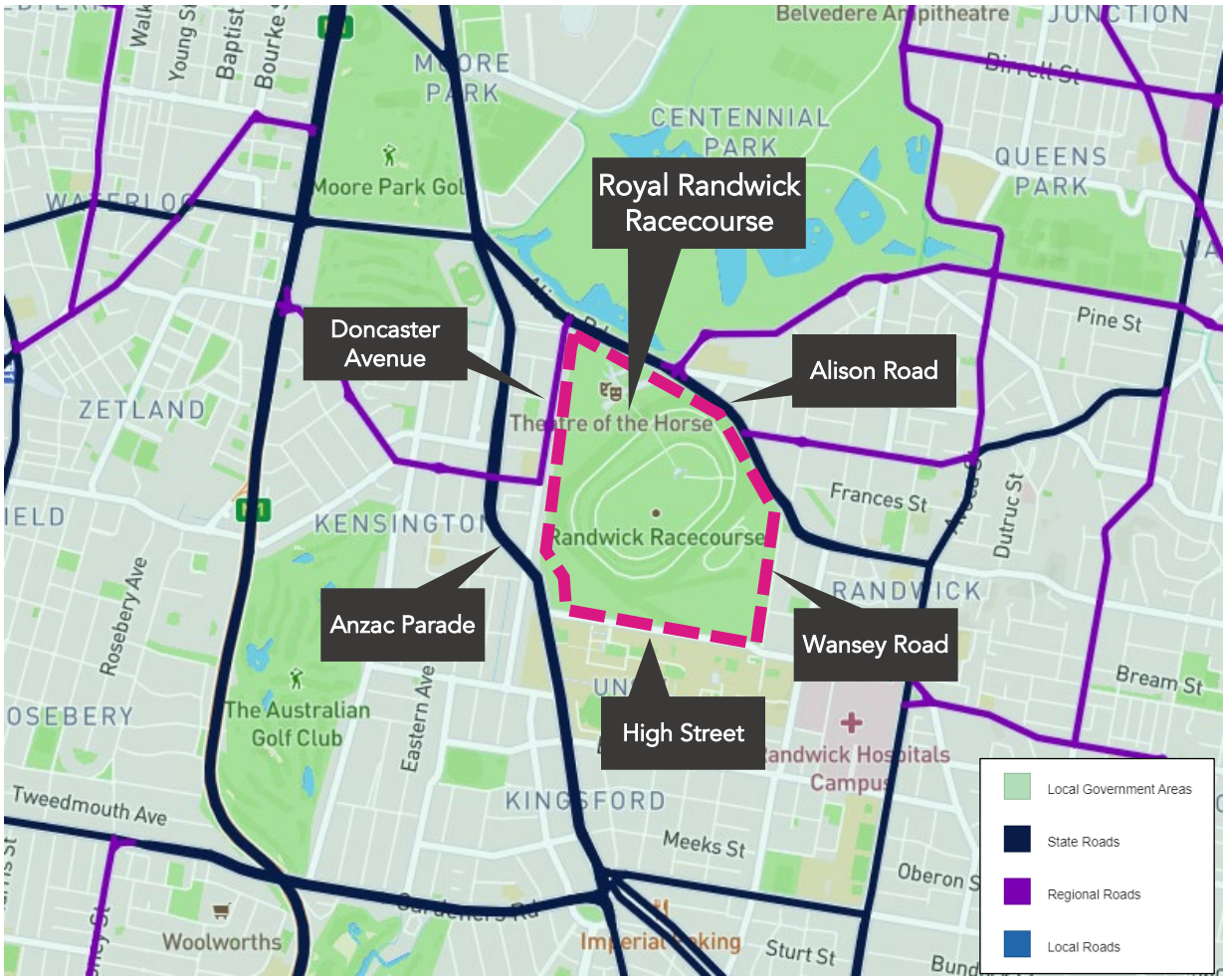

Figure 6: Road Hierarchy (Source: TfNSW Road Network Classifications)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

State Roads	Freeways and Primary Arterials (TfNSW Managed)
Regional Roads	Secondary or sub arterials (Council Managed, Part funded by the State)
Local Roads	Collector and local access roads (Council Managed)

4.1.1 Anzac Parade

A State Road running north-south along the extent of the Randwick local Government Area (LGA). It possesses a divided carriageway. Within the vicinity of the site, Anzac Parade generally comprises two lanes in either direction, with additional left and right turning lanes at/near the intersections. The CSELR aligns with Anzac Parade between Moore Park and Rainbow Street and off-road cycle routes are provided in parallel to Anzac Parade. The outermost lanes generally have time-dependant conditions, varying between on-street parking, bus lanes and clearway.

Speed restrictions vary between 50km/h and 60km/h within the vicinity of the site. Anzac Parade provides signalised access onto Alison Road for southbound travel and Dacey Avenue for both northbound and southbound travel.

Figure 7: Street View – Anzac Parade southbound towards Alison Road

4.1.2 Alison Road

A State road providing an east-west link between Anzac Parade and Avoca Street and forms the northern frontage of The Racecourse. The road possesses a divided carriageway with three (3) lanes in each direction. On-street parking is provided along sections of the outermost lanes, typically limited to outside the hours of 10am – 6pm. The CSELR aligns with Alison Road between Anzac Parade and Wansey Road. A dedicated off-road cycleway is provided along Alison Road. Dedicated bus lanes are provided along some sections of the road.

Speed limits vary between 50km/h and 60km/h. Alison Road provides direct site access (shown in Figure 8) as well as signalised access onto Doncaster Avenue for westbound travellers.

Figure 8: Street View – Alison Road westbound towards Doncaster Avenue

4.1.3 Doncaster Avenue

A Regional road aligned north-south between Alison Road and Anzac Parade. This road runs parallel to the western border of the Racecourse. The road is an undivided two-way carriageway, offering a mix of unrestricted, and restricted parking. The road is largely subject to school zone restrictions (40kph 8-9:30AM, 2:30-4PM, MON-FRI), and provides an on-street cyclist lane, as well as a number of pedestrian crossings and associated traffic controls. A posted speed limit of 50kph applies. Doncaster Road provides the most direct access and egress point for the Members Car Park and taxi rank, via Gate 18 off Ascot Street, as shown in Figure 9 below.

Figure 9: Street View – Doncaster Avenue

4.1.4 Wansey Road

A Local road aligned north-south between Alison Road and High Street. It forms a major eastern frontage of the Racecourse, with access via Gate 10. Wansey Road allows one-way, southbound traffic between Alison Road and Arthur Street, and two-way traffic between Arthur Street and High Street. A northbound contra-flow lane is provided from the Gate 10 to Alison Road to allow vehicles to exit the and access Alison Road (westbound only). Time restricted parking lanes are provided along Wansey Road between Alison Road and Arthur Street.

Off-road cycle routes and CSELR routes are provided along the western side of Wansey Road. The CSELR aligns with Wansey Road between Alison Road and High Street. A light rail station is provided at the intersection of Wansey Road and Alison Road. Wansey Road is a high pedestrian activity zone with 40km/h speed limit.

Figure 10: Street View – Wansey Road northbound towards Alison Road

4.1.5 High Street

A Local road aligned east-west between Anzac Parade and Avoca Street. It forms a major southern frontage of the Racecourse and provides access via Gate 13. High Street generally comprises one traffic lane in either direction. Additional kerbside lanes on either side offer parking outside of bus zones. The street is subject to a speed limit of 50km/h.

Figure 11: Street View – Hight Street eastbound towards Gate Two Avenue

4.2 Public Transport

The NSW Planning Guidelines for Walking and Cycling (2004) suggests that an 800m catchment is an acceptable walkable distance if the development is within an area with public transport links. Furthermore, the document also suggests a distance of 1500m is a suitable catchment for cycling for accessibility to public transport facilities and local amenities. The immediate surrounds were reviewed with the above guides in consideration. illustrates the 800m catchments from Royal Randwick Racecourse. Details of public transport options available are outlined in the following sections.

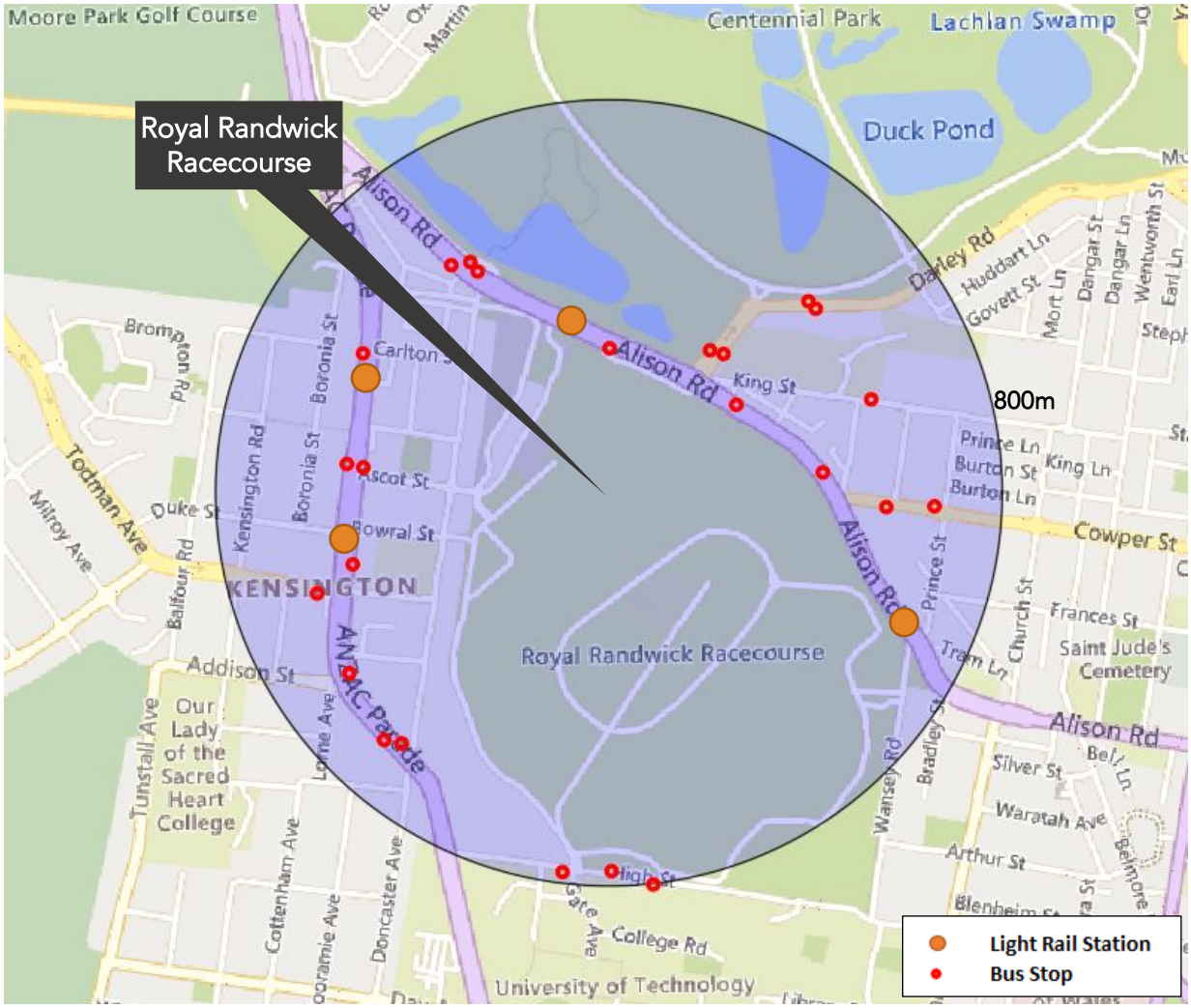

Figure 12: 800m Walking Catchment

4.2.1 Regular Bus Service

A high volume of bus routes was identified operating along roads making up the Racecourse frontages, including:

Table 2: Regular Bus Service

Street	
Alison Road (Moore Park Busway)	338, 339, 372, 373, 374, 376, 377
Anzac Parade	391, 392, 393, 394, 395, 396, 397, 399, X92, L94, X94, X96, X97, X99
High Street	370 & 400

These routes offer medium to high frequency services throughout the week, providing access to Sydney's CBD, South Sydney, Eastern Beaches area, Inner West, and links to major transport hubs including Central Station.

Notably, the major bus corridor along Anzac Parade provides visitors to the Spectator Precinct with access to much of the greater Sydney region via bus travel. This is located within a 1km radius of the site or a 15-

25-minute walk, which although lying outside the 800 metre 'comfortable' walking catchment, will still be considered a viable walking distance for a proportion of the demographic population.

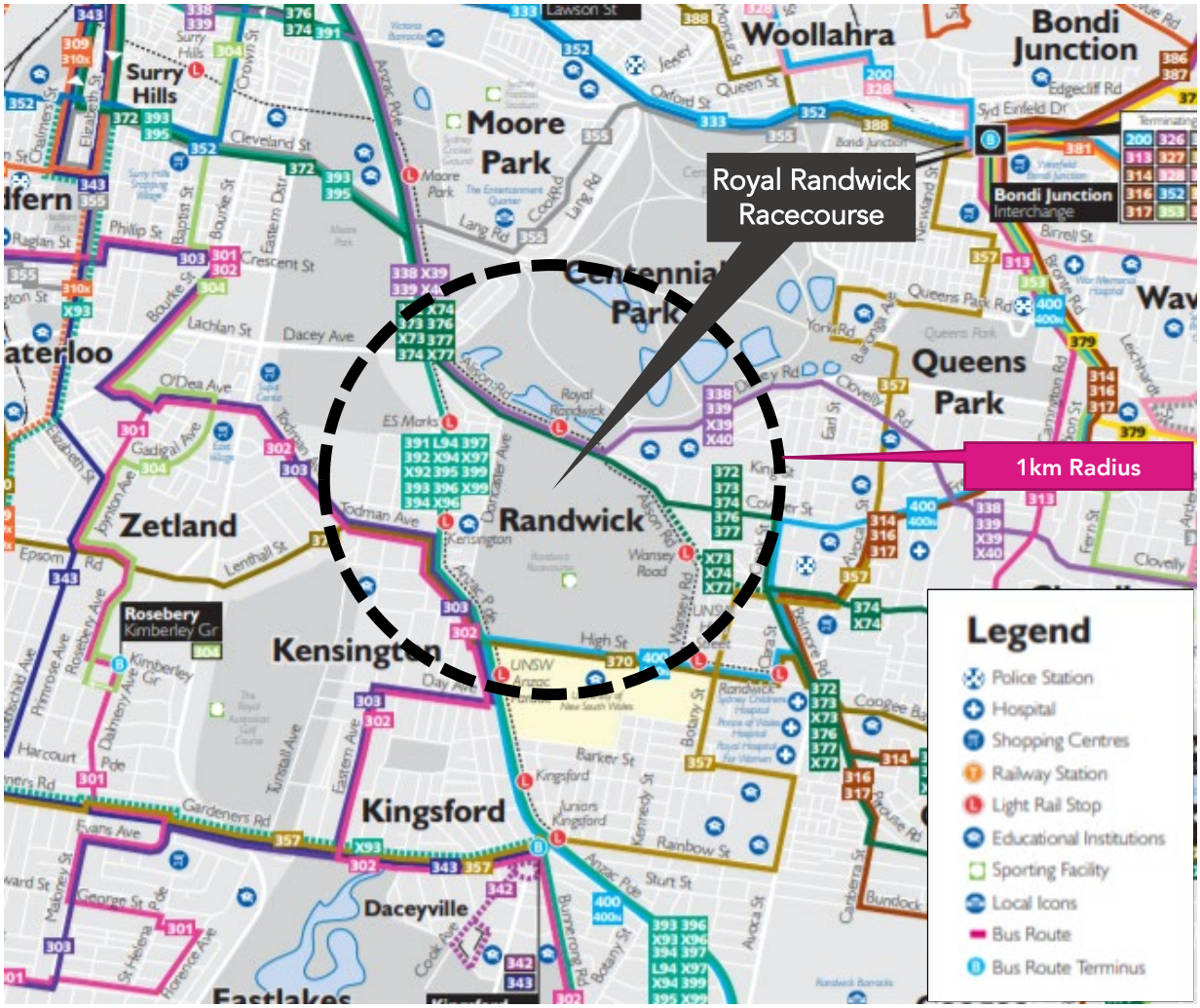

Figure 13: Sydney Bus Network Map

4.2.2 Event Bus Service

Through the MEOG, ATC and STA are able to plan additional special event bus services. These services provide direct connections between Central and Bondi, the details of which are outlined in Table 3.

Table 3: Additional Bus Services during Current Events

Route	Bus Capacity	Maximum Crowd	Bus / Crowd Ratio	Additional Buses	Additional Capacity (People)
Royal Randwick – Central	65	15,000	1 per 1000	15	975
Royal Randwick – Bondi	65	15,000	1 per 3000	5	325
Total:				**20**	**1,300**

As part of the aim to promote the use of public transport, it is proposed that special event buses will be arranged for the night racing events, as per those currently arranged for daytime events. The number of buses is determined based on the expected crowd size (on the basis of ticket sales). Buses have the ability to transport 1,300 patrons to and from the venue, using the internal busway.

4.2.3 Light Rail

The CBD & South East Light Rail Project (CSELR) provides a major light-rail link between Sydney's CBD and Randwick. The L2 Randwick line CSELR project was completed in 2019 and L3 Kingsford line CSELR project was completed in early 2020 (source: Wikipedia). The L2 service predominantly services the Racecourse and offers high frequency services (8-12 minutes) in both directions between 5:30am-1:40am. The L3 also provides high frequency services (8-12 minutes) in both directions between 5:30am-1:30am. Each light-rail vehicle is capable of transporting up to 450 patrons, leading to an hourly capacity of approximately 2,700 to 3,375 patrons in each direction under standard operation.

Through a consultation process between Sydney Light Rail and the ATC, it is noted that during events at Royal Randwick, additional light rail services (northbound and southbound) may be arranged, meeting frequencies of up to every two minutes. This would amount to a total capacity of 13,500 persons, or an additional capacity of 10,125 patrons in each direction.

The route map is presented in Figure 14. It is noted that the Racecourse is well integrated within the light rail route, which links a number of major destinations and transport hubs, including Sydney's CBD, Central Station, Moore Park, UNSW, and Prince of Wales Hospital among others.

Figure 14: CBD and South East Light Rail Route Map[1]

[1] www.parliament.nsw.gov.au

4.3 Active Transport

4.3.1 Pedestrians

It is noted that the immediate locality of the Racecourse is well established in regard to pedestrian infrastructure. All local roads provide paved footpaths, lighting, and ancillary signage, as well as various crossings at key decision points, in the form of refuge islands, 'Zebra' crossings and signalised crossings. This is due to the large volume of existing pedestrian movements already in the area, generally associated with UNSW and the Racecourse. As such, walking trips between the Racecourse and the local residential precinct or nearby public transport facilities are readily achievable.

The key pedestrian desire lines (including along Anzac Parade, Alison Road and Wansey Road) have been upgraded in 2019 with improved footpaths, crossings, lighting, and connections to the light rail stations. Of particular note, is the bi-directional pedestrian crossing at the signalised intersection of Gate 1 and Alison Road. This is a key link across Alison Road and provides direct pedestrian connection between the Racecourse and the new light rail station along Alison Road.

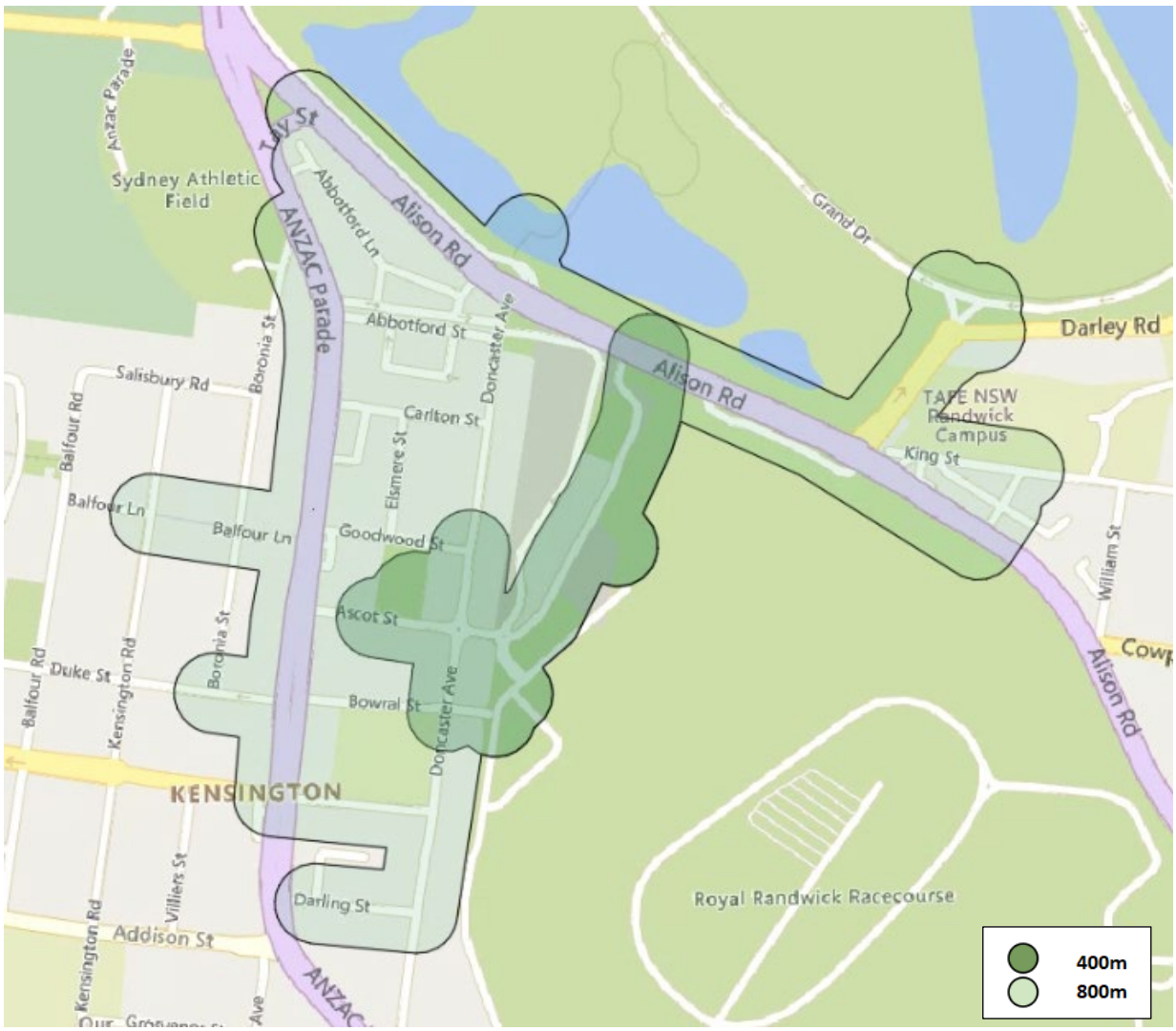

Figure 15: Walking Catchment 400m and 800m

4.3.2 Cyclists

A number of existing off-road cycle routes are also provided in the area, including along Anzac Parade, Alison Road, Wansey Road, Doncaster Avenue, and Darley Road, many of which were upgraded in 2019 as part of the CSELR works package. These routes provide connectivity to the Greater Randwick cycling network, and those of adjoining Councils, providing direct linkages between the Racecourse and the Greater Randwick area.

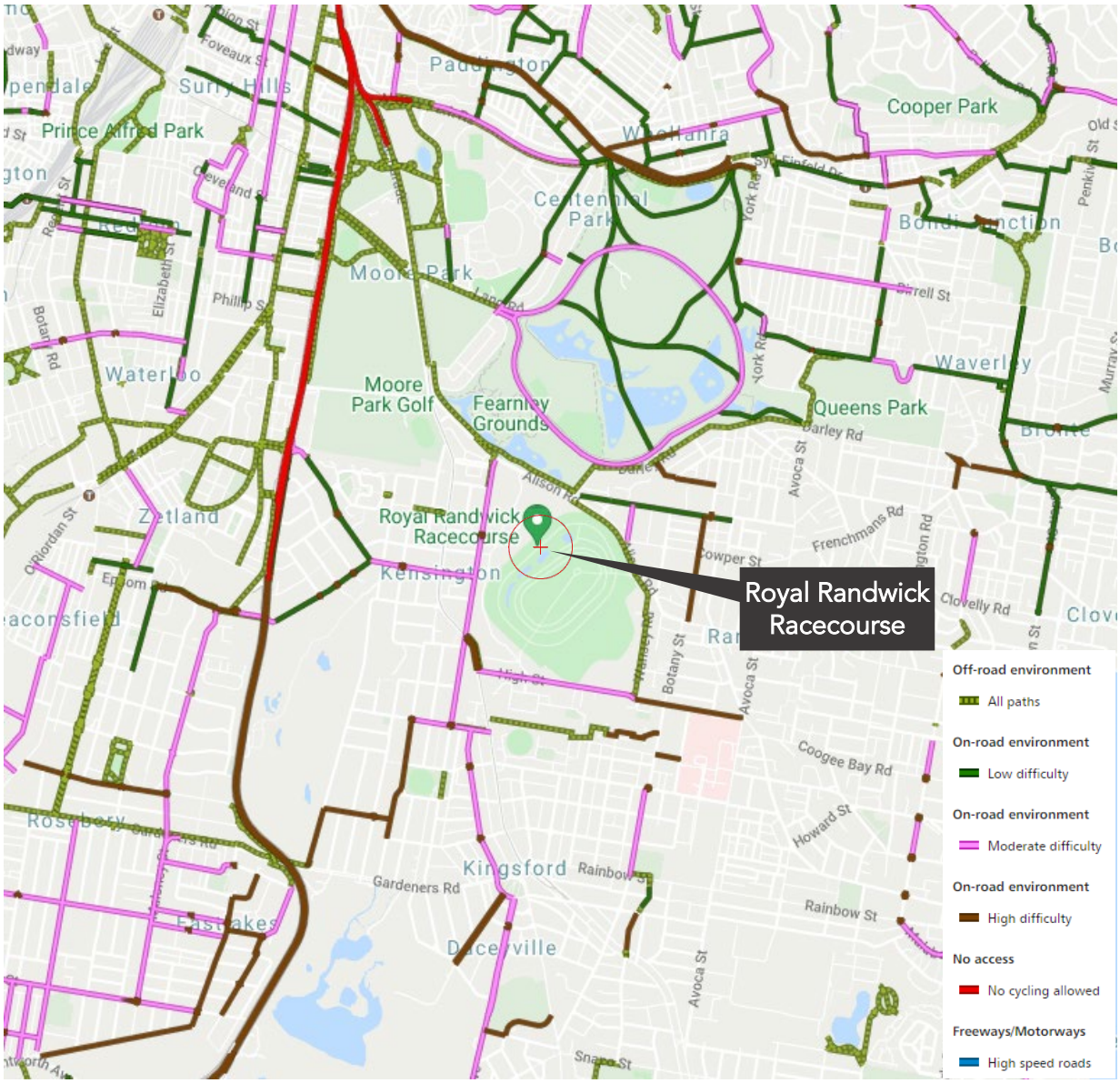

Figure 16: Existing Cycling Paths (Source: TfNSW Cycleway Finder)

It is understood that Randwick is currently engaging with the community in regard to the future of cycling in Randwick, and has identified a number of priority bicycle routes, outlined in Figure 17.

Figure 17: Randwick Bicycle Route Construction Priority 2015

5 Risk Management

5.1 Work Health and Safety

A risk management approach is an integral part of the planning for any pedestrian and traffic management planning activity. The risk identification, assessment and control processes are a legal obligation (as per the WHS Act and Regulations 2011) and should be aligned with AS/NZS ISO 31000 – Risk Management and the Code of Practice 'How to Manage Work Health & Safety Risks'.

The Australian Turf Club are the event organisers (as per RMS Guide to Traffic & Transport management for Special Events) and the risk managers for event operations. They shall ensure that the risk management methodology and culture are applied throughout all stages and aspects of the event activities. ptc. accepts the TTMP and associated Traffic Guidance Schemes (TGSs) as traffic risk control measures but notes that TGSs and the TTMP alone cannot entirely substitute a thorough AS/NZS ISO 31000-based event/activity risk assessment.

The Australian Turf Club and ptc. will undertake pro-active consultation with key stakeholders in order to assess traffic risk and develop this plan further if required.

Throughout the risk management process, the document will link activities to the Australian Standard (AS/NZS 31000:2009). The standard provides a systematic approach to the risk management.

5.2 Consultation and Method of Communicating Traffic Changes

Traffic Guidance Schemes (TGSs, previously known as 'Traffic Control Plans' or TCPs) in accordance with Australian Standards (*AS 1742.3 – Traffic Control Devices for Works on Roads*) and *TfNSW Traffic Control at Work Sites Manual* will advise motorists of upcoming changes in the road network.

Any variation to the layout of the TGSs on site is to be recorded and certified by authorised TfNSW accredited personnel. The associated TGS road signage will inform drivers of works activities in the area including truck movements in operation. Any modifications to the TGSs must also be approved by Council and/or TfNSW prior to implementing any changes.

Prior to commencement of works on site the contractor is to inform neighbouring properties of proposed works and provide site contact information by means of a letter box distribution. Throughout the construction process, the Principal Contractor shall inform the local businesses and residents about construction updates by monthly communications.

5.3 Hazard and Risk Identification

All special events entail a set of risks—from a transport perspective—that may need to be mitigated. Some of these hazards and risks are related to:

- Moving traffic (R1)
- Queued traffic (R2)
- Highly vulnerable road user activity (R3)
- Other construction activity or roadworks in close proximity to the proposed work site (R4)

These are appropriate for the site because of the following:

- Moving traffic on the surrounding road network could be held up by traffic entering/exiting the gates, potentially creating changed conditions and conflicts.

  Risk Matrix Reference: R1

- Queued traffic could pose safety and manoeuvrability issue for vehicles turning into and out of the site, prolong and delay the bump in/out processes and impact on surrounding on-street parking.

  Risk Matrix Reference: R2

- The existing cycleway on Doncaster Avenue could pose a safety risk to vulnerable road users (cyclists) due to proximity to the site and increased traffic.

  Risk Matrix Reference: R3

- Traffic Management for the events in combination with other construction activity in close proximity to the site may result in potential conflicts.

  Risk Matrix Reference: R4

As there is no guarantee that the contractor responsible for implementing the TGSs are fully aligned with the intention of this traffic report, this remains a risk to be assessed. As such, a risk matrix has been prepared as shown in Table 5 using the following definitions:

Risk Rating

- Very High (VH)
- High (H)
- Medium (M)
- Low (L)

Likelihood

- Insignificant: Illness, first aid or injury not requiring medical treatment. No lost time.
- Minor: Minor injury or illness requiring medical treatment. No lost time post medical treatment.
- Moderate: Minor injuries or illnesses resulting in lost time.
- Major: 1 to 10 serious injuries or illnesses resulting in lost time or potential permanent impairment.
- Severe: single fatality and/or 11 to 20 serious injuries or illnesses* resulting in lost time or potential permanent impairment.
- Catastrophic: multiple fatalities and/or more than 20 serious injuries or illnesses* resulting in lost time or potential permanent impairment.

Consequence

- Almost certain: expected to occur multiple times (10 or more times) during any given year.
- Very likely: expected to occur occasionally (1 to 10 times) during any given year.
- Likely: expected to occur once during any given year.
- Unlikely: expected to occur once every 1 to 10 years.
- Very unlikely: expected to occur once every 10 to 100 years.

- Almost unprecedented: not expected to occur in the next 100 years.

Table 5: Risk Matrix

Likelihood	Consequence						
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
	Almost certain L1	R1, R2					
	Very likely L2						
	Likely L3						
	Unlikely L4			R3, R4			
	Very unlikely L5						
	Almost unprecedented L6						

Some recommended risk mitigation measures include:

R1

- Regular checks of surrounding roadways on event day by Traffic Manager.
- Adequate signs, devices and staff are available to implement contingency actions (if required).
- Preparation of TGSs to communicate to road users within the vicinity of the work site of the changed traffic conditions.
- Transdev and TfNSW incident response plan actions.

R2

- Consistent patron messaging by the Australian Turf Club within Randwick Racecourse precinct.
- Event Police to facilitate traffic flow at gates.

R3

- Ensure adequate signage, including VMS to advise road users of changed conditions.
- Transdev, Police and TfNSW Event Commanders to monitor for unsafe behaviour.

R4

- Coordination with Site Managers of neighbouring sites to ensure that there is no clash of construction vehicles, cranes etc with event traffic.
- Consult with the local residents, businesses and tenancies to notify them of the potential impact on their access driveways. This can be done by the Construction Manager or a Traffic Engineer within the City of Sydney Council. Consultation letters can be prepared and drafted accordingly.

6 Traffic and Transport Management

The following sections outline the proposed activity and the proposed management measures relating to vehicular access, pedestrian access and other key considerations for the site. Reference has been made to the Australian Turf Club, Event Operational Management Plan Royal Randwick Racecourse – Night Racing, April 2021 (EOMPNR).

6.1 Objectives

The traffic management plan associated with Night Racing events aims to ensure the safety of all road users within the vicinity of the site and the following are the primary objectives:

- To minimise the impact of the vehicle traffic on the overall operation of the road network.
- To ensure continuous, safe and efficient movement of traffic for both the general public and event staff.
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions.
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site.
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for vehicles including the construction vehicles accessing the site.
- Establishment of a safe pedestrian environment in the vicinity of the site.

6.2 Traffic Management Planning Process

Temporary Traffic Management (TTM) for the project has been planned in accordance with Transport for NSW, *Traffic control at work sites – Technical Manual, Issue No.6.0,* 14 September 2020 (TCAWS). The process is shown in Figure 6.

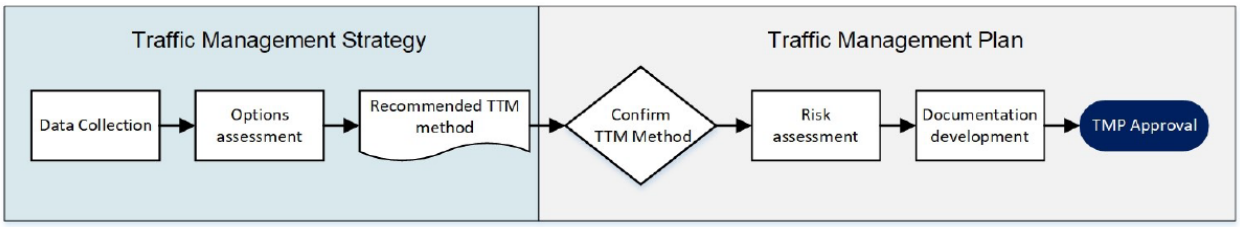

Figure 6: Traffic Management Planning Process

An iterative process is being adopted in collaboration with relevant stakeholders to adopt the most appropriate traffic management approach and develop the associated documents for the work.

6.3 Traffic Management Strategy

A traffic management strategy has been chosen to support the appropriate allocation of time, funds and resources for the project, and allow for consultation in determining the safest and most efficient way for road users to interact with the work site. The following have been considered in determining the TTM method:

Detour Options

No detours are necessary or proposed by the client and therefore, disproportionate amount of disruption to the road users will NOT be introduced.

Site Location
The site and surrounding road network of the events contains some vegetation, existing signage and infrastructure that may obstruct signs and devices needed for certain strategies.

Event Area
The site does not require any road closures to facilitate operations.

Vulnerable Road Users
Desire lines of pedestrians, cyclists, motorcyclists and users of scooters do impact on events or create undesired interaction between these road users and traffic. In particular, the existing cycleway on Doncaster Avenue presents a potential conflict point between cyclists and other road users.

Community Facilities and Needs
Additional services will be added for Light Rail as required and agreed between TfNSW and ATC, subject to monitoring of patronage.

6.4 Decision of TTM Method

After considering the factors in Section 6.3 and the recommendation of the client, the TTM method chosen comprises a combination of "Around (elimination)" and "Past (isolating or engineering)" methods. This method will provide the lowest overall net risk option.

For Dalley Street, the TTM method is "Past (isolating or engineering)" as the reduction in roadway width during the project to accommodate a Works Zone will require contraflow without a separated median (traffic to be managed by TfNSW accredited Traffic Controllers).

6.5 Traffic Control Measures

Traffic Guidance Schemes (TGSs), previously known as 'Traffic Control Plans' or TCPs, outline the proposed traffic management measures to inform road users of the changed traffic conditions in the vicinity of the site.

Traffic Controllers will be required at key intersections to facilitate traffic flow, if necessary, and to prevent potential queued vehicles from clocking intersections and pedestrian desire lines. This role can also be fulfilled by point duty police, depending on the cause and severity.

It is noted that detailed TGSs are to be prepared by the appointed traffic management contractor prior to commencement of works and submitted to Council and TfNSW for approval. All TGSs associated with the TTMP must comply with the Australian Standards and the *TfNSW Traffic Control at Work Sites Technical Manual* (TCAWS). Any traffic controllers shall be appropriately qualified and TfNSW accredited.

Traffic control shall be established in accordance with the requirements of the TCAWS and gate controllers are to be stationed at site access gates to manage access and egress to the site.

6.6 Access to Adjoining Properties

Access to all adjoining properties will be maintained throughout the events. The adjacent landowners will be notified of events via letter box distribution and/or road signage to advise of anticipated changed conditions with access to adjoining properties being maintained at all times.

6.7 Mitigation Measures

6.7.1 Access For Local Residents, Businesses, Hospitals and Emergency Vehicles

Access for local residents and businesses will not be restricted and access via Ascot Street will be closed after 8pm. Access to the precinct will be available for emergency service vehicles at all times.

6.7.2 Advertising Traffic and Transport Arrangements

The ATC and TfNSW collaborate to prepare communication material for all RRR events. TfNSW has a 'Getting to events' webpage (www.transportnsw.info/events). This website provides information on traffic and transport for events across NSW. Key information includes:

- Day, date, location and time of event
- Promotion and benefits of public transport
- Promotion of park and ride, if operating
- A link to plan your trip to the event via public transport
- Various transport options including Metro, Train, Light Rail, Bus, Ferry
- Opal ticketing information
- A link to 'Live Traffic NSW', if you choose to drive

The ATC also publishes transport options on their official website, which is available for patron viewing and planning. Webpage https://www.australianturfclub.com.au/royal-randwick/royal-randwick-transport/

6.7.3 Permanent Variable Message Signs

TfNSW uses the general purpose variable message signs (VMS) on the road network that are located in permanent positions above or adjacent to the roadway for traffic management and/or drivers' information applications. Advertising special event information for the Night Racing events will be prioritised in accordance with their policy as standby messages whilst there are no unplanned incidents to manage and in the lead-up to event dates.

The use of permanent VMS is supported, subject to TfNSW endorsement and approval.

6.7.4 Portable Variable Message Signs

Variable Message Signs are critical for the flawless operation of traffic and pedestrian management. The VMS allocation is proposed and is subject to change as operational requirements change. The following figures summarise the VMS schedule for each location. Each frame is displayed for 3 seconds.

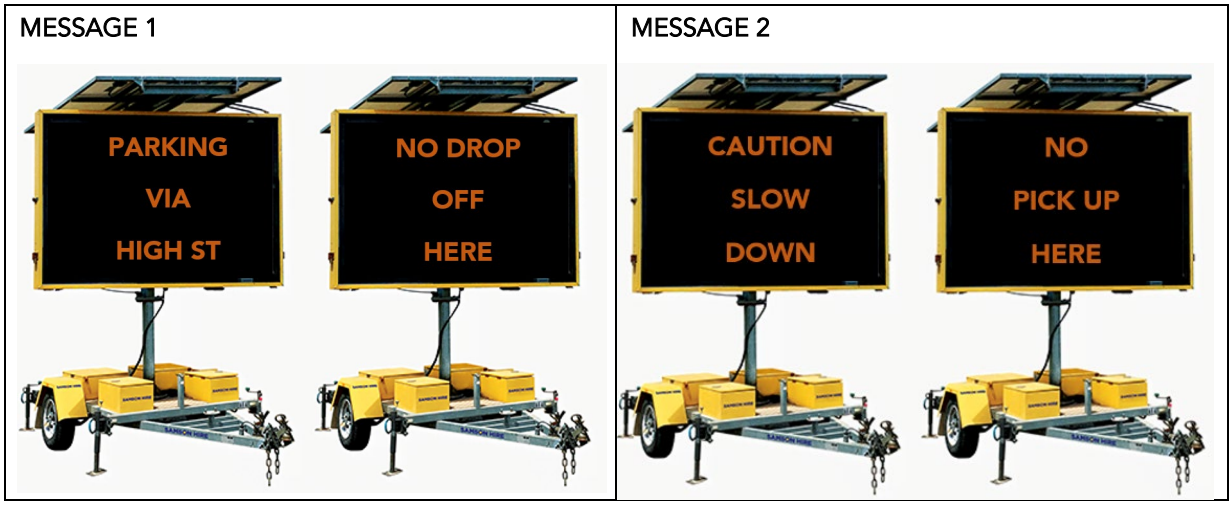

Figure 18: VMS 1 – Alison Road at Main Gate (footpath near light pole)

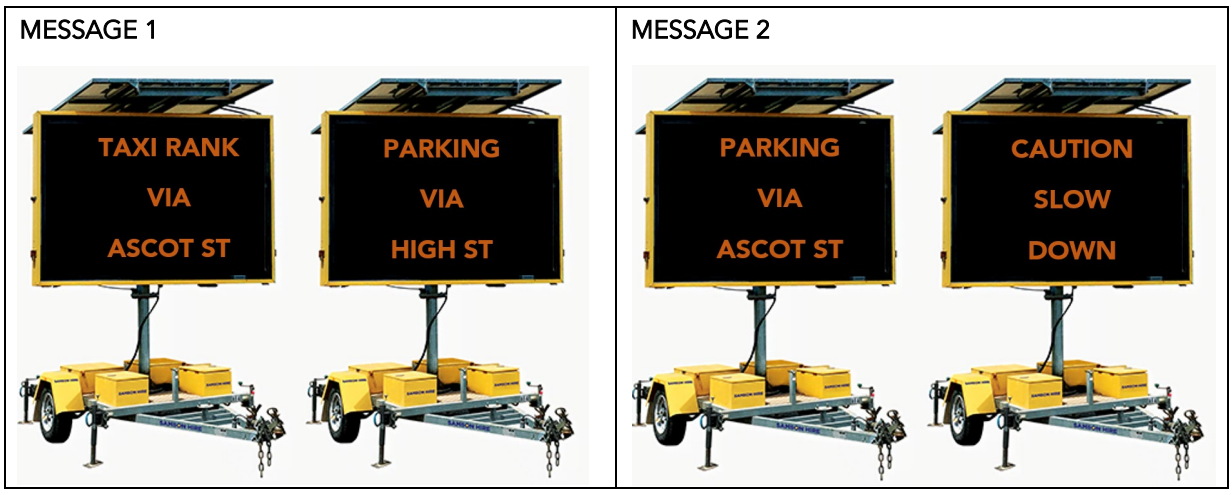

Figure 19: VMS 2 – Anzac Parade/Abbotsford Street – Side of road/footpath

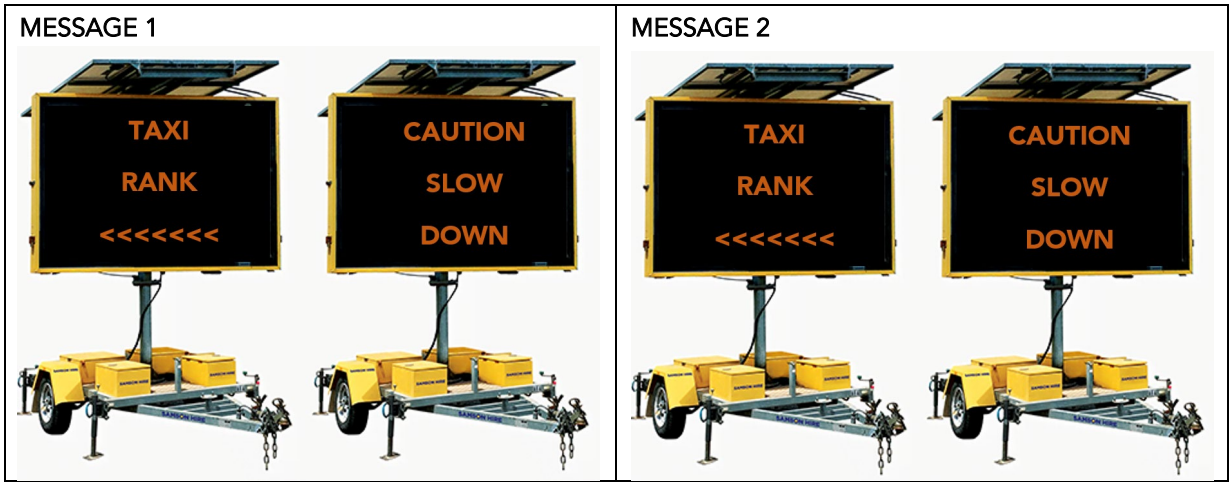

Figure 20: VMS 3 – Anzac Parade and Ascot Street – side of road/footpath

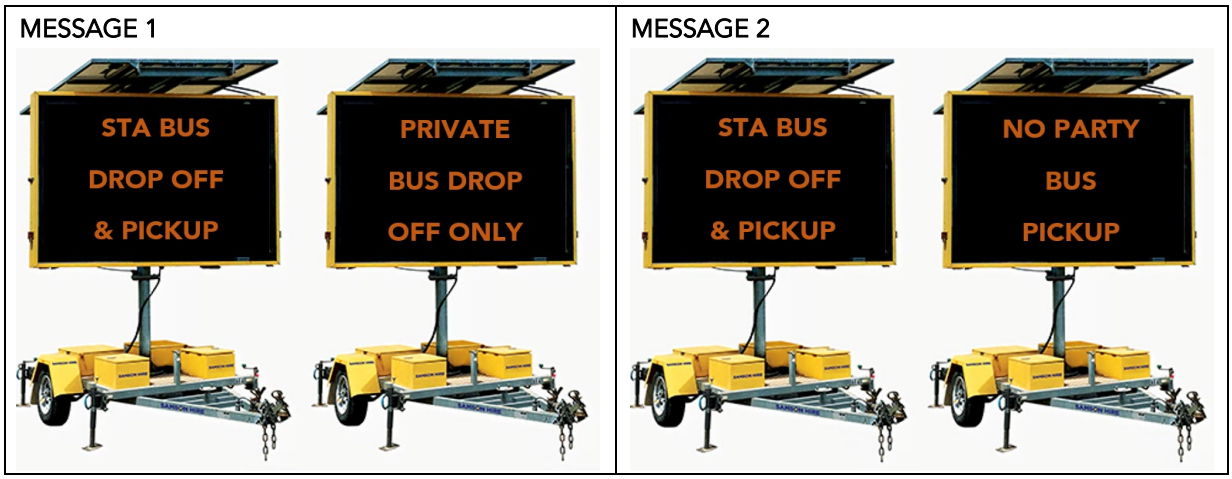

Figure 21: VMS 4 – Intersection of Darley Rd & Alison Rd (entrance to new busway)

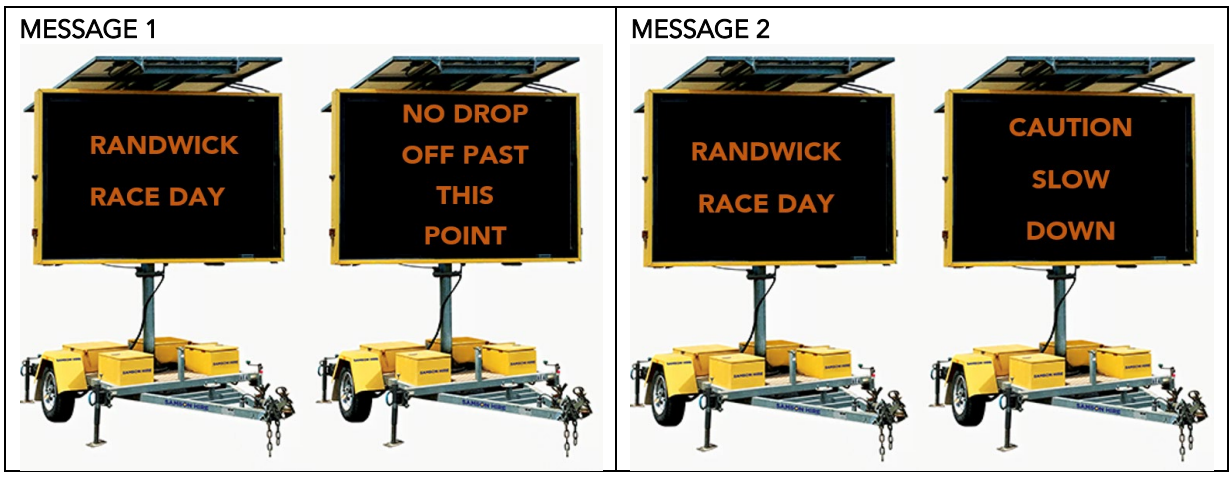

Figure 22: VMS 5 – IntersectioSSn of Alison Road & Wansey Road (SE side of intersection)

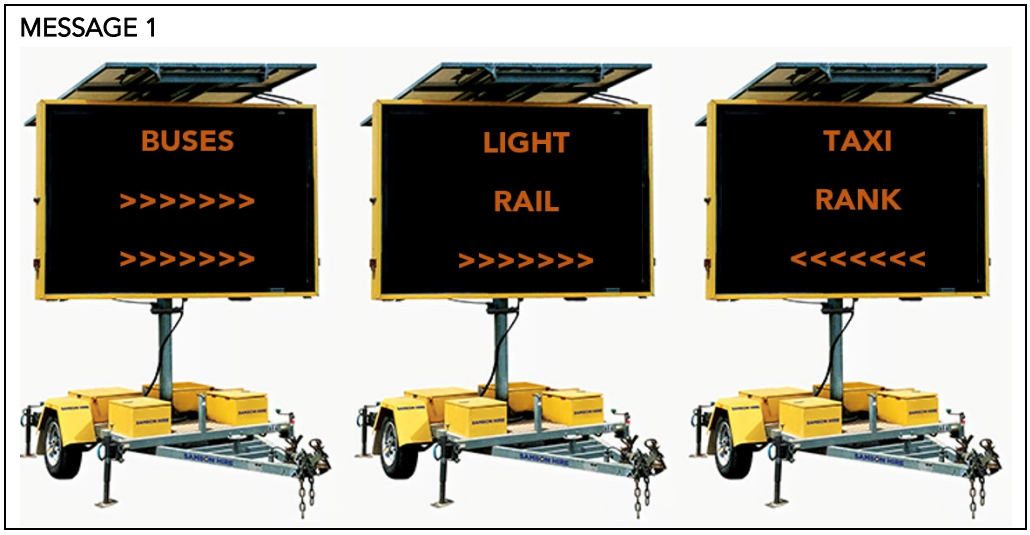

Figure 23: VMS 6 – Rose Garden Lawn (Internal)

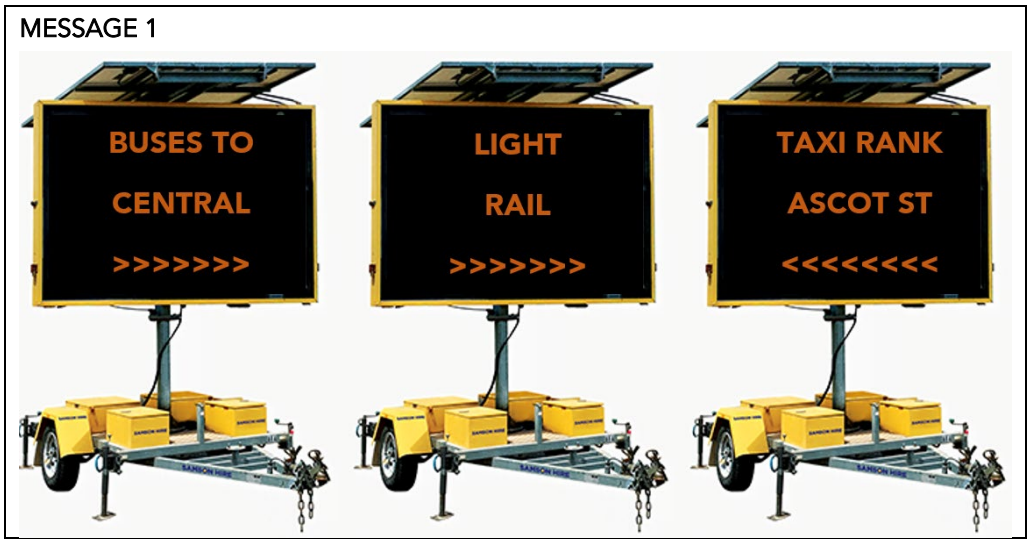

Figure 24: VMS 7 – Gate E (Internal)

6.8 Pedestrian Management

The TTMP should prioritise the safe and efficient movement of pedestrians between the site and their means of transport. This should consider movement within and surrounding the site, with respect to:

- Royal Randwick Racecourse Car Parks
- Taxi, Bus and Car Share ranks (pick-up/drop-off)
- Public bus stops and light rail stations
- Private shuttle/coach/limousine drop-off/pick-up points
- Cycling facilities and external cycle routes
- Pedestrian facilities (footpaths, crossings, signage, lighting, etc) in the immediate local road network

Allowing pedestrians to efficiently enter and exit the site reduces noise and safety issues from lingering persons on-site and improves both the customer experience and the local residential amenity. Closure of the Ascot Street entrance to vehicles and pedestrians after 8pm will facilitate this.

6.8.1 Risks

Various risks and impacts are associated with moving people in any context. Regarding the night racing events, some general risks and impacts are listed that should be assessed by management during events:

- Overcrowding near roads and crossings
- Pedestrian-vehicle conflicts (public and internal)
- Pedestrian-pedestrian conflicts (trampling)
- Anti-social behaviour (yelling, fighting, urinating, vomiting, etc)
- Confusion (i.e. lost) leading to excessive time occupying pedestrian facilities
- Unauthorised access breaches (i.e. patrons entering equestrian areas)
- Residential amenity impacts

6.8.2 Wayfinding Signage

Wayfinding signage is installed throughout the Royal Randwick Racecourse where pedestrians are expected to congregate or travel. Any signage for this purpose should be concise and clear, as designed so that it may be visible to large crowds, and not merely for a nearby pedestrian. This involves consideration of size, height, and positioning.

It is noted that ATC already have wayfinding maps and direction signage installed throughout the facility to accomplish this, with an example provided in Figure 25. It is noted that pedestrian wayfinding is an ongoing process, where regular review should identify constraints and opportunities in the existing wayfinding system and identify measures to be implemented.

Possible updates to the wayfinding system include directions to light rail stations, directions to the member car park, directions to a designated car share pick-up points, directions to cycling facilities, and access to the external cycling network.

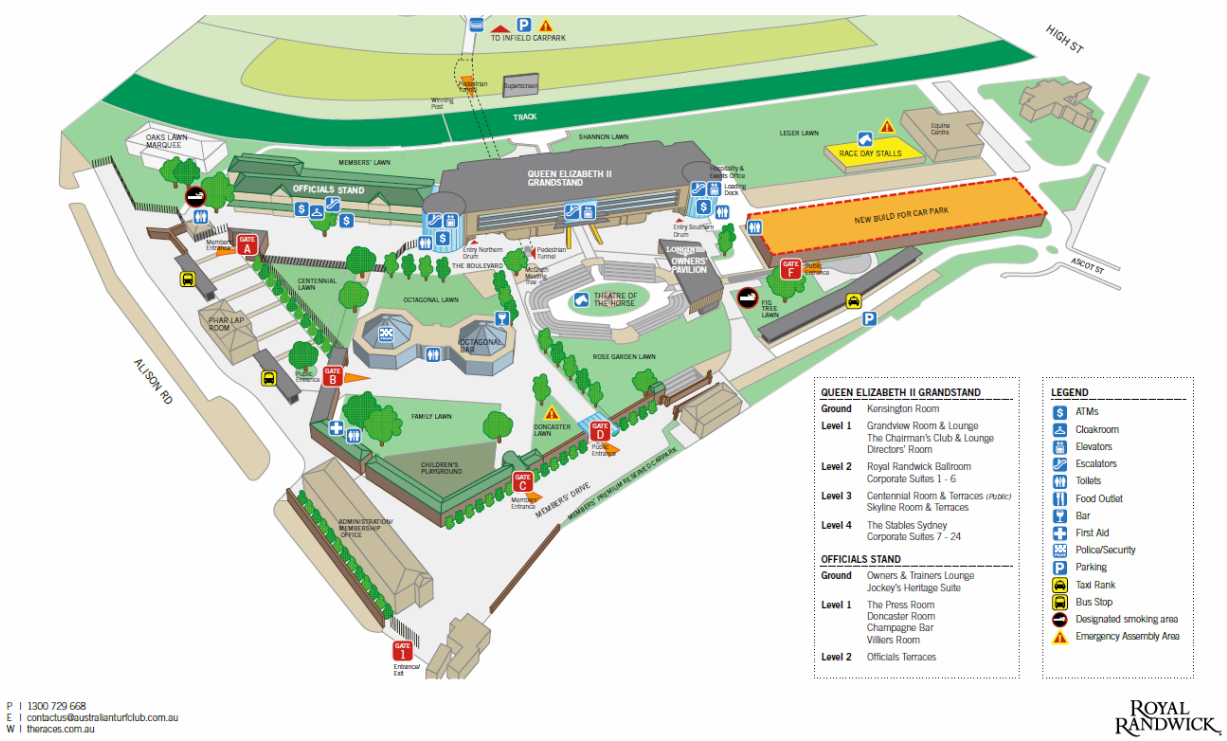

Figure 25: Royal Randwick Racecourse Wayfinding Map

6.8.3 Crowd Management

ATC Staff and in certain cases, the Police, will be a necessary element in crowd control. These personnel should be strategically located around the site at key congregation points, points of vehicle interaction, and points of security interest, and pedestrian decision points to act as a guide to improve wayfinding. The traffic management guide plans in Appendix B to Appendix D outline recommended locations for police and ATC staff presence.

6.9 Public Transport Management

6.9.1 Bus Service

Public transport will be relied on heavily as a means of reducing the reliance of private vehicles. In this regard the Bus-way, located within the Alison Road frontage is available for the exclusive use by buses, which also allows for event charter services. The access and operation of the Bus-way is controlled by traffic controllers and NSW Police and will manage the interfacing of vehicles and pedestrians in accordance with standard Police crown management practice, and relevant TfNSW traffic control requirements.

To avoid risking a shortfall in the required number of buses, consultation with Sydney Buses should be undertaken early in the event preparation, to determine expected demand and ensure availability.

6.9.2 Light Rail Service

The CSELR includes a light-rail station on the northern edge of Alison Road, opposite Gate 1 and a light rail stabling yard immediately adjacent to Gate 1. As such, a number of light rail carriage movements will be

introduced around the Gate 1 area, which will inherently attract a large volume of pedestrians seeking to utilise light rail.

The light rail station has been designed to manage large crowds due to its proximity to the Royal Randwick Racecourse. Notwithstanding, the station should be closely monitored during events, to identify any risks or underperformance early on. To manage the risk of pedestrians overcrowding on the light rail station or around Alison Road and crossing point outside Gate 1, it is advised that Police presence and ATC staff be stationed on both sides of the crossing. Although, it may be sufficient to only post ATC staff around the light rail.

To avoid risking a shortfall in the required number of light rail services during events, consultation with Sydney Light Rail should be undertaken early in the event preparation, to determine expected demand and ensure availability.

6.10 Parking

6.10.1 Parking Capacity and Demand

The Racecourse has a large supply of on-site parking with the ability to use off-site parking at Moore Park when available with no requirement for overflow onto local streets due to the maximum number of patrons expected and the category of event.

Table 4: Parking Provisions

	Members Car Park	Infield Car Park	On-Site Total	Off-site Parking (Moore Park)	Combined Total
Capacity (Spaces)	574	3,500	**4,074**	700	**4,774**

With reference to the mode share surveys conducted for the TIA which indicated a parking demand of 1,876 spaces, it is apparent that 1,876 cars will be easily accommodated within the infield and the Members car park.

6.10.2 Parking Management

It is noted that the bulk of on-site parking is provided within the infield area, as informal parking. Being informal parking, the capacity of this area is highly dependent on the arrangement of vehicles. To ensure a balance between parking efficiency and manoeuvrability, the following measures are to be adopted by ATC parking management staff:

- Encourage reverse parking, which notably reduces the required width of parking;
- Limit aisle widths to between 6.2 - 6.6 metres;
- Ensure that vehicles park in the correct alignment, as far as is practicable.

To encourage uptake of ATC-provided parking and discourage on-street parking, the following additional measures are proposed:

- Variable Message Signage (VMS) established around the local road network to guide patrons directly towards the car park, and advise of capacity;

- Advise patrons that on-street parking is discouraged, and sufficient on-site parking is available. This may be done through the website, Traffic Marshals, VMS and as part of the email ticket purchase;
- As part of the overall event monitoring process, ATC staff will undertake observations of the local streets, and parking location data may be included in the patron survey. Any identifying issues should be raised to management for review and action.
- A feedback forum should be provided for residents to communicate with ATC regarding any parking issues.

6.10.3 Drop-Off Provisions

The Racecourse will operate all drop-off facilities as it would for existing day-events. These facilities include:

- Taxi Rank via Ascot Street, Gate 18;
- Public Bus layby via Alison Road; and
- Shuttle drop-off via Alison Road, Gate 1, and infield car park;
- Limousine, and large shuttle/coach drop off, via infield car park.

6.10.4 Bus Provisions

The Racecourse Bus rank accommodates 11 independent bus stops. According to NSW Bus Infrastructure Guide lines, 6 bus stops can accommodate between 120-180 buses per hour, based on a 30 second dwell time. In the case of the Racecourse, each bus would require longer dwell times due to larger intake of passengers. Notwithstanding, 11 bus stops is considered readily able to accommodate the additional 20 public bus serves (occurring over more than a single hour) with capacity to accommodate private coaches on demand.

6.10.5 Taxi Rank

The taxi rank (also used for car share drop off) and on-site queue is able to accommodate up to 48 vehicles at any one time, before queueing back onto Ascot Road. On-site observations during major events (30,000+) noted that this queue current extends to the Doncaster Avenue and Ascot Street roundabout, creating notable congestion along the length of Doncaster Avenue. This impact is likely to occur during the proposed night events, to a similar extent as is currently observed.

Furthermore, the measures identified to encourage public/active transport will help reduce demand at Gate 18.

6.10.6 Limousine, Shuttle and Coach Drop-off

Shuttles are able to access the site via Gate 1 from Alison Road, however as there is limited capacity, this is only permitted by prior arrangement.

Coaches may drop off via the bus layby off Alison Road.

Moreover, area is set aside within the Infield car park to drop off patrons from Shuttles, Limousines and Coaches as required.

6.11 Service Vehicle Management

Service vehicles should be coordinated by site management, to avoid arriving within an hour of the event start and close times, or commuter peak periods and if practicable, other services. Notwithstanding, management of services shall continue to occur as per existing ATC practice.

6.12 Horse Float Management

Horse owners will be advised that any horse transports should avoid peak commuter periods, and lead-up times to events. Notwithstanding, management of horses shall continue to occur as per existing ATC practice.

7 TTMP Inspections, Monitoring and Review

7.1 Temporary Traffic Management Inspections/Monitoring

This TTMP has been reviewed and endorsed by the designer's one-up manager who holds a current SafeWork NSW Prepare a work zone traffic management plan card. This approved TTMP will been used to inform the development of all necessary TGSs for the events.

The inspection, review and audit of temporary traffic management (TTM) arrangements for racing events are critical to ensure that the work site is operating safely. As such, the structure, schedule and frequency of these activities have been considered and identified during the TTM planning phase. These aspects will vary depending on the size, complexity and duration of events.

There are two categories of monitoring activities that will occur:

1) Mandatory monitoring activities—these are required for all TTM arrangements; and

2) Additional monitoring activities—these are provided to assist the TTM application and may be prescribed as mandatory by authorities or undertaken on behalf of ATC representatives as part of other functions.

7.2 Stakeholder Contacts

Regular monitoring and review are to be conducted throughout the life of the project to ensure that the TTMP remains current and addresses all risks at the work site for the duration of the project or activity. Table 5 list the person identified by each relevant organisation for review and input into the process.

Table 5: TTMP Contacts

Name	Organisation	Contact Detail
Adam Smith	Australian Turf Club	0422 271 555 asmith@australianturfclub.com.au
Adam Perkins	Australian Turf Club	0467 898 282 aoerkins@australianturfclub.com.au
Andrew Sturday	Transport for NSW	0403 784 191 Andrew.Sturday@tmc.transport.nsw.gov.au
Corinne Dawes		(02) 9349 9299 dawe1cor@police.nsw.gov.au
Gary Colston	Australian Turf Club	0437 503 087 gcolston@australianturfclub.com.au
Heather Gavriel	Transport for NSW	0424 366 714 Heather.Gavriel2@transport.nsw.gov.au
John Flanigan	Randwick City Council	0439 613 589 john.flanigan@randwick.nsw.gov.au
Ray Carroll	STA – Sydney Buses	0411 407 425
Traffic Management Centre	Transport for NSW	131 700
Taxi Control Room	NSW Taxi Council	9020 2325

To ensure that this TTMP is kept up to date, the activities identified in Table 6 will be undertaken to facilitate review and continuous improvement.

Table 6: Monitoring Activities

Stage	Activity	Purpose	Qualification	Tools and checklists
Planning	TGS verification	To ensure that the TGSs selected or designed are suitable for the location.	ITCP or PWZTMP	TCAWS Appendix E.2 TGS verification checklist
During TTM	Regular inspections (includes pre-event inspection)	To ensure that the TTTMP and relevant TGSs are appropriate and operating safely, effectively and efficiently	PWZTMP	TCAWS Appendix E.3 Weekly TTM inspection checklist
	Shift TTM inspections	To ensure that the TGS is implemented as designed. This includes at a minimum, twice per shift and when: • A TGS is installed, changed or updated. • At regular frequency afterwork commences, recommended every 2 hours; and • Once after care arrangements have been installed if required	ITCP or PWZTMP	TCAWS Appendix E.4 Shift / Daily TTM inspection checklist
	TTTMP review	To ensure that TTTMP controls are achieving the required outcomes.	PWZTMP	Not provided
	Client inspections	Verification of TTM through the Transport Traffic Engineering Services, Work Health and Safety Branch, Surveillance Officers or other client representatives.	Divisionally determined	Not provided
Post Event	Post event inspection	To ensure that the site has been demobilised as planned and is safe for return to normal traffic operations	ITCP or PWZTMP	Appendix E.5 Post completion inspection checklist

All relevant changes must be considered and recorded in the TTTMP with any changes made by an appropriately qualified person. A copy of all documentation relating to the endorsement of the changes must be available to be accessed, either electronically or in hard copy, by the person responsible for the works.

The Traffic Guidance Schemes (TGSs) identified in Appendix C outlines the proposed traffic management to inform road users of the changed traffic conditions in the vicinity of the works site. The TGSs must be set out in accordance with Issue 6.0 of the Traffic Control at Work Sites Technical Manual, September 2020 (TCAWS).

TGSs are to be implemented on Pitt Street, Reiby Place, Underwood Street and Dalley Street throughout the project to warn road users that trucks will be turning into and out of the site, in accordance with TCAWS TGS D.4.7. A TGS in accordance with TCAWS TGS D.4.18 is to also be implemented to warn road users of the presence of traffic controllers managing traffic.

It is noted that any changes to the existing parking restrictions will require a minimum fourteen (14) days notification to adjoining property owners prior to the implementation of any temporary traffic control measures.

Any revisions or additional TGSs ones must be prepared by a SafeWork NSW qualified person upon engagement of the traffic management contractor and prior to commence of works on site.

7.3 TGS Verification

TCAWS TGS D.4.7 and TGS.D.4.18 has been approved as being appropriate for use at the work site. Site confirmation must be undertaken via the completion of the TGS verification.

A TGS verification must be undertaken to confirm the selected or designed TGS is fit for purpose. A TGS verification must be completed in accordance with Section 8.1.2 TGS verification by an ITCP or PWZTMP qualified person. TGS verification must include an inspection of the work site where the TGS will be implemented.

7.4 TGS Approval

The SafeWork NSW qualified person who has designed or modified the relevant TGS has approved the TGS for use. Approval of the TGS includes:

- Review of the relevant TMP, risk assessment and associated TTM specific documentation.
- Design, redesign or modification of the TGS must be in accordance with the requirements of TCAWS.
- Confirmation that the TGS provides the relevant information for the ITCP person to safely implement on-site.

The one up manager of the SafeWork NSW qualified person has approved the TGS, including:

- Any non-standard or unaccepted signs or devices
- Any departures from the requirements of TCAWS
- If a manual traffic controller is proposed for use

8 Conclusion

This TTMP has been prepared to outline the measures to improve site safety to the public and staff and the Night Racing Event process.

With the measures described in the TTMP in place, the activity is anticipated to have minimal disruption to the daily activities within the vicinity of the site.

It is envisaged that this document will be continually reviewed and amended if required, due to changes in design, TfNSW, Council or any other authority requirements. Should any changes be made, they will need to be reviewed and approved by the relevant stakeholders.

Appendix A Notification Form

Attachment 1 - Notification Form

Event Summary

Event Name:

Anticipated Crowd:

Event Location:

Event Date: .....

Event Start Time: ..... Event Finish Time: .....

Event Setup Start Time: ..... Event Packdown Finish Time: .....

Event is off-street/on-street moving/on-street non-moving/held regularly throughout the year (calendar attached)

Contact names

Event Organiser*: .....

Phone:..... Fax:..... Mobile:..... E-mail:.....

Event Management Company (if applicable).....

Phone:..... Fax:..... Mobile:..... E-mail:.....

Police .....

Phone:..... Fax:..... Mobile:..... E-mail:.....

Council.....

Phone:..... Fax:..... Mobile:..... E-mail:.....

Roads and Maritime Service (if Class 1).....

Phone:..... Fax:..... Mobile:..... E-mail:.....

*Note: The Event Organiser is the person or organisation in whose name the Public Liability Insurance is taken out.

Appendix B Class 1 Event Traffic Management

1/1025 - IWP Plans.dwg

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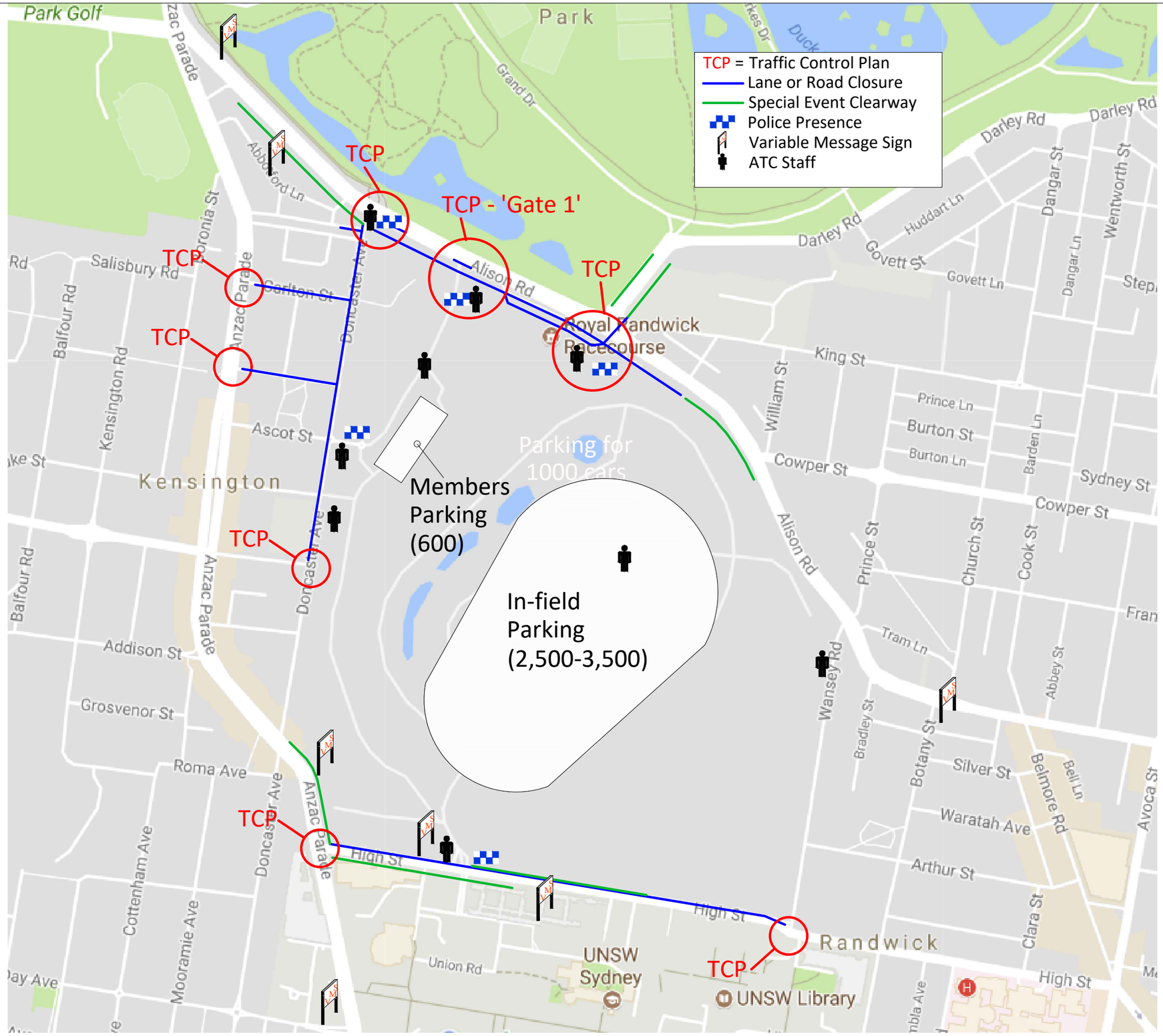


ptc.

Suite 102, 506 Miller Street,
Cammeray NSW 2062

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
1	25/10/17	For Information Only.	CS	AM					

PROJECT:
Royal Randwick Racecourse

Night Racing

DRAWING TITLE:
Traffic Management

Class 1 Event

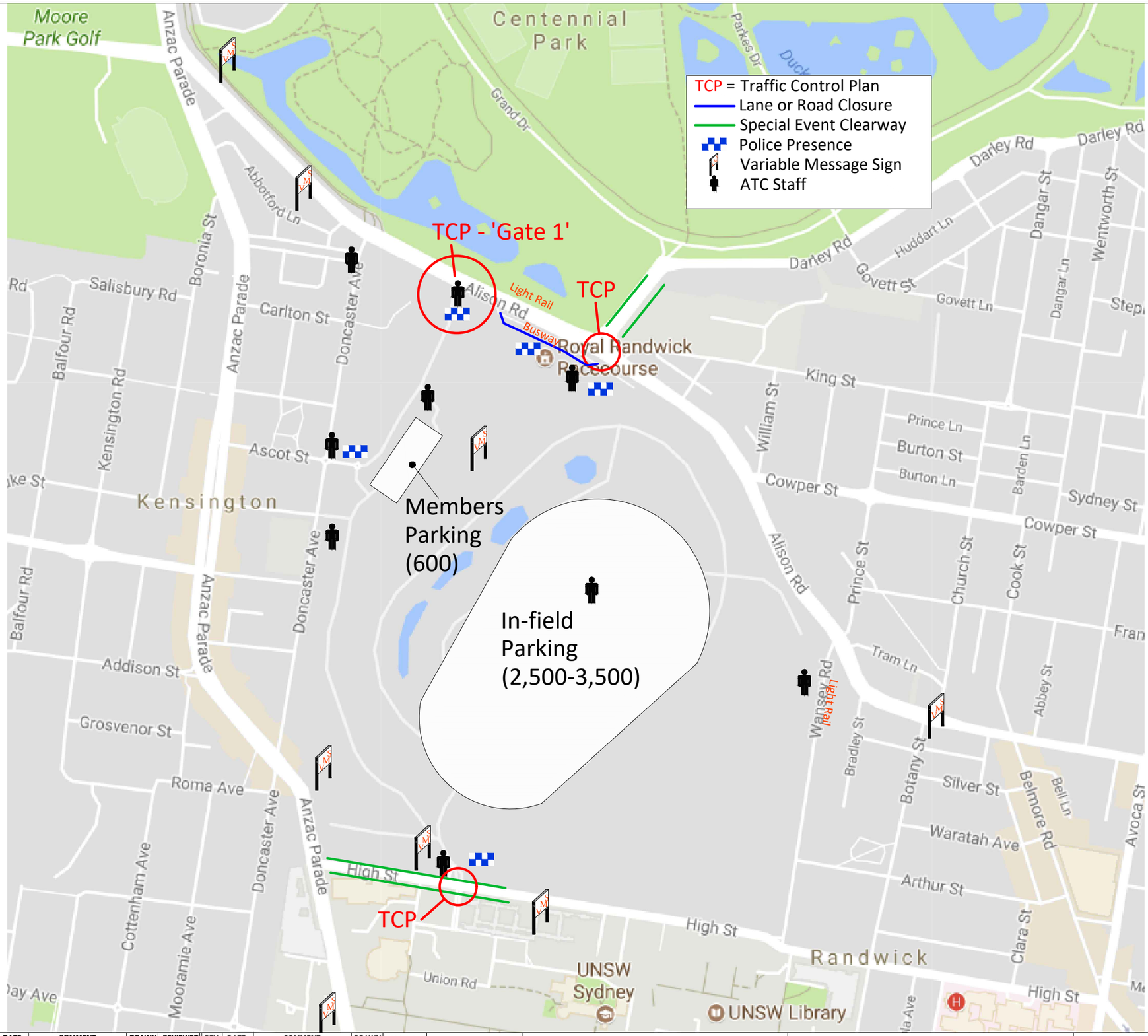
CLIENT:	Australian Turf Club
DRG. #:	PTC-001
PROJECT #:	T2-2135
SCALE:	1:1000

REV: 1

Appendix C Class 2 Event Traffic Management

1/1025 - IWP Plans.dwg

A3



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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
1	25/10/17	For Information Only.	CS	AM					

PROJECT:
Royal Randwick Racecourse

Night Racing

DRAWING TITLE:
Traffic Management

Class 2 Event

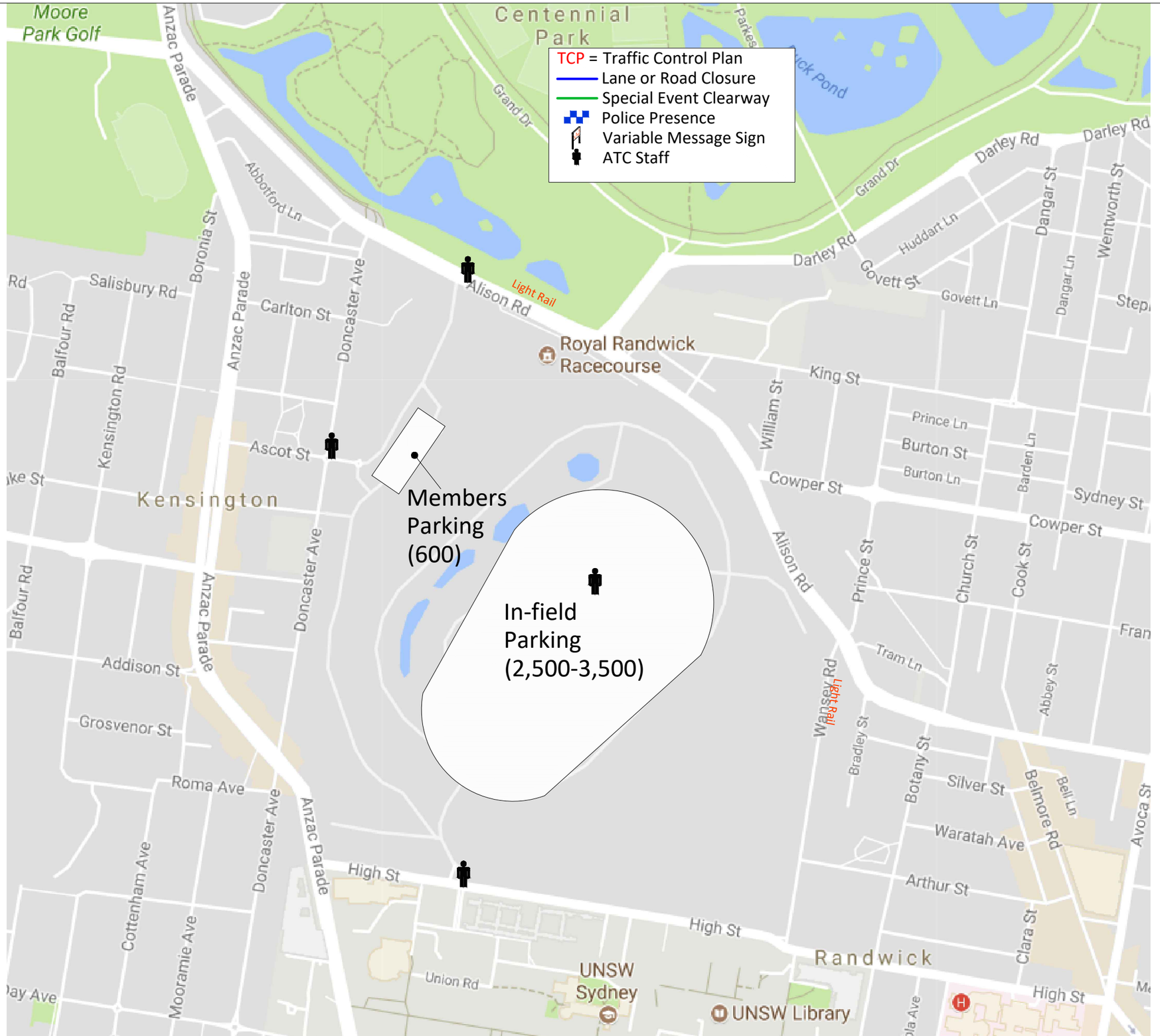
CLIENT:	Australian Turf Club
DRG. #:	PTC-002
PROJECT #:	T2-2135
SCALE:	1:1000

REV: 1

Appendix D Class 3 Event Traffic Management

1/1025 - IMP Plans.dwg

A3



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ptcconsultants.co

REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
1	25/10/17	For Information Only.	CS	AM					

PROJECT:
Royal Randwick Racecourse

Night Racing

DRAWING TITLE:
Traffic Management

Class 3 Event

CLIENT:	Australian Turf Club
DRG. #:	PTC-003
PROJECT #:	T2-2135
SCALE:	1:1000

REV: 1