Sydney Swans Headquarters and Community Centre

Royal Hall of Industries
Transport Assessment

Prepared by: GTA Consultants (NSW) Pty Ltd for Sydney Swans Limited

on 23/04/19

Reference: N165280

Issue #: A

GTAconsultants

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Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
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Appendices

1. INTRODUCTION

01

1.1. Background

This transport assessment report has been prepared on behalf of the Sydney Swans Limited in support of a State Significant Development (SSD) application for the proposed adaptive reuse of the Royal Hall of Industries for a high-performance sport and community facility. The facility will enable a range of land uses, including a new home for the Sydney Swans and NSW Swifts. It will accommodate a multi-purpose facility available for community uses, sporting, medical and rehabilitation areas, administration and office spaces and associated plant and store rooms.

1.2. Secretary's Environmental Assessment Requirements

The Department of Planning and Environment (DPE) has issued the Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development (SSD) 9627 for the preparation of a transport assessment for the proposed development. Matters raised in the SEARs have been considered during the preparation of this report and addressed within specified sections as shown in Table 1.1.

Table 1.1: Secretary's Environmental Assessment Requirements

SEARs	Report section where addressed
Transport and Accessibility (Operation)	
Details of the current daily and peak hour vehicle, public transport, special event buses, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network and located adjacent to the proposed development on a typical weekday and weekend (event day) and consideration of simultaneous events within the Moore Park Precinct.	Sections 3.3, 3.6 and 3.7
Traffic modelling and analysis of the future daily and peak hour vehicle (including point to point transport), public transport, coaches, special event buses, pedestrian and bicycle movements likely to be generated by the proposed development and assessment of the impacts on the local road network on a typical weekday and weekend (event day) and consideration of simultaneous events within the Moore Park Precinct, including key intersection capacity and any potential need for upgrading or road works (if required).	Sections 7.1 and 7.3
Assessment of the operation of existing and future transport networks including the light rail and bus networks and their ability to accommodate the forecast number of trips to and from the development on a typical weekday and weekend (event day) and consideration of simultaneous events within the Moore Park Precinct.	Section 7.3
Details of the proposed pick up and drop off facilities to accommodate the development's point to point transport and coach demand and measures to mitigate adverse traffic impacts on a typical weekday and weekend (event day) and consideration of simultaneous events within the Moore Park Precinct.	Section 5.1.2
Assessment of the cumulative impacts of traffic volumes from the proposal together with existing and approved developments in the area, and proposed measures to mitigate any associated impacts on public transport, pedestrian, cycle and traffic networks.	Section 7.3
Measures to promote sustainable travel choices for employees and visitors, that support the achievement of State Plan targets, such as implementing a location-specific travel plan and provision of end of trip facilities.	Sections 8 and 8.2
Details of the proposed access, appropriate provision, design and location of on-site bicycle parking including compliance with the relevant parking codes and Australian Standards, and details of how bicycle parking provision will be integrated into the existing network.	Sections 6.1 and 6.2

SEARs	Report section where addressed
Service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type, routes and the likely arrival and departure times).	Section 4.5 and 5.2
A road safety assessment of any proposed signage, lighting displays and reflectivity on roads.	To be addressed in a different report.
Construction	
Details of peak hour and daily construction and servicing vehicle movements and access arrangements and cumulative impact from surrounding development sites, including the Sydney Light Rail project, on the local road network, public transport services and parking.	Sections 9.6, 9.7 and 9.4
Road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity.	Section 9.8
Details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements, including measures to reduce construction worker private vehicle trips.	Section 9.5
Details of temporary cycling and pedestrian access during construction.	Section 9.8
Details of proposed construction vehicle access arrangements at all stages of construction.	Sections 9.4 and 9.7
Assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists and public transport operations within the Moore Park Precinct, including during adjacent events.	Section 9.6
Potential impacts of the construction on surrounding areas and the public realm with respect to noise and vibration, air quality and odour impacts, dust and particle emissions, water quality, storm water runoff, groundwater seepage, soil pollution and construction waste.	To be addressed in a separate report.
Annual volume of materials to be extracted, processed or stored onsite during construction and how the extracted material will be disposed of or reused.	Section 9.9
Details of any crane locations and road closures.	Section 9.9
Details of a consultation strategy for liaison with surrounding stakeholders.	Section 9.10

1.3. Stakeholder Engagement

GTA attended a meeting on Friday 12 April 2019 with Transport for NSW's Sydney Coordination Office (SCO), Roads and Maritime Services (Roads and Maritime) and Traffic Management Centre (TMC) to provide input into the preparation of this transport assessment. The key items that were discussed and the report section where these topics have been addressed are detailed in Table 1.2. Minutes for this meeting are attached in Appendix C.

Table 1.2: Stakeholder engagement discussion

Stage	Topic	Report section where addressed
Construction	Impacts to pedestrians, private vehicles and coaches during events within the Moore Park Precinct.	Section 7.3
	Cumulative construction impacts with Sydney Football Stadium construction.	Section 9.7
Operation	Forecast traffic generation of the development and how it will be accommodated, including cumulative impact with special events in the Moore Park Precinct.	Section 7.3
	Measures to promote sustainable travel choices for employees and visitors.	Section 8

1.4. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

- existing traffic and parking conditions surrounding the site
- suitability of the proposed parking in terms of supply (quantum) and layout
- service vehicle requirements
- pedestrian and bicycle requirements
- the traffic generating characteristics of the proposed development
- suitability of the proposed access arrangements for the site
- the transport impact of the development proposal on the surrounding road network.

1.5. References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds
- State Environmental Planning Policy No 47 – Moore Park Showground
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- traffic and car parking surveys completed in February 2019 as referenced in the context of this report
- Plans for the proposed development prepared by Populous, Project Number: 15.7401.00, Drawing Number: AT.20.0000 and AT.20.0100 dated 11 April 2018
- other documents and data as referenced in this report.

2. STRATEGIC CONTEXT

02

2.1. Local Policies and Strategic Background

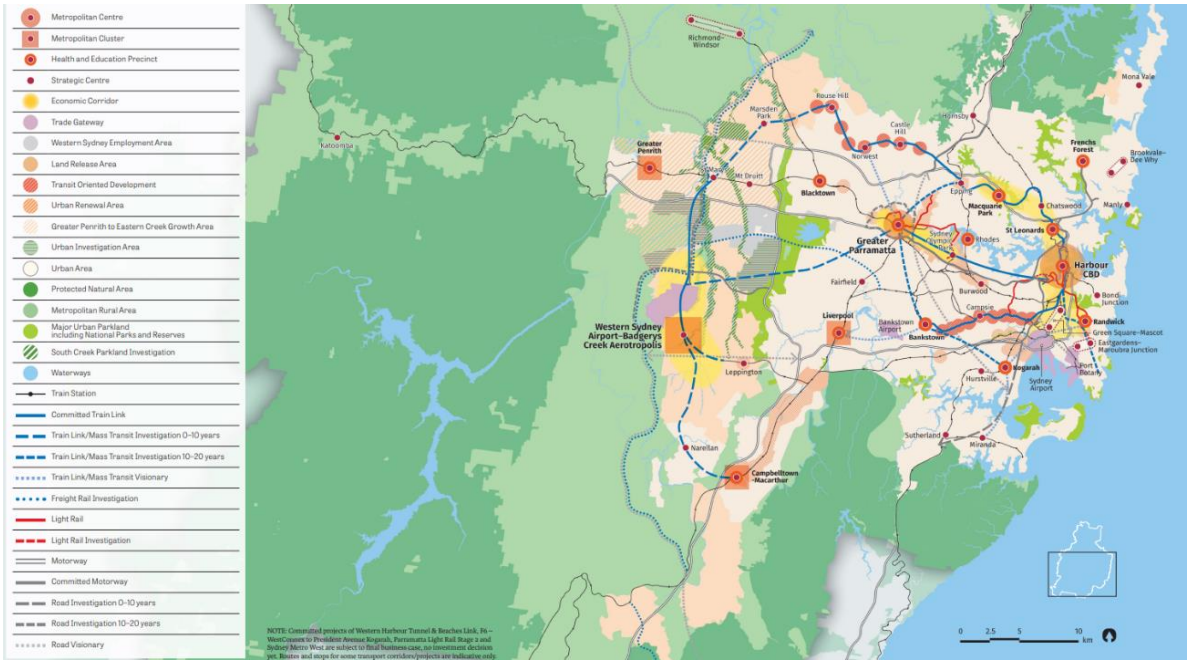
2.1.1. The Greater Sydney Region Plan 2018

The Greater Sydney Commission (GSC) is an independent organisation that leads metropolitan planning for Greater Sydney. It has prepared the Greater Sydney Region Plan which outlines how Greater Sydney will manage growth and guide infrastructure delivery. The Greater Sydney Region Plan has been prepared in conjunction with the NSW Government's Future Transport 2056 Strategy and informs Infrastructure NSW's State Infrastructure Strategy.

The GSC's vision is to create three connected cities; a Western Parkland City west of the M7, a Central River City with Greater Parramatta at its heart and an Eastern Harbour City. By integrating land use, transport links and infrastructure across the three cities, more people will have access within 30 minutes to job, school, hospitals and services.

The Greater Sydney Region Plan is a 20-year plan with a 40-year vision and has four key focuses; infrastructure and collaboration, liveability, productivity and sustainability. The Greater Sydney Structure Plan 2056 is shown indicatively in Figure 2.1.

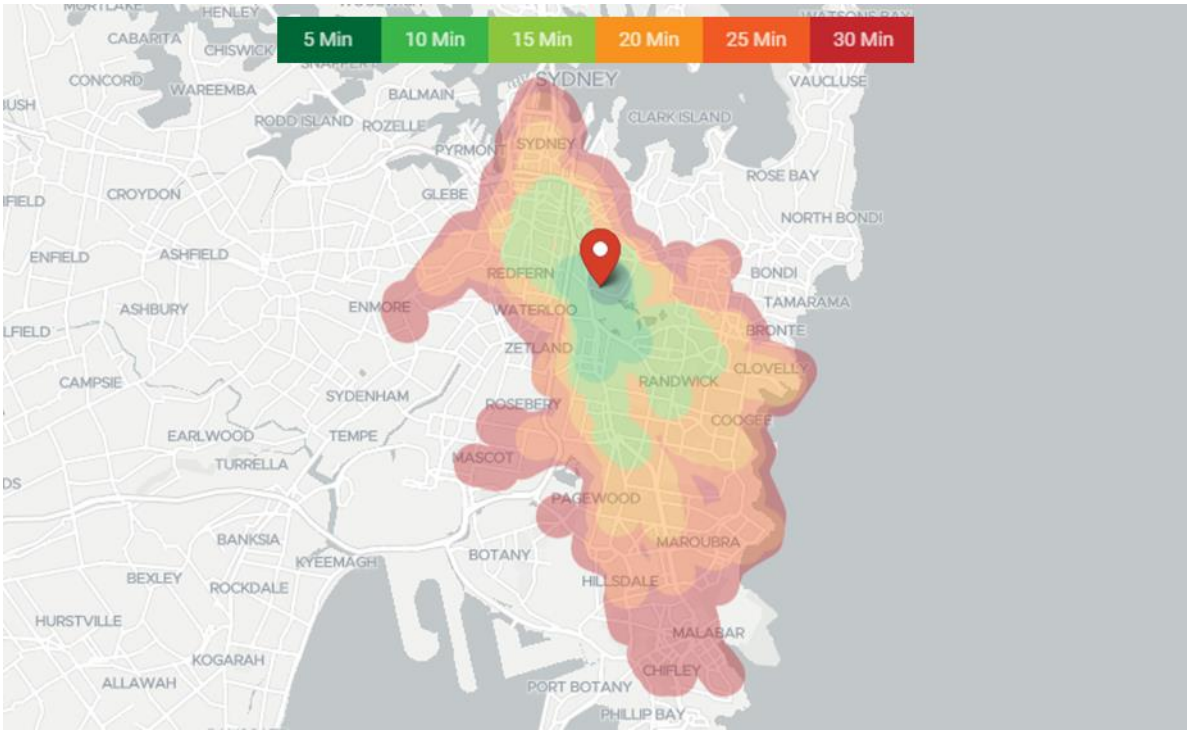
Figure 2.1: Greater Sydney Structure Plan 2056 – The Three Cities



Source: Greater Sydney Commission

The location of the site, in the context of the 30-minute city concept is shown in Figure 2.2. This is based on public transport mode of travel.

Figure 2.2: Travel distance by public transport



Source: https://app.targomo.com/, accessed 30 January 2019

2.1.2. Eastern City District Plan 2018

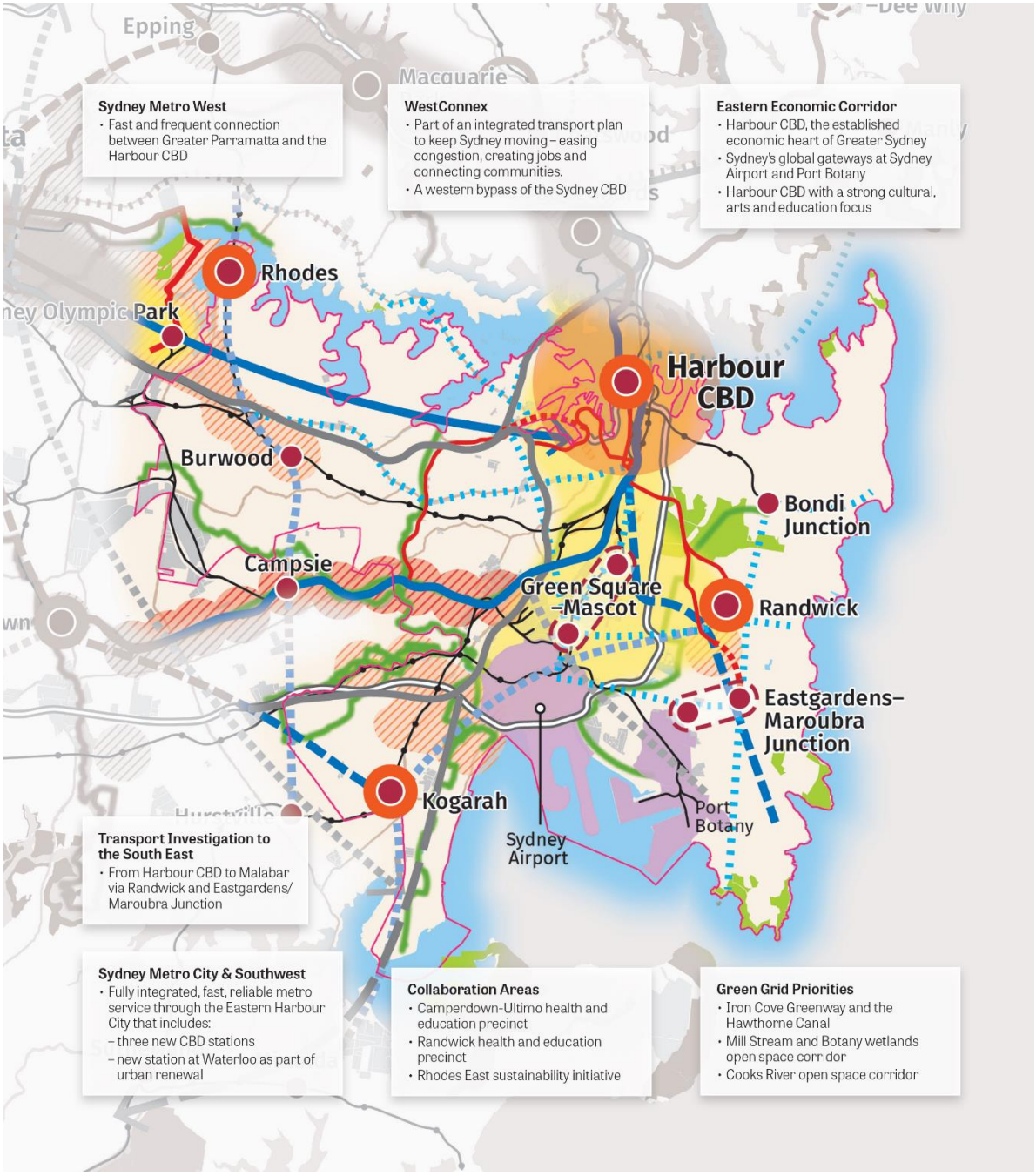
The vision for Greater Sydney as a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City and a 30-minute city – will see the Eastern City District become more innovative and globally competitive, carving out a greater portion of knowledge intensive jobs from the Asia Pacific Region.

The plan emphases aligning growth with infrastructure, including transport, social and green infrastructure and delivering sustainable, smart and adaptable solutions. Communities are also to be supported through vibrate public places, walking and cycling and cultural, artistic and tourism assets.

The proposed development will seek to align with the aims of the Eastern City District Plan by linking in with the surrounding walking and cycling infrastructure to encourage modes of travel to and from the site other than private vehicle.

The Eastern City District is shown in Figure 2.3.

Figure 2.3: The Eastern City District



Source: Greater Sydney Commission, accessed 30 January 2019

2.1.3. Future Transport Strategy 2056

Future Transport 2056 provides a 40-year strategy for how transport will be planned, amended and forecast within NSW, both regional and metropolitan, for the expected 12 million residents within the state. Future Transport 2056 follows from the 2012 Long Term Transport Master Plan which listed over 700 transport projects, the majority of which are completed or in progress. It also ties in with Greater Sydney Region Plan and the subsequent district plans to support the three cities metropolis vision.

Future Transport 2056 is supported by two key documents, Greater Sydney Services and Infrastructure Plan and Regional NSW Services and Infrastructure Plan which provide guidance and planning for these areas.

From a metropolitan view, Future Transport 2056 and associated plans include the 30-minute city where jobs and services are within 30 minutes of residents within Greater Sydney. Strategic transport corridors to move people and goods are outlined between metropolitan and strategic centres, clusters and surrounds. The Movement and Place framework is also emphasised to support liveability, productivity and sustainability.

2.1.4. NSW State Infrastructure Strategy 2018-2038

The NSW State Infrastructure Strategy 2018-2038 sets out the government's priorities for the next 20 years, and combined with the Future Transport Strategy 2056, the Greater Sydney Region Plan and the Regional Development Framework, brings together infrastructure investment and land-use planning for our cities and regions.

Greater Sydney is home to 4.7 million people and is set to grow to 8.3 million with a trillion-dollar economy by 2056. To manage the pressures of population growth, the Greater Sydney Commission has set out a vision to reshape and rebalance the city's structure. Relevant to the site, the planned transport projects in delivery include the CBD and South East Light Rail (CSELR) which will connect close by with the Sydney Metro City and Southwest project.

2.1.5. NSW Planning Guidelines for Walking and Cycling

The NSW Planning Guidelines for Walking and Cycling were developed with the aim to assist with improving consideration of walking and cycling when planning for new developments. With improved consideration comes opportunities for people to live in places within easy walking and cycling access to urban services, resulting in reduced car use and creating healthier neighbourhoods and cities.

The guidelines provide recommendations for bicycle parking rates for different land-use types along with measures which could be implemented to encourage residents/ staff and visitors of new developments to travel by active modes. These will be discussed further in Sections 6 of this report.

2.1.6. Moore Park Masterplan 2040

The Moore Park Masterplan 2040 was developed to guide the direction and management of the Park up to 2040. The key transport focus of the plan is to improve access for cyclists and pedestrians, with the aim of establishing 10 kilometres of new and enhanced pathways, rationalising car parking and integrating with the new CSELR.

The proposal considers the need to establish convenient connections with existing and future planned pedestrian and cycling paths together with supporting infrastructure for the CSELR.

3. EXISTING CONDITIONS

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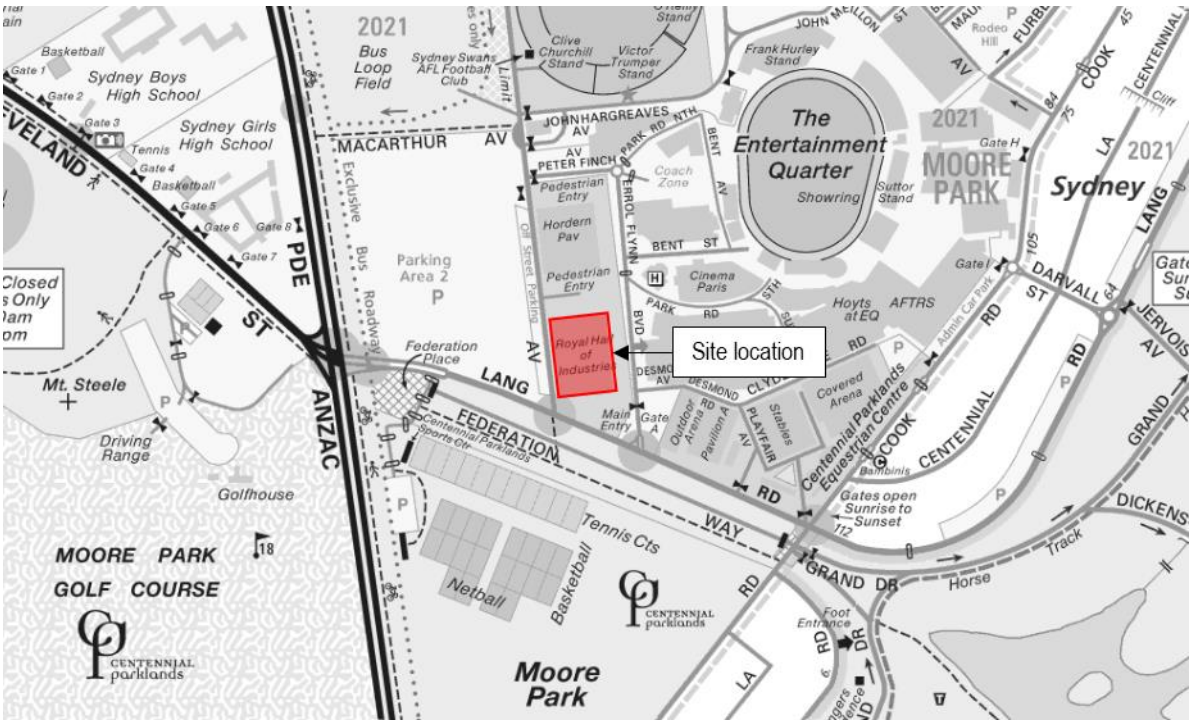
3.1. Location

The subject site is at 1 Driver Avenue, Moore Park and comprises a portion of two separate lots, legally described as Lot 3, DP861843 and Lot 52 of DP1041134. It has frontages of approximately 100 metres to Driver Avenue to the west and Errol Flynn Boulevard to the east. The site is owned by the Centennial Park and Moore Park Trust and is leased to the Sydney Swans for the purposes of the development. The site is within the Moore Park Showground as referenced in the City of Sydney LEP 2012 and broadly recognised as the Entertainment Quarter.

The surrounding properties mainly comprise sporting facilities including the Sydney Cricket Ground and Sydney Football Stadium together with supporting retail, restaurant and leisure land uses making up the Entertainment Quarter.

The location of the site and its surrounding environs is shown in Figure 3.1.

Figure 3.1: Subject site and its environs



Base image source: Sydway

3.2. Transport Network

3.2.1. Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Roads and Maritime responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules, most recently amended on 19 March 2018.

Roads and Maritime defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

Arterial Roads – Controlled by Roads and Maritime, typically no limit in flow and designed to carry vehicles long distance between regional centres.

Sub-Arterial Roads – Managed by either Council or Roads and Maritime under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).

Collector Roads – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.

Local Roads – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

3.2.2. Surrounding Road Network

Driver Avenue

Driver Avenue is a local road aligned in a north-south direction west of the site. It is a two-way road with one traffic lane in each direction, set within an approximately 11-metre-wide carriageway. Kerbside parking is permitted on both sides of the road under 4P ticketed parking restrictions outside of special event clearway times. Parking on the eastern side of the road near the site is parallel while parking along the western side of the road is 90-degree angle parking.

Driver Avenue has a posted speed limit of 50 km/ h.

Errol Flynn Boulevard

Errol Flynn Boulevard is a local road that provides access to the Entertainment Quarter and multideck car park. It is aligned in a north-south direction along the eastern boundary of the site with access via Lang Road to the south. It is a two-way road generally providing two traffic lanes in each direction and a central median. Kerbside parking is not permitted, with select areas for set-down/ pick-up purposes and taxi zones.

Errol Flynn Boulevard has a posted speed limit of 20 km/h and is shown in Figure 3.2 and Figure 3.3.

Figure 3.2: Errol Flynn Boulevard (looking north)

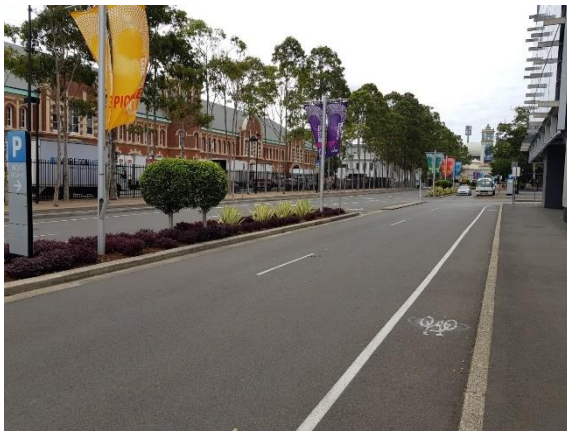


Figure 3.3: Errol Flynn Boulevard (looking south to Lang Road)

Lang Road

Lang Road functions as a collector road and is aligned in an east-west direction south of the site. It provides a key connection through the local area dissecting the Entertainment Quarter and Centennial Park to link Oxford Street in

Paddington with Anzac Parade in Moore Park. It is a two-way road with two traffic lanes in each direction and no kerbside parking in the vicinity of the site.

Lang Road has a posted speed limit of 50 km/h and is shown in Figure 3.4 and Figure 3.5.

Figure 3.4: Lang Road (looking east)

Figure 3.5: Lang Road (looking west to Errol Flynn Boulevard)

3.2.3. Surrounding Key Intersections

The following key signalised intersections currently exist near the site:

- Lang Road/ Driver Avenue
- Lang Road/ Errol Flynn Boulevard.

3.3. Traffic Volumes

GTA completed traffic counts on key roads in the vicinity of the site on Saturday 2 February 2019 and Wednesday 6 February 2019 during the following peak periods:

- 4:30pm and 7:30pm (Saturday)
- 7:30am and 9:30am, and 3:30pm and 6:30pm (Thursday).

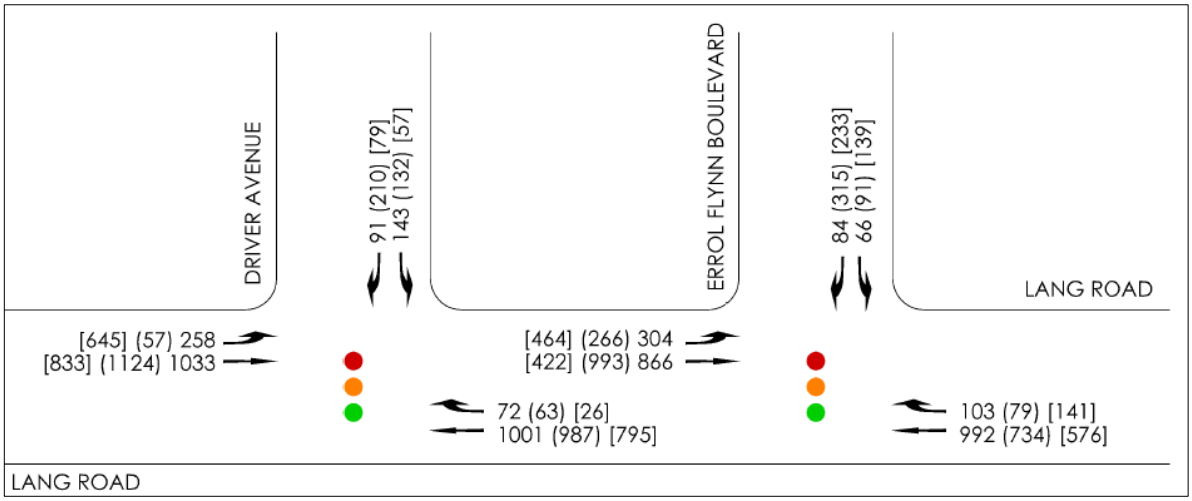
The Saturday surveys covered the peak period in the lead up to a Big Bash League (BBL) 20:20 cricket match at the Sydney Cricket Ground and therefore reflects an event scenario. This game was between the Sydney Sixers and Sydney Thunder and the last regular season game at the Sydney Cricket Ground. It attracted an official crowd of 34,385 people, which was one of the largest crowds of the season at the ground. BBL crowd attendances are shown in Table 3.1.

Table 3.1: Sydney Cricket Ground game attendance

Date	Crowd
02/02/19	34,385
29/01/19	8,083
20/01/19	14,921
16/01/19	16,281
27/12/18	22,221

Typical weekday peak periods conditions are also important for the day-to-day operation of the surrounding road network. The weekday peak hours were between 8:00am and 9:00am, and 5:00pm and 6:00pm, with all surveyed traffic volumes summarised in Figure 3.6. Full survey results are contained in Appendix A.

Figure 3.6: Existing AM (PM) [Sat] peak hour traffic volumes



3.4. Intersection Operation

The operation of the key intersections within the study area have been assessed using SIDRA INTERSECTION[1] (SIDRA), a computer-based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the Roads and Maritime, is vehicle delay. SIDRA determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 3.2 shows the criteria that SIDRA adopts in assessing the level of service.

Table 3.2: SIDRA level of service criteria

Level of Service (LoS)	Average Delay per vehicle (secs/ veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

Table 3.3 presents a summary of the existing operation of the intersection, with full results presented in Appendix B of this report.

[1] Program used under license from Akcelik & Associates Pty Ltd.

Table 3.3: Existing operating conditions

Intersection	Peak	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
Lang Road/ Driver Avenue	AM	0.93	20	85	B
	PM	0.91	21	78	B
	Saturday (game day)	0.89	35	201	C
Lang Road/ Errol Flynn Boulevard	AM	0.74	22	95	B
	PM	0.77	26	95	B
	Saturday (game day)	0.61	23	95	B

Table 3.3 indicates that both intersections operate at a satisfactory level of service (Level of Service C or better) in all peak periods. Traffic signal phase times are generally prioritised to favour the Lang Road approaches and results in slightly higher delays for the Driver Avenue and Errol Flynn Boulevard approaches. Such outcomes are common and accepted by drivers in high density urban locations where minor roads intersect with major roads.

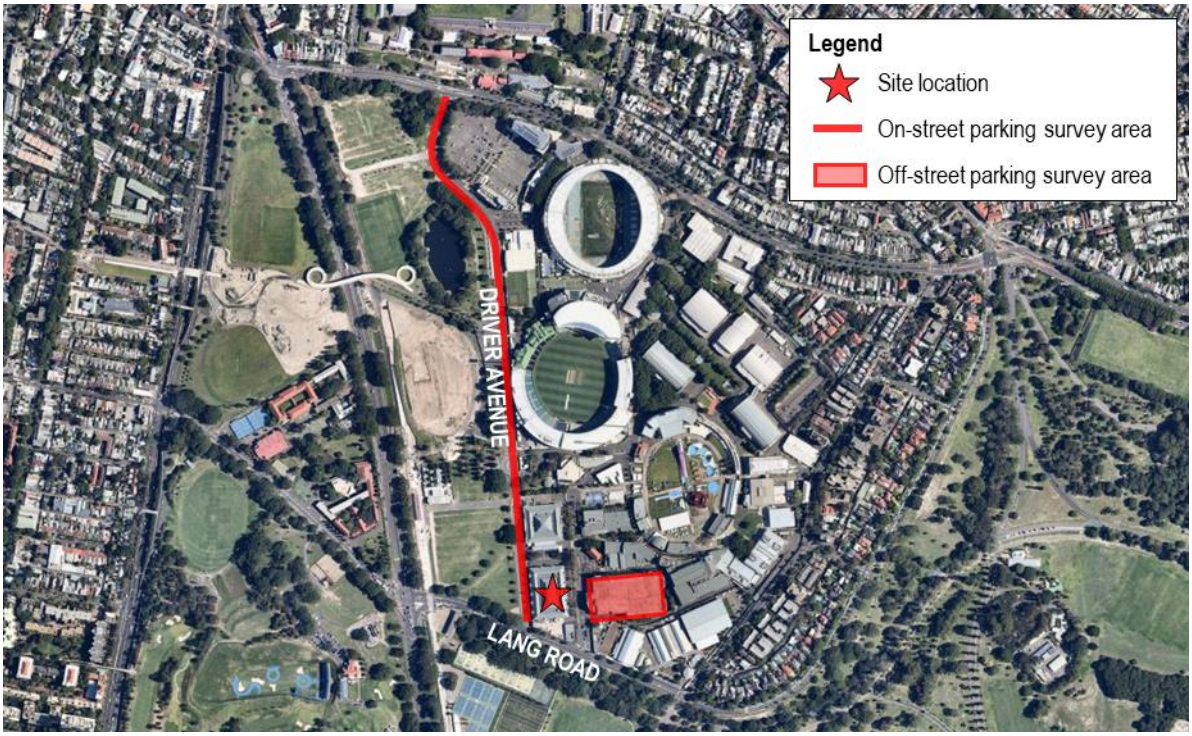
The SIDRA results also indicate that both intersections generally operate satisfactory under a typical game day (in this case, night) scenario. It is however noted that much of the surrounding Moore Park precinct is typically under traffic management for special events which has a limiting effect on traffic flows through the surrounding intersections. As such, the Saturday game day resulted in less traffic through the key intersections, as indicated by the degree of saturation.

3.5. Car Parking

3.5.1. Supply

GTA compiled an inventory of publicly available on-street and off-street car parking along Driver Avenue and in the Entertainment Quarter Wilson multi-storey car park. The car parking survey area is shown in Figure 3.7, with the breakdown of the parking supply and corresponding restrictions detailed in Table 3.4.

Figure 3.7: Car parking survey area



Base image source: Nearmap

Table 3.4: Car parking supply

Location	No. of spaces
Driver Avenue	158
Multi-storey car park	1,958

The inventory identified a total of 158 on-street spaces and 1,958 off-street parking spaces in the multi-storey car park. On-street spaces along Driver Avenue are generally all time restricted 4P metered parking (with the exception of one taxi zone space), with clearway restrictions in place during special events.

It is noted that the multi-storey car park is a paid car park with the cost breakdown summarised in Table 3.5.

Table 3.5: Entertainment Quarter multi-storey car park fees

Rate	Duration of stay	Fee
Casual	0-2 hrs	$0
	2-3 hrs	$10
	3-4 hrs	$12
	4-5 hrs	$16
	5-6 hrs	$20
	6+ hrs	$30
	Special events	$25
Night (Entry after 6pm and exit before 2am)	Monday to Sunday	$7
	Special events	$25

3.5.2. Demand

Parking demand surveys were completed within the study area between 5pm and 11pm on Saturday 2 February 2019 and on Wednesday 6 February 2019. These dates were chosen to assess parking around the site on a game day (Saturday) and on a typical weekday (Wednesday).

The parking survey results indicate that parking demand on the Wednesday generally peaked around midday at 46 per cent of the total supply. On the Saturday game day, the 90-degree angled parking at the southern end of Driver Avenue was observed to be fully occupied by event buses. All other parking areas along Driver Avenue were unavailable for use for the survey duration.

The Entertainment Quarter multi-storey car park parking profile throughout the Saturday and Wednesday survey periods is shown in Figure 3.8.

Figure 3.8: Saturday 2 February 2019 and Wednesday 6 February 2019 multi-storey car park demand

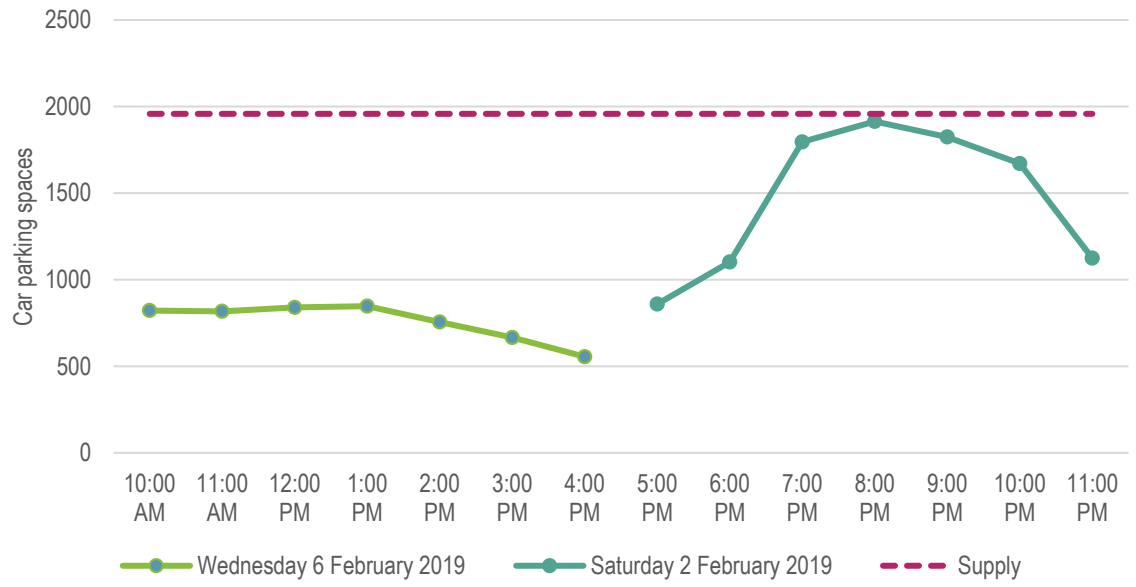


Figure 3.8 indicates that demand on the Saturday game day peaked at 1,914 spaces (98 per cent occupied), with 44 vacant spaces. On the Wednesday, parking demand peaked at 43 per cent at 1:00pm, with more than 1,100 vacant spaces.

Full survey results are included in Appendix A.

3.6. Public Transport

3.6.1. Bus Network

The site is well serviced by the surrounding bus network, with a range of frequent services operating along Anzac Parade. A review of the public transport available near the site is shown indicatively in Figure 3.9 and summarised in Table 3.6.

Figure 3.9: Surrounding public transport network

Base image source: Transport for NSW, accessed 30 January 2019

Table 3.6: Surrounding bus network routes

Route number	Route description	Location of stop	Distance to nearest stop	Frequency on/ off-peak
355	Marrickville Metro to Bondi Junction via Moore Park and Erskineville	Lang Road at Errol Flynn Boulevard	60 metres	30 mins peak and off peak
338	Clovelly to Central Railway Square	Anzac Parade at Lang Road	250 metres	10-30 mins peak only
339	Clovelly to City Gresham Street			20 mins peak/ 30 mins off peak
372	Coogee to Central Railway Square			5-10 mins peak/ 15 mins off peak
373	Coogee to City Circular Quay via Belmore Road			30 mins peak/ 10-15 mins off peak
374	Coogee to City Circular Quay via Bream St			30 mins peak and off peak
376	Maroubra Beach to Central Railway Square			20 mins peak/ 30 mins off peak
377	Maroubra Beach to City Circular Quay			Maroubra Beach to City Circular Quay
391	La Perouse to Central Railway Square			30 mins peak and off peak
392	Little Bay to City Circular Quay via Eastgardens & Prince Henry Hospital			15 mins peak/ 30 mins off peak
393	Little Bay to Central Railway Square via Maroubra and Kingsford			10-15 mins peak and off peak
394	City Circular Quay to La Perouse via Maroubra and Kingsford			20 mins peak only
395	Maroubra Beach to Central Railway Square			30 mins peak and off peak
396	Maroubra Beach to City Circular Quay			30 mins peak and off peak
397	South Maroubra to City Circular Quay			15 mins peak/ 30 mins off peak
399	La Perouse to City Circular Quay via Malabar Beach & Maroubra Junction			15 mins peak/ 30 mins off peak
M10	Maroubra Junction to Leichhardt via City			10 mins peak/ 15 mins off peak
M50	Coogee to Drummoyne			10-15 mins peak/ 15 mins off peak

Express shuttle buses operate for special events in the Moore Park precinct including regular season sporting games as well as music concerts and festivals.

Route 1 shuttle buses depart Stand D at Eddy Avenue at Central Station. Buses run direct to Moore Park at 10-minute frequencies and typically commence approximately two hours prior to the official event start. After the event, shuttle buses run back to Central Station departing from the Moore Park Bus Station on Driver Avenue for a duration of approximately one hour following the events conclusion.

Bus services to the Moore Park precinct are generally increased significantly when simultaneous events are on within the Moore Park precinct to cater for larger crowds.

3.6.2. CBD and South East Light Rail (CSELR)

The CSELR is currently under construction and will form part of the Sydney Light Rail network which includes the operational Inner West Light Rail. The CSELR alignment will connect Circular Quay, through George Street within Sydney CBD, Surry Hills, Moore Park and along Anzac Parade through to Kingsford. This route is shown in Figure 3.10, with services expected to commence in 2020.

Figure 3.10: CSELR route

Source: NSW Government

Once operational, CSELR will provide a turn-up-and-go service with services expected to run every four minutes in each direction in peak periods. As a result, the bus network will be restructured to deliver an integrated public transport system within Inner Sydney.

The closest light rail stop to the site will be the Moore Park stop located adjacent to Anzac Parade north of Lang Road.

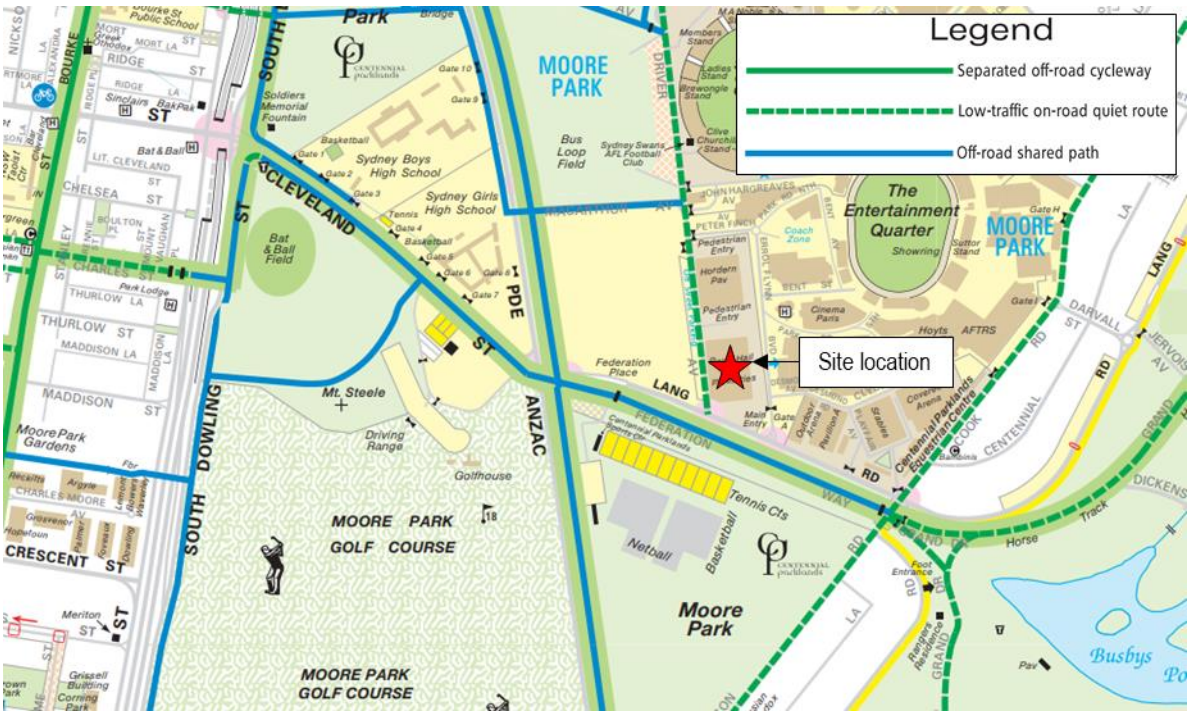
3.7. Walking and Cycling Infrastructure

The site is well supported by a network of surrounding walking infrastructure. Footpaths are generally provided on both sides of surrounding roads and generally wide or provided as shared paths to accommodate large pedestrian volumes associated with events in the precinct. Near the site, safe crossing points are provided at the signalised intersections on Lang Road at Driver Avenue and Errol Flynn Boulevard.

There are also a number of cycling paths near the site, with an off-road cycle path south of Lang Road providing a connection between Centennial Park and Redfern and more broadly Sydney CBD. Anzac Parade also has an off-road shared path that runs along the eastern side of the road connecting Surry Hills with Randwick and Coogee.

The surrounding cycling infrastructure is shown in Figure 3.11.

Figure 3.11: Surrounding cycling network

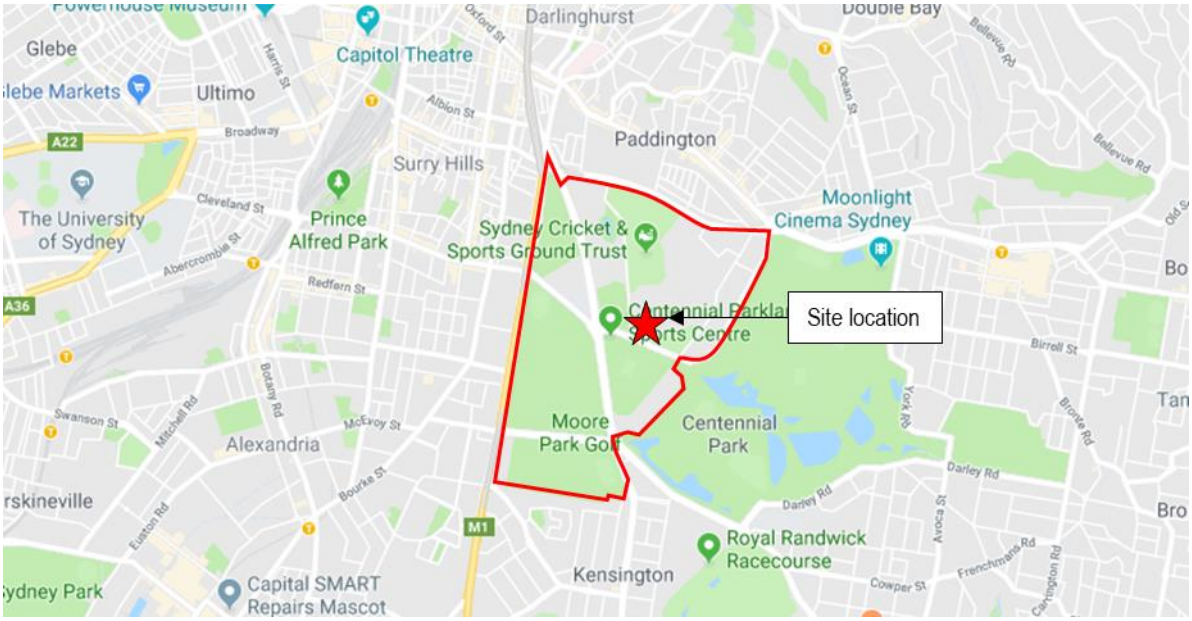


Base image source: City of Sydney

3.8. Existing Travel Behaviour

Journey to work data has been sourced from the Australian Bureau of Statistics 2016 census and provides a robust picture of travel patterns to the local area. Figure 3.12 details the catchment of census data analysed which largely represents the responses of people who work within the Entertainment Quarter and surrounding commercial, retail and educational areas.

Figure 3.12: Moore Park mode share survey area



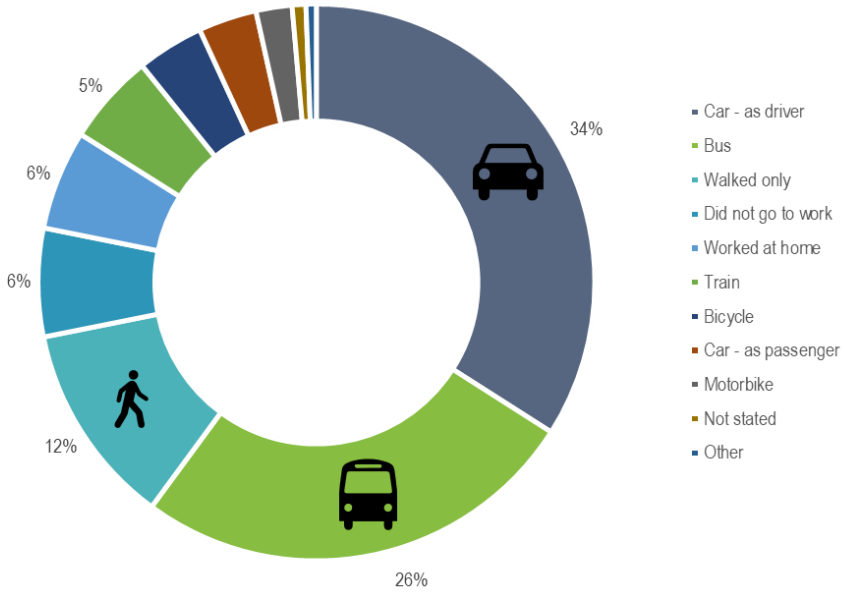
Base image source: Google Maps

Table 3.7 and Figure 3.13 provide a summary of the existing mode share to the surrounding Moore Park area. The results indicate that private car is the most common mode of transport to the area, followed closely by bus. Walking also makes up a significant portion of the mode share, with many workers making use of the well-established network of pedestrian footpaths linking with the Entertainment Quarter.

Table 3.7: Existing travel mode share to Moore Park

Mode of travel	Mode share
Car - as driver	34.1%
Bus	26.1%
Walked only	11.8%
Did not go to work	6.3%
Worked at home	5.8%
Train	5.3%
Bicycle	3.9%
Car - as passenger	3.4%
Motorbike	2.1%
Not stated	0.8%
Other	0.6%

Figure 3.13: Existing travel mode share to Moore Park

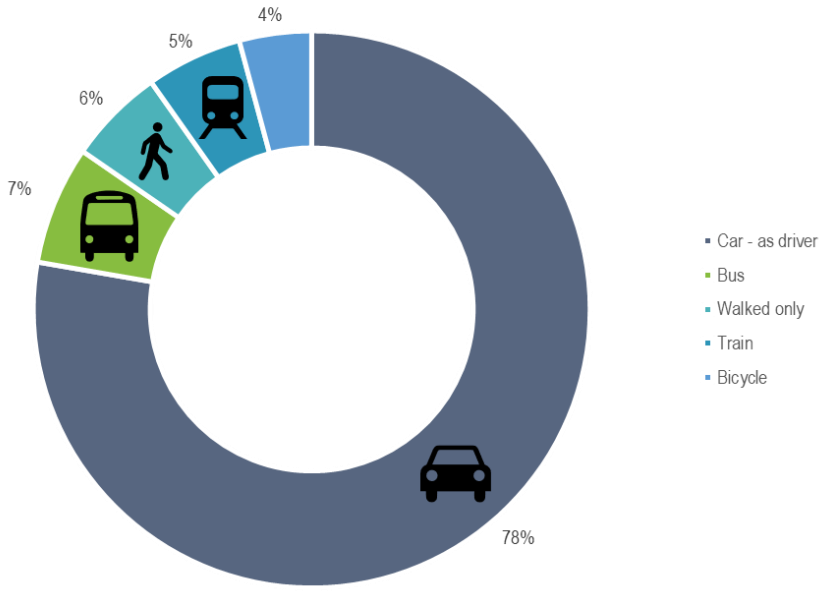


GTA also conducted a travel survey for the current 105 Sydney Swans staff. The response rate was positive, with a total of 72 (69 per cent) responses received. The mode share survey showed that the majority of staff currently drive to work (78 per cent), with bus being the second most common mode of transport (seven per cent). The results indicate that a greater proportion of Swans staff drive to work than those in the broader Moore Park area with the results detailed in Table 3.8 and Figure 3.14.

Table 3.8: Existing Swans staff travel mode share

Mode of travel	Mode share
Car - as driver	77.7%
Bus	6.9%
Walked only	5.6%
Train	5.6%
Bicycle	4.2%
Car - as passenger	0%
Motorbike	0%

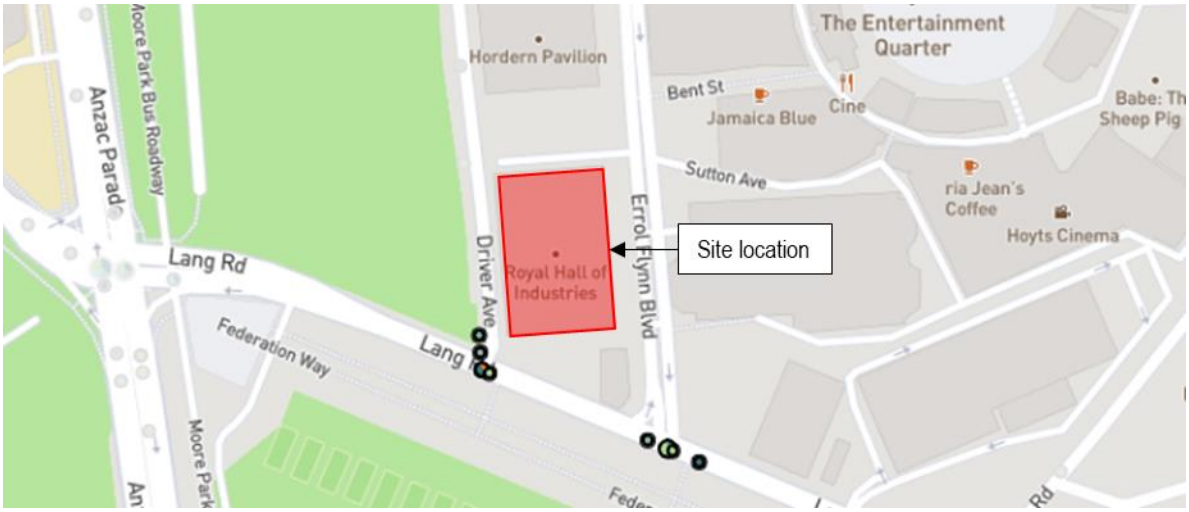
Figure 3.14: Existing Swans staff travel mode share



3.9. Crash History

An analysis the most recent five-year period of available crash data from 2013 to 2017 has been undertaken based on crash data sourced from the Transport for NSW Centre for Road Safety for the roads surrounding the site. The locations of the crash data for the five-year period is shown in Figure 3.15.

Figure 3.15: Crash map from 2013 to 2017



Base image source: Transport for NSW Centre for Road Safety

The following key statistics can be drawn from the crash data:

- A total of 12 crashes have been recorded in the five-year period at the Lang Road intersections with Driver Avenue and Errol Flynn Boulevard.
- One fatality was recorded near the site which occurred at the Lang Road/ Driver Avenue intersection and was as a result of side impact collision at the T-intersection.
- One collision involving a pedestrian was recorded which occurred at the Lang Road/ Errol Flynn Boulevard intersection.
- The majority of crashes were either through and right crashes (42 per cent) or rear end crashes (33 per cent).

4. DEVELOPMENT PROPOSAL

04

4.1. Land Uses

This application seeks approval for the proposed adaptive reuse of the Royal Hall of Industries (RHI) for a high-performance sport and community facility. The development will maintain the structural integrity and façade of the RHI, whilst re-purposing the interior of the building to support a number of compatible uses and utilise the space effectively.

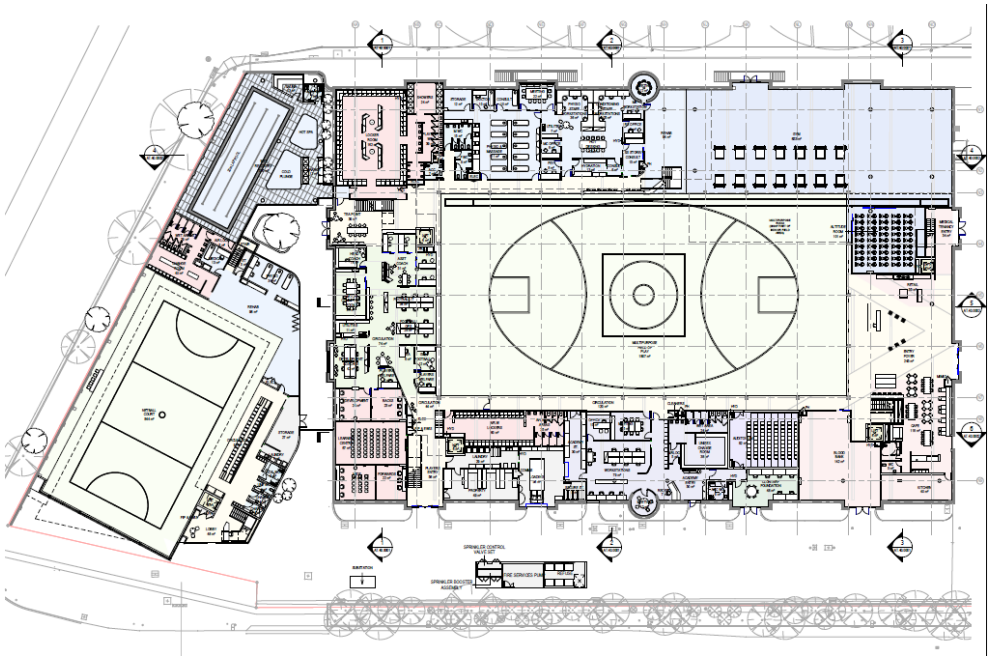
In addition to the repurposing of the RHI, an extension of the building will be constructed to the south of the building in the current service and courtyard area. The built form of the extension is consistent in height, scale and material with the RHI and will be largely concealed behind the existing courtyard wall.

The facility will include:

- Home of the Sydney Swans
- Home of the NSW Swifts
- Multi-purpose indoor facility available for community use and public events such as junior club nights, school graduations, functions
- An indoor netball court for the NSW Swifts Netball Team and netball community
- Facilities for a Swans team in the AFL National women's competition
- Player change areas, lockers and wet areas
- Wet recovery – pool and hot/cold hydrotherapy
- Go Foundation and Clontarf Foundation for indigenous education
- Australian Red Cross Blood Service Donation Centre
- Medical, rehabilitation and sport science areas
- Gymnasium, museum, media centre and auditorium
- Back of house offices and café/canteen
- Entry foyer and retail/shop units
- Plant and store rooms
- Sydney Swans Academy.

The proposed ground floor plan is shown in Figure 4.1.

Figure 4.1: Proposed floor plan



Source: Populous, Project Number: 15.7401.00, Drawing Number: AT.20.0000 dated 11 April 2019

4.2. Population Schedule

Once developed, the site will accommodate 206 regular users of the site including Sydney Swans and NSW Swifts staff and players as well as other minor tenancies. Over a five to 10-year planning horizon, this is expected to increase to around 282 people with the addition of the Sydney Swans AFLW staff and players, as well as increases to general Swans and Swifts staffing numbers.

The population schedule for the site is summarised in Table 4.1.

Table 4.1: Staff/ player schedule

Department	Staff
Sydney Swans Staff	105
Sydney Swans Players	46
NSW Swifts Staff	11
NSW Swifts Players	14
New Jobs (Tenants, Childminding etc (estimate))	30
Total Staff Numbers (excl 5/ 10 year growth)	**206**
Sydney Swans AFLW Staff	4
Sydney Swans AFLW Players	35
5/ 10 year growth spaces (Swans/Swifts)	37
Total Staff Numbers (incl 5/ 10 year growth)	**282**

4.3. Car Parking

The proposal includes on-site parking along the eastern boundary of the site. This parking is proposed to be reserved for the football playing group and executive team with no general public access. The eastern forecourt allows adequate area to provide 11 angled parking spaces while also maintaining loading access and manoeuvring.

4.4. Walking and Cycling Facilities

Given the heritage nature of the existing building, existing access arrangements are largely proposed to be maintained. Four pedestrian accesses will be provided on the eastern side of the site, with two proposed along each of the remaining frontages.

End of trip facilities also form part of the proposal, including those included as part of the overall purpose of the facility. Dedicated bicycle parking facilities are proposed for staff and visitors along the eastern side of the building.

4.5. Loading Facilities and Vehicle Access

A single loading bay is proposed on the eastern side of the building, suitable of accommodating vehicles up to 6.4 metre small rigid vehicles. The loading bay will be recessed into the building and does not impact the building façade.

The current vehicle access arrangements are proposed to be maintained, with vehicles to enter the site via the southern end of Errol Flynn Boulevard (in the south-east corner of the site) and exit directly back to Errol Flynn Boulevard via a new access.

Infrequent service vehicle access will also be facilitated at the northern end and via the concourse area between the two buildings. This is for bump-in/ bump-out special event periods and limited to small rigid trucks and vans/ utes.

5. PARKING AND LOADING ASSESSMENT

05

5.1. Car Parking

5.1.1. Parking Provision Rates

There are no specific parking rates for the Moore Park precinct included in SEPP 47 – Moor Park Showground. As such, an empirical assessment has been completed based on the outcomes of the Swans staff travel mode survey.

The survey found that approximately 78 per cent of staff currently drive to work and with no carpooling, there is an average occupancy of one person per car. There are currently 105 Swans staff and all that drive, park in the Entertainment Precinct multi-storey car park under prior arrangement. The typical weekday demand is 82 parking spaces.

Under a five to 10-year plan, it is anticipated that an additional 82 staff will work at the site, including NSW Swifts staff (11), tenants (30), Swans AFLW staff (4) and future staff for both Swans and Swifts (37). Based on existing travel mode share patterns, the additional 82 Swans staff would likely generate an additional parking demand of up to 64 parking spaces over existing.

It is also understood that some minor car-pooling by players occurs, and assuming an average car occupancy of 1.2, the existing 46 Swans players are estimated to currently generate a demand for 38 car parking spaces. Assuming similar travel characteristics for the anticipated additional 49 players (14 NSW Swifts players and 35 Swans AFLW players) would result in a parking demand of 41 parking spaces.

A summary of the parking demand of existing staff and players, along with the future anticipated increase in parking demand is provided in Table 5.1

Table 5.1: Existing and future parking demand

Demand	Department	Staff/ players	Estimated parking demand
Existing demand	Sydney Swans Staff	105	82
	Sydney Swans Players	46	38
	Sub-total	*151*	*120*
Future demand	NSW Swifts Staff	11	9
	NSW Swifts Players	14	12
	New Jobs (Tenants, Childminding etc (estimate))	30	23
	Sydney Swans AFLW Staff	4	3
	Sydney Swans AFLW Players	35	29
	5 / 10 year growth spaces (Swans/Swifts)	37	29
	Sub-total	*131*	*105*
		Total	**225**

5.1.2. Adequacy of Car Parking Supply

As discussed, the proposed development includes provision for 11 on-site parking spaces. These spaces will be assigned for use by the Swans playing group and executive team. With no specific parking rates applying under the relevant environmental planning instruments, there is no formal requirement for parking. That said, assuming adoption of one space per 75m^2 GFA (as applied in the Sydney LEP 2012 for commercial uses) for the approximately 10,800 square metres, the proposal could provide a maximum of 144 spaces.

The provision of 11 spaces is less than this and is considered appropriate noting that the on-site provision also minimises parking demand in the multi-storey car park, especially on games days. Whilst development on the site is not controlled by the Sydney LEP 2012, this is consistent with the maximum parking rates adopted within the LEP.

All Swans staff that drive are expected to continue to park the Entertainment Quarter multi-storey car park following full site development. With an existing typical weekday peak demand of 43 per cent (1,100 vacant spaces), the minor additional parking demand associated with the increase in staff could easily be accommodated within the available supply. On-street parking along Driver Avenue would also continue to cater for short-term visitor parking demand across a typical weekday. It is understood that approximately 80 per cent of staff currently attend game days either to work or watch the game. Based on the potential increase of 41 Swans AFL and AFLW staff, this would equate to an additional parking demand of around 25 spaces which is considered minor. They would also tend to arrive early and leave later than the general public.

Some minor set-down/ pick-up activity can be accommodated on-site (under prior agreement) or on-street on Driver Avenue and Errol Flynn Boulevard. Game day scenarios would not be expected to materially change as a result of the proposed development.

It is noted that the proximity of the new Moore Park light rail stop and implementation of potential sustainable travel initiatives on occupation of the building (as detailed in Section 8) will encourage a shift in staff travel mode and ultimately less demand for travel alone in a private car.

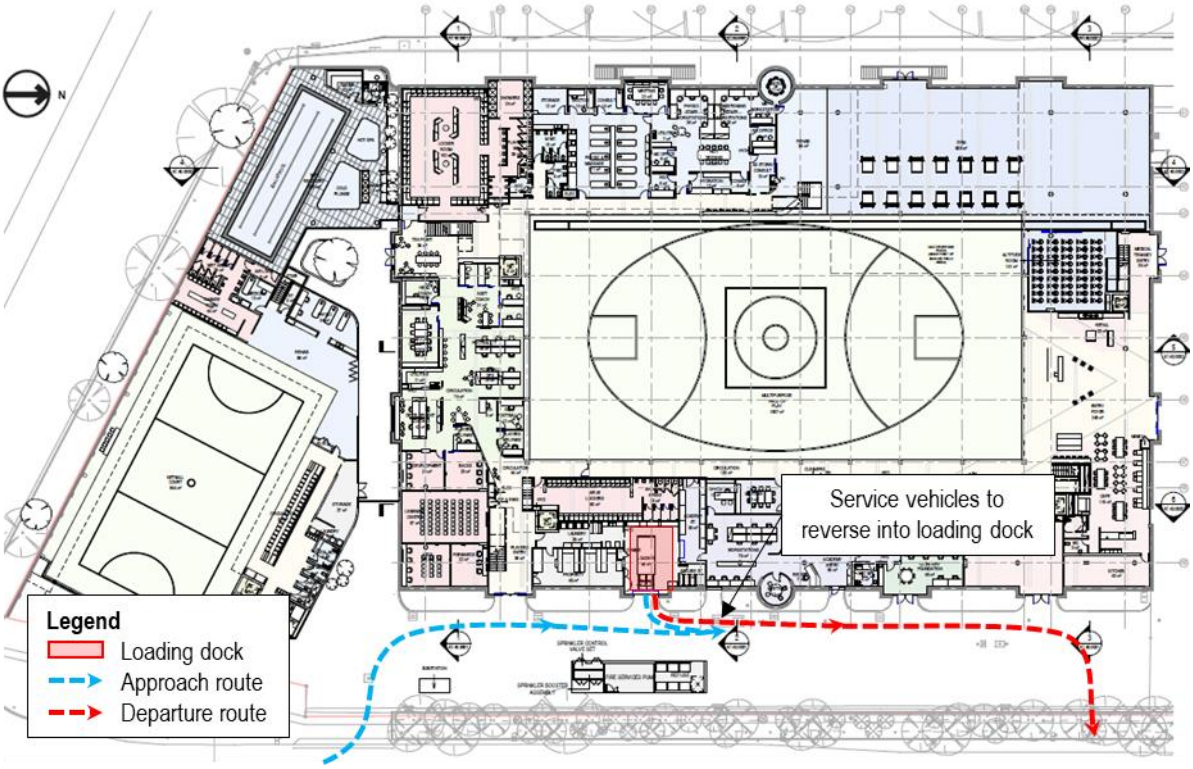
5.2. Loading and Servicing

Loading is proposed to occur via a single loading dock on the eastern side of the building suitable for all vehicles up to 6.8-metre-long rigid trucks. It is anticipated that typical weekday loading activity would amount to 10 deliveries per day. With appropriate scheduling of deliveries, it is expected that the loading dock will be able to accommodate the servicing demands of the site.

Services vehicles would enter the site via the southern gate on Errol Flynn Drive (close to Lang Road) and reverse into the loading dock. On exit, vehicles will drive forward out of the loading dock and continue north and exit via a new access to Errol Flynn Boulevard. Garbage collection will occur on the internal road adjacent to the eastern side of the building by appointed private contractors.

The majority of loading is expected to occur outside road network and Entertainment Quarter precinct peak periods, generally in the morning and at night when surrounding vehicle and pedestrian movements are low. Deliveries could be scheduled through a booking system coordinated by building management to avoid service vehicles arriving at the same time. The loading dock and its access arrangements are shown in Figure 5.1.

Figure 5.1: Loading dock and access arrangements



Base image source: Populous, Project Number: 15.7401.00, Drawing Number: AT.20.0000 dated 11 April 2019

6. SUSTAINABLE TRANSPORT INFRASTRUCTURE

06

6.1. Bicycle Parking

To support accessibility for cyclists, appropriate bicycle parking will be included as part of the development. Considering the variety of different uses proposed, reference has been made to the Green Star Design & As Built v1.2 transport category prescriptive pathway requirements. The recommended provision based on these guidelines is shown in Table 6.1.

Table 6.1: Recommended Green Star bicycle parking provision

Department	People	Recommended bicycle parking rate	Recommended bicycle parking provision
Sydney Swans	Staff – 176 Players – 81 Visitors – 75 [1]	Staff parking: 7.5% of staff Visitor parking: 5% of visitors	Staff: 20 spaces Visitors: 4 spaces
NSW Swifts	Staff – 11 Players – 14 Visitors – 25 [1]		Staff: 2 spaces Visitors: 2 spaces
		Total	**Staff: 22 spaces** **Visitors: 6 spaces**

As shown in Table 6.1, it is recommended that 22 bicycle spaces be provided for staff and six for visitors.

Staff bicycle parking should be provided in a secure location while visitor parking should be provided within the public domain to encourage use. There is also bicycle racks provided within the broader Entertainment Quarter precinct with observations confirming only moderate daily use.

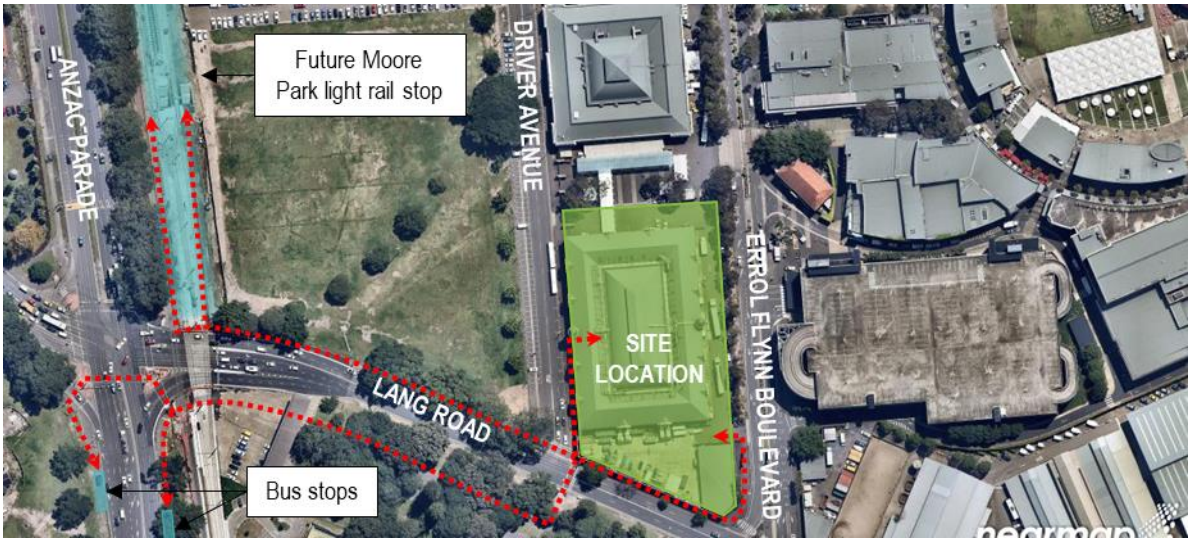
The proposal will include provision of bicycle parking facilities in accordance with the Green Star guidelines along the eastern side of the site and will be designed in accordance with AS 28900.3:2015: Bicycle Parking.

6.2. Walking, Cycling and Public Transport

The Entertainment Quarter Precinct provides a high level publicly accessible bicycle parking, an extensive network of established pedestrian/ shared paths and cycleways providing good connection between the site and sporting/ entertainment facilities. A walking and cycling network is important near the CBD and tourist destinations like the Entertainment Quarter and surrounding sporting precinct. This is highlighted by the implementation of dock-less share bike schemes throughout City of Sydney whereby users can download an app, locate a shared-bike nearby, ride to their destination and leave the bike in that location.

The walking and cycling network feeds into the supporting high frequency public transport network near the site, including the existing bus services along Anzac Parade and the future Moore Park light rail stop which, when operational, will provide services at four-minute frequencies during peak periods. Both the bus and light rail services will be within a 400 metre walk of the site, with safe pathways and signalised crossing points shown in Figure 6.1.

Figure 6.1: Safe pedestrian paths to public transport services



Base image source: Nearmap

7. TRAFFIC IMPACT ASSESSMENT

07

7.1. Traffic Generation

Given the various proposed land uses, the lack of relevant traffic generation rates in the Roads and Maritime Guide to Traffic Generating Developments 2002 (the Guide 2002) and recognising the sites location in relation to the future CSELR, traffic generation associated with the proposal have been estimated based on a first principles assessment.

As discussed in Section 4.2, 82 staff and 49 players are anticipated to be accommodated within the Royal Hall of Industries building following full development, in addition to the existing 105 Swans staff and 46 players which will be relocated from the Basil Sellers Centre. Assuming no change to existing travel patterns and assuming new staff will adopt the similar travel patterns to existing Swans staff, the number of staff trips in any peak hour has been estimated in Table 7.1.

Table 7.1: Anticipated increase in staff trips by mode (assuming no change to existing mode share)

Mode	Existing staff mode share	Estimated existing number of peak hour person trips	Estimated future number of peak hour person trips	Net change from existing peak hour person trips	Net change from existing daily trips
Car - as driver	77.7%	82	146	+64	+128
Bus	6.9%	7	13	+6	+12
Walked only	5.6%	6	10	+4	+8
Train (then walk)	5.6%	6	10	+4	+8
Bicycle	4.2%	4	8	+4	+8
Car - as passenger	0%	0	0	+0	+0
Motorbike	0%	0	0	+0	+0
Total		**105**	**187**	**+84**	**+168**

As shown in Table 7.1, based on existing travel habits it is estimated that the additional 82 staff will primarily travel to site by private vehicle, with some additional uptake in travel by public transport and active travel modes. In terms of player travel, it is understood that the majority of players currently drive outside peak periods. Notwithstanding, conservatively assuming 25 per cent of players will travel during the peak periods (approximately 12 of the additional players) and an average vehicle occupancy of 1.2 players per car as mentioned in Section 5.1 would result in approximately 10 vehicle trips during a peak hour.

It is noted that with the opening of the CSELR (anticipated to begin operation in 2020), there will be a mode shift towards light rail. This would likely result in a higher uptake from existing rail commuters allowing for easy connection to CBD train stations. There would also likely be a reduction in private vehicle trips as a result of greater convenience at key public transport interchanges within the CBD and lower costs involved, increasing the appeal of daily travel by public transport.

Table 7.2 estimates the increase in trips for each mode of transport to the site following opening of CSELR.

Table 7.2: Anticipated increase in person trips by mode (assuming no change to existing mode share)

Mode	Anticipated mode share	Estimated future number of peak hour person trips	Net change from existing peak hour person trips	Net change from existing daily trips
Car - as driver	72%	135	+53	+106
Light rail	8.5%	16	+16	+32
Bus	6.9%	13	+6	+12
Walked only	5.6%	10	+4	+8
Train (then walk)	2.8%	5	-1	-2
Bicycle	4.2%	8	+4	+8
Car - as passenger	0%	0	+0	+0
Motorbike	0%	0	+0	+0
Total		**187**	**+82**	**+102**

Table 7.2 indicates once CSELR opens, the additional private vehicle trips could be as low as 53 staff trips plus 10 player trips in a peak hour, prior to implementation of green travel initiatives discussed in Section 8. Notwithstanding, SIDRA modelling has been completed based on an increase of 74 vehicle trips (64 staff trips and 10 player trips) during the weekday peak periods based on the existing mode share of staff and assuming no light rail.

7.2. Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

- configuration of the arterial road network in the immediate vicinity of the site
- existing operation of intersections providing access between the local and arterial road network
- distribution of households in the vicinity of the site
- surrounding employment centres, retail centres and schools in relation to the site
- likely distribution of employee's residences in relation to the site
- configuration of access points to the site.

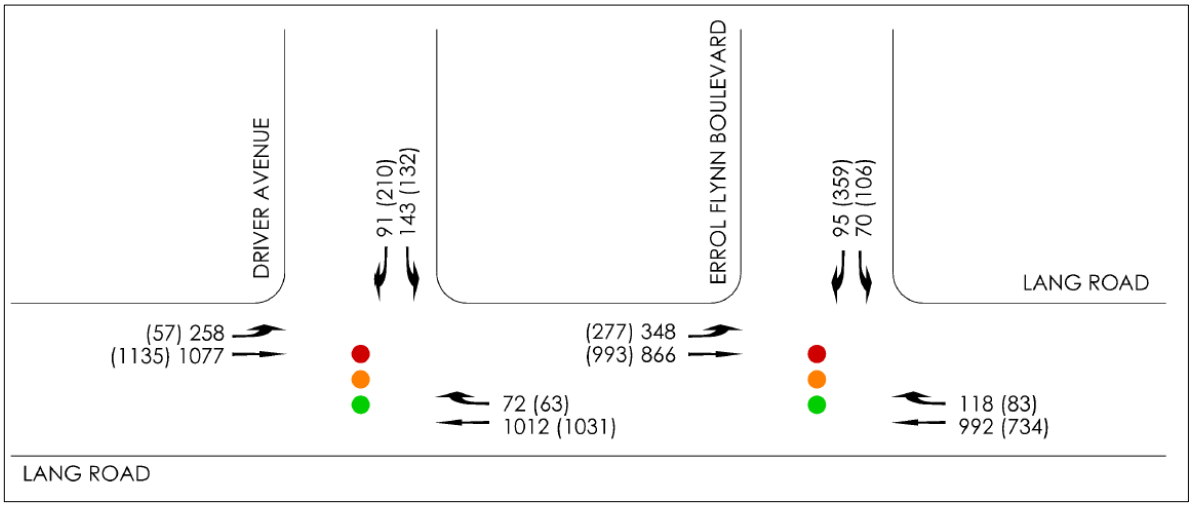
Having consideration to the above, for the purposes of estimating vehicle movements, the following distributions have been assumed:

- West: 75%
- East: 25%.

This distribution is also consistent with existing turning movements into Errol Flynn Boulevard. In addition, the directional split of traffic (i.e. the ratio between the inbound and outbound traffic movements) of 80 per cent inbound and 20 per cent outbound has been assumed in the weekday AM peak hour and the reverse in the PM peak hour, corresponding to the majority of staff arriving in the morning and departing in the afternoon.

Based on the above, Figure 7.1 have been prepared to show the estimated marginal increase in turning movements near the subject property following full site development. As mentioned in Section 7.1, the assessment has been based on an increase of 74 trips in a peak hour.

Figure 7.1: Future AM (PM) peak hour traffic volumes



7.3. Traffic Impact

The additional traffic during the weekday AM and PM peak hours have been modelled in SIDRA, with results summarised in Table 7.3.

Table 7.3: Future intersection operating conditions

Intersection	Peak	Degree of Saturation (DoS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LoS)
Lang Road/ Driver Avenue	AM	0.97	26	138	B
	PM	0.91	21	80	B
Lang Road/ Errol Flynn Boulevard	AM	0.77	24	95	B
	PM	0.78	27	95	B

Table 7.3 indicates both intersections are expected to operate similar to existing conditions, with minor increases in delay of up to six seconds. It is noted that SIDRA results indicate queues will increase at the Lang Road/ Driver Avenue by up to seven vehicles on the west approach in the AM peak hour, however will not extend to have an impact on light rail or the intersection with Anzac Parade. Against existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development and increase in staff and players could not be expected to compromise the safety or function of the surrounding road network.

On a game day, staff are expected to either travel outside of peak periods (if on a weekday) or not be working (on a weekend). As such, it is not expected that additional staff for the proposed development will result in a traffic impact on game days within the Moore Park precinct.

Given the minor increase of staff, any future staff looking to catch public transport to or from work could adequately accommodated on the extensive public transport network near the site, including the frequent buses along Anzac Parade, the future light rail at the Moore Park stop, and/ or the existing train network at Central Station. The extensive walking and cycling network would also cater for the anticipated increase in active travel trips.

The proposed development is not expected to impact existing or approved developments in the area, including CSELR which was under construction when the traffic surveys were completed.

7.4. Special Events

It is understood that there may be opportunity for the facility to host a select number of special events throughout the year.

Game day events could occur prior to the game commencing where fans may be able to participate in activities, buy merchandise at the ground floor retail stores and meet members of the football club. People travelling to the site for such game day events would already be travelling to the precinct and as such, would not represent additional or 'new' traffic or parking demand than that otherwise occurring. It is also likely that they would tend to arrive to the precinct earlier than normal, hence 'flattening' peak traffic activity.

It is also planned that the proposed development would accommodate activities associated with the Sydney Swans Academy. This would involve approximately 350 children visiting the facility on between January and October (Monday to Thursday) to train and be provided with full access to Sydney Swans expertise. The Swans Academy will be run in sessions of up to two hours with an estimated 100 children per session. This activity is currently accommodated on Tramway Oval adjacent to the SCG, however the development would allow for increased training flexibility in the event of poor weather. It is understood that approximately 60 per cent of children travelling to these sessions travel via public transport, with the remaining 40 per cent travelling via car. The majority of children are picked up via car, with a lot of carpooling taking place. Conservatively assuming parents/ carers drive their children to the venue with two to three children per car, park, and wait until these sessions conclude, it is estimated this would result in a parking demand of 40 vehicles. It is noted that this activity already occurs at the Tramway Oval approximately 300 metres away from the site and as such, this would not result in any increase to parking or traffic demand further than existing conditions.

Other special events could include club night events for staff and players such as awards nights and club anniversaries. These events would typically commence later than the weekday evening road network peak period. Based on typical weekday parking demand, the additional demand would be easily accommodated in the Entertainment Quarter multi-deck car park, and on Driver Avenue. The majority of vehicle trips would be outside of the road network peaks when traffic volumes are lower.

8. OVERVIEW GREEN TRAVEL PLAN

08

8.1. Introduction

8.1.1. Travel Plan Framework

Transport is a necessary part of life which has effects that can be managed. The transport sector is one of the fastest growing emissions sectors in Australia and therefore a travel plan provides an opportunity for reducing greenhouse gases, and for managing traffic congestion (which has adverse economic, health and social outcomes). As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure strong and prosperous communities.

The physical infrastructure being provided as part of the development is only part of the solution. A green travel plan will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and co-ordinated to achieve the most sustainable outcome possible.

8.1.2. What is a Green Travel Plan

A green travel plan (GTP) is a package of actions and strategies aimed at encouraging sustainable modes of transport such as walking, cycling, public transport and higher-occupancy car use for travel. The GTP for the Sydney Swans HQ will aim to mitigate (as far as possible) private car commuting to allow people to carry out their daily business in a more sustainable manger using the following measures:

- measures which encourage reduced car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel (such as active transport, public transport and multi-occupant vehicle use)
- reduce the need to travel or make travelling more efficient (incentives or 'carrots').

A GTP would allow staff and visitors to the proposed facility to achieve the above outcomes by providing flexibility to staff and visitors about how and when they travel. This is especially important in well planned precincts, such as the Entertainment Quarter, which attracts a high number of visitors and staff. As part of the proposed development, a GTP would be implemented after the opening of the development which would tie in with the broader precinct to achieve consistency.

The GTP would seek to understand the existing public transport, cycling and walking catchments to identify gaps in the network for improvement. Similarly, opportunities would also be identified to provide better connectivity between the site and other centres. The GTP would also understand the origins and destinations of staff to understand what targeted actions would bring about the most benefit. This would occur using staff surveys, either by physical means such as interviews or by electronic means such as email surveys. Future travel conditions, including expected mode shares for different scenarios would be considered prior to the development of actions.

Implementation of a GTP for the facility and broader Entertainment Quarter will benefit from the established pedestrian and cycling network surrounding it as well as the high frequency of bus services and future CSELR that runs next to it. The travel plan will seek to:

- advise staff and visitors on the wider travel choices available to them and encourage use of sustainable travel modes
- aim to reduce congestion on the surrounding road network by causing mode shift from private vehicles, or at the very least encourage higher vehicle occupancy to reduce private vehicle trips.

8.2. Site specific measures

The location of the site, in terms of its proximity to a wide range of sustainable transport including frequent bus routes along Anzac Parade and the future Moore Park light rail stop, is a key consideration for development of the site.

A GTP will put in place measures to raise awareness and further influence the travel patterns of people living, working or visiting the site with a view to encouraging modal shift away from cars.

The following potential measures and initiatives could be implemented to encourage more sustainable travel modes:

1. Limiting on-site parking provision.
2. Provide a Travel Access Guide (TAG) which would be provided to all residents and staff and publicly available to all visitors. The document would be based on facilities available at the site and include detail on the surrounding public transport services and active transport initiatives. The TAG would be updated as the surrounding transport environment changes.
3. Providing public transport information boards/ apps to inform residents, staff and visitors of alternative transport options (the format of such information boards would be based upon the TAG).
4. Providing a car sharing pod(s) on-site or nearby and promoting the availability of car sharing pods for trips that require the use of private vehicles.
5. Providing bicycle facilities including secure bicycle parking for staff, bicycle racks/ rails for visitors and shower and change room facilities.
6. Encouraging staff that drive to work and park on surrounding roads to carpool through creation of a carpooling club or registry/ forum.
7. Regularly promoting ride/ walk to work days.
8. Providing a regular newsletter to all residents and staff members bringing the latest news on sustainable travel initiatives in the area.

8.2.1. Travel Access Guide

A TAG provides information to residents, staff and visitors on how to travel to the site using sustainable transport modes such as walking and public transport. The information is presented visually in the format of a map (or app) showing the site location and nearby transport modes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure (or app) to be included in a welcome pack or on the back of company stationery and business cards.

8.2.2. Information and Communication

Several opportunities exist to provide residents, staff and visitors with information about nearby transport options. Connecting residents, staff and visitors with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour. These include:

- Transport NSW provides bus, train and ferry routes, timetables and journey planning through their Transport Info website: http://www.transportnsw.info.

Council provides a number of services and a range of information and events to encourage people of all levels of experience to travel by bicycle: https://www.innerwest.nsw.gov.au/explore/parks-sport-and-recreation/walking-and-cycling.

In addition, connecting residents, staff and visitors via social media may provide a platform to informally pilot new programs or create travel-buddy networks and communication.

8.2.3. Monitoring of the GTP

There is no standard methodology for monitoring the GTP, but it is suggested that it be monitored to ensure that it is achieving the desired benefits and modify it if required. It will not be possible at this stage to state what additional modifications might be made as this will be dependent upon the particular circumstances prevailing at that time.

The GTP should be monitored on a regular basis, e.g. yearly, by carrying out travel surveys. Travel surveys will allow the most effective initiatives of the GTP to be identified, and conversely less effective initiatives can be modified or replaced to ensure the best outcomes are achieved. It will clearly be important to understand people's reasons for travelling the way they do: - any barriers to changing their behaviour, and their propensity to change.

To ensure the successful implementation of the GTP, a Travel Plan Coordinator (TPC) should be appointed to ensure the successful implementation of the GTP. This could be the building manager or a member of the body corporate.

8.3. Summary

The proposed development would be able to develop and utilise a travel plan to actively promote increased use of sustainable transport modes. Although it is difficult to predict what measures might be achievable, the above measures provide a framework for the site and implementation of a future travel plan.

9. OVERVIEW CONSTRUCTION TRAFFIC MANAGEMENT PLAN

9

9.1. Overview

This section seeks to provide an overview of the Construction Traffic Management Plan (CTMP) initiatives to be implemented as part of the construction works associated with the proposed development.

Specifically, this overview CTMP considers the following:

- construction site access arrangements
- anticipated truck volumes during construction stages
- truck routes to/ from the site
- requirements for works zones
- pedestrian and cyclist access
- site personnel parking
- traffic control measures
- overview of CTMP requirements.

9.2. Principles of Traffic Management

The general principles of traffic management during construction activities are as follows:

- minimise the impact on pedestrian and cyclist movements
- maintain appropriate public transport access
- minimise the loss of on-street parking
- minimise the impact on adjacent and surrounding buildings
- maintain access to/ from adjacent buildings
- restrict construction vehicle movements to designated routes to/ from the site
- manage and control construction vehicle activity near the site
- carry out construction activity in accordance with approved hours of works.

9.3. Work Hours

The works will be carried out during the approved work hours. Indicative work hours are as follows:

- Weekdays: 7:30am – 5:30pm
- Saturdays: 7:30am – 3:00pm
- Sundays and public holidays: no work permitted.

Workers would be advised of the approved work hours during induction. Any works outside of the approved work hours would be subject to specific prior approval from the appropriate authorities. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access.

9.4. Site Access and Loading

Construction vehicle access will be provided via Errol Flynn Boulevard, with vehicles entering the site at the southern end and exiting via an existing crossover on Errol Flynn Boulevard between the site and the Hordern Pavilion.

Traffic controllers will likely be needed at both site accesses to manage pedestrian movement when trucks are entering and exiting the site. All loading is expected to take place wholly within the site. Should a works zone be required, an application will be made to the relevant authorities prior to commencement of works.

As part of the detailed CTMP, a traffic control plan (TCP) will be prepared in accordance with the principles of the Roads and Maritime Services Traffic Control at Work Sites manual. The TCPs primarily show where construction signs will be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle movements.

Access to the neighbouring sites by emergency vehicles would not be affected by the works as the road and footpath frontages would be unaffected. General access to the adjacent Entertainment Quarter and multi-storey car park will also be maintained. Emergency protocols on the site would include a requirement for site personnel to assist with emergency access from the street. All truck movements to the site and/or incident point would be suspended and cleared.

9.5. Construction Staff Parking

It is anticipated that there will be up to 100 workers on-site at any given time during peak activities.

No construction worker parking will be provided. Given the site's proximity to a range of high frequency public transport services, workers will be encouraged to use public transport to access the site. During site induction, workers will be informed of the existing bus network servicing the site. Appropriate arrangements will be made for any equipment/ tool storage and drop-off requirements.

9.6. Heavy Vehicle Traffic Generation

Construction vehicles generated by the site would generally include vehicle up to 12.5 metre heavy rigid vehicles. There is expected to be up to 10 trucks per day or one to two trucks per hour accessing the site during peak activities.

Based on these low volumes, it is anticipated that the construction traffic would have a minimal impact on the surrounding road network. Notwithstanding, construction vehicle movements will be minimised/ avoided during peak hours where possible. Through consultation with SCO, Roads and Maritime and TMC, construction traffic would likely have to be restricted from two hours before a Special Event until two hours after, however it is understood noise limited work could still occur on-site. Any such restrictions would be addressed in the detailed CTMP for the development.

9.7. Heavy Vehicle Access Routes

Heavy vehicle movements would be restricted to designated routes and confined to the arterial road network wherever feasible. Truck routes to/ from the site have been identified with the aim of providing the most direct routes to/ from the site as well as minimising the impact of heavy vehicles on local roads and other surrounding developments including Sydney Football Stadium and CSELR.

Figure 9.1 provide a summary of the anticipated construction vehicle routes to/ from the site. Truck drivers will be advised of the designated truck routes to/ from the site.

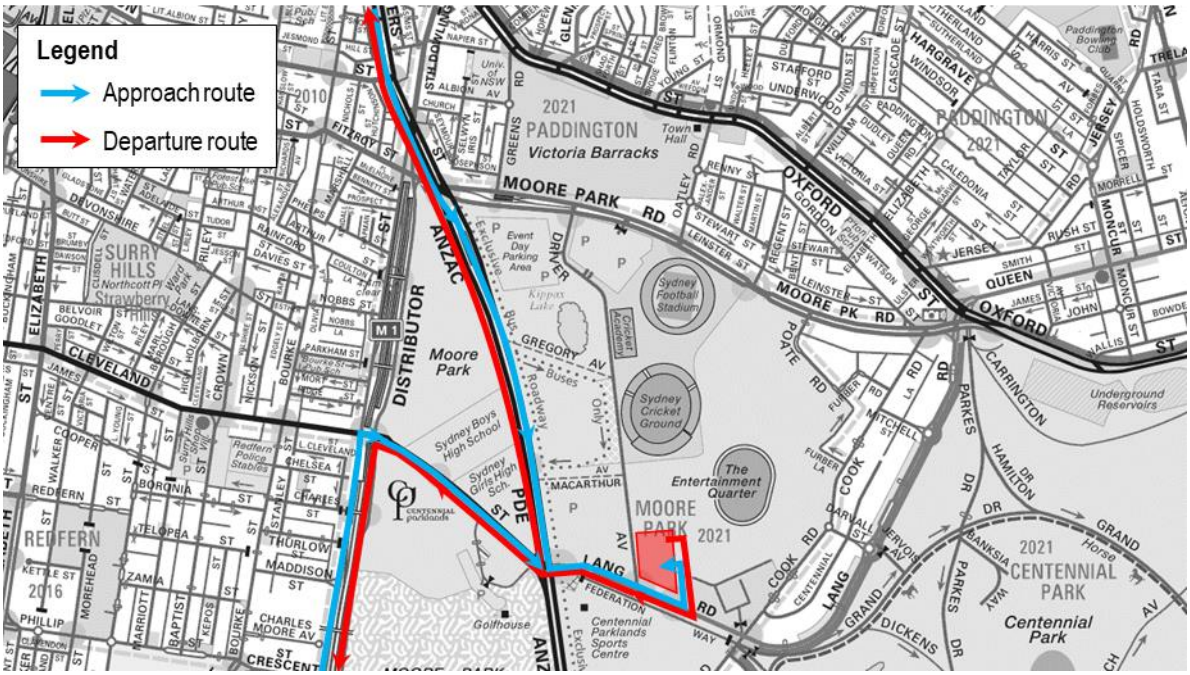
Approach Routes

- North: Eastern Distributor, Anzac Parade, Lang Road, Errol Flynn Boulevard
- South: Eastern Distributor, South Dowling Street, Cleveland Street, Lang Road, Errol Flynn Boulevard.

Departure Routes

- North: Errol Flynn Boulevard, Lang Road, Anzac Parade, Eastern Distributor
- South: Errol Flynn Boulevard, Lang Road, Cleveland Street, South Dowling Street, Eastern Distributor.

Figure 9.1: Construction vehicle routes



Base image source: Sydway

9.8. Pedestrian and Cyclist Access

Where required B-Class hoardings will be installed along the perimeter of the site where overhead works are occurring to maintain and ensure safe pedestrian and cyclist passage adjacent to the site. Where B-Class hoarding is not required, A-Class hoarding will be provided. It is likely that traffic controllers will be required at both site accesses to also manage pedestrian/ cyclist movements when heavy vehicles are accessing the site. The corresponding traffic management plans will assist in minimising the impacts to pedestrian and cyclist movements along Lang Road and Driver Avenue from construction related traffic.

Truck movements will be avoided during peak hours where possible to minimise the impact on pedestrians and cyclists.

9.9. Other Construction Details

No road closures are expected to be required during construction. Should a road closure be required, the appropriate approvals will be sought prior to construction commencing.

Any use of cranes during the construction works will be completed within the bounds of the site.

Given the heritage nature of the site, construction works will largely be refurbishment works. As such, the volume of materials to be extracted, processed or stored onsite during construction is expected to be low.

9.10. Stakeholder Consultation Strategy

Prior approval from City of Sydney and Transport for NSW Sydney Coordination Office will be required along with consultation with the Entertainment Quarter. Ongoing consultation with key stakeholders and adjacent landowners will be key to ensuring construction impact is minimised.

9.11. Overview of CTMP Requirements

This letter provides an overview of the CTMP initiatives that would be implemented for the demolition and construction of the Sydney Swans Headquarters and Community Centre development. A detailed CTMP would cover the following additional information:

- Description of construction activities and duration.
- Construction work hours.
- Detailed assessment of construction traffic impacts including any cumulative impacts.
- Details regarding any one-off activities for installation of cranes and other equipment.
- Swept path analysis of heavy vehicle access to the site and Works Zone.
- Detailed assessment of on-street parking impacts.
- Emergency vehicle access.
- Impacts to public transport services.
- Traffic Control Plan(s).
- Contact details of key project personnel.

10. CONCLUSION

10

CONCLUSION

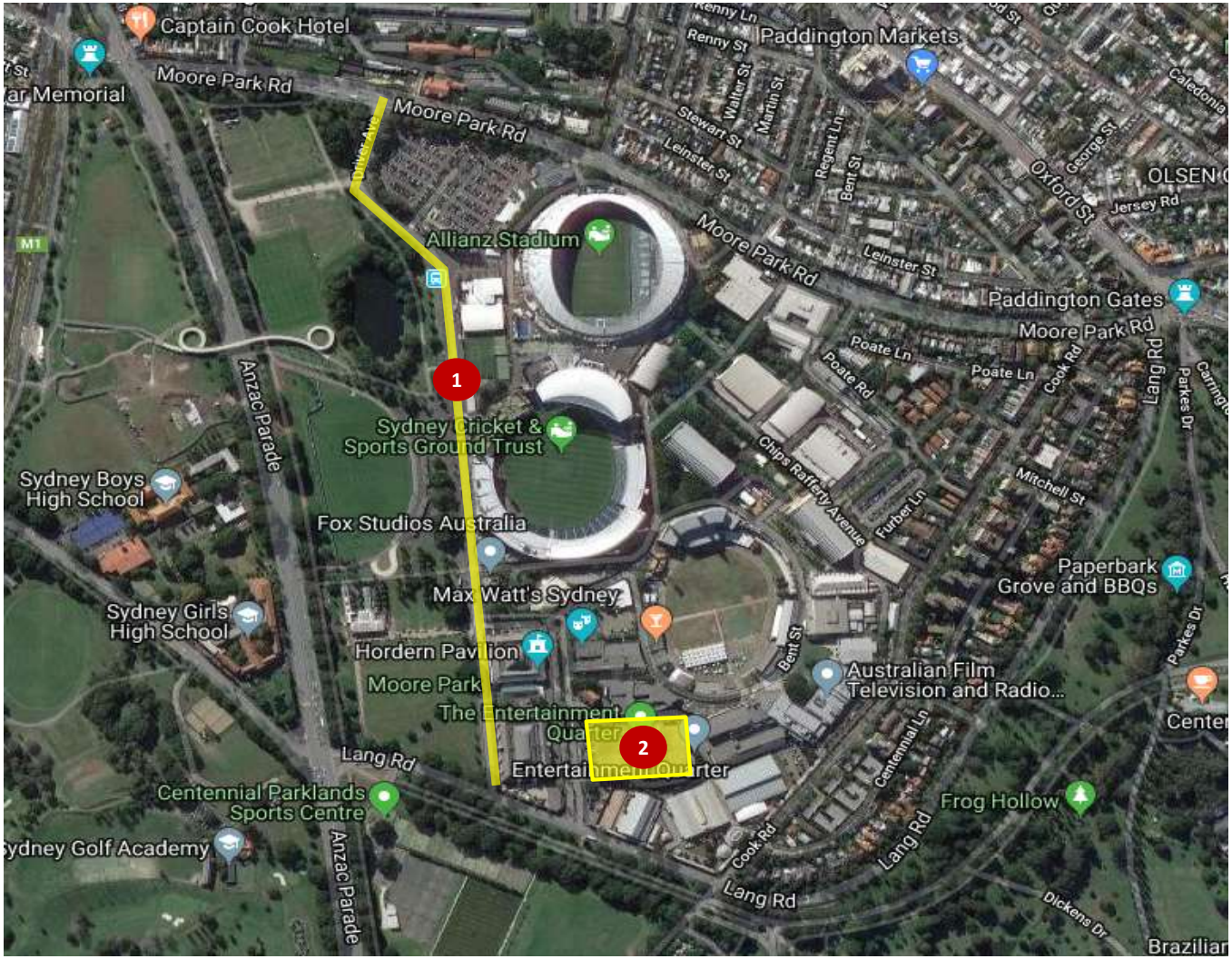
Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The proposed development is expected to generate an additional car parking demand of up to 105 vehicles.
2. The development proposed 11 car parking spaces on the eastern side of the site to be designated to players and the executive team, while the remaining additional parking demand can adequately be accommodated within the Entertainment Quarter multi-storey car park.
3. The recommended provision of 28 bicycle spaces for staff and visitors will be accommodated on the eastern side of the site.
4. The proposed loading provision of one service vehicle bay is considered acceptable for the development, with the loading access arrangements consistent with existing conditions.
5. The proposed development is expected to generate up to 74 vehicle trips in a weekday peak hour assuming existing travel patterns by staff are maintained, noting the nearby light rail is expected to open in 2020. There is not expected to be any additional trips on game days.
6. The addition traffic generated by the development could not be expected to compromise the safety or function of the surrounding road network.
7. Green travel initiatives should be implemented post development to encourage staff and visitors to travel to site by public transport or active modes.
8. The construction impact of the proposed development is expected to be negligible, with construction activity to be reduced/ avoided during peak hours where possible.

A. SURVEY RESULTS

A

Client	GTA
Date	Saturday, 2nd February 2019
Description	Moore Park Parking Survey



Location

1. Driver Ave
2. Multi Story Car Park

Client	GTA
Location	1. Driver Ave
Date	Saturday, 2nd February 2019
Description	Moore Park Parking Survey

MATRIX Traffic and Transport Data

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Driver Ave - West Side										
Lang Rd										
	No Stopping									
	4P	Meter Parking 7days special event clearway (90' angle Parking)	68	15 buses	15 buses	15 buses	15 buses	15 buses	10 buses	4 buses
Driveway to Moore Park										
	No Stopping									
	Taxi Zone	During Special Events	1	0	0	0	0	0	0	0
	No Parking									
	No Stopping									
	4P	Meter Parking 7days special event clearway (Parallel Parking)	5	0	0	0	0	0	0	0
	No Stopping									
	4P	Meter Parking 7days (Parallel Parking)	35	0	0	0	0	0	0	0
	No Parking									
	No Stopping									
Moore Park Rd										
	Total		**109**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Driver Ave - East Side										
Moore Park Rd										
	No Stopping									
	No Parking									
	4P	Meter Parking 7days (Parallel Parking)	26	0	0	0	0	0	0	0
	No Stopping									
	4P	Meter Parking 7days (Parallel Parking)	12	0	0	0	0	0	0	0
	No Stopping									
	4P	Meter Parking 7days	11	0	0	0	0	0	0	0
	No Stopping									
Lang Rd										
	Total		**49**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Client	GTA
Location	2. Multi Story Car Park
Date	Saturday, 2nd February 2019
Description	Moore Park Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Moore Park - Off Street										
Ground Level										
	No Restriction		116	116	116	116	116	110	96	45
	Disabled Parking		39	15	39	39	39	35	24	17
	P	Prams	9	7	9	9	9	9	6	3
	P	Reserved for Car Wash	31	0	0	0	0	0	0	0
Level 1										
	No Restriction		294	293	293	294	294	286	257	134
Level 2										
	No Restriction		278	273	278	278	278	262	243	118
	P	Reserved Parking only Foodco (Penalties will apply)	18	5	6	6	7	7	4	2
Level 3										
	No Restriction		266	142	266	266	266	260	244	165
	P	Reserved Parking only	30	0	3	3	5	7	5	1
Level 4										
	No Restriction		296	6	90	296	295	286	260	208
Level 5										
	No Restriction		296	1	1	281	290	271	259	214
Level 6 - Roof Level										
	No Restriction		316	1	1	208	315	291	273	217
	Total		**1989**	**859**	**1102**	**1796**	**1914**	**1824**	**1671**	**1124**
	% Capacity			**43%**	**55%**	**90%**	**96%**	**92%**	**84%**	**57%**

Client	GTA
Location	1. Driver Ave
Date	Wednesday, 6th February 2019
Description	Moore Park Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Driver Ave - West Side										
Lang Rd										
	No Stopping									
	4P	Meter Parking 7days special event clearway (90' angle Parking)	68	15	17	18	18	13	10	6
Driveway to Moore Park										
	No Stopping									
	Taxi Zone	During Special Events	1	0	0	0	0	0	0	0
	No Parking									
	No Stopping									
	4P	Meter Parking 7days special event clearway (Parallel Parking)	5	2	3	3	3	2	2	2
	No Stopping									
	4P	Meter Parking 7days (Parallel Parking)	35	13	18	22	20	21	17	13
	No Parking									
	No Stopping									
Moore Park Rd										
	Total		**109**	**30**	**38**	**43**	**41**	**36**	**29**	**21**
	% Capacity			**28%**	**35%**	**39%**	**38%**	**33%**	**27%**	**19%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Driver Ave - East Side										
Moore Park Rd										
	No Stopping									
	No Parking									
	4P	Meter Parking 7days (Parallel Parking)	26	16	19	21	20	20	16	11
	No Stopping									
	4P	Meter Parking 7days (Parallel Parking)	12	8	7	5	5	3	3	2
	No Stopping									
	4P	Meter Parking 7days	11	5	5	4	3	5	5	3
	No Stopping									
Lang Rd										
	Total		**49**	**29**	**31**	**30**	**28**	**28**	**24**	**16**
	% Capacity			**59%**	**63%**	**61%**	**57%**	**57%**	**49%**	**33%**

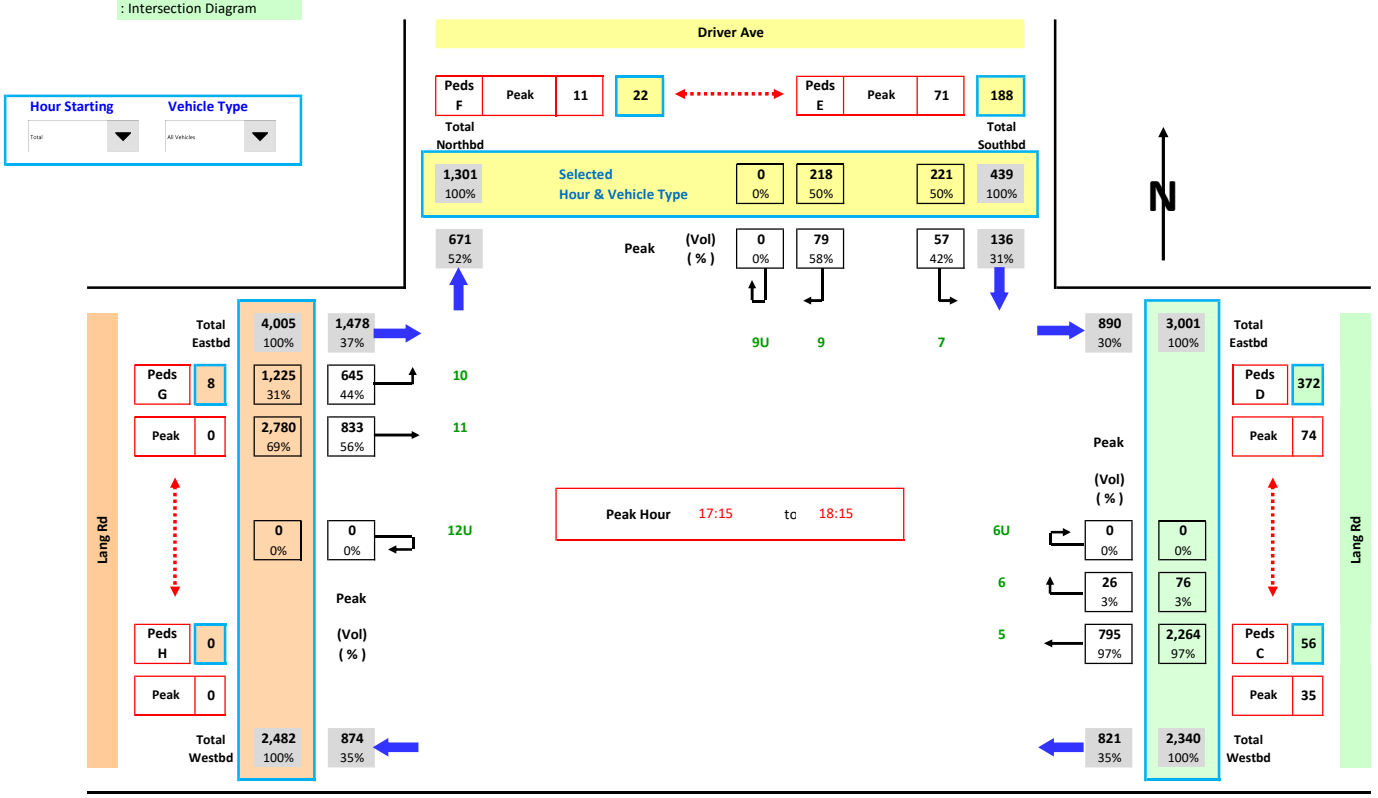
Client	GTA
Location	2. Multi Story Car Park
Date	Wednesday, 6th February 2019
Description	Moore Park Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Moore Park - Off Street										
Ground Level										
	No Restriction		116	108	111	112	114	114	105	100
	Disabled Parking		39	23	22	19	16	14	10	8
	P	Prams	9	8	8	9	9	8	5	4
	P	Reserved for Car Wash	31	9	7	10	11	11	8	5
Level 1										
	No Restriction		294	289	287	291	294	280	264	221
Level 2										
	No Restriction		278	243	240	240	238	203	182	155
	P	Reserved Parking only Foodco (Penalties will apply)	18	5	5	5	4	4	3	2
Level 3										
	No Restriction		266	126	126	143	150	113	84	57
	P	Reserved Parking only	30	1	1	1	1	1	1	1
Level 4										
	No Restriction		296	9	9	9	9	6	4	2
Level 5										
	No Restriction		296	1	1	1	1	1	0	0
Level 6 - Roof Level										
	No Restriction		316	0	0	0	0	0	0	0
	Total		**1989**	**822**	**817**	**840**	**847**	**755**	**666**	**555**
	% Capacity			**41%**	**41%**	**42%**	**43%**	**38%**	**33%**	**28%**

Job No. : N4764
Client : GTA
Suburb : Moore Park
Location : 1. Lang Rd / Driver Ave

Day/Date : Sat, 2nd Feb 2019
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

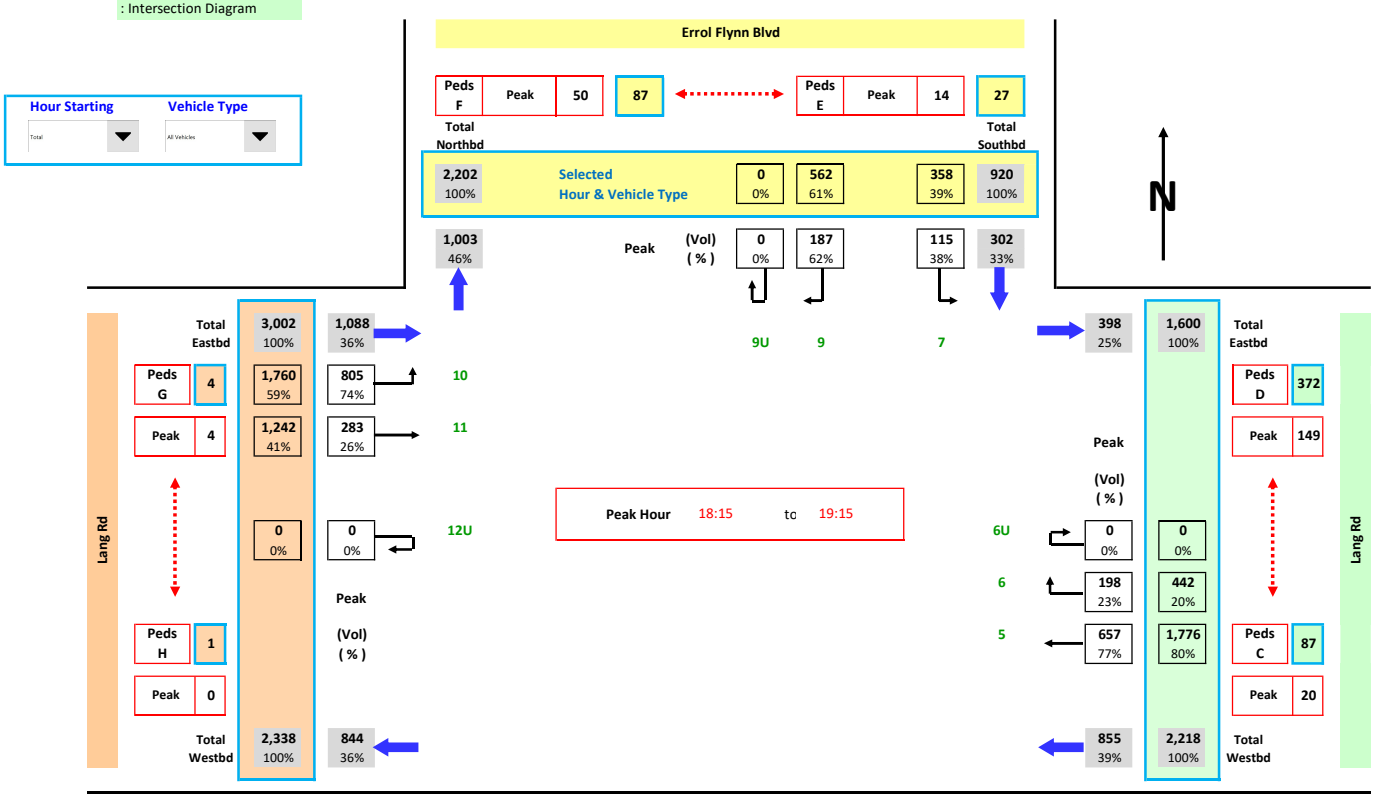
MATRIX Traffic and Transport Data



Job No. : N4764
Client : GTA
Suburb : Moore Park
Location : 2. Lang Rd / Errol Flynn Blvd

Day/Date : Sat, 2nd Feb 2019
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

MATRIX Traffic and Transport Data

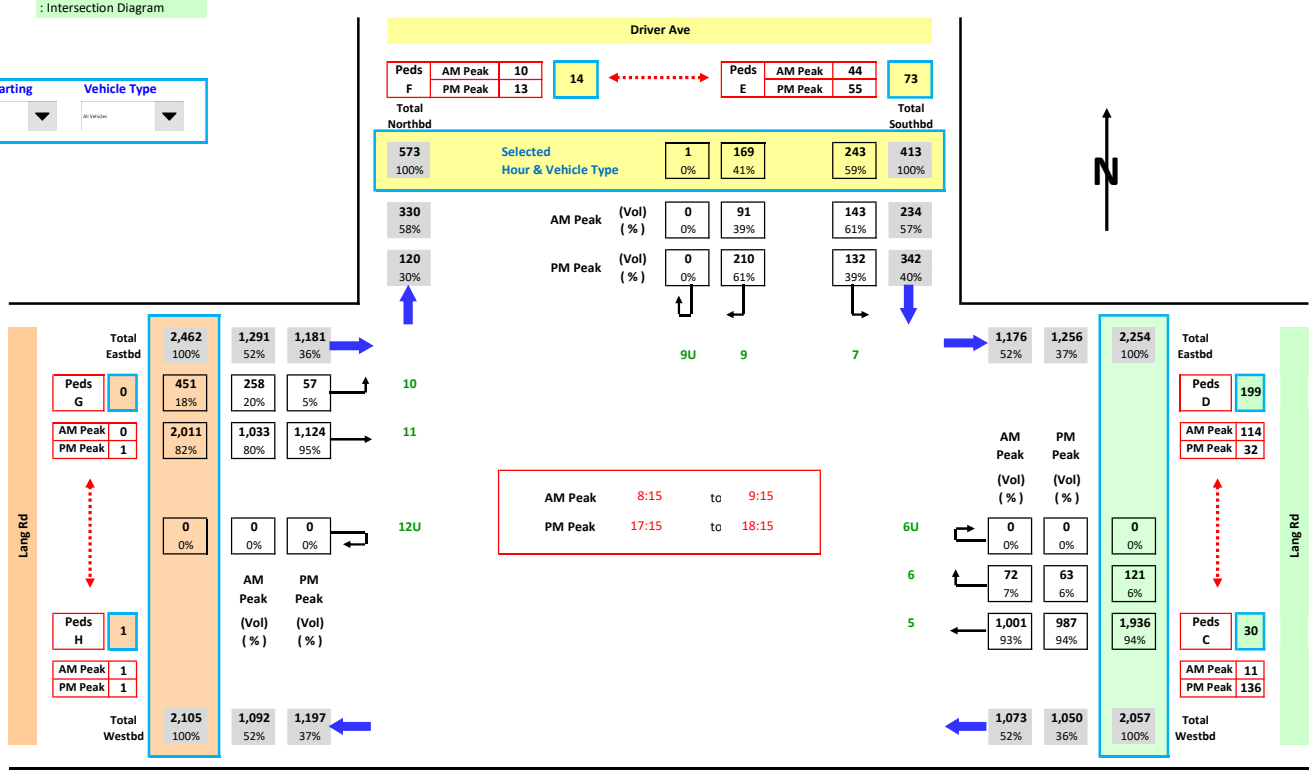


Job No. : N4764
Client : GTA
Suburb : Moore Park
Location : 1. Lang Rd / Driver Ave

Day/Date : Wed, 6 Feb 2019
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

MATRIX Traffic and Transport Data

Hour Starting: AM Totals
Vehicle Type: All Vehicles

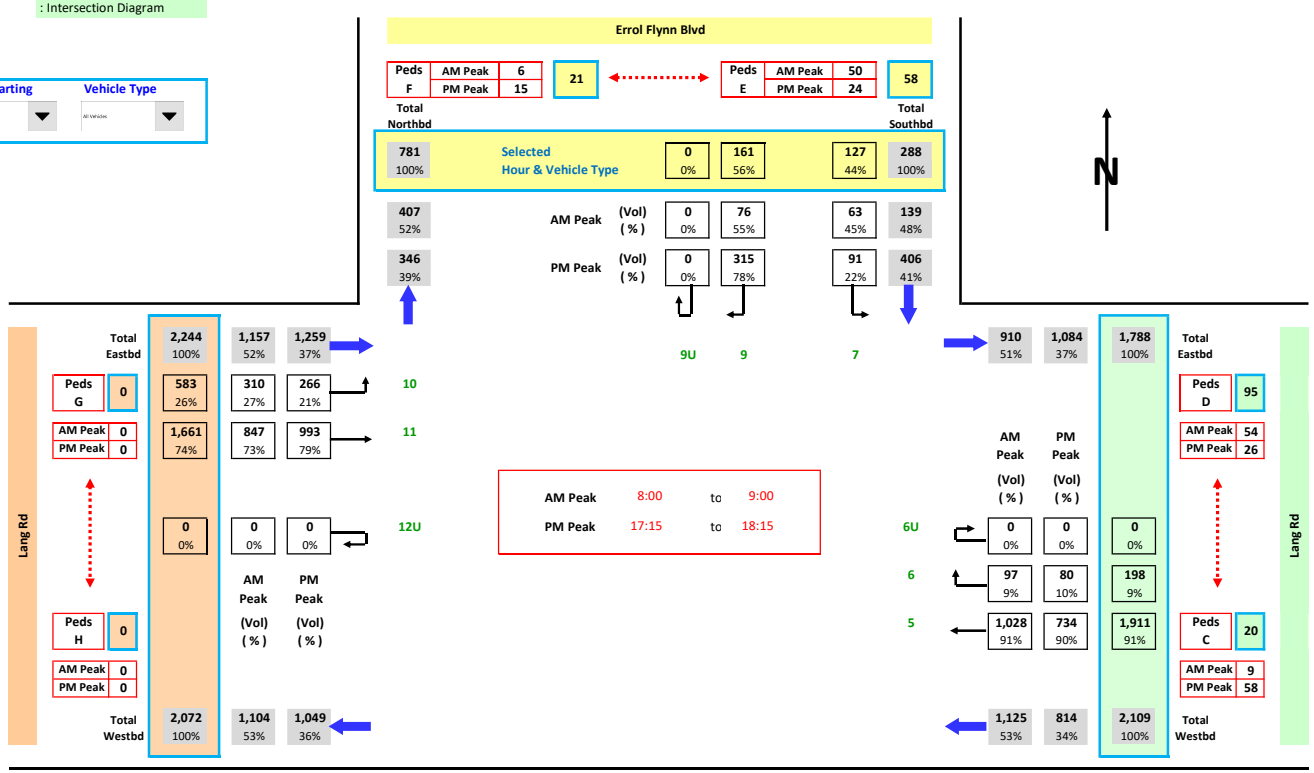


Job No. : N4764
Client : GTA
Suburb : Moore Park
Location : 2. Lang Rd / Errol Flynn Blvd

Day/Date : Wed, 6 Feb 2019
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

MATRIX Traffic and Transport Data

Hour Starting: AM Totals
Vehicle Type: All Vehicles



B. SIDRA OUTPUTS

B

USER REPORT FOR NETWORK SITE

Project: 190416sid-N165280 Sydney Swans Intersection Model

Template: Default Site User Report

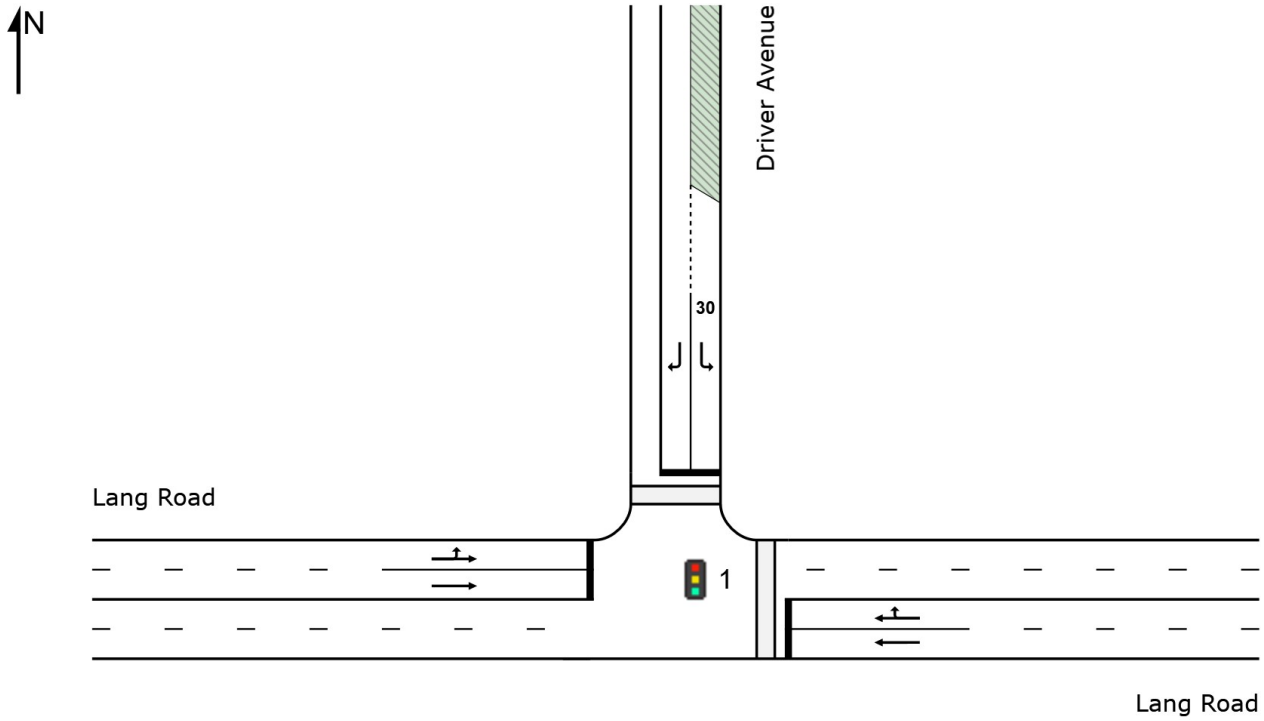
Site: 1 [1 Lang/Driver AM]

Network: 4 [AM Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog
Phase Times specified by the user
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C
Output Phase Sequence: A, C

Site Layout



Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1054	1.8	1054	1.8	0.612	7.2	LOS A	9.6	68.2	0.38	0.36	0.38	37.0
6	R2	76	1.4	76	1.4	0.612	14.5	LOS B	4.6	32.5	0.43	0.46	0.43	34.5
Approach		1129	1.8	1129	1.8	0.612	7.7	LOS A	9.6	68.2	0.38	0.37	0.38	36.7
North: Driver Avenue														
7	L2	151	2.8	151	2.8	0.906	78.6	LOS F	6.8	48.5	1.00	1.13	1.52	14.9
9	R2	96	7.7	96	7.7	0.261	46.7	LOS D	2.9	21.7	0.88	0.76	0.88	23.4
Approach		246	4.7	246	4.7	0.906	66.2	LOS E	6.8	48.5	0.95	0.98	1.27	17.9
West: Lang Road														
10	L2	272	5.0	272	5.0	0.932	23.3	LOS B	11.8	84.5	0.25	0.49	0.45	31.7
11	T1	1087	2.0	1087	2.0	0.932	20.3	LOS B	11.8	84.5	0.25	0.43	0.44	20.2
Approach		1359	2.6	1359	2.6	0.932	20.9	LOS B	11.8	84.5	0.25	0.44	0.44	24.4
All Vehicles		2735	2.5	2735	2.5	0.932	19.5	LOS B	11.8	84.5	0.37	0.46	0.49	26.3

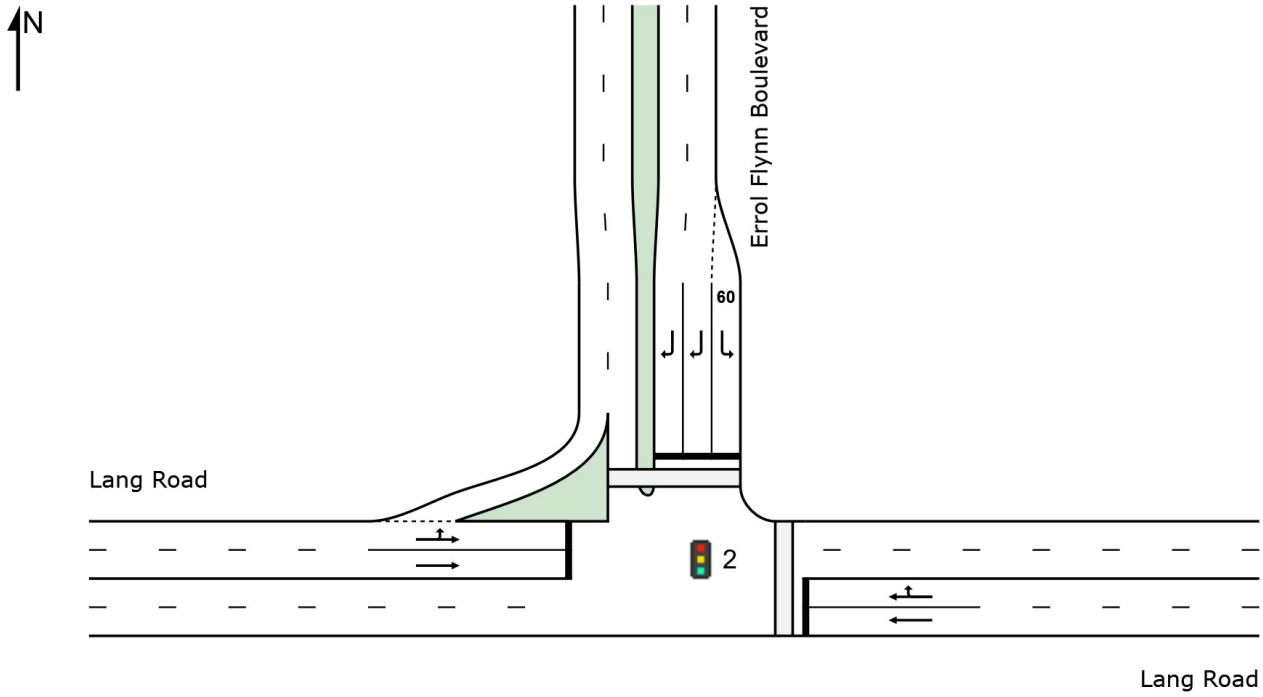
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 2 [2 Lang/ Errol Flynn AM] Network: 4 [AM Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1044	1.4	1044	1.4	0.496	8.6	LOS A	11.1	78.5	0.48	0.44	0.48	29.4
6	R2	108	1.0	108	1.0	0.496	21.2	LOS B	11.1	78.5	0.68	0.63	0.68	20.7
Approach		1153	1.4	1153	1.4	0.496	9.8	LOS A	11.1	78.5	0.50	0.46	0.50	27.7
North: Errol Flynn Boulevard														
7	L2	69	0.0	69	0.0	0.080	18.7	LOS B	1.4	9.5	0.58	0.46	0.58	19.2
9	R2	88	6.0	88	6.0	0.266	55.8	LOS D	1.6	12.0	0.96	0.72	0.96	6.2
Approach		158	3.3	158	3.3	0.266	39.5	LOS C	1.6	12.0	0.79	0.61	0.79	10.8
West: Lang Road														
10	L2	320	0.7	320	0.7	0.735	34.6	LOS C	13.4	95.0	0.88	0.84	0.88	14.1
11	T1	912	2.8	912	2.8	0.735	29.6	LOS C	13.4	95.0	0.89	0.81	0.89	19.7
Approach		1232	2.2	1232	2.2	0.735	30.9	LOS C	13.4	95.0	0.89	0.82	0.89	18.0
All Vehicles		2542	1.9	2542	1.9	0.735	21.9	LOS B	13.4	95.0	0.70	0.64	0.70	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

USER REPORT FOR NETWORK SITE

Project: 190416sid-N165280 Sydney Swans Intersection Model

Template: Default Site User Report

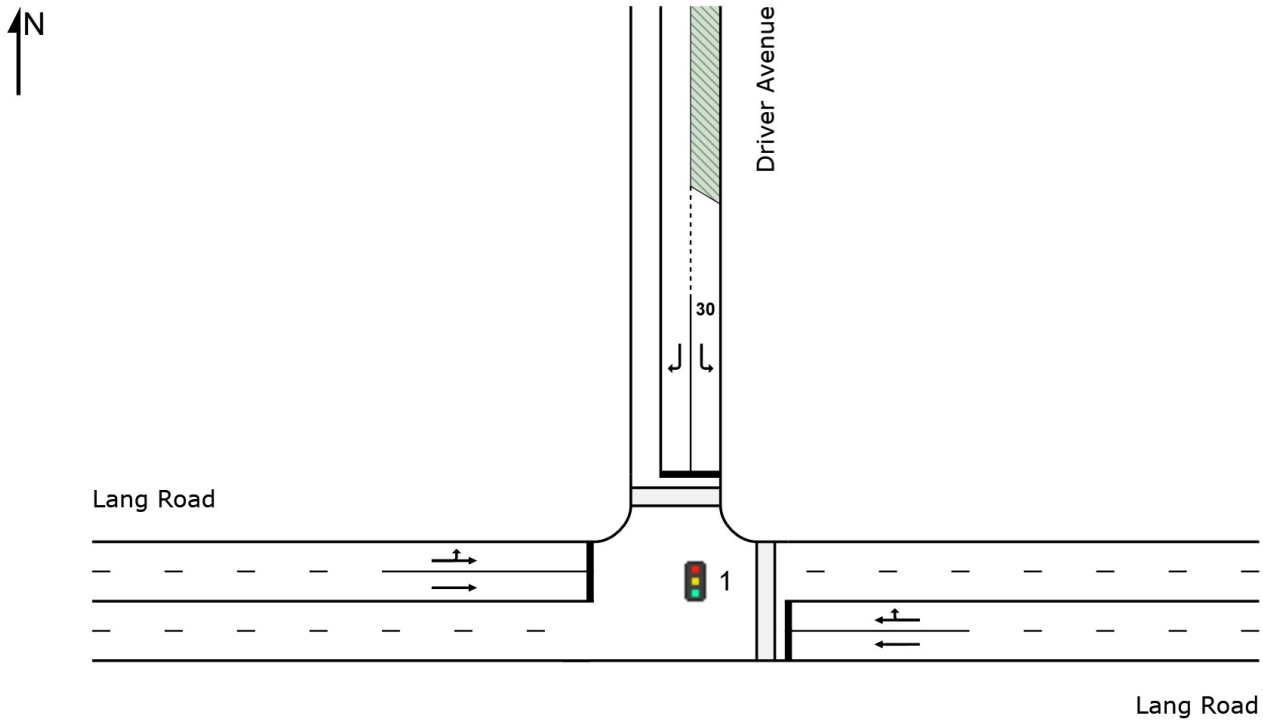
Site: 1 [1 Lang/Driver PM]

Network: 2 [PM Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C
Output Phase Sequence: A, C

Site Layout



Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1039	1.9	1039	1.9	0.547	10.7	LOS A	10.9	77.6	0.53	0.49	0.53	32.9
6	R2	66	6.3	66	6.3	0.547	19.3	LOS B	8.5	60.9	0.68	0.64	0.68	32.2
Approach		1105	2.2	1105	2.2	0.547	11.2	LOS A	10.9	77.6	0.54	0.50	0.54	32.8
North: Driver Avenue														
7	L2	139	2.3	139	2.3	0.830	66.1	LOS E	5.6	40.1	1.00	1.02	1.33	16.5
9	R2	221	1.0	221	1.0	0.874	63.1	LOS E	8.4	59.6	0.95	0.99	1.28	20.3
Approach		360	1.5	360	1.5	0.874	64.3	LOS E	8.4	59.6	0.97	1.00	1.30	18.9
West: Lang Road														
10	L2	60	3.5	60	3.5	0.910	20.2	LOS B	8.4	59.8	0.20	0.33	0.39	33.5
11	T1	1183	1.2	1183	1.2	0.910	15.8	LOS B	8.4	59.8	0.20	0.31	0.36	23.5
Approach		1243	1.4	1243	1.4	0.910	16.1	LOS B	8.4	59.8	0.20	0.31	0.36	24.7
All Vehicles		2708	1.7	2708	1.7	0.910	20.5	LOS B	10.9	77.6	0.44	0.48	0.56	25.2

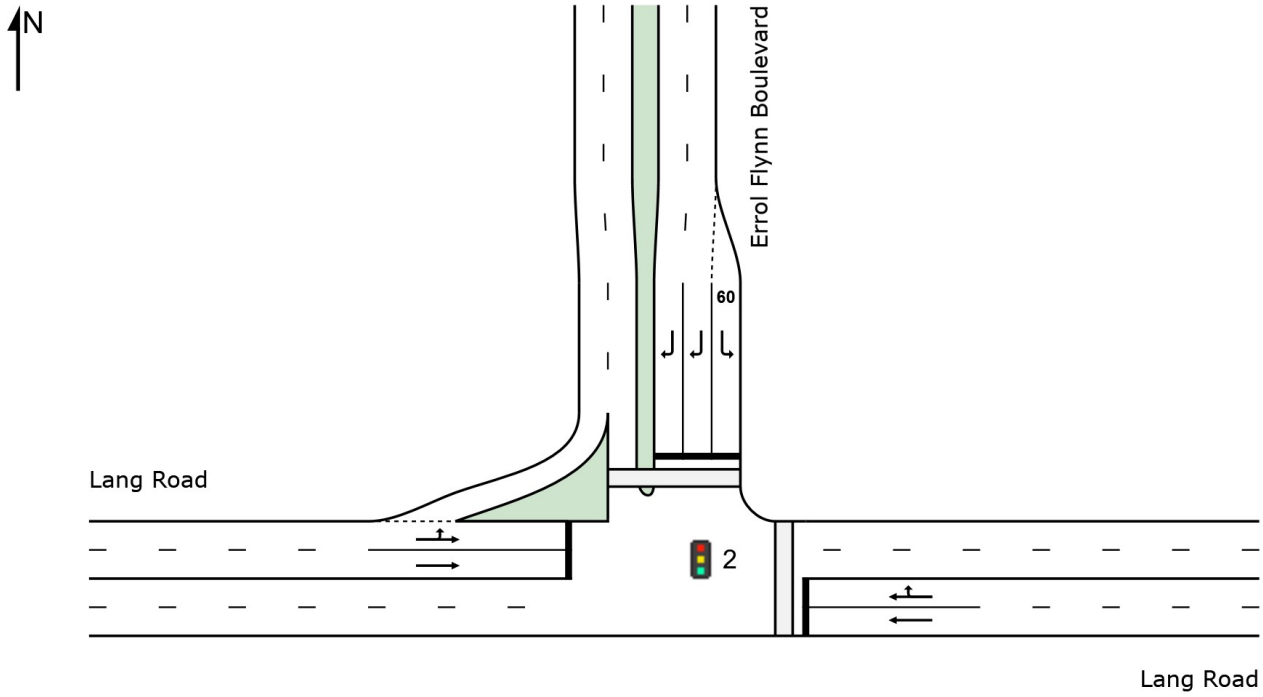
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 2 [2 Lang/ Errol Flynn PM] Network: 2 [PM Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	773	1.8	773	1.8	0.449	10.2	LOS A	9.0	63.7	0.51	0.47	0.51	27.4
6	R2	83	1.3	83	1.3	0.449	21.5	LOS B	9.0	63.7	0.67	0.62	0.67	20.6
Approach		856	1.7	856	1.7	0.449	11.3	LOS A	9.0	63.7	0.52	0.48	0.52	26.1
North: Errol Flynn Boulevard														
7	L2	96	1.1	96	1.1	0.118	20.9	LOS B	2.0	14.0	0.62	0.50	0.62	18.5
9	R2	332	3.2	332	3.2	0.765	58.6	LOS E	7.3	52.2	1.00	0.97	1.15	6.0
Approach		427	2.7	427	2.7	0.765	50.1	LOS D	7.3	52.2	0.91	0.87	1.03	8.1
West: Lang Road														
10	L2	280	3.0	280	3.0	0.747	33.7	LOS C	13.4	95.0	0.86	0.81	0.86	14.6
11	T1	1045	0.9	1045	0.9	0.747	25.5	LOS B	13.5	95.0	0.81	0.74	0.81	21.6
Approach		1325	1.4	1325	1.4	0.747	27.2	LOS B	13.5	95.0	0.82	0.76	0.82	19.8
All Vehicles		2608	1.7	2608	1.7	0.765	25.7	LOS B	13.5	95.0	0.74	0.68	0.76	17.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

USER REPORT FOR NETWORK SITE

Project: 190416sid-N165280 Sydney Swans Intersection Model

Template: Default Site User Report

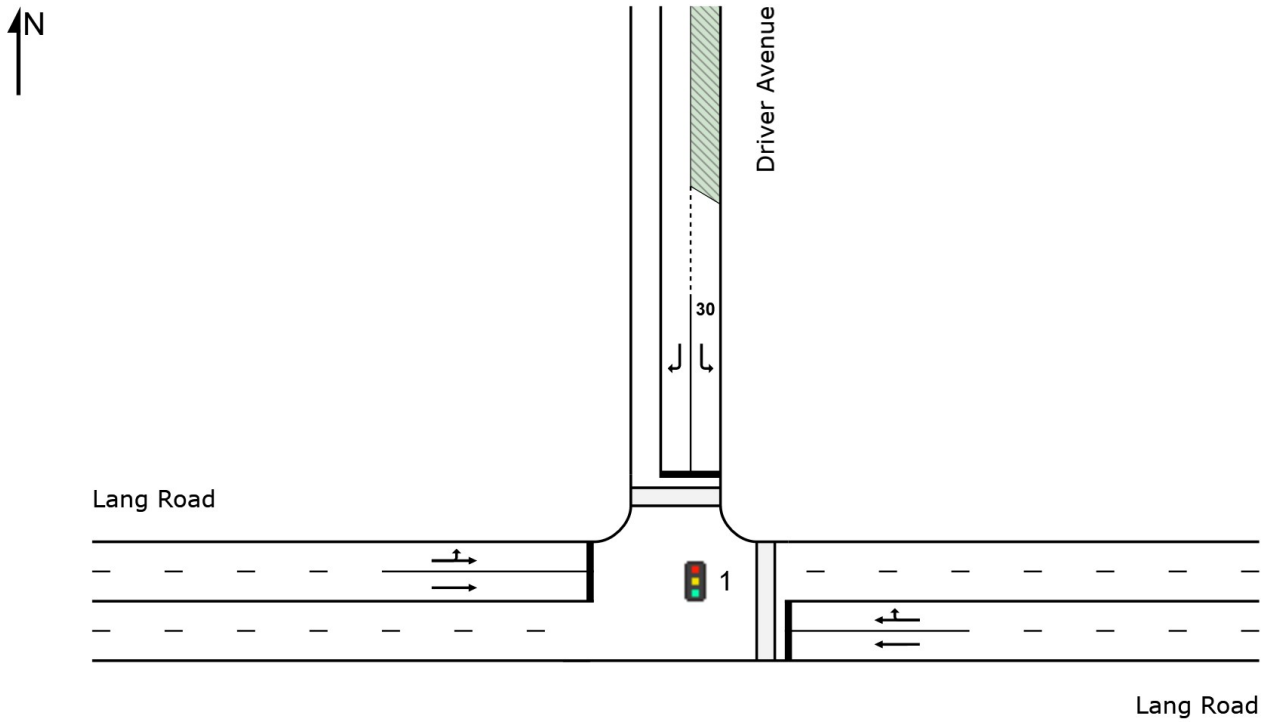
Site: 1 [1 Lang/Driver PM Sat]

Network: 3 [Saturday Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C
Output Phase Sequence: A, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	837	1.0	837	1.0	0.658	30.6	LOS C	13.5	95.0	0.85	0.75	0.85	20.4
6	R2	27	0.0	27	0.0	0.658	51.8	LOS D	8.3	58.6	0.97	0.82	0.97	21.9
Approach		864	1.0	864	1.0	0.658	31.2	LOS C	13.5	95.0	0.86	0.76	0.86	20.5
North: Driver Avenue														
7	L2	60	1.8	60	1.8	0.125	27.8	LOS B	1.4	9.6	0.66	0.68	0.66	25.0
9	R2	83	0.0	83	0.0	0.107	26.1	LOS B	1.8	12.5	0.64	0.68	0.64	29.0
Approach		143	0.7	143	0.7	0.125	26.8	LOS B	1.8	12.5	0.65	0.68	0.65	27.5
West: Lang Road														
10	L2	679	0.9	679	0.9	0.889	35.9	LOS C	26.6	187.9	0.95	0.96	1.08	26.7
11	T1	877	0.6	877	0.6	0.889	39.6	LOS C	28.5	200.5	0.98	0.99	1.11	13.1
Approach		1556	0.7	1556	0.7	0.889	38.0	LOS C	28.5	200.5	0.97	0.98	1.09	20.9
All Vehicles		2563	0.8	2563	0.8	0.889	35.1	LOS C	28.5	200.5	0.91	0.89	0.99	21.2

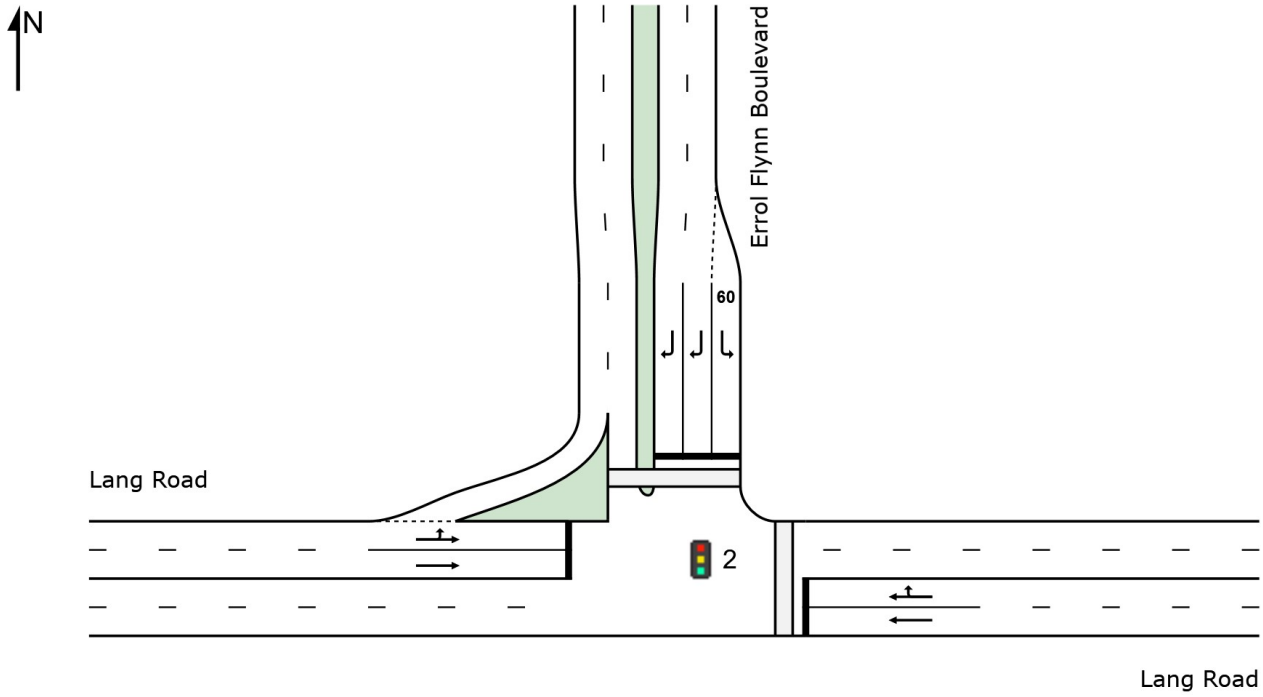
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 2 [2 Lang/ Errol Flynn Sat] Network: 3 [Saturday Peak Hour]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	609	0.5	609	0.5	0.411	8.5	LOS A	7.9	55.7	0.47	0.45	0.47	29.1
6	R2	149	0.7	149	0.7	0.411	16.6	LOS B	7.9	55.7	0.57	0.57	0.57	22.4
Approach		759	0.6	759	0.6	0.411	10.1	LOS A	7.9	55.7	0.49	0.48	0.49	26.7
North: Errol Flynn Boulevard														
7	L2	146	0.0	146	0.0	0.139	12.9	LOS A	2.4	16.9	0.50	0.41	0.50	21.5
9	R2	251	2.1	251	2.1	0.610	53.6	LOS D	5.4	38.8	0.98	0.82	1.00	6.4
Approach		397	1.3	397	1.3	0.610	38.6	LOS C	5.4	38.8	0.81	0.67	0.82	10.5
West: Lang Road														
10	L2	491	0.4	491	0.4	0.611	30.5	LOS C	13.5	95.0	0.79	0.82	0.79	14.7
11	T1	448	0.9	448	0.9	0.611	23.1	LOS B	13.5	95.0	0.71	0.64	0.71	22.7
Approach		939	0.7	939	0.7	0.611	27.0	LOS B	13.5	95.0	0.75	0.73	0.75	17.9
All Vehicles		2095	0.8	2095	0.8	0.611	23.1	LOS B	13.5	95.0	0.67	0.63	0.67	17.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

USER REPORT FOR NETWORK SITE

Project: 190416sid-N165280 Sydney Swans Intersection Model

Template: Default Site User Report

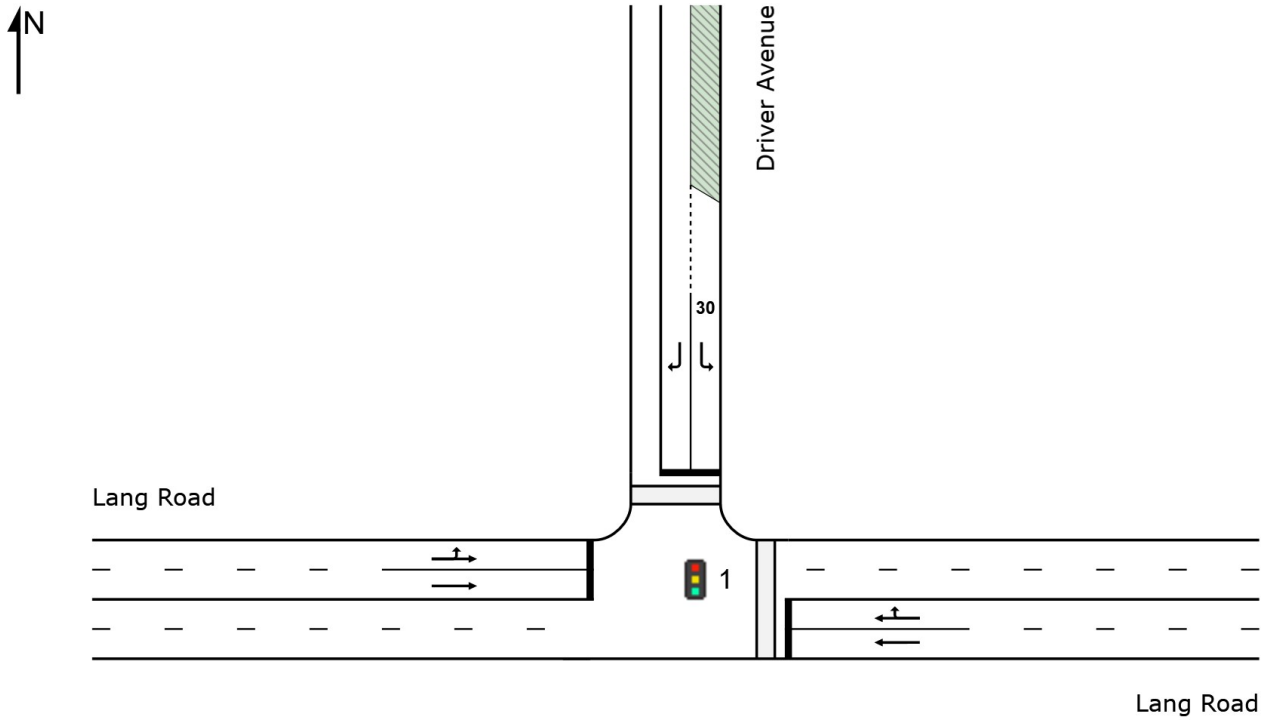
Site: 1 [1 Lang/Driver AM - Fut]

Network: 5 [AM Peak Hour - Fut]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog
Phase Times specified by the user
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C
Output Phase Sequence: A, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1065	1.8	1065	1.8	0.673	7.8	LOS A	12.0	85.5	0.43	0.41	0.43	36.3
6	R2	76	1.4	76	1.4	0.673	16.2	LOS B	4.2	29.9	0.50	0.53	0.51	33.4
Approach		1141	1.8	1141	1.8	0.673	8.3	LOS A	12.0	85.5	0.43	0.42	0.43	35.9
North: Driver Avenue														
7	L2	151	2.8	151	2.8	0.906	78.6	LOS F	6.8	48.5	1.00	1.13	1.52	14.9
9	R2	96	7.7	96	7.7	0.261	46.7	LOS D	2.9	21.7	0.88	0.76	0.88	23.4
Approach		246	4.7	246	4.7	0.906	66.2	LOS E	6.8	48.5	0.95	0.98	1.27	17.9
West: Lang Road														
10	L2	272	5.0	272	5.0	0.967	35.5	LOS C	19.2	138.2	0.42	0.67	0.71	27.5
11	T1	1134	2.0	1134	2.0	0.967	32.6	LOS C	19.2	138.2	0.42	0.63	0.70	15.0
Approach		1405	2.6	1405	2.6	0.967	33.2	LOS C	19.2	138.2	0.42	0.64	0.70	19.0
All Vehicles		2793	2.5	2793	2.5	0.967	25.9	LOS B	19.2	138.2	0.47	0.58	0.64	23.0

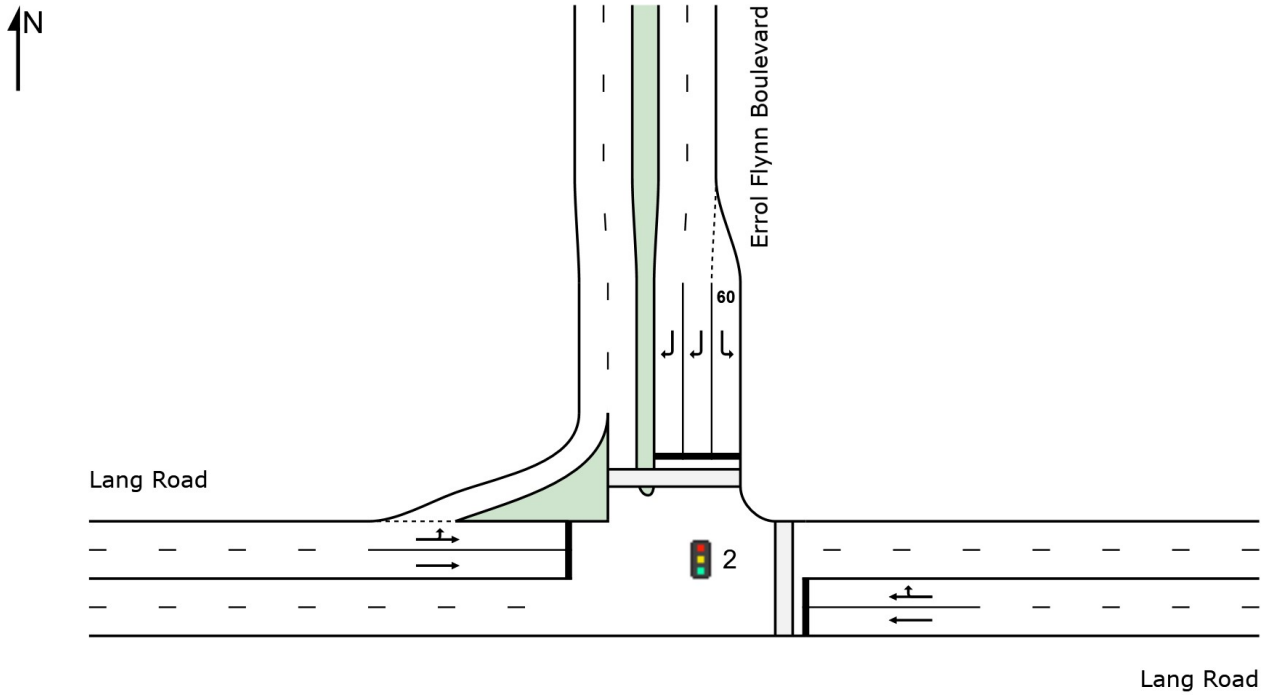
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 2 [2 Lang/ Errol Flynn AM - Fut] Network: 5 [AM Peak Hour - Fut]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1044	1.4	1044	1.4	0.538	9.9	LOS A	12.0	84.6	0.51	0.48	0.54	27.6
6	R2	124	1.0	124	1.0	0.538	24.0	LOS B	12.0	84.6	0.72	0.70	0.80	19.6
Approach		1168	1.4	1168	1.4	0.538	11.4	LOS A	12.0	84.6	0.53	0.50	0.56	25.9
North: Errol Flynn Boulevard														
7	L2	74	0.0	74	0.0	0.084	18.1	LOS B	1.4	9.9	0.57	0.46	0.57	19.4
9	R2	100	6.0	100	6.0	0.314	56.3	LOS D	1.9	14.2	0.97	0.73	0.97	6.2
Approach		174	3.4	174	3.4	0.314	40.1	LOS C	1.9	14.2	0.80	0.61	0.80	10.6
West: Lang Road														
10	L2	366	0.7	366	0.7	0.774	36.0	LOS C	13.4	95.0	0.91	0.86	0.91	13.7
11	T1	912	2.8	912	2.8	0.774	31.0	LOS C	13.4	95.0	0.92	0.84	0.92	19.1
Approach		1278	2.2	1278	2.2	0.774	32.5	LOS C	13.4	95.0	0.92	0.84	0.92	17.3
All Vehicles		2620	1.9	2620	1.9	0.774	23.6	LOS B	13.4	95.0	0.74	0.68	0.75	19.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

USER REPORT FOR NETWORK SITE

Project: 190416sid-N165280 Sydney Swans Intersection Model

Template: Default Site User Report

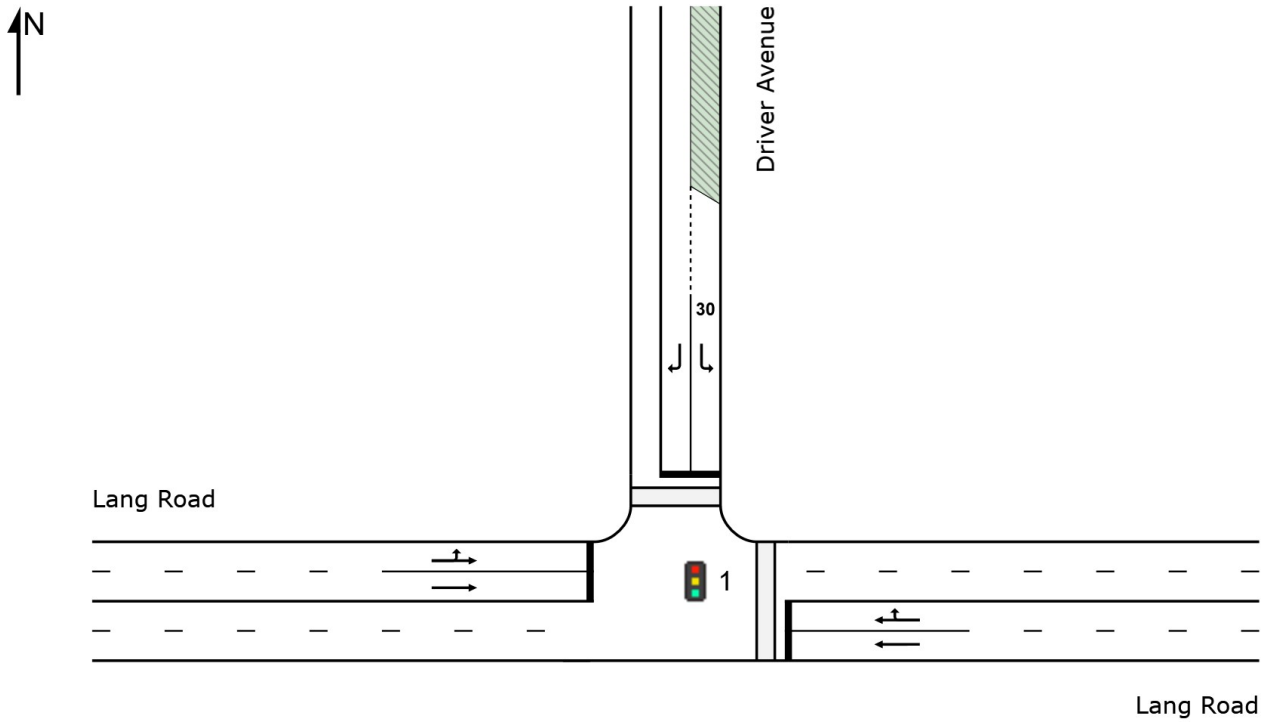
Site: 1 [1 Lang/Driver PM - Fut]

Network: 6 [PM Peak Hour - Fut]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C
Output Phase Sequence: A, C

Site Layout



Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	1051	1.9	1051	1.9	0.553	11.0	LOS A	11.3	80.2	0.54	0.50	0.54	32.7
6	R2	66	6.3	66	6.3	0.553	19.5	LOS B	8.7	62.2	0.69	0.65	0.69	32.1
Approach		1117	2.2	1117	2.2	0.553	11.5	LOS A	11.3	80.2	0.55	0.51	0.55	32.6
North: Driver Avenue														
7	L2	139	2.3	139	2.3	0.830	66.1	LOS E	5.6	40.1	1.00	1.02	1.33	16.5
9	R2	221	1.0	221	1.0	0.874	63.1	LOS E	8.4	59.6	0.95	0.99	1.28	20.3
Approach		360	1.5	360	1.5	0.874	64.3	LOS E	8.4	59.6	0.97	1.00	1.30	18.9
West: Lang Road														
10	L2	60	3.5	60	3.5	0.913	20.7	LOS B	8.7	61.5	0.21	0.34	0.40	33.3
11	T1	1186	1.2	1186	1.2	0.913	16.4	LOS B	8.7	61.5	0.21	0.32	0.37	23.1
Approach		1246	1.4	1246	1.4	0.913	16.6	LOS B	8.7	61.5	0.21	0.32	0.37	24.3
All Vehicles		2723	1.7	2723	1.7	0.913	20.8	LOS B	11.3	80.2	0.45	0.49	0.57	25.0

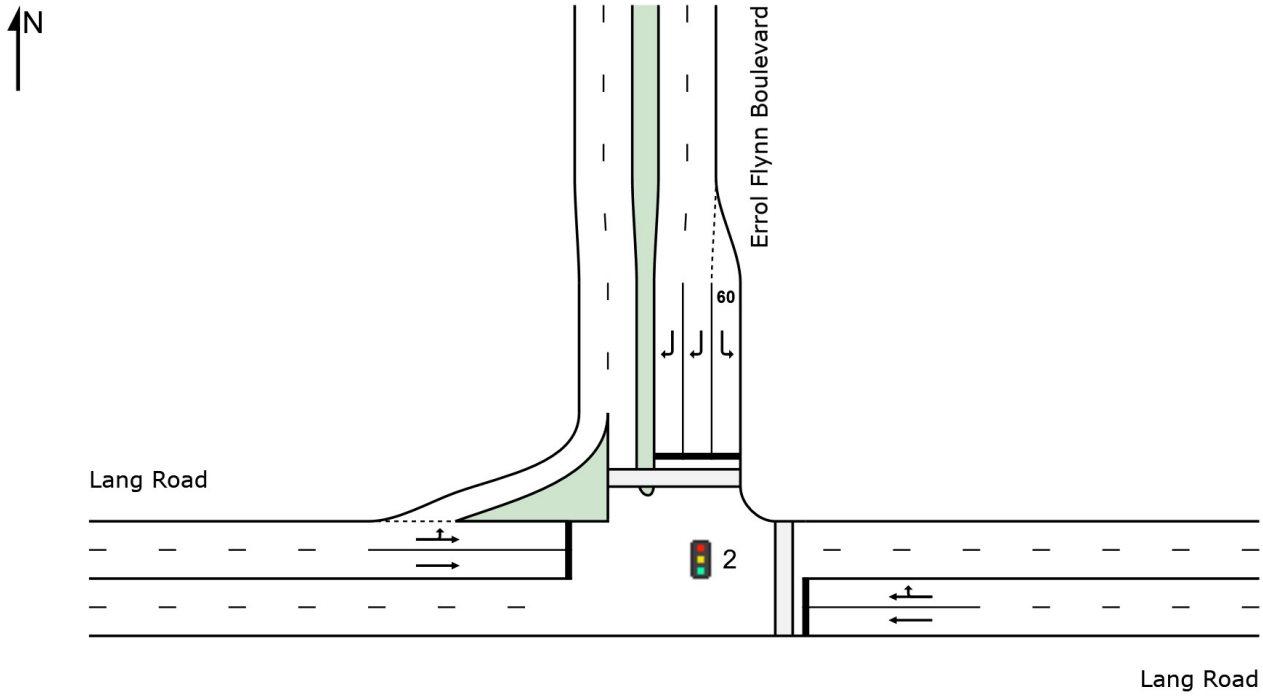
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 2 [2 Lang/ Errol Flynn PM - Fut] Network: 6 [PM Peak Hour - Fut]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout



Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Lang Road														
5	T1	773	1.8	773	1.8	0.467	11.5	LOS A	9.7	68.8	0.54	0.49	0.54	26.0
6	R2	84	1.3	84	1.3	0.467	23.5	LOS B	9.7	68.8	0.70	0.64	0.70	19.9
Approach		857	1.7	857	1.7	0.467	12.6	LOS A	9.7	68.8	0.55	0.50	0.55	24.8
North: Errol Flynn Boulevard														
7	L2	100	1.1	100	1.1	0.118	19.7	LOS B	2.0	14.2	0.60	0.49	0.60	18.9
9	R2	343	3.2	343	3.2	0.761	57.6	LOS E	7.6	54.6	1.00	0.97	1.14	6.1
Approach		443	2.7	443	2.7	0.761	49.1	LOS D	7.6	54.6	0.91	0.86	1.02	8.2
West: Lang Road														
10	L2	283	3.0	283	3.0	0.776	35.5	LOS C	13.4	95.0	0.89	0.83	0.89	14.1
11	T1	1045	0.9	1045	0.9	0.776	27.5	LOS B	13.5	95.0	0.85	0.78	0.85	20.7
Approach		1328	1.4	1328	1.4	0.776	29.2	LOS C	13.5	95.0	0.86	0.79	0.86	19.0
All Vehicles		2628	1.7	2628	1.7	0.776	27.1	LOS B	13.5	95.0	0.77	0.71	0.79	17.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

C. STAKEHOLDER ENGAGEMENT MEETING MINUTES

C

Mackenzie Brinums

From: Mobayed, George <George.Mobayed@transport.nsw.gov.au>
Sent: Thursday, 18 April 2019 9:53 AM
To: Mackenzie Brinums
Cc: Rhys Hazell
Subject: RE: Royal Hall of Industries Meeting Minutes
Attachments: 190418memo-N165280 Royal Hall of Industries-TfNSW Meeting Minutes.docx

Hi Mackenzie,

Thanks. The minutes are great.

Regards,

George

George Mobayed
Principal Transport Planner
Sydney Coordination Office
Transport Coordination
Transport for NSW

M 0466 495 135
Level 44 680 George Street Sydney NSW 2000

Use public transport... plan your trip at transportnsw.info
Get on board with Opal at opal.com.au

From: Mackenzie Brinums [mailto:Mackenzie.Brinums@gta.com.au]
Sent: Thursday, 18 April 2019 9:29 AM
To: Mobayed, George
Cc: Rhys Hazell
Subject: Royal Hall of Industries Meeting Minutes

Hi George

Please see attached minutes for the meeting last Friday. Let us know if we missed anything.

Kind regards,

Mackenzie Brinums
Consultant
GTA Consultants
P 02 8448 1800 **D** 02 8448 1813 **M** 0414 600 989
Level 16, 207 Kent Street, Sydney, NSW 2000
Mackenzie.Brinums@gta.com.au
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MEETING MINUTES

Transport Engineering

Job No:	N165280	**GTA Rep:**	Rhys Hazell Mackenzie Brinums	**Date:**	12/04/19
Job Name:	Royal Hall of Industries, Moore Park			**Time:**	1pm
Client:	Sydney Swans Limited			**Location:**	680 George Street, Sydney
Purpose:	Stakeholder engagement for Adaptive Reuse of Royal Hall of Industries development				

Attendees:	George Mobayed (TfNSW SCO), Andrew Glass (TfNSW SCO), Kerry Ryan (RMS), Edward Tai (TfNSW TMC), Mackenzie Brinums (GTA), Rhys Hazell (GTA)
Apologies:	
Distribution:	George Mobayed (TfNSW SCO)

Item	Discussion
1	Operation: Measures to promote sustainable travel choices for employees and visitors will be provided in the overview Green Travel Plan as required by the SEARs
2	Operation: Concern was raised for if a large one-off event (i.e. club awards night) overlaps with Moore Park events. It is understood that approval would be sought from relevant stakeholders including Entertainment Quarter and Moore Park Trust for one off events, with an event management plan likely to be required for large events.
3	Operation: It is not envisaged that the site would require coaches for users of the site.
4	Operation: In terms of sporting related activity within the development, only training would occur within the facility and not games and therefore it is not expected to generate traffic/ parking demand for spectators.
5	Construction: SCO advised that conditions for SFS requires no construction traffic movements in the 2 hour lead up to a Special Event, during the event and 2 hours after the event. It is likely that the Royal Halls of Industries development would be required to meet the same conditions. SCO confirmed that non noise-intrusive construction works could still occur on site.
6	Construction: It is understood that construction vehicles for SFS use the northern end of Driver Avenue to minimise disruption to CSELR. Proposed construction route is to use Lang Road/ Anzac Parade rather than Driver Avenue so as to not impact on SFS construction which has considerably high traffic volumes due to the size of the project. It is noted that the proposed route will run past the CSELR alignment however is expected to have a low impact as anticipated Royal Halls construction volumes will be low (adaptive reuse construction works only).

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