VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants
ACN 071 762 537 ABN 88 071 762 537

29 May 2026
Ref 25332

Department of Planning, Housing & Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Attn: Victor Casasanta

Dear Victor,

SSD-97528708
PROPOSED MIXED-USE DEVELOPMENT
13 GIPPS STREET, 6 SHADFORTH STREET &
142-148, 160 OXFORD STREET, PADDINGTON
TRAFFIC & PARKING MATTERS

I refer to Woollahra Municipal Council's letter dated 16 March 2026 requesting additional information in respect of the abovementioned development proposal.

The following advice is provided in response to the traffic and parking matters raised in Council's letter:

25) Parking Provision

The *minimum* off-street parking requirements applicable to the development proposal are specified in the *State Environmental Planning Policy (Housing) 2021* in the following terms:

Chapter 2 Affordable housing
Division 1 In-fill affordable housing
22A Requirements to provide car parking
Development consent must not be granted to development under this division unless-

(a) the consent authority is satisfied the development will result in–
  (i) the following number of parking spaces for dwellings used for affordable housing–
    (A) for each dwelling containing 1 bedroom–at least 0.4 parking spaces,
    (B) for each dwelling containing 2 bedrooms–at least 0.5 parking spaces,
    (C) for each dwelling containing at least 3 bedrooms–at least 1 parking space, and
  (ii) the following number of parking spaces for dwellings not used for affordable housing–
    (A) for each dwelling containing 1 bedroom–at least 0.5 parking spaces,
    (B) for each dwelling containing 2 bedrooms–at least 1 parking space,
    (C) for each dwelling containing at least 3 bedrooms–at least 1.5 parking spaces, or

(b) the consent authority has considered the *Guide to Transport Impact Assessment* published by Transport for NSW on 4 November 2024.

The *SEPP (Housing) 2021* document does not specify off-street parking rates for visitors. To ensure adequate off-street parking is available for visitors to the development (without increasing on-street parking demands), the *survey-based* TfNSW *Guide to Transport Impact Assessment (*TfNSW *Guide)* rate of ***1 visitor space per 5 dwellings*** for residential flat buildings has been adopted.

Reference is also made to the off-street car parking requirements applicable to the proposed retail component specified in the Council's *Woollahra Development Control Plan 2015 Part E1 – Parking and Access* document as follow:

Table 2: Non-residential parking generation rates
Retail premises: 3.3 spaces per $100m^2$

Finally, as the existing garage associated with the residential dwelling at 13 Gipps Street is to be demolished as outlined in the development proposal, off-street car parking provision for the existing residential dwelling at 13 Gipps Street is proposed to be maintained via a new car space in the proposed basement parking area.

Application of the above parking requirements to the proposed development yields a *minimum* off-street car parking requirement of 64 spaces, as set out below:

CUMULATIVE *MINIMUM* PARKING REQUIREMENTS

Affordable Dwellings (SEPP 2021)	**Parking Rate**	**Required**
1-bedroom (6 dwellings):	0.4 spaces/dwelling	2.4 spaces
2-bedroom (4 dwellings):	0.5 spaces/dwelling	2.0 spaces
3-bedroom (1 dwelling):	1.0 space/dwelling	1.0 space
Sub-Total:		**5.4 spaces**
Standard Dwellings (SEPP 2021)		
2-bedroom (11 dwellings):	1 space/dwelling	11.0 spaces
3-bedroom (22 dwellings):	1.5 spaces/dwelling	33.0 spaces
Sub-Total:		**44.0 spaces**
Existing Dwelling at 13 Gipps Street		
Residential dwelling:	1 space	1.0 space
Sub-Total:		**1.0 space**
Visitor (TfNSW *Guide*)		**Required**
Visitors (44 dwellings):	1 space/5 dwellings	8.8 spaces
Sub-Total:		**8.8 spaces**
Retail Component (DCP 2015)		**Required**
Retail tenancies ($153m^2$):	3.3 spaces/$100m^2$	5.1 spaces
Sub-Total:		**5.1 spaces**
TOTAL PARKING REQUIRED:		**64.3 spaces**

In response, the proposed development makes provision for a total of 82 off-street car parking spaces (including 5 accessible car spaces), comprising 67 residential spaces, 9 visitor spaces, and 6 retail spaces, thereby satisfying the *SEPP (Housing) 2021* and TfNSW *Guide minimum* car parking requirements.

Reference to the source documents[1] for the TfNSW *Guide* indicates that the surplus "18 parking spaces" could be expected to generate an additional 3 vph during peak periods, based on the Sydney Metropolitan Area "*per parking space*" traffic generation rates of 0.15/0.12 vph *per parking space* for high density residential developments during the AM and PM peak periods respectively.

That potential additional 3 vph as a consequence of those 18 spaces is *statistically insignificant*, and will clearly not have any unacceptable traffic implications in terms of road network capacity or traffic-related environmental effects.

Finally, it should also be noted that car ownership does not correlate to traffic generation, with residents leaving their car at home when there are good public transport options available to their destination.

However, despite the availability of good public transport options, residents will still seek to own a car for other journeys and will require storage for their vehicles.

26) Traffic Generation

The proposed development is expected to generate in the order of 11 vph during peak periods based on the traffic generation rates nominated in the TfNSW *Guide* for sites in Sydney with high public transport accessibility.

That projected future traffic generation potential assumes that the site is currently *vacant*, and no discounting was applied in the SIDRA capacity analysis to account for the existing uses of the site.

The TfNSW *Guide* confirms the subject site is located within "Category 1" area with "very high" public transport accessibility, as indicated on the webmap containing the SA2 categorisation. Furthermore, the proposed small, local shop component will ***not*** result in customer vehicle trips similar to a shopping centre, as there is ***no*** parking proposed onsite for customers but ***only*** for retail staff/employees.

The application of "low public transport accessibility" and "shopping centre" traffic generation rates, to the proposed residential and retail components respectively in Council's traffic generation calculation, is therefore considered inappropriate.

For a more conservative assessment of the site however, the SIDRA capacity analysis has been updated with a projected future traffic generation potential of the site of 20 vph to take into account the Council's projected traffic flows of 17.2 vph and 19.8 vph during peak periods.

The results of that analysis are summarised in the table below, confirming that both intersections in the vicinity of the site will continue to operate at current Levels of Service "A", with *negligible* increases in average vehicle delays (i.e. less than 1 second, if any) as a consequence of the development proposal.

[1] *Report for High Density Residential Trip Generation Surveys - Survey Data Analysis Report* for Roads and Maritime Services prepared by GHD Pty Ltd on 28 September 2012

Intersection	Key Indicators	Existing AM Traffic Demand	Projected AM Traffic Demand	Existing PM Traffic Demand	Projected PM Traffic Demand
Oxford Street & Shadforth Street	LoS	A	A	A	A
	DoS	0.213	0.213	0.292	0.295
	Delay	0.2	0.3	1.2	1.3
Shadforth Street & Gipps Street	LoS	A	A	A	A
	DoS	0.012	0.014	0.026	0.027
	Delay	1.3	1.7	1.0	1.1

LoS = Levels of Service
DoS = Degree of Saturation
AVD = Total average vehicle delay (seconds per vehicle)

Criteria for interpreting the results of SIDRA capacity analysis are reproduced in the following pages. These detailed SIDRA *Movement Summaries* are also reproduced in the following pages.

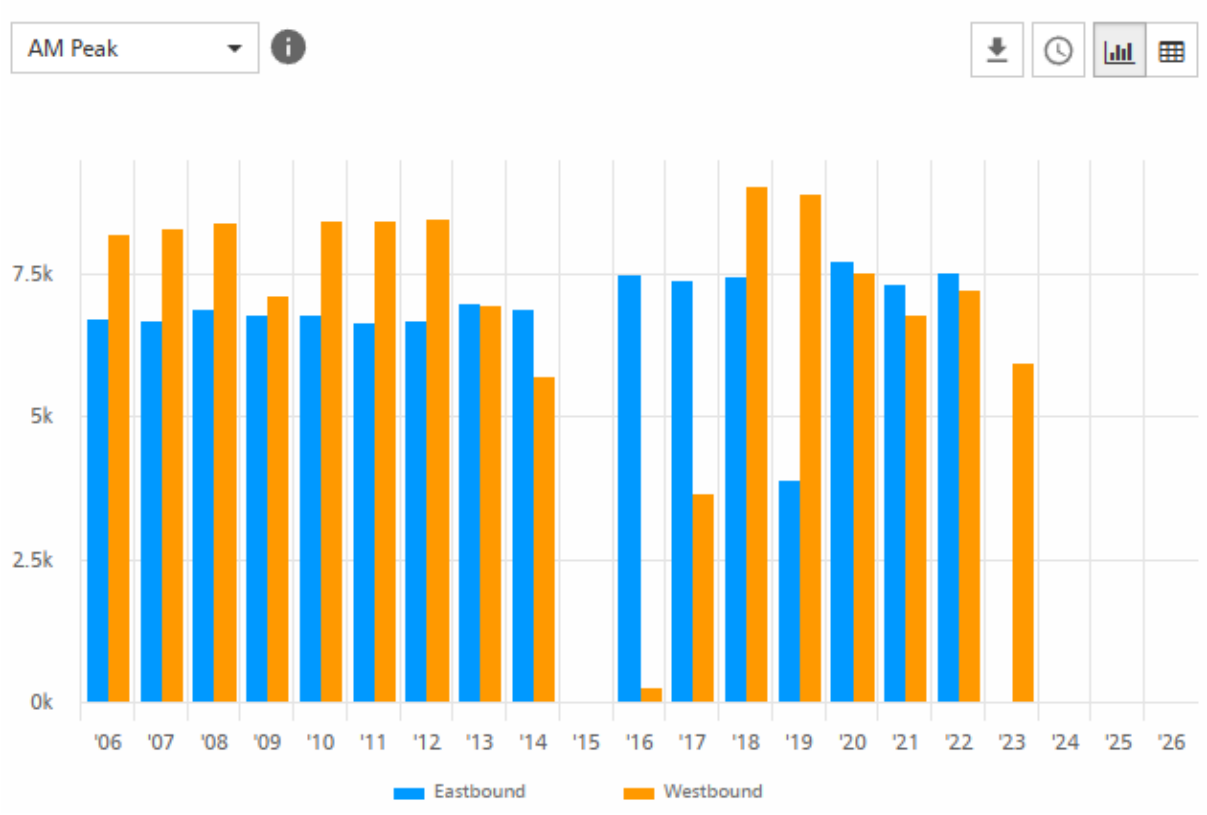
Council has drawn attention to the post-development Level of Service for the *right-turn movement* from Shadforth Street into Oxford Street, at Level of Service "E". The right-turn movement is a minor movement at the intersection which accounts for only 5 vph, because a more convenient right-turn movement is available immediately to the west of the site at the signalised intersection of Glenmore Road and Oxford Street.

In addition, the *right turn* movement from Shadforth Street into Oxford Street will experience a 1.2 second increase in vehicle delays as a consequence of the development proposal, which is considered *negligible* and *insignificant*.

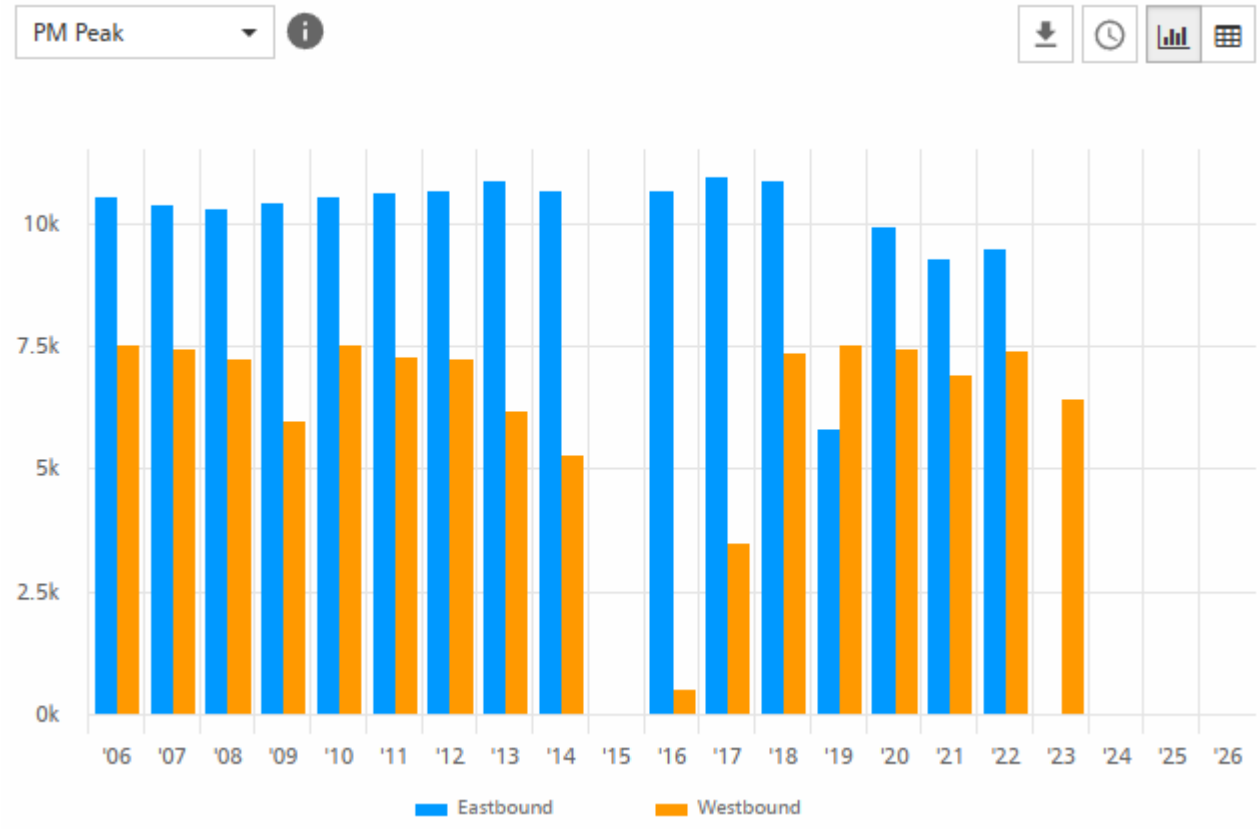
That 1.2 second increase in delay from 55.9 seconds to 57.1 seconds for this minor right-turn movement is just 0.1 seconds above the "D" to "E" *threshold* of 57 seconds, and Council's reference to "*just below*" LoS "F" is clearly incorrect; the *threshold* for LoS "F" is 70 seconds (see attached criteria for interpreting results of SIDRA analysis).

Furthermore, it is noted also that TfNSW's *Annual Average Daily Traffic* (AADT) count data (reproduced below) shows that there has not been any background growth, and that traffic volumes in Oxford Street have been steadily decreasing over the past 10 years.

Finally, the above SIDRA capacity analysis has shown that despite the narrow width of Shadforth Street, the surrounding intersections have been and will continue to operate at Levels of Service "A" which is considered "good operation".



Oxford Street (Station No. 10032 at 20m north of Syd Einfeld Drive, Centennial Park) AM Peak Data



Oxford Street (Station No. 10032 at 20m north of Syd Einfeld Drive, Centennial Park) PM Peak Data

27) Vehicle Access

The landscaped kerb blister island opposite the driveway aligns with the kerbside parking on that side of the road and does *not* restrict vehicle manoeuvrability in any way.

The proposed 6.1m wide driveway complies with *AS2890.1* and can accommodate simultaneous two-way traffic flows as illustrated on the attached swept turning path diagram. Accordingly, a traffic signal system is not required.

The pedestrian safety visibility splay is provided on the exit side of the two-lane driveway in accordance with *Figure 3.3 Minimum Sight Lines for Pedestrian Safety*, and landscaping in this area will be limited to a maximum height of 900mm.

28) Service Vehicles

Council's confirmation that the swept turn path analysis of an overhead clearance is satisfactory is acknowledged.

29) Construction Traffic Management Plan

The CTMP has been amended to relocate the Works Zone to Shadforth Street to address Council's comments regarding existing street trees along Oxford Street site frontage. The amended CTMP is to be provided under separate cover.

The amended Works Zone will accommodate access by 12.5m long HRV trucks, which will approach the site via Glenmore Road, Liverpool Street, then Shadforth Street, and will leave the site via Oxford Street.

A *temporary* kerbside NO STOPPING restriction is proposed to be located along eastern side of Shadforth Street to the south of Bourke Lane and directly opposite the subject site, up until the end of construction stage during construction hours *only*, to allow vehicles to traverse Shadforth Street whilst a construction vehicle is parked within the proposed Works Zone.

The suggestion by Council that vehicles attending the site via Shadforth Street should be reduced to 6.4m long SRV trucks "to minimize local impacts" would, in fact, have the opposite effect, because using the smaller truck would require a commensurate increase in the number of truck movements.

Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely

Robert Varga
Director
Varga Traffic Planning Pty Ltd

Criteria for Interpreting Results of Sidra Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good operation.	Good operation.
'B'	Good with acceptable delays and spare capacity.	Acceptable delays and spare capacity.
'C'	Satisfactory.	Satisfactory but accident study required.
'D'	Operating near capacity.	Near capacity and accident study required.
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode.	At capacity and requires other control mode.
'F'	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode.

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (i.e. inner-city conditions) and on some roads (i.e. minor side street intersecting with a major arterial route).

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
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	Operating near capacity.	Near capacity and accident study required.
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode.	At capacity and requires other control mode.

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by traffic signals[2] both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a roundabout or GIVE WAY or STOP signs, satisfactory intersection operation is indicated by a DS of 0.8 or less.

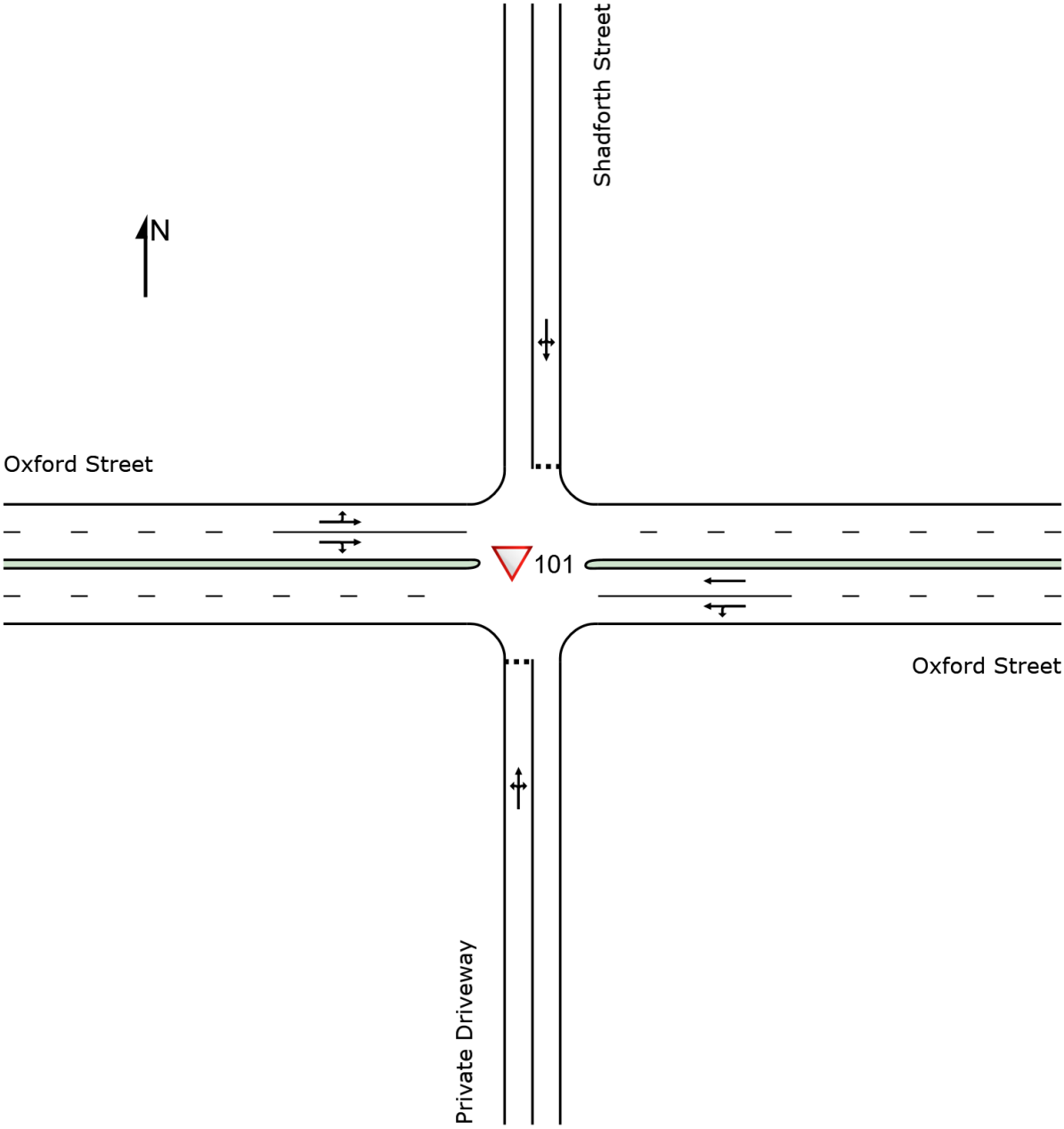
2 *The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.*

SITE LAYOUT

Site: 101 [AM Peak Oxford St & Shadforth St (Site Folder: Existing)]

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [AM Peak Oxford St & Shadforth St (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Private Driveway															
1	L2	All MCs	1	0.0	1	0.0	0.019	5.1	LOS A	0.1	0.4	0.79	0.75	0.79	34.0
2	T1	All MCs	1	0.0	1	0.0	0.019	27.9	LOS B	0.1	0.4	0.79	0.75	0.79	31.7
3	R2	All MCs	1	0.0	1	0.0	0.019	37.3	LOS C	0.1	0.4	0.79	0.75	0.79	33.9
Approach			3	0.0	3	0.0	0.019	23.4	LOS B	0.1	0.4	0.79	0.75	0.79	33.1
East: Oxford Street															
4	L2	All MCs	1	0.0	1	0.0	0.213	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	48.7
5	T1	All MCs	801	5.8	801	5.8	0.213	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach			802	5.8	802	5.8	0.213	0.1	NA	0.0	0.0	0.00	0.00	0.00	49.9
North: Shadforth Street															
7	L2	All MCs	19	0.0	19	0.0	0.037	5.0	LOS A	0.1	0.9	0.53	0.57	0.53	39.7
8	T1	All MCs	1	0.0	1	0.0	0.037	29.1	LOS C	0.1	0.9	0.53	0.57	0.53	36.6
9	R2	All MCs	1	0.0	1	0.0	0.037	38.1	LOS C	0.1	0.9	0.53	0.57	0.53	39.7
Approach			21	0.0	21	0.0	0.037	7.8	LOS A	0.1	0.9	0.53	0.57	0.53	39.5
West: Oxford Street															
10	L2	All MCs	12	9.1	12	9.1	0.198	4.7	LOS A	0.0	0.0	0.00	0.02	0.00	48.4
11	T1	All MCs	720	7.9	720	7.9	0.198	0.0	LOS A	0.0	0.1	0.00	0.01	0.00	49.9
12	R2	All MCs	1	0.0	1	0.0	0.198	5.7	LOS A	0.0	0.1	0.01	0.00	0.01	43.9
Approach			733	7.9	733	7.9	0.198	0.1	NA	0.0	0.1	0.00	0.01	0.00	49.9
All Vehicles			1559	6.7	1559	6.7	0.213	0.2	NA	0.1	0.9	0.01	0.01	0.01	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [AM Peak Oxford St & Shadforth St (Site Folder: Proposed)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Private Driveway															
1	L2	All MCs	1	0.0	1	0.0	0.019	5.1	LOS A	0.1	0.4	0.79	0.76	0.79	33.9
2	T1	All MCs	1	0.0	1	0.0	0.019	28.1	LOS B	0.1	0.4	0.79	0.76	0.79	31.6
3	R2	All MCs	1	0.0	1	0.0	0.019	37.8	LOS C	0.1	0.4	0.79	0.76	0.79	33.9
Approach			3	0.0	3	0.0	0.019	23.6	LOS B	0.1	0.4	0.79	0.76	0.79	33.1
East: Oxford Street															
4	L2	All MCs	1	0.0	1	0.0	0.213	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	48.7
5	T1	All MCs	801	5.8	801	5.8	0.213	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach			802	5.8	802	5.8	0.213	0.1	NA	0.0	0.0	0.00	0.00	0.00	49.9
North: Shadforth Street															
7	L2	All MCs	26	0.0	26	0.0	0.045	5.0	LOS A	0.2	1.2	0.51	0.57	0.51	40.0
8	T1	All MCs	1	0.0	1	0.0	0.045	29.5	LOS C	0.2	1.2	0.51	0.57	0.51	36.9
9	R2	All MCs	1	0.0	1	0.0	0.045	38.6	LOS C	0.2	1.2	0.51	0.57	0.51	40.0
Approach			28	0.0	28	0.0	0.045	7.1	LOS A	0.2	1.2	0.51	0.57	0.51	39.9
West: Oxford Street															
10	L2	All MCs	16	6.7	16	6.7	0.199	4.7	LOS A	0.0	0.0	0.00	0.02	0.00	48.4
11	T1	All MCs	720	7.9	720	7.9	0.199	0.0	LOS A	0.0	0.1	0.00	0.01	0.00	49.9
12	R2	All MCs	1	0.0	1	0.0	0.199	5.7	LOS A	0.0	0.1	0.01	0.00	0.01	43.9
Approach			737	7.9	737	7.9	0.199	0.1	NA	0.0	0.1	0.00	0.01	0.00	49.8
All Vehicles			1571	6.6	1571	6.6	0.213	0.3	NA	0.2	1.2	0.01	0.02	0.01	49.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [PM Peak Oxford St & Shadforth St (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Private Driveway															
1	L2	All MCs	1	0.0	1	0.0	0.027	5.0	LOS A	0.1	0.6	0.83	0.80	0.83	31.2
2	T1	All MCs	1	0.0	1	0.0	0.027	39.5	LOS C	0.1	0.6	0.83	0.80	0.83	29.3
3	R2	All MCs	1	0.0	1	0.0	0.027	54.1	LOS D	0.1	0.6	0.83	0.80	0.83	31.2
Approach			3	0.0	3	0.0	0.027	32.8	LOS C	0.1	0.6	0.83	0.80	0.83	30.5
East: Oxford Street															
4	L2	All MCs	1	0.0	1	0.0	0.202	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	48.7
5	T1	All MCs	572	6.8	572	6.8	0.202	1.4	LOS A	1.0	7.4	0.15	0.17	0.15	48.6
6	R2	All MCs	45	2.3	45	2.3	0.202	12.7	LOS A	1.0	7.4	0.43	0.49	0.43	41.1
Approach			618	6.5	618	6.5	0.202	2.2	NA	1.0	7.4	0.17	0.19	0.17	48.0
North: Shadforth Street															
7	L2	All MCs	17	6.3	17	6.3	0.109	6.5	LOS A	0.3	2.5	0.77	0.83	0.77	35.3
8	T1	All MCs	1	0.0	1	0.0	0.109	41.7	LOS C	0.3	2.5	0.77	0.83	0.77	32.8
9	R2	All MCs	5	0.0	5	0.0	0.109	55.9	LOS D	0.3	2.5	0.77	0.83	0.77	35.3
Approach			23	4.5	23	4.5	0.109	19.3	LOS B	0.3	2.5	0.77	0.83	0.77	35.1
West: Oxford Street															
10	L2	All MCs	8	0.0	8	0.0	0.292	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	48.6
11	T1	All MCs	1107	2.9	1107	2.9	0.292	0.1	LOS A	0.0	0.1	0.00	0.00	0.00	49.9
12	R2	All MCs	1	0.0	1	0.0	0.292	5.0	LOS A	0.0	0.1	0.00	0.00	0.00	43.9
Approach			1117	2.9	1117	2.9	0.292	0.1	NA	0.0	0.1	0.00	0.00	0.00	49.9
All Vehicles			1761	4.2	1761	4.2	0.292	1.2	NA	1.0	7.4	0.07	0.08	0.07	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
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Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

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Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Private Driveway															
1	L2	All MCs	1	0.0	1	0.0	0.028	5.1	LOS A	0.1	0.6	0.84	0.81	0.84	31.1
2	T1	All MCs	1	0.0	1	0.0	0.028	40.4	LOS C	0.1	0.6	0.84	0.81	0.84	29.1
3	R2	All MCs	1	0.0	1	0.0	0.028	54.8	LOS D	0.1	0.6	0.84	0.81	0.84	31.1
Approach			3	0.0	3	0.0	0.028	33.4	LOS C	0.1	0.6	0.84	0.81	0.84	30.4
East: Oxford Street															
4	L2	All MCs	1	0.0	1	0.0	0.211	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	48.7
5	T1	All MCs	572	6.8	572	6.8	0.211	1.5	LOS A	1.1	8.2	0.15	0.18	0.15	48.6
6	R2	All MCs	53	2.0	53	2.0	0.211	12.8	LOS A	1.1	8.2	0.50	0.56	0.50	40.6
Approach			625	6.4	625	6.4	0.211	2.5	NA	1.1	8.2	0.18	0.21	0.18	47.8
North: Shadforth Street															
7	L2	All MCs	19	5.6	19	5.6	0.113	6.4	LOS A	0.4	2.6	0.77	0.83	0.77	35.5
8	T1	All MCs	1	0.0	1	0.0	0.113	42.6	LOS D	0.4	2.6	0.77	0.83	0.77	33.1
9	R2	All MCs	5	0.0	5	0.0	0.113	57.1	LOS E	0.4	2.6	0.77	0.83	0.77	35.6
Approach			25	4.2	25	4.2	0.113	18.5	LOS B	0.4	2.6	0.77	0.83	0.77	35.4
West: Oxford Street															
10	L2	All MCs	18	0.0	18	0.0	0.295	4.7	LOS A	0.0	0.0	0.00	0.02	0.00	48.5
11	T1	All MCs	1107	2.9	1107	2.9	0.295	0.1	LOS A	0.0	0.1	0.00	0.01	0.00	49.9
12	R2	All MCs	1	0.0	1	0.0	0.295	5.0	LOS A	0.0	0.1	0.00	0.00	0.00	43.9
Approach			1126	2.9	1126	2.9	0.295	0.1	NA	0.0	0.1	0.00	0.01	0.00	49.8
All Vehicles			1780	4.1	1780	4.1	0.295	1.3	NA	1.1	8.2	0.08	0.09	0.08	48.8

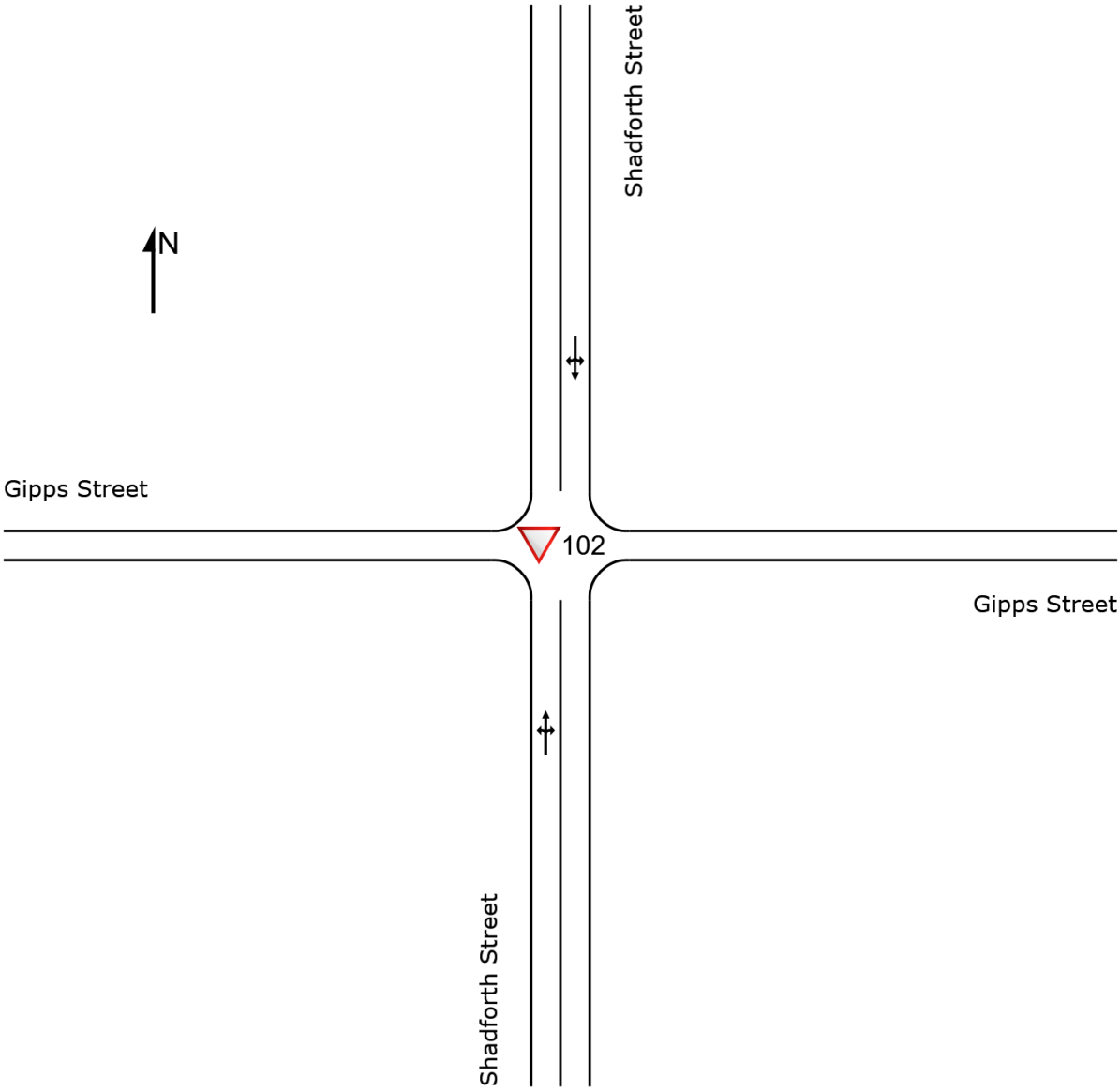
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

SITE LAYOUT

Site: 102 [AM Peak Shadforth St & Gipps St (Site Folder: Existing)]

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 102 [AM Peak Shadforth St & Gipps St (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Shadforth Street															
10	L2	All MCs	7	0.0	7	0.0	0.009	3.4	LOS A	0.0	0.1	0.03	0.28	0.03	38.5
11	T1	All MCs	6	16.7	6	16.7	0.009	0.0	LOS A	0.0	0.1	0.03	0.28	0.03	39.0
12	R2	All MCs	2	0.0	2	0.0	0.009	3.8	LOS A	0.0	0.1	0.03	0.28	0.03	38.4
Approach			16	6.7	16	6.7	0.009	2.1	NA	0.0	0.1	0.03	0.28	0.03	38.7
North: Shadforth Street															
4	L2	All MCs	2	0.0	2	0.0	0.012	3.4	LOS A	0.0	0.1	0.02	0.10	0.02	39.2
5	T1	All MCs	18	0.0	18	0.0	0.012	0.0	LOS A	0.0	0.1	0.02	0.10	0.02	39.7
6	R2	All MCs	2	0.0	2	0.0	0.012	3.8	LOS A	0.0	0.1	0.02	0.10	0.02	39.0
Approach			22	0.0	22	0.0	0.012	0.7	NA	0.0	0.1	0.02	0.10	0.02	39.6
All Vehicles			38	2.8	38	2.8	0.012	1.3	NA	0.0	0.1	0.02	0.17	0.02	39.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [AM Peak Shadforth St & Gipps St (Site Folder: Proposed)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Shadforth Street															
10	L2	All MCs	17	0.0	17	0.0	0.014	3.4	LOS A	0.0	0.1	0.02	0.35	0.02	38.4
11	T1	All MCs	6	16.7	6	16.7	0.014	0.0	LOS A	0.0	0.1	0.02	0.35	0.02	38.8
12	R2	All MCs	2	0.0	2	0.0	0.014	3.8	LOS A	0.0	0.1	0.02	0.35	0.02	38.2
Approach			25	4.2	25	4.2	0.014	2.6	NA	0.0	0.1	0.02	0.35	0.02	38.5
North: Shadforth Street															
4	L2	All MCs	2	0.0	2	0.0	0.012	3.4	LOS A	0.0	0.1	0.02	0.10	0.02	39.2
5	T1	All MCs	18	0.0	18	0.0	0.012	0.0	LOS A	0.0	0.1	0.02	0.10	0.02	39.7
6	R2	All MCs	2	0.0	2	0.0	0.012	3.8	LOS A	0.0	0.1	0.02	0.10	0.02	39.0
Approach			22	0.0	22	0.0	0.012	0.7	NA	0.0	0.1	0.02	0.10	0.02	39.6
All Vehicles			47	2.2	47	2.2	0.014	1.7	NA	0.0	0.1	0.02	0.23	0.02	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [PM Peak Shadforth St & Gipps St (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Shadforth Street															
10	L2	All MCs	12	0.0	12	0.0	0.026	3.4	LOS A	0.0	0.3	0.02	0.17	0.02	39.0
11	T1	All MCs	33	3.2	33	3.2	0.026	0.0	LOS A	0.0	0.3	0.02	0.17	0.02	39.4
12	R2	All MCs	5	0.0	5	0.0	0.026	3.8	LOS A	0.0	0.3	0.02	0.17	0.02	38.8
Approach			49	2.1	49	2.1	0.026	1.2	NA	0.0	0.3	0.02	0.17	0.02	39.2
North: Shadforth Street															
4	L2	All MCs	1	0.0	1	0.0	0.012	3.4	LOS A	0.0	0.1	0.03	0.08	0.03	39.2
5	T1	All MCs	19	5.6	19	5.6	0.012	0.0	LOS A	0.0	0.1	0.03	0.08	0.03	39.7
6	R2	All MCs	2	0.0	2	0.0	0.012	3.9	LOS A	0.0	0.1	0.03	0.08	0.03	39.0
Approach			22	4.8	22	4.8	0.012	0.5	NA	0.0	0.1	0.03	0.08	0.03	39.6
All Vehicles			72	2.9	72	2.9	0.026	1.0	NA	0.0	0.3	0.03	0.14	0.03	39.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 102 [PM Peak Shadforth St & Gipps St (Site Folder: Proposed)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

160 Oxford St, Paddington
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Shadforth Street															
10	L2	All MCs	14	0.0	14	0.0	0.027	3.4	LOS A	0.0	0.3	0.02	0.18	0.02	38.9
11	T1	All MCs	33	3.2	33	3.2	0.027	0.0	LOS A	0.0	0.3	0.02	0.18	0.02	39.4
12	R2	All MCs	5	0.0	5	0.0	0.027	3.8	LOS A	0.0	0.3	0.02	0.18	0.02	38.7
Approach			52	2.0	52	2.0	0.027	1.3	NA	0.0	0.3	0.02	0.18	0.02	39.2
North: Shadforth Street															
4	L2	All MCs	1	0.0	1	0.0	0.012	3.4	LOS A	0.0	0.1	0.03	0.08	0.03	39.2
5	T1	All MCs	19	5.6	19	5.6	0.012	0.0	LOS A	0.0	0.1	0.03	0.08	0.03	39.7
6	R2	All MCs	2	0.0	2	0.0	0.012	3.9	LOS A	0.0	0.1	0.03	0.08	0.03	39.0
Approach			22	4.8	22	4.8	0.012	0.5	NA	0.0	0.1	0.03	0.08	0.03	39.6
All Vehicles			74	2.9	74	2.9	0.027	1.1	NA	0.0	0.3	0.03	0.15	0.03	39.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

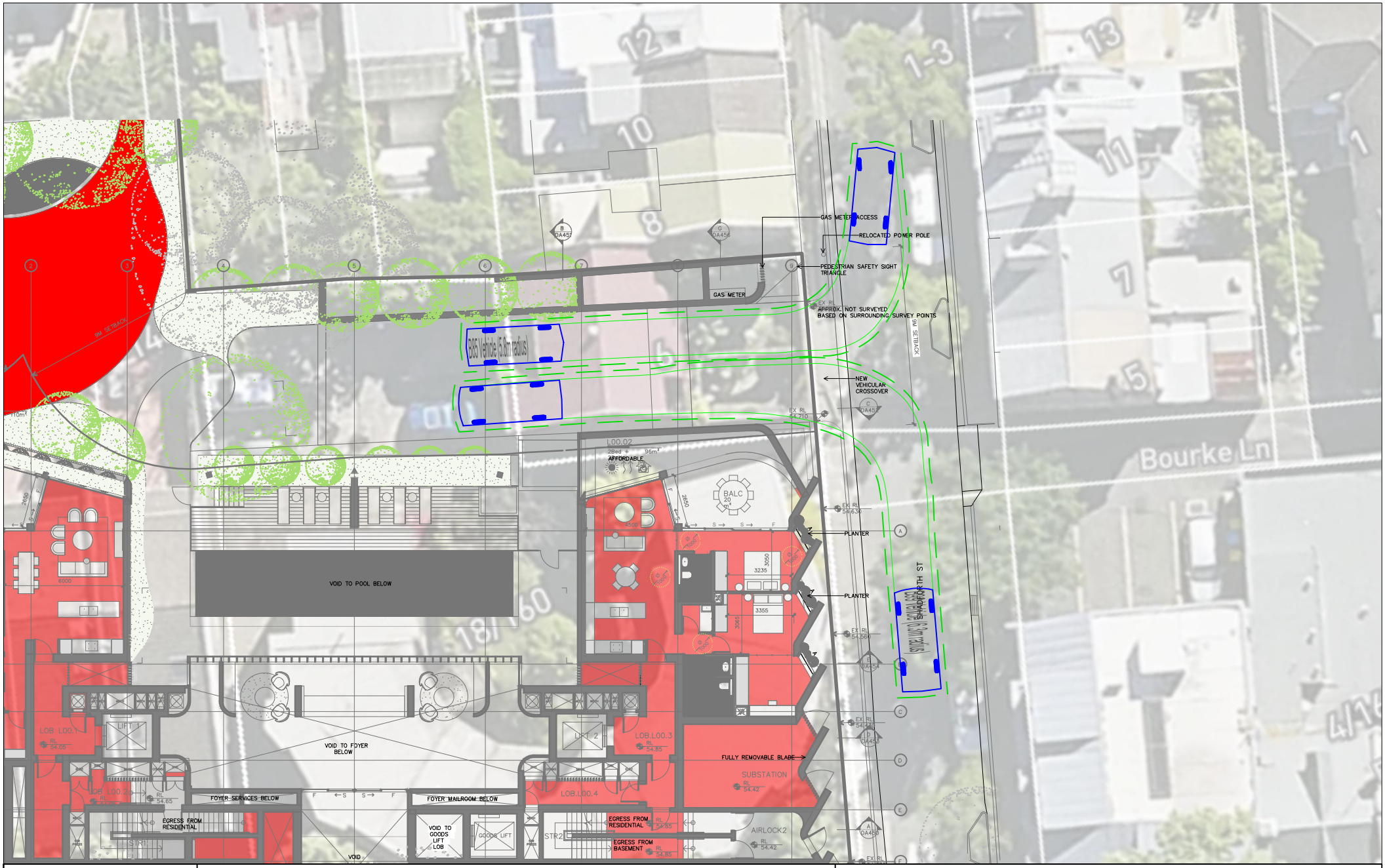
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.



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PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
GF_B99&B85_Passing

1:250 @ A4

ADDRESS
160 Oxford St,
Paddington

PROJECT NO.
25332

DATE DRAWN
2026-5-29

REVIEWED
RV

PREPARED
MN

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants