22 April 2025

Sumi Thambyrajah
School Infrastructure
259 George Street
Sydney NSW 2000

Dear Sumi

RE: The Forest High School Modification 3 - Transport Statement

I refer to State Significant Development SSD-26876801 for the construction of the new The Forest High School. SCT Consulting prepared a Transport Accessibility Impact Assessment, preliminary Construction Traffic Management Plan and School Transport Plan. The application was approved on 23 November 2023.

Modification 3

The proposed modifications entail staged construction of the public domain and road works as follows:

– Stage 1 works comprising all works except the intersection upgrade to Aquatic Drive | Allambie Road, with minor adjustments to kiss and drop arrangements and bus stop arrangements and with a temporary pedestrian crossing on Aquatic Drive. These works are to be completed prior to occupation of the site by students; and

– Stage 2 works comprising the completion of the intersection upgrade with permanent pedestrian crossing facilities on Aquatic Drive and removal of temporary measures. These works are to be completed prior to occupation of the site by more than 1,200 students or, within 2 years of the date of initial occupation.

Reasons for modification

The proponent has been progressing the design of the Allambie Road | Aquatic Drive intersection upgrade in consultation with Council, TfNSW and the bus operator.

Part of the design deliberations has been the possibility that the intersection of Allambie Road | Aquatic Drive be upgraded in a different manner to that which has been approved, in order to improve the efficiency of the intersection and to minimise disturbance to significant utility infrastructure within the road reserve. Accordingly, the proponent is required undertake further investigations which will delay the delivery of the intersection upgrade as approved.

Notwithstanding, even if the intersection design were to remain unchanged, the design specifications, the requisite approvals under the Roads Act 1993 and the physical works could not be completed prior to the intended commencement of school operations in October 2025.

Accordingly, it is proposed that the school commence operation in October 2025 without completion of the intersection upgrade and with several interim arrangements to enable the efficient use of the intersection and the safe management of pedestrians.

It is proposed that the following interim measures be applied in this interim period:

– The student capacity of the school be limited to 1,200 students

– A temporary, at-grade pedestrian crossing be installed on Aquatic Drive approximately 50m to the west of the intersection with Allambie Road, along with temporary kerb blisters, and signage

– That the temporary crossing be managed by traffic controllers during school pickup and drop-off – i.e. between the hours of 8:00am and 9:00am and between 2:30pm and 3:30pm Mondays to Fridays.

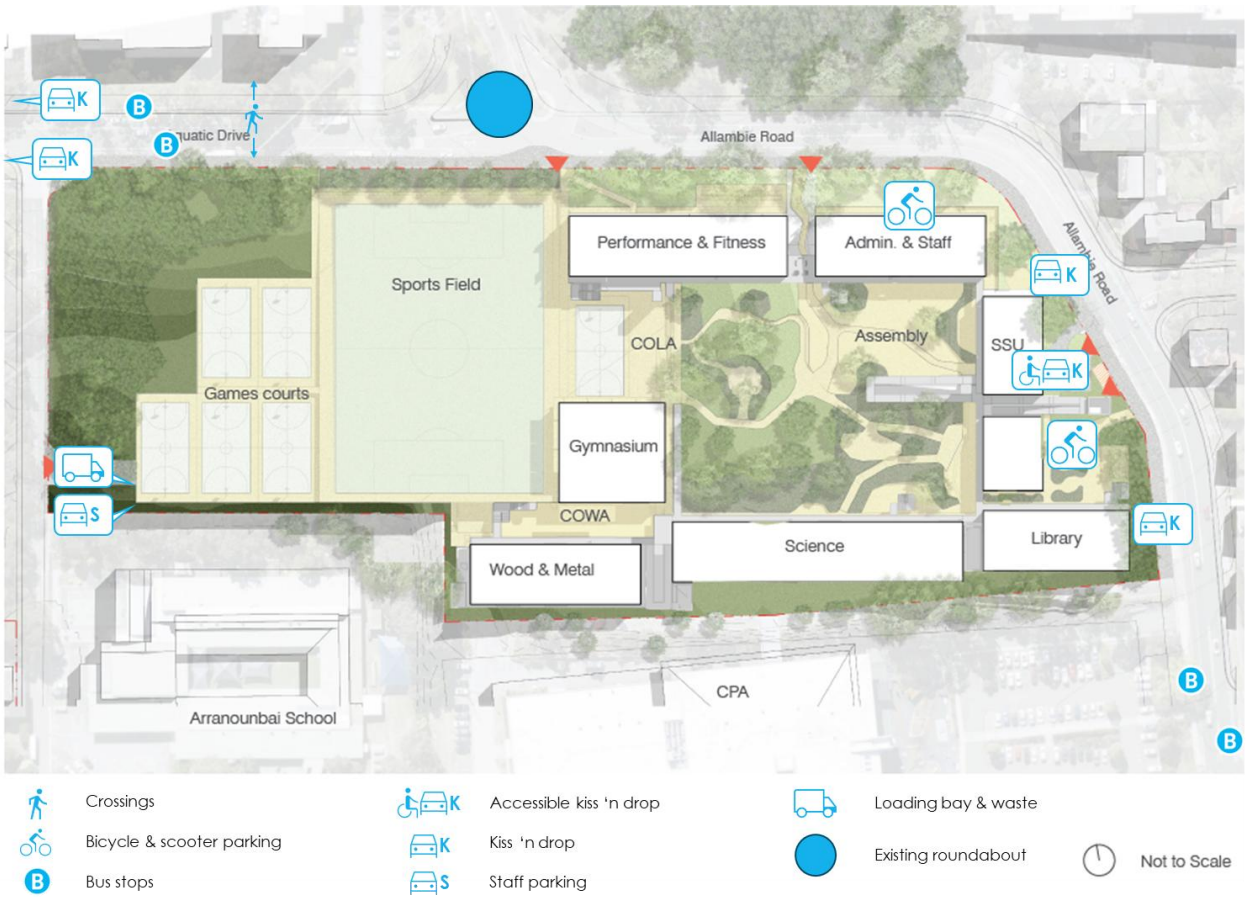
Transport assessment of modification

A transport assessment has been undertaken in the following sections of the changes to operations of the school based on the modification. This transport assessment is based on the operation of the school with the existing roundabout at Allambie Road | Aquatic Drive in place.

Impact to site access

The proposed site access is provided in **Figure 1**. This is an update to Figure 5-1 of the original Transport Access Impact Assessment.

Figure 1 Proposed access arrangements



Source: Architectus & annotations by SCT Consulting

The changes to the approved site access are limited to:

– A changed type of pedestrian crossings outside the front of the school (from signalised to a zebra crossing).

– An additional bus bay on Aquatic Drive northern side (an increase from one bus bay to two).

All other modes access the site in a similar way. The impacts arising from these changes are discussed in turn in the following sections.

Impact to pedestrians and cyclists

Pedestrians and cyclists will have the benefit of a wider shared path around the boundary of the site. The shared path will be widened to 4m (where feasible) in response to Northern Beaches Council request. The minimum width accommodated is a 3.15m, which is due to position of trees. The wider shared path transitions back to the existing shared path west of the entry. A drawing of the works is provided in **Attachment A** of this letter.

The TfNSW Cycleway Design Toolbox identifies that for shared paths, a width of 4.0m is desirable[1]. The original school project was approved with a shared path width of 3.0m, which was considered by the Department of Planning as sufficient to mitigate the impacts of the school. The proposed widening of the shared path provides improved safety for pedestrians, bus riders and cyclists along the frontage of the school, providing increased room for passing and waiting for buses. The wider shared path requires additional land within the site and this land will require minor adjustments to the alignment of site fencing. This change would be permanent.

The proposal is to open the school with a roundabout and a zebra crossing on the western Aquatic Drive approach rather than to have traffic signals in place. This proposal will enable a student capacity of 1,200 students, which is justified by traffic modelling in the below section.

Provision of a zebra crossing across Aquatic Drive is an improved form of crossing, providing greater priority for students to cross compared to private vehicles. The impact is that there is no crossing provided over Allambie Road providing east-west connectivity. The bus stop to the east of Aquatic Drive on the northern side of Allambie Road is removed due to safety concerns, so there is no desire line that requires crossing at this location.

The bus stops on Allambie Road near Sunlea Place will be used and that a modified pedestrian refuge is being discussed with the road authority and will be dealt with through the Roads Act section 138 process.

Impacts to public transport users

Bus users of the stop on the northern side of Allambie Road, east of Aquatic Drive will have to walk further to the nearest stop. The closest stops for southbound services are:

– To the north, Allambie Road south of Rodborough Road which is a 265m walk

– To the south, Allambie Road south of Sunlea Place, which is a 286m walk.

The proposal increases bus stop spacing from the 265-285m distance to a 550m distance. This walk distance is reasonable considering that majority of the residential properties are located south of the existing stop, so the walk distance to the new stop would be for most bus stop users only an additional 164m. The additional walk is also downhill.

The original TAIA assumed that the Allambie Road frequency of 14 services per hour was sufficient to support the school. These services did not require additional bays on the Aquatic Drive route as this was the existing frequency. Additional or altered bus routes would be diverted to Aquatic Drive after the school opens. The additional bus bay on the northern side of Aquatic Drive improves bus operations for the school by ensuring that two buses can arrive concurrently, enabling a larger number of bus routes to be provided on Aquatic Drive if considered appropriate by TfNSW service planners.

Impact to waste and servicing

There are no impacts to the route of travel for waste collection or deliveries to the school. Waste collection and servicing will remain off the driveway to the west of the site in accordance with the layout shown in **Figure 1** (above).

Impacts to kiss ‘n drop

School Infrastructure is proposing the reduction in kiss ‘n drop kerb space on the northern side of Aquatic Drive as part of the proposed design. The approved kiss ‘n drop length is 189m. Alternative kiss ‘n drop locations are provided as indicated in **Appendix A**. The total number of spaces is summarised in **Table 1**.

Table 1 Alternative kiss ‘n drop provision

Location	Length	Number of spaces
Northern side of Aquatic Drive (previously approved)	60m	10
Southern side of Aquatic Drive (previously approved)	78m	13
Allambie Road western side (new)	31m + 24m	3+4
Total	**193m**	**30**

[1] Cycleway Design Toolbox, s3.4.1

There is therefore no impact to the number of spaces proposed in the original SSDA. The revised locations also present the opportunity for drivers to pick a location that better suits their travel direction and therefore will reduce unnecessary turning movements in the traffic network.

Traffic modelling of proposed changes

Traffic modelling was conducted for a scenario of 1,200 students at the new The Forest High School based on the assumptions specified in TAIA Section 4.2.3 but particularly Section 4.2.3.4 2025 day of opening intersection performance.

The following assumptions were made as part of this assessment:

– 20 per cent of drivers would use the pick-up / drop off on the western side of Allambie Road on the eastern frontage of the school

– 40 per cent of drivers would use the pick-up / drop off on the northern side of Aquatic Drive

– 40 per cent of drivers would use the pick-up / drop off on the southern side of Aquatic Drive.

The zebra crossing was included in the traffic model west of the roundabout to ensure that the delays from the zebra crossing are captured.

The original TAIA assessment had a 2025 horizon for day of opening, which included the following assumptions:

– Bunnings located at the corner of Allambie Road and Rodborough Road was included.

– 22 per cent of the Frenchs Forest Precinct traffic demands were included. 22 per cent of the precinct is equivalent to a traffic generation of 151 veh/h in the morning peak and 238 veh/h in the afternoon peak.

These same assumptions were adopted for this modelling exercise. However, it is observed that at the time of writing this modification, there has been no development within the Frenchs Forest Precinct. None of the nominated areas have been demolished. Development applications are under way for some of the sites. Hence the amount of background growth identified in the 2025 model is more appropriate as a 2028 horizon year given the extent of background growth assumed. Hence the model year is 2028 for this exercise despite having the same assumptions as the TAIA 2025 model.

Operational performance is typically measured through an assessment of the throughput of vehicles across a traffic network, with the average delay per vehicle used to assess the performance of an individual intersection. The average delay per vehicle measure is linked to a Level of Service (LoS) index which characterises the intersection's operational performance.

Table 2 provides a summary of the LoS performance bands.

In addition, intersection performance is measured using Degree of Saturation (DoS), which is a measure of the spare capacity of each intersection.

Table 2 Level of Service index

Level of Service	Average Delay per Vehicles (sec/h)	Performance explanation
A	Less than 14.5	Good operation
B	14.5 to 28.4	Good with acceptable delays and spare capacity
C	28.5 to 42.4	Satisfactory
D	42.5 to 56.4	Operating near capacity
E	56.5 to 70.4	At capacity, at signals incidents will cause excessive delays. Roundabouts require other control method.
F	70.5 or greater	At capacity, at signals incidents will cause excessive delays. Roundabouts require other control method.

Source: Guide to Traffic Generating Developments; RMS; 2002

The results are shown in **Table 3**.

Table 3 2028 intersection performance

Intersection	Delay	LoS	DoS	Delay	LoS	DoS
	Weekday AM peak			Weekday PM peak		
Existing scenario						
Allambie Rd | Warringah Rd	48.7s	D	0.90	42.2s	C	0.86
Allambie Rd | Rodborough Rd	19.4s	B	0.65	16.4s	B	0.55
Allambie Rd | Aquatic Dr	17.0s	B	0.87	15.5s	B	0.78
Allambie Rd | Mortain Ave	11.5s	A	0.68	9.4s	A	0.57
Allambie Rd | Fleurs St	9.7s	A	0.58	7.4s	A	0.44
2025 with project and 1,200 students						
Allambie Rd | Warringah Rd	48.7s	D	0.88	54.6s	D	0.96
Allambie Rd | Rodborough Rd	20.1s	B	0.78	18.0s	B	0.65
Allambie Rd | Aquatic Dr	16.9s	B	0.90	12.6s	A	0.84
Allambie Rd | Mortain Ave	11.5s	A	0.60	9.7s	A	0.54
Allambie Rd | Fleurs St	9.6s	A	0.53	7.9s	A	0.46

The results show that the network has spare capacity in the morning peak in the counter-peak direction which the school takes advantage of. Hence, there are very small changes in network delays in the morning peak. In the afternoon peak, the intersections experience a larger increase in delays, although the increase is less than what was anticipated under the Transport Access Impact Assessment that was prepared as part of the SSD lodgement.

Detailed results are provided in **Attachment B**.

The impacts of the proposal are considered a minor increase in delays and acceptable from a network operations perspective.

Interim School Transport Plan

A School Transport Plan was prepared as part of the SSD documentation. An updated version of this report is provided in **Attachment C**. Sections which have not been updated have been replaced with “No change” to improve readability of this document.

Conclusion

Based on the assessed impacts, the modifications have an acceptable transport impact.

Yours sincerely

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Associate Director
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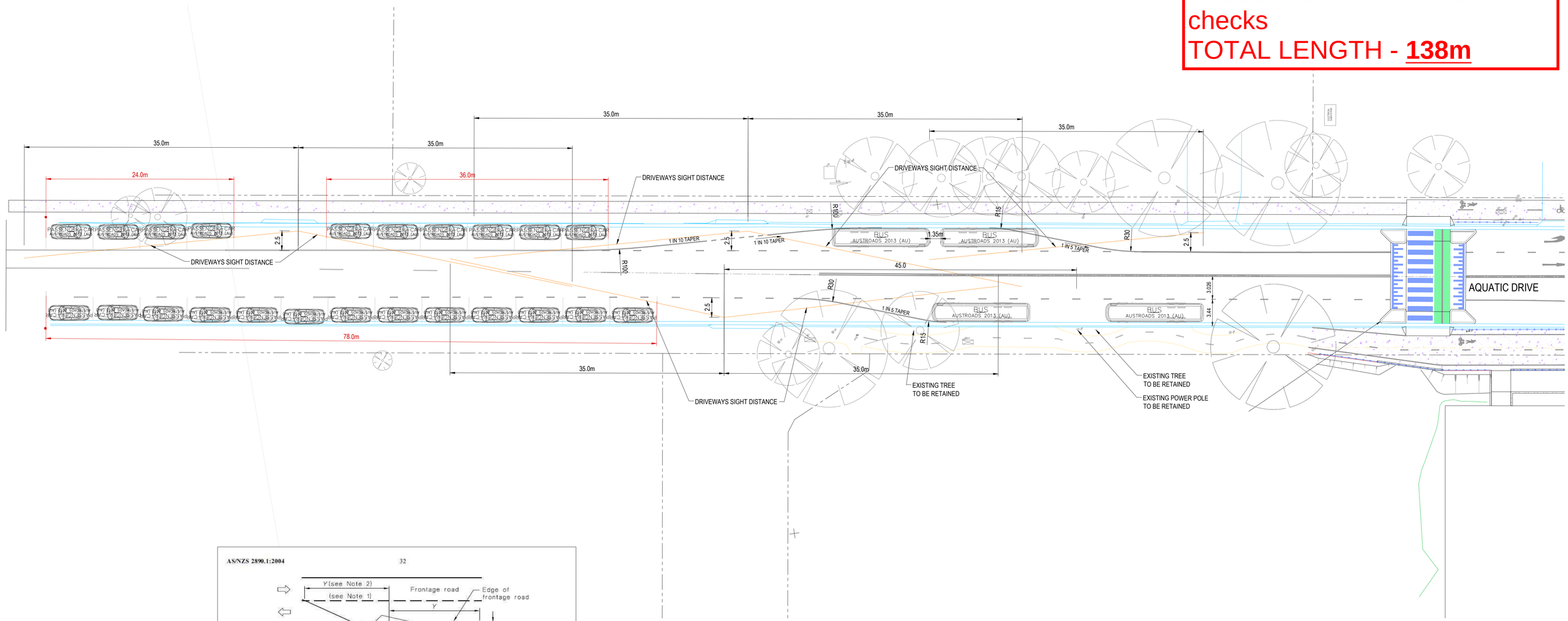
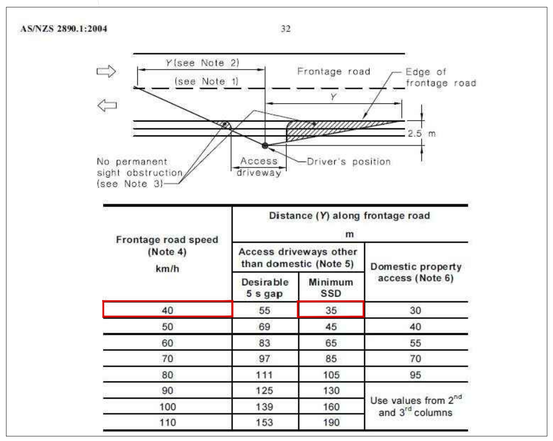
Attachment A – Proposed Public Domain Works

AQUATIC DRIVE KISS AND DROP SPACES
- 40kmhr speed
- AS2890.1 PART 3 -MGSD checks
TOTAL LENGTH - **138m**





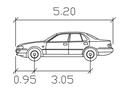
AS/NZS 2890.1:2004 32

Frontage road speed (Note 4) km/h	Distance (Y) along frontage road m		
	Access driveways other than domestic (Note 5)		Domestic property access (Note 6)
	Desirable 5 s gap	Minimum SSD	
40	55	35	30
50	69	45	40
60	83	65	55
70	97	85	70
80	111	105	95
90	125	130	Use values from 2nd and 3rd columns
100	139	160	
110	153	190	

SOURCE: AUSTRALIAN STANDRDS, AS/2890.1:2004

SIGHT DISTANCE CHECK

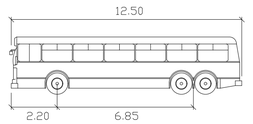
SCALE: 1:250



PASSENGER-CAR

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	6.0
Steering Angle	: 33.6

B99
N.T.S



BUS

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

12.5m LONG BUS
N.T.S

0 5 10 15 20 25m
5 4 3 2 1
SCALE 1:250

FOR INFORMATION ONLY

SURVEY INFORMATION
SURVEYED BY
C.M.S. SURVEYOURS
PTY LIMITED
DATUM: AHD
ORIGIN OF LEVELS: SSM 9185, RL 127.659

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR INFORMATION	LC	TD	31.03.2025
05	ISSUED FOR WAD APPROVAL	LC	TD	12.03.2025
04	ISSUED FOR WAD APPROVAL	MP	TD	06.11.2024
03	ISSUED FOR WAD APPROVAL	LC	TD	18.10.2024
02	ISSUED FOR WAD APPROVAL	LC	TD	22.08.2024
01	ISSUED FOR WAD APPROVAL	LC	TD	25.06.2024

Client: ADCO
Architect: ARCHITECTUS

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H&H Job No: 231123
henry&hymas

DRAWING TO BE PRINTED IN COLOUR

Project: PROPOSED THE FOREST HIGH SCHOOL
187 ALLAMBIE ROAD, ALLAMBIE HEIGHTS, NSW

Title: PROPOSED BUS STOPS AND KISS AND DROP PARKING

Drawn	Designed	Original issue date
L.Caha	L.Caha	JULY
Checked	Approved	Scale @A1
T.Dempsey	A.Francis	1:250

Drawing number: 231123_D2_C630
Revision: 06

SIGHT DISTANCE TO QUEUING CARS

Table 5.5: Stopping sight distances for cars on sealed roads

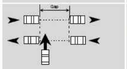
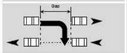
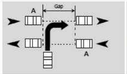
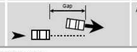
Design speed (km/h)	Absolute minimum values Only for specific road types and situations[1] based on d = 0.46[2],[3]			Desirable minimum values for all road types based on d = 0.36			Values for major highways and freeways in flat terrain[7] based on d = 0.26	
	R_T = 1.5 s[4]	R_T = 2.0 s[4]	R_T = 2.5 s	R_T = 1.5 s[4]	R_T = 2.0 s[4]	R_T = 2.5 s	R_T = 2.0 s	R_T = 2.5 s
40	30	36	–	34	40	45	–	–
50	42	49	–	48	55	62	–	–
60	56	64	–	64	73	81	–	–
70	71	81	–	83	92	102	113	123
80	88	99	–	103	114	126	141	152
90	107	119	132	126	139	151	173	185
100	–	141	155	–	165	179	207	221
110	–	165	180	–	193	209	244	260
120	–	190	207	–	224	241	285	301
130	–	217	235	–	257	275	328	346
Corrections due to grade [5] [6]	**–8**	**–6**	**–4**	**–2**	**2**	**4**	**6**	**8**
40	5	3	2	1	–1	–2	–2	–3
50	8	5	3	2	–1	–3	–4	–5
60	11	8	5	2	–2	–4	–6	–7
70	15	11	7	3	–3	–5	–8	–10
80	20	14	9	4	–4	–7	–10	–13
90	25	18	11	5	–5	–9	–13	–16
100	31	22	14	6	–6	–11	–16	–20
110	38	26	17	8	–7	–13	–19	–24
120	45	31	20	9	–8	–16	–22	–29
130	53	37	23	11	–10	–18	–26	–34

SOURCE: AUSTROADS, PART 3: GEOMETRIC DESIGN

SIGHT DISTANCE FOR DRIVEWAY

Guide to Road Design Part 4A: Unsignalised and Signalised Intersections

Table 3.5: Critical acceptance gaps and follow-up headways

Movement	Diagram	Description	t_c[1] (sec)	t_f[2] (sec)
Left turn		Not interfering with A Requiring A to slow	14–40 5	2–3 2–3
Crossing		Two lane/one way Three lane/one way Four lane/one way Two lane/two way Four lane/two way Six lane/two way	4 6 8 5 8 8	2 3 4 3 5 5
Right turn from major road		Across one lane Across two lanes Across three lanes	4 5 6	2 3 4
Right turn from minor road		Not interfering with A One way Two lane/two way Four lane/two way Six lane/two way	14–40 3 5 8 8	3 3 3 5 5
Merge		Acceleration lane	3	2

1 t_c = critical acceptance gap (sec).
2 t_f = follow-up headway (sec).

Notes:

For a description of the follow-up headway and its uses, refer to AGTM Part 3.

The critical acceptance gaps (t_c) listed are based on simple road layouts with an assumed 3.5 m wide lane and no median width to cross. Any geometric features that increase the crossing distance therefore require an increase in the values of t_a to be applied. These factors include, a skewed crossing path, auxiliary turn lanes and bicycle lanes, wide centreline treatments and narrow medians. t_c values can be extrapolated for those given in Table 3.5 based on the specific conditions. For example, for a crossing manoeuvre at a two-lane/two-way road with an auxiliary lane, t_c could be assumed using the mid-point between a two-lane/two-way and a four-lane/two-way (e.g. t_c = 6.5).

Source: Department of Main Roads (2006).

Guide to Road Design Part 4A: Unsignalised and Signalised Intersections

Table 3.6: Table of minimum gap sight distances ('D' metres) for various speeds

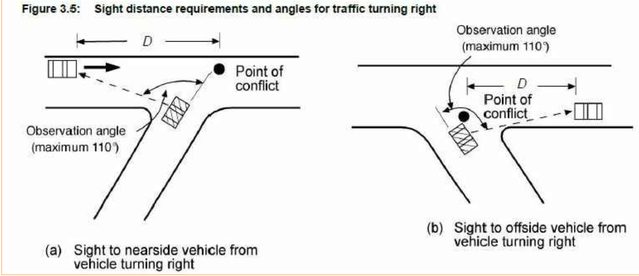
Critical gap acceptance time (t_c) (secs)	85th percentile speed of approaching vehicle (km/h)										
	10	20	30	40	50	60	70	80	90	100	110
4	11	22	33	44	55	67	78	89	100	111	122
5	14	28	42	55	69	83	97	111	125	139	153
6	17	33	50	67	83	100	117	133	150	167	183
7	19	39	58	78	97	117	136	155	175	194	214
8	22	44	67	89	111	133	155	178	200	222	244
9	25	50	75	100	125	150	175	200	225	250	275
10	28	56	83	111	139	167	194	222	250	278	305

Detailed sight distance requirements for left-turning drivers

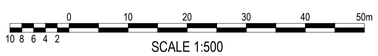
Figure 3.6 illustrates the sight distance to a through vehicle from a vehicle turning left. Sight requirements for left turns depend on the direction of approaching traffic and right-of-way regulations. For drivers of vehicles entering a priority road, sight lines should be considered to:

- through vehicles approaching from the left and right
- turning vehicles on other approaches.

Figure 3.5: Sight distance requirements and angles for traffic turning right

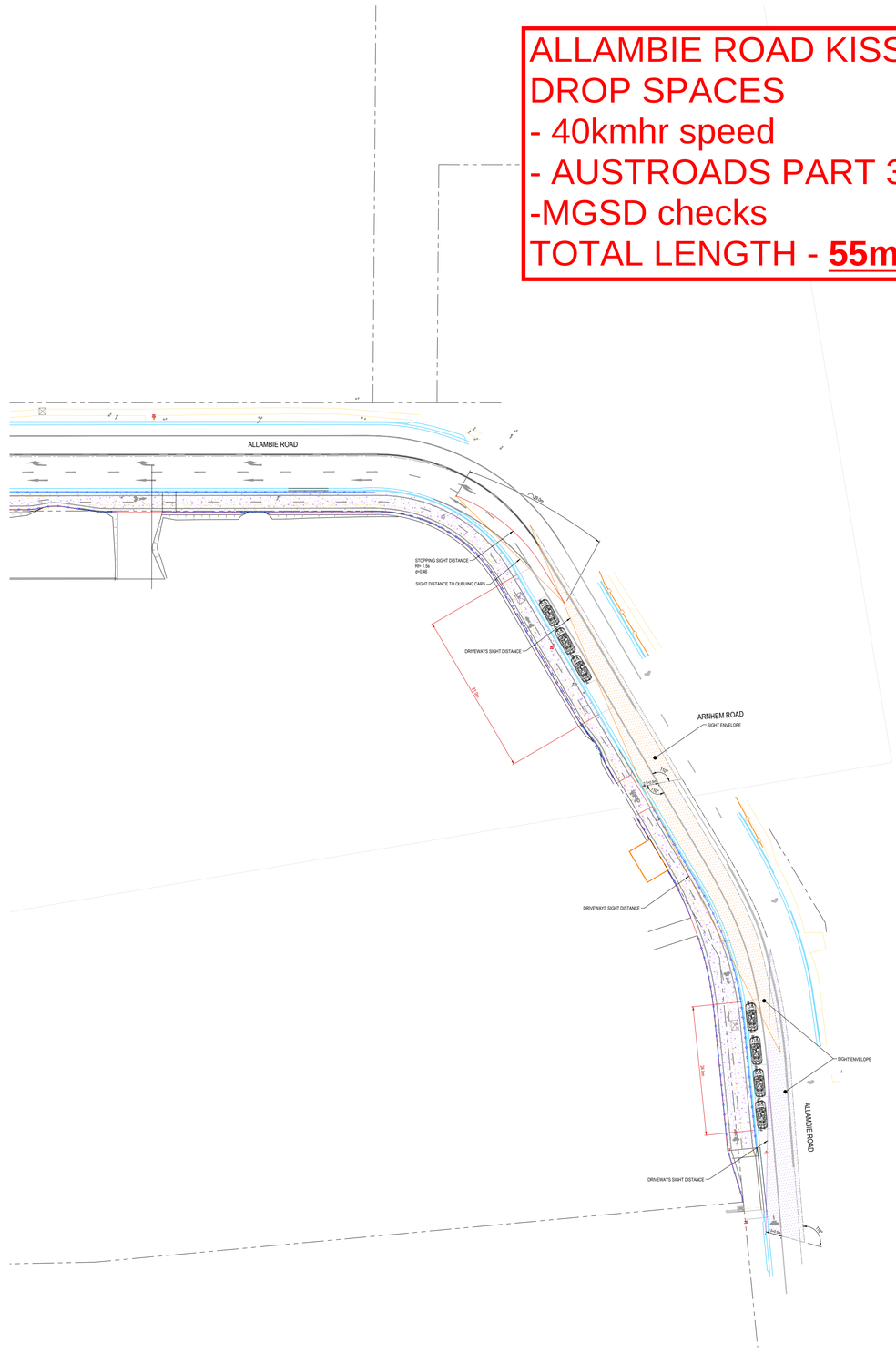


SOURCE: AUSTROADS, PART 4A: UNSIGNALISED AND SIGNALISED INTERSECTIONS



SCALE 1:500

ALLAMBIE ROAD KISS AND DROP SPACES
- 40kmhr speed
- AUSTROADS PART 3
-MGSD checks
TOTAL LENGTH - **55m**



SIGHT DISTANCE CHECK
SCALE: 1:500

FOR INFORMATION ONLY

SURVEY INFORMATION
SURVEYED BY
C.M.S. SURVEYOURS
PTY LIMITED
DATUM: AHD
ORIGIN OF LEVELS: SSM 9185, RL 127.659

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMATION	LC	TD	31.03.2025

Client: ADCO
Architect: ARCHITECTUS

Suite 2.01
828 Pacific Highway Gordon NSW 2072
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Facsimile +61 2 9417 8337
Email email@hhconsult.com.au
Web www.henryandhymas.com.au
H&H Job No: 231123

DRAWING TO BE PRINTED IN COLOUR

henry&hymas

Project: PROPOSED THE FOREST HIGH SCHOOL
187 ALLAMBIE ROAD, ALLAMBIE HEIGHTS, NSW

Title: PROPOSED BUS STOPS AND KISS AND DROP PARKING

Drawn	Designed	Original issue date
L.Caha	L.Caha	JULY
Checked	Approved	Scale @A1
T.Dempsey	A.Francis	1:250

Drawing number: 231123_D2_C631
Revision: 01

Attachment B – SIDRA Results

USER REPORT FOR NETWORK SITE

Project: SCT_00703_TFHS Construction ISTP_MDL_v0.2

Output produced by SIDRA INTERSECTION Version: 9.1.6.228 **Template: SCT Default Site Outputs**

Site: 1AM_MOD3 [ALL_WAR_28_AM_MOD3 (Site Folder: AM_MOD3)]

Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

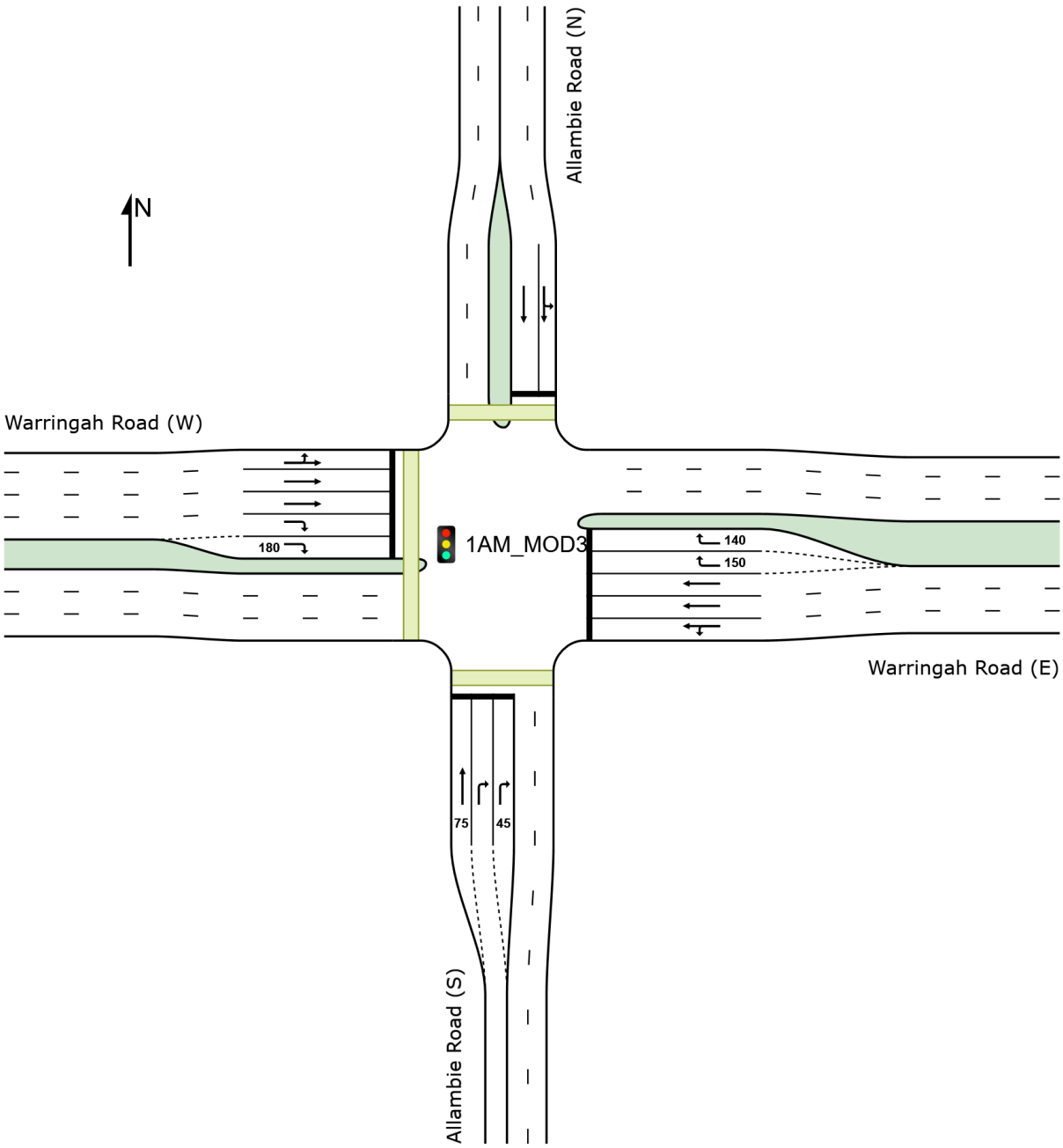
1AM_MOD3

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 160 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn - full dia
Input Phase Sequence: A, C, D, E, F, F1, F2
Output Phase Sequence: A, C, D, E, F, F1, F2
Reference Phase: Phase A
Offset: NA

Site Layout

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


N
Allambie Road (N)
Warringah Road (W)
180
1AM_MOD3
140
150
Warringah Road (E)
75
45
Allambie Road (S)

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: Allambie Road (S)															
2	T1	All MCs	326	2.3	326	2.3	0.836	82.6	LOS F	22.9	163.2	1.00	0.96	1.10	9.1
3	R2	All MCs	212	2.5	212	2.5	0.576	88.8	LOS F	8.1	58.2	1.00	0.79	1.00	25.2
Approach			538	2.3	538	2.3	0.836	85.0	LOS F	22.9	163.2	1.00	0.89	1.06	15.7
East: Warringah Road (E)															
4	L2	All MCs	359	2.3	359	2.3	* 0.880	37.6	LOS C	50.3	363.8	1.00	0.99	1.06	30.5
5	T1	All MCs	1707	5.5	1707	5.5	* 0.880	62.3	LOS E	53.5	392.5	1.00	0.96	1.06	43.1
6	R2	All MCs	274	0.4	274	0.4	0.496	70.1	LOS E	9.1	63.9	0.97	0.79	0.97	28.8
Approach			2340	4.4	2340	4.4	0.880	59.4	LOS E	53.5	392.5	1.00	0.95	1.05	39.0
North: Allambie Road (N)															
7	L2	All MCs	6	0.0	6	0.0	* 0.660	42.6	LOS D	9.3	67.0	1.00	0.83	1.03	25.3
8	T1	All MCs	242	3.9	242	3.9	* 0.660	78.8	LOS F	9.9	71.9	1.00	0.83	1.03	4.6
Approach			248	3.8	248	3.8	0.660	77.9	LOS F	9.9	71.9	1.00	0.83	1.03	5.4
West: Warringah Road (W)															
10	L2	All MCs	101	2.1	101	2.1	0.795	21.4	LOS B	23.5	171.4	0.62	0.74	0.62	49.8
11	T1	All MCs	1739	5.7	1739	5.7	* 0.795	14.9	LOS B	24.4	179.1	0.62	0.71	0.62	59.5
12	R2	All MCs	648	3.7	648	3.7	* 0.828	63.6	LOS E	22.2	160.6	0.98	0.95	1.03	28.7
Approach			2488	5.0	2488	5.0	0.828	27.9	LOS B	24.4	179.1	0.72	0.77	0.73	50.8
All Vehicles			5615	4.5	5615	4.5	0.880	48.7	LOS D	53.5	392.5	0.87	0.86	0.91	40.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

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 Green.

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Allambie Road (S)											
P1	Full	53	73.3	LOS F	0.2	0.2	0.96	0.96	240.0	200.0	0.83
North: Allambie Road (N)											
P3	Full	53	73.3	LOS F	0.2	0.2	0.96	0.96	240.0	200.0	0.83
West: Warringah Road (W)											
P4	Full	53	73.3	LOS F	0.2	0.2	0.96	0.96	240.0	200.0	0.83
All Pedestrians		158	73.3	LOS F	0.2	0.2	0.96	0.96	240.0	200.0	0.83

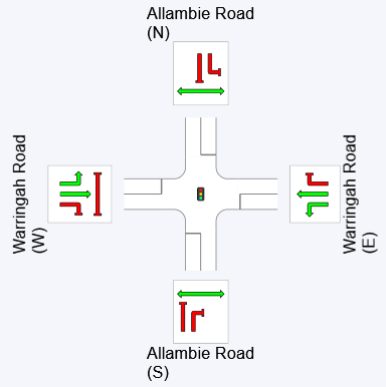
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

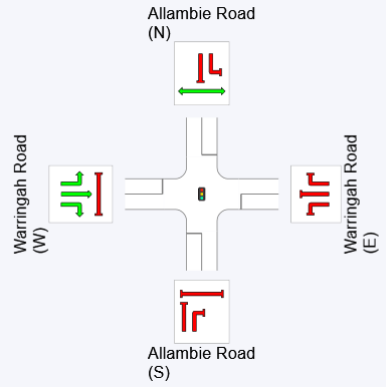
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence

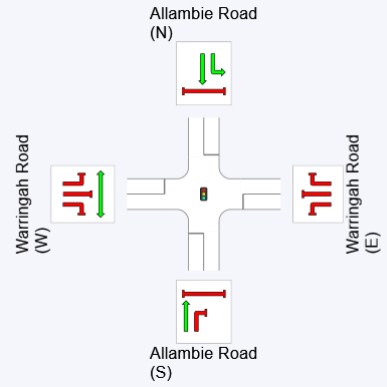
Phase A REF



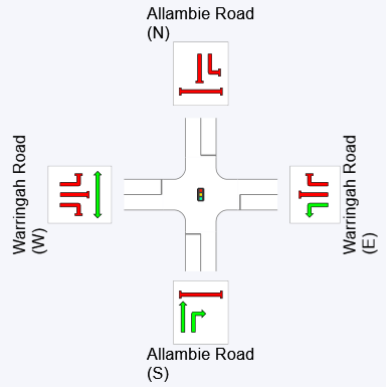
Phase C



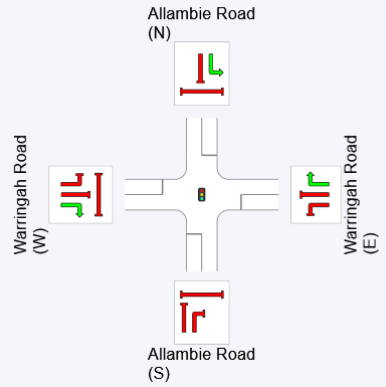
Phase D



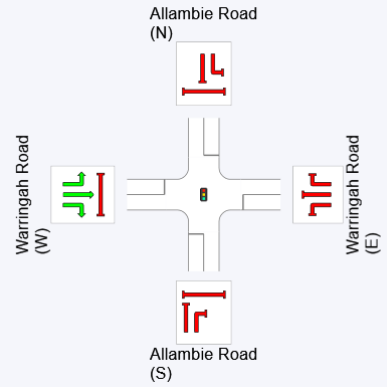
Phase E



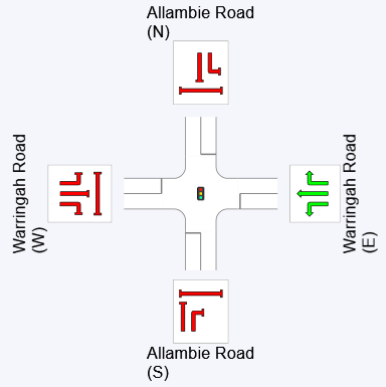
Phase F



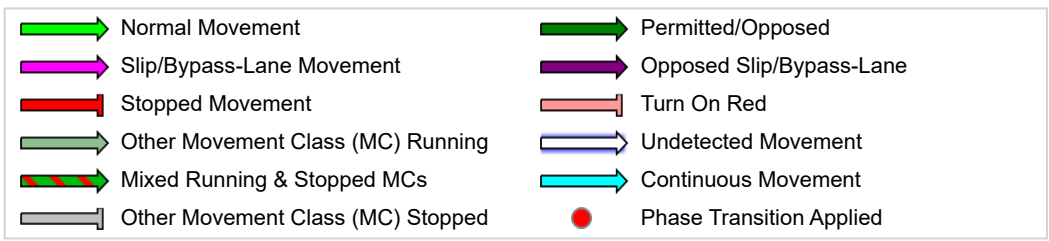
Phase F1



Phase F2



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	A	C	D	E	F	F1	F2
Phase Change Time (sec)	0	64	70	93	116	144	155
Green Time (sec)	63	2	16	15	19	6	3
Phase Time (sec)	67	9	24	24	24	8	4
Phase Split	42%	6%	15%	15%	15%	5%	3%
Phase Frequency (%)	47.0[2]	81.8[2]	100.0	100.0	68.0[1]	22.0[1]	10.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

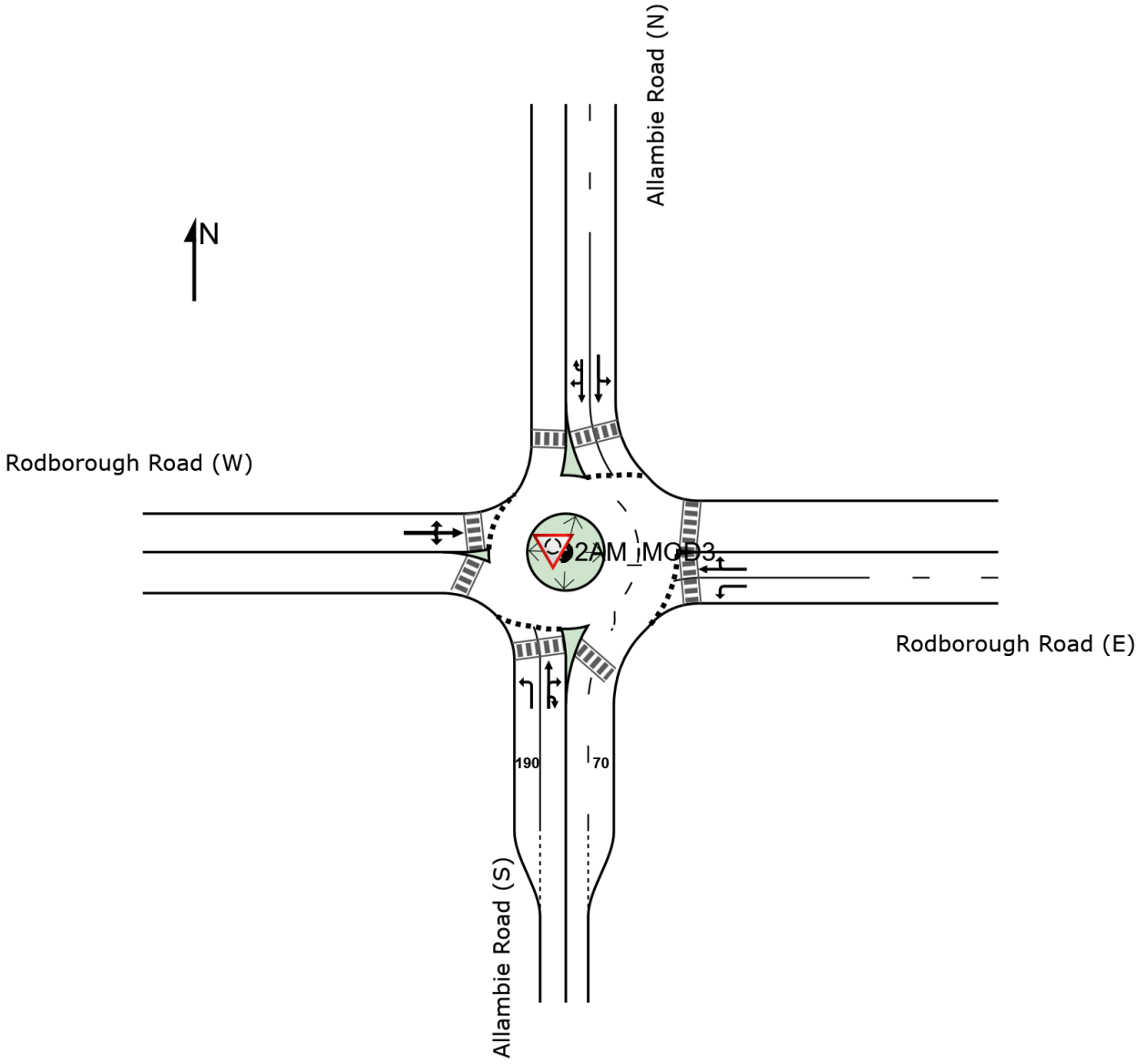
Site: 2AM_MOD3 [ALL_ROD_28_AM_MOD3 (Site Folder: AM_MOD3)]

Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

NA
Site Category: (None)
Roundabout

Site Layout

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



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: Allambie Road (S)															
1	L2	All MCs	301	4.5	301	4.5	0.344	7.6	LOS A	2.6	19.0	0.67	0.61	0.67	41.3
2	T1	All MCs	352	2.4	352	2.4	0.779	11.3	LOS A	8.0	57.0	1.00	0.74	1.20	33.3
3	R2	All MCs	141	0.7	141	0.7	0.779	14.5	LOS A	8.0	57.0	1.00	0.74	1.20	40.1
3u	U	All MCs	2	0.0	2	0.0	0.779	16.1	LOS B	8.0	57.0	1.00	0.74	1.20	33.3
Approach			796	2.9	796	2.9	0.779	10.5	LOS A	8.0	57.0	0.87	0.69	1.00	38.2
East: Rodborough Road (E)															
4	L2	All MCs	139	0.8	139	0.8	0.236	14.8	LOS B	2.4	16.6	0.95	0.66	0.95	34.2
5	T1	All MCs	43	17.1	43	17.1	0.514	17.6	LOS B	4.0	29.8	1.00	0.81	1.18	32.8
6	R2	All MCs	141	3.0	141	3.0	0.514	20.1	LOS B	4.0	29.8	1.00	0.81	1.18	30.0
Approach			323	3.9	323	3.9	0.514	17.5	LOS B	4.0	29.8	0.98	0.74	1.08	32.1
North: Allambie Road (N)															
7	L2	All MCs	500	1.7	500	1.7	0.476	6.4	LOS A	3.9	27.8	0.41	0.59	0.41	41.8
8	T1	All MCs	675	5.0	675	5.0	0.630	6.4	LOS A	6.8	49.7	0.46	0.56	0.46	29.9
9	R2	All MCs	93	4.5	93	4.5	0.630	9.6	LOS A	6.8	49.7	0.46	0.56	0.46	36.0
9u	U	All MCs	6	0.0	6	0.0	0.630	11.2	LOS A	6.8	49.7	0.46	0.56	0.46	29.9
Approach			1274	3.6	1274	3.6	0.630	6.7	LOS A	6.8	49.7	0.44	0.57	0.44	37.8
West: Rodborough Road (W)															
10	L2	All MCs	8	12.5	8	12.5	0.038	8.3	LOS A	0.1	1.0	0.68	0.70	0.68	31.1
11	T1	All MCs	3	0.0	3	0.0	0.038	7.9	LOS A	0.1	1.0	0.68	0.70	0.68	41.2
12	R2	All MCs	5	0.0	5	0.0	0.038	11.1	LOS A	0.1	1.0	0.68	0.70	0.68	31.1
Approach			17	6.3	17	6.3	0.038	9.1	LOS A	0.1	1.0	0.68	0.70	0.68	34.8
All Vehicles			2409	3.5	2409	3.5	0.779	9.4	LOS A	8.0	57.0	0.66	0.63	0.71	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

Roundabout 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.

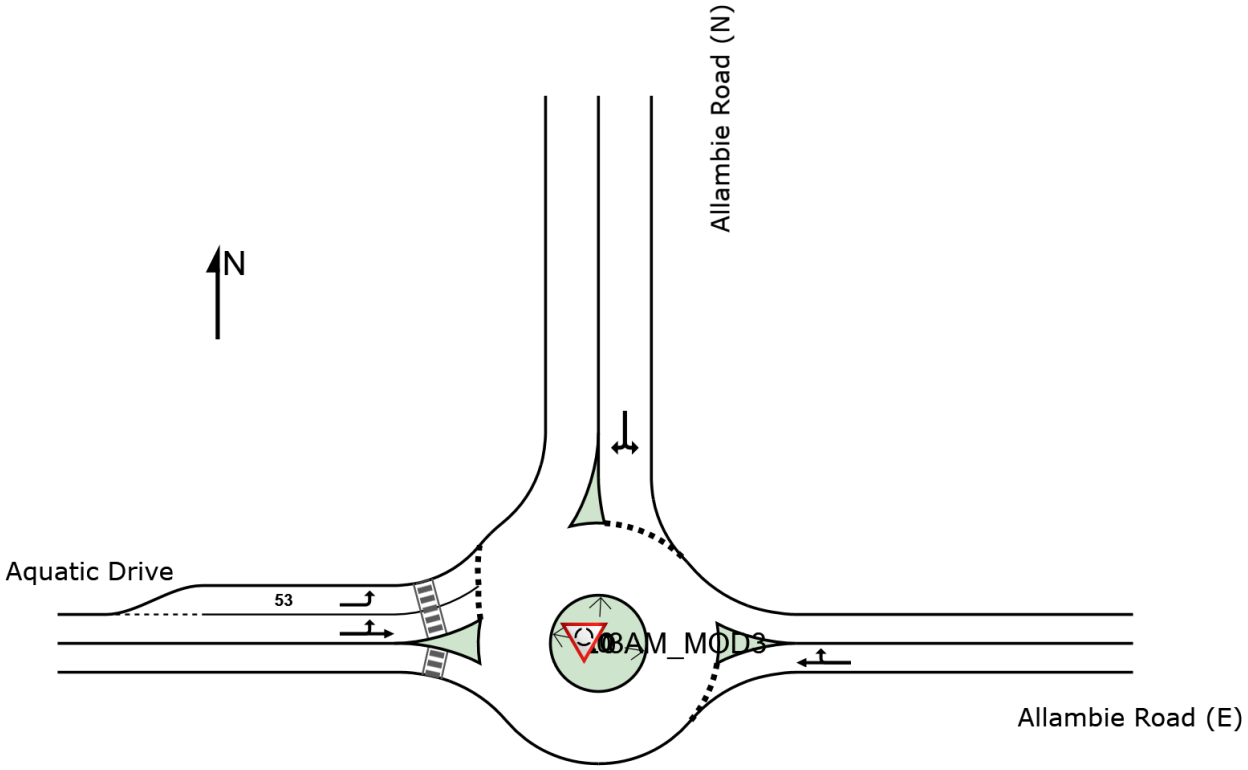
Site: 3AM_MOD3 [ALL_AQU_28_AM_MOD3 (Site Folder: AM_MOD3)]

Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

NA
Site Category: (None)
Roundabout

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	174	1.8	174	1.8	0.660	9.5	LOS A	7.3	52.8	0.79	0.77	0.88	45.4
6	R2	All MCs	434	3.9	434	3.9	0.660	12.9	LOS A	7.3	52.8	0.79	0.77	0.88	45.4
Approach			607	3.3	607	3.3	0.660	12.0	LOS A	7.3	52.8	0.79	0.77	0.88	45.4
North: Allambie Road (N)															
7	L2	All MCs	574	5.1	574	5.1	0.902	13.6	LOS A	16.9	123.1	1.00	0.86	1.31	30.3
9	R2	All MCs	218	2.9	218	2.9	0.902	16.9	LOS B	16.9	123.1	1.00	0.86	1.31	30.3
Approach			792	4.5	792	4.5	0.902	14.5	LOS B	16.9	123.1	1.00	0.86	1.31	30.3
West: Aquatic Drive															
10	L2	All MCs	385	1.9	385	1.9	0.665	10.9	LOS A	8.1	57.5	0.92	0.81	1.11	15.7
11	T1	All MCs	212	2.5	212	2.5	0.665	11.0	LOS A	8.1	57.5	0.96	0.83	1.19	15.6
Approach			597	2.1	597	2.1	0.665	10.9	LOS A	8.1	57.5	0.94	0.82	1.14	15.7
All Vehicles			1996	3.4	1996	3.4	0.902	12.7	LOS A	16.9	123.1	0.92	0.82	1.13	35.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

Roundabout 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: 4AM_MOD3 [ALL_MOR_28_AM_MOD3 (Site Folder: AM_MOD3)]

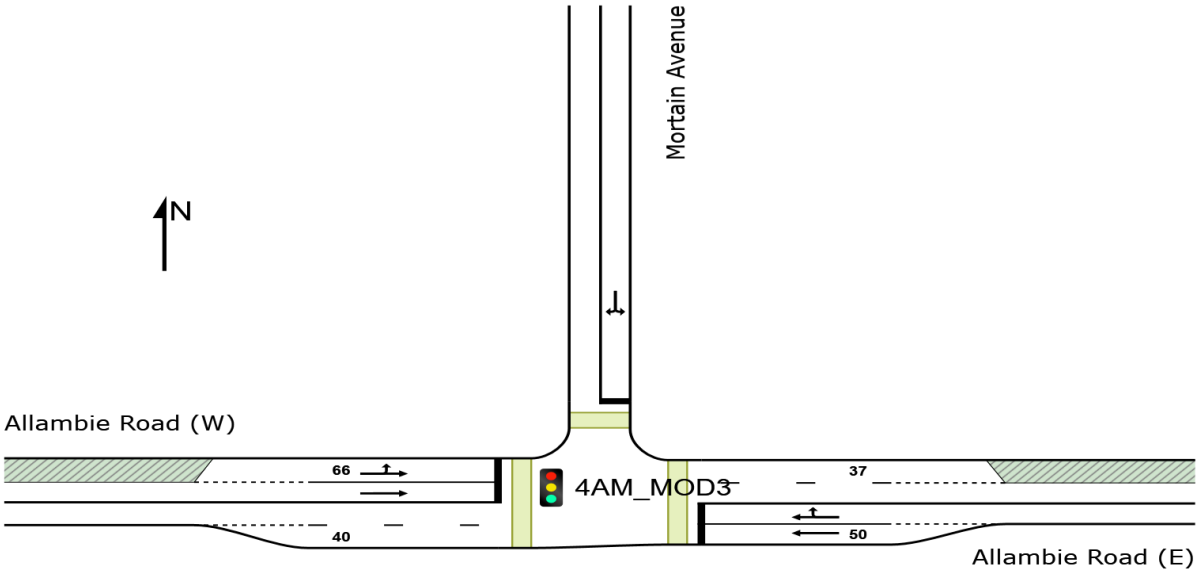
Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

NA
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 63 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn
Input Phase Sequence: A, B
Output Phase Sequence: A, B
Reference Phase: Phase A
Offset: NA

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	605	3.0	605	3.0	0.595	9.9	LOS A	10.8	77.4	0.69	0.61	0.69	44.2
6	R2	All MCs	51	0.0	51	0.0	* 0.595	28.8	LOS C	10.8	77.4	0.76	0.68	0.76	34.5
Approach			656	2.7	656	2.7	0.595	11.4	LOS A	10.8	77.4	0.69	0.61	0.69	42.8
North: Mortain Avenue															
7	L2	All MCs	63	0.0	63	0.0	0.352	24.4	LOS B	3.9	27.0	0.87	0.74	0.87	15.4
9	R2	All MCs	82	0.0	82	0.0	* 0.352	22.8	LOS B	3.9	27.0	0.87	0.74	0.87	15.4
Approach			145	0.0	145	0.0	0.352	23.5	LOS B	3.9	27.0	0.87	0.74	0.87	15.4
West: Allambie Road (W)															
10	L2	All MCs	32	6.7	32	6.7	0.147	13.2	LOS A	2.2	16.1	0.49	0.47	0.49	38.3
11	T1	All MCs	740	4.1	740	4.1	0.589	9.3	LOS A	12.3	89.4	0.66	0.60	0.66	47.8
Approach			772	4.2	772	4.2	0.589	9.4	LOS A	12.3	89.4	0.65	0.59	0.65	47.1
All Vehicles			1573	3.2	1573	3.2	0.595	11.5	LOS A	12.3	89.4	0.69	0.61	0.69	41.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.
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 Green.
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.

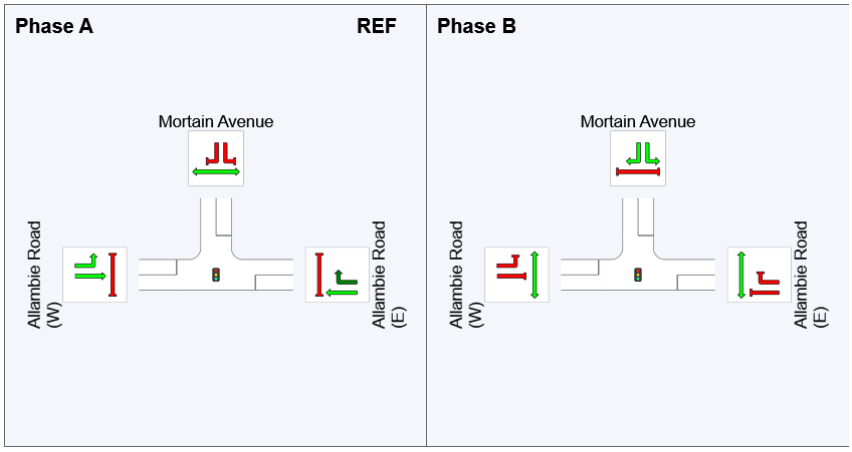
* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Allambie Road (E)											
P2	Full	53	25.8	LOS C	0.1	0.1	0.91	0.91	192.5	200.0	1.04
North: Mortain Avenue											
P3	Full	53	25.8	LOS C	0.1	0.1	0.91	0.91	192.5	200.0	1.04
West: Allambie Road (W)											
P4	Full	53	25.8	LOS C	0.1	0.1	0.91	0.91	192.5	200.0	1.04
All Pedestrians		158	25.8	LOS C	0.1	0.1	0.91	0.91	192.5	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

Phase Timing Summary

Phase	A	B
Phase Change Time (sec)	0	42
Green Time (sec)	36	15
Phase Time (sec)	42	21
Phase Split	67%	33%
Phase Frequency (%)	100.0[1]	100.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

Site: 5AM_MOD3 [ALL_FLE_28_AM_MOD3 (Site Folder: AM_MOD3)]

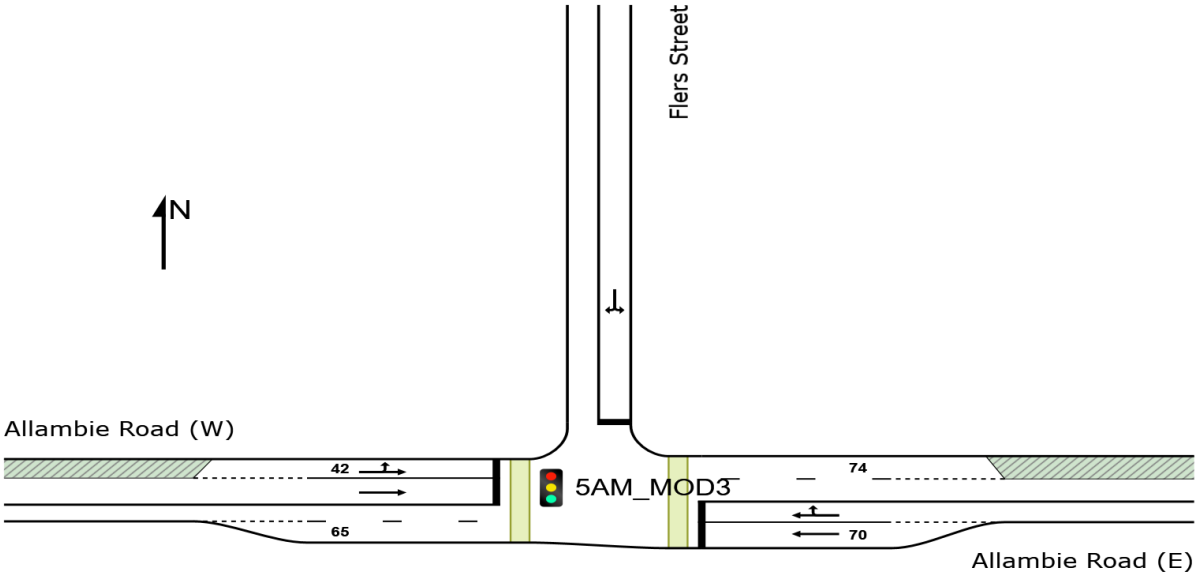
Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

NA
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 62 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn
Input Phase Sequence: A, B
Output Phase Sequence: A, B
Reference Phase: Phase A
Offset: NA

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	664	2.5	664	2.5	0.520	8.9	LOS A	9.4	66.8	0.63	0.55	0.63	24.0
6	R2	All MCs	25	0.0	25	0.0	* 0.520	21.6	LOS B	9.4	66.8	0.68	0.61	0.68	26.8
Approach			689	2.4	689	2.4	0.520	9.3	LOS A	9.4	66.8	0.63	0.55	0.63	24.2
North: Flers Street															
7	L2	All MCs	15	0.0	15	0.0	0.076	24.3	LOS B	0.8	5.4	0.80	0.68	0.80	19.3
9	R2	All MCs	17	6.3	17	6.3	* 0.076	22.7	LOS B	0.8	5.4	0.80	0.68	0.80	12.2
Approach			32	3.3	32	3.3	0.076	23.5	LOS B	0.8	5.4	0.80	0.68	0.80	16.1
West: Allambie Road (W)															
10	L2	All MCs	23	4.5	23	4.5	0.214	11.0	LOS A	3.3	23.8	0.53	0.46	0.53	34.5
11	T1	All MCs	765	3.6	765	3.6	0.533	9.3	LOS A	10.8	77.7	0.63	0.56	0.63	34.8
Approach			788	3.6	788	3.6	0.533	9.4	LOS A	10.8	77.7	0.63	0.56	0.63	34.6
All Vehicles			1509	3.1	1509	3.1	0.533	9.6	LOS A	10.8	77.7	0.63	0.56	0.63	32.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.
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 Green.
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.

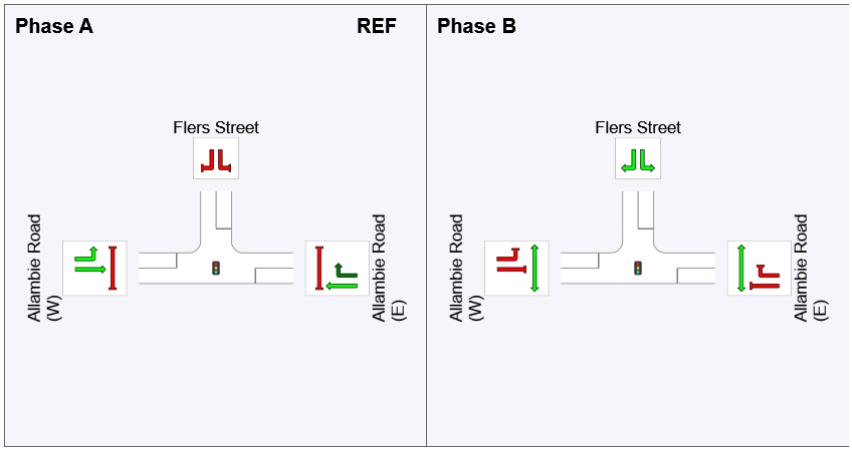
* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Allambie Road (E)											
P2	Full	53	25.3	LOS C	0.1	0.1	0.91	0.91	192.0	200.0	1.04
West: Allambie Road (W)											
P4	Full	53	25.3	LOS C	0.1	0.1	0.91	0.91	192.0	200.0	1.04
All Pedestrians		105	25.3	LOS C	0.1	0.1	0.91	0.91	192.0	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

Phase Timing Summary

Phase	A	B
Phase Change Time (sec)	0	41
Green Time (sec)	35	15
Phase Time (sec)	41	21
Phase Split	66%	34%
Phase Frequency (%)	100.0[1]	100.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

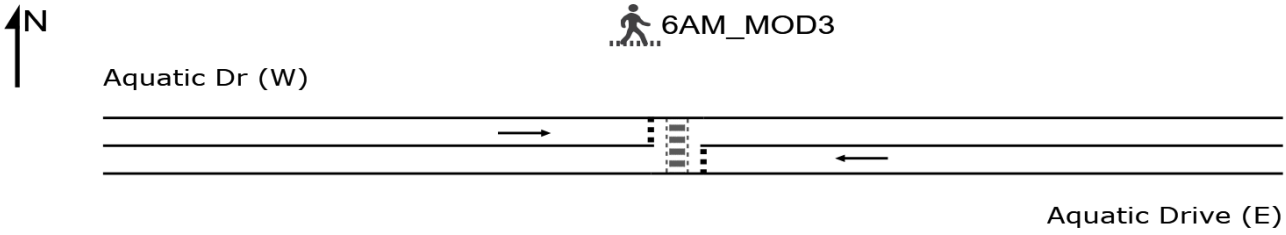
Site: 6AM_MOD3 [AQU_28_AM_MOD3 (Site Folder: AM_MOD3)]

Network: 1 [AM_MOD3 (Network Folder: AM_MOD3)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Site Layout

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



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
East: Aquatic Drive (E)															
8	T1	All MCs	212	4.5	212	4.5	0.153	3.7	LOS A	0.6	4.4	0.36	0.57	0.36	50.8
Approach			212	4.5	212	4.5	0.153	3.7	LOS A	0.6	4.4	0.36	0.57	0.36	50.8
West: Aquatic Dr (W)															
2	T1	All MCs	596	2.1	596	2.1	0.453	5.7	LOS A	2.8	20.2	0.49	0.64	0.58	50.2
Approach			596	2.1	596	2.1	0.453	5.7	LOS A	2.8	20.2	0.49	0.64	0.58	50.2
All Vehicles			807	2.7	807	2.7	0.453	5.2	NA	2.8	20.2	0.46	0.62	0.52	50.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

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: Akçelik M1.

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.

USER REPORT FOR NETWORK SITE

Project: SCT_00703_TFHS Construction ISTP_MDL_v0.2

Output produced by SIDRA INTERSECTION Version: 9.1.6.228 **Template: SCT Default Site Outputs**

Site: 1PM_MOD3 [ALL_WAR_28_PM_MOD3 (Site Folder: PM_MOD3)]

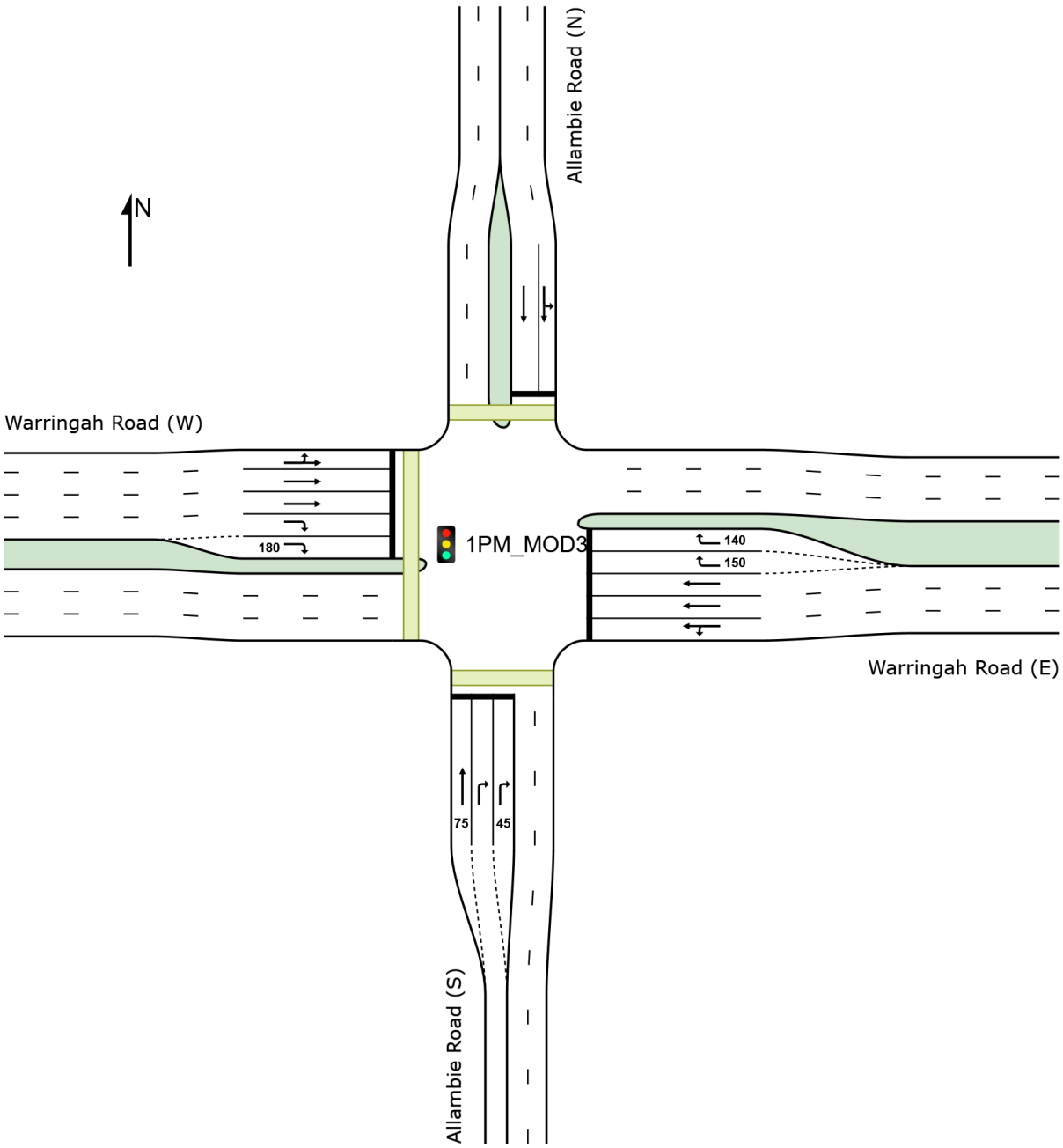
Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

NA
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 149 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn
Input Phase Sequence: A, C, D, E, F
Output Phase Sequence: A, C, D, E, F
Reference Phase: Phase A
Offset: NA

Site Layout

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


N
Allambie Road (N)
Warringah Road (W)
180
1PM_MOD3
140
150
Warringah Road (E)
75
45
Allambie Road (S)

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: Allambie Road (S)															
2	T1	All MCs	306	2.4	306	2.4	0.772	66.1	LOS E	21.5	153.4	0.99	0.89	1.04	10.2
3	R2	All MCs	236	2.7	236	2.7	0.598	79.3	LOS F	8.4	60.5	1.00	0.80	1.00	26.3
Approach			542	2.5	542	2.5	0.772	71.9	LOS F	21.5	153.4	1.00	0.85	1.02	18.6
East: Warringah Road (E)															
4	L2	All MCs	366	2.3	366	2.3	* 0.958	59.6	LOS E	58.5	422.4	1.00	1.10	1.23	25.2
5	T1	All MCs	1794	5.3	1794	5.3	* 0.958	81.5	LOS F	64.0	468.3	1.00	1.12	1.22	37.9
6	R2	All MCs	249	0.4	249	0.4	0.515	79.9	LOS F	8.7	60.8	0.98	0.79	0.98	26.7
Approach			2409	4.3	2409	4.3	0.958	78.0	LOS F	64.0	468.3	1.00	1.08	1.19	34.4
North: Allambie Road (N)															
7	L2	All MCs	7	0.0	7	0.0	* 0.898	52.0	LOS D	11.7	84.1	1.00	1.04	1.33	23.6
8	T1	All MCs	289	2.9	289	2.9	* 0.898	87.9	LOS F	12.4	89.3	1.00	1.04	1.33	4.1
Approach			297	2.8	297	2.8	0.898	87.0	LOS F	12.4	89.3	1.00	1.04	1.33	4.8
West: Warringah Road (W)															
10	L2	All MCs	101	2.1	101	2.1	0.779	20.1	LOS B	23.5	171.6	0.60	0.59	0.60	51.5
11	T1	All MCs	1705	5.7	1705	5.7	0.779	12.6	LOS A	24.4	179.1	0.60	0.56	0.60	60.9
12	R2	All MCs	477	3.8	477	3.8	* 0.789	54.1	LOS D	12.1	87.6	0.98	0.92	1.03	31.5
Approach			2283	5.2	2283	5.2	0.789	21.6	LOS B	24.4	179.1	0.68	0.63	0.69	54.4
All Vehicles			5532	4.4	5532	4.4	0.958	54.6	LOS D	64.0	468.3	0.87	0.87	0.98	38.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

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 Green.

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

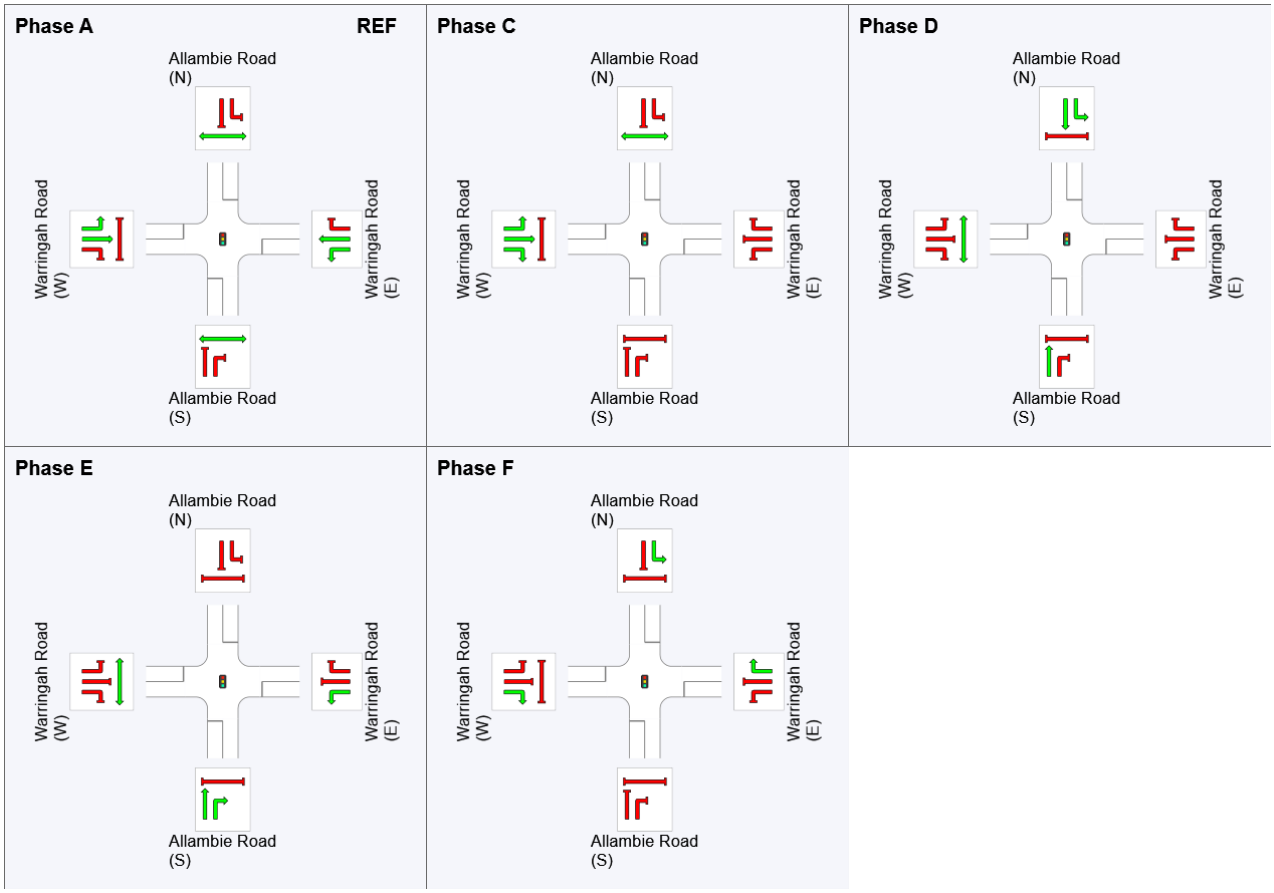
Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Allambie Road (S)											
P1	Full	53	67.8	LOS F	0.2	0.2	0.96	0.96	234.5	200.0	0.85
North: Allambie Road (N)											
P3	Full	53	67.8	LOS F	0.2	0.2	0.96	0.96	234.5	200.0	0.85
West: Warringah Road (W)											
P4	Full	53	67.8	LOS F	0.2	0.2	0.96	0.96	234.5	200.0	0.85
All Pedestrians		158	67.8	LOS F	0.2	0.2	0.96	0.96	234.5	200.0	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

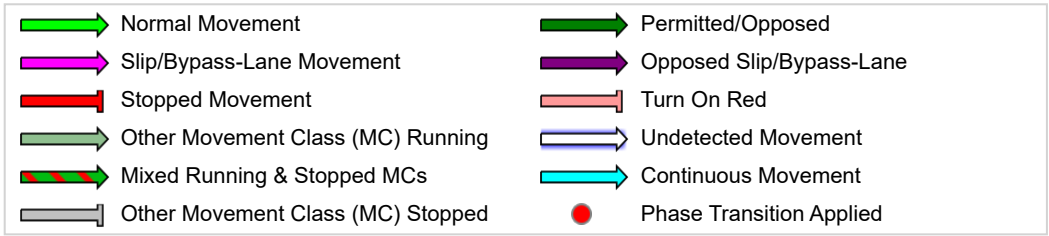
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	A	C	D	E	F
Phase Change Time (sec)	0	65	78	99	122
Green Time (sec)	57	5	13	15	18
Phase Time (sec)	65	13	21	24	26
Phase Split	44%	9%	14%	16%	17%
Phase Frequency (%)	100.0[1]	100.0[1]	100.0[1]	100.0[1]	100.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

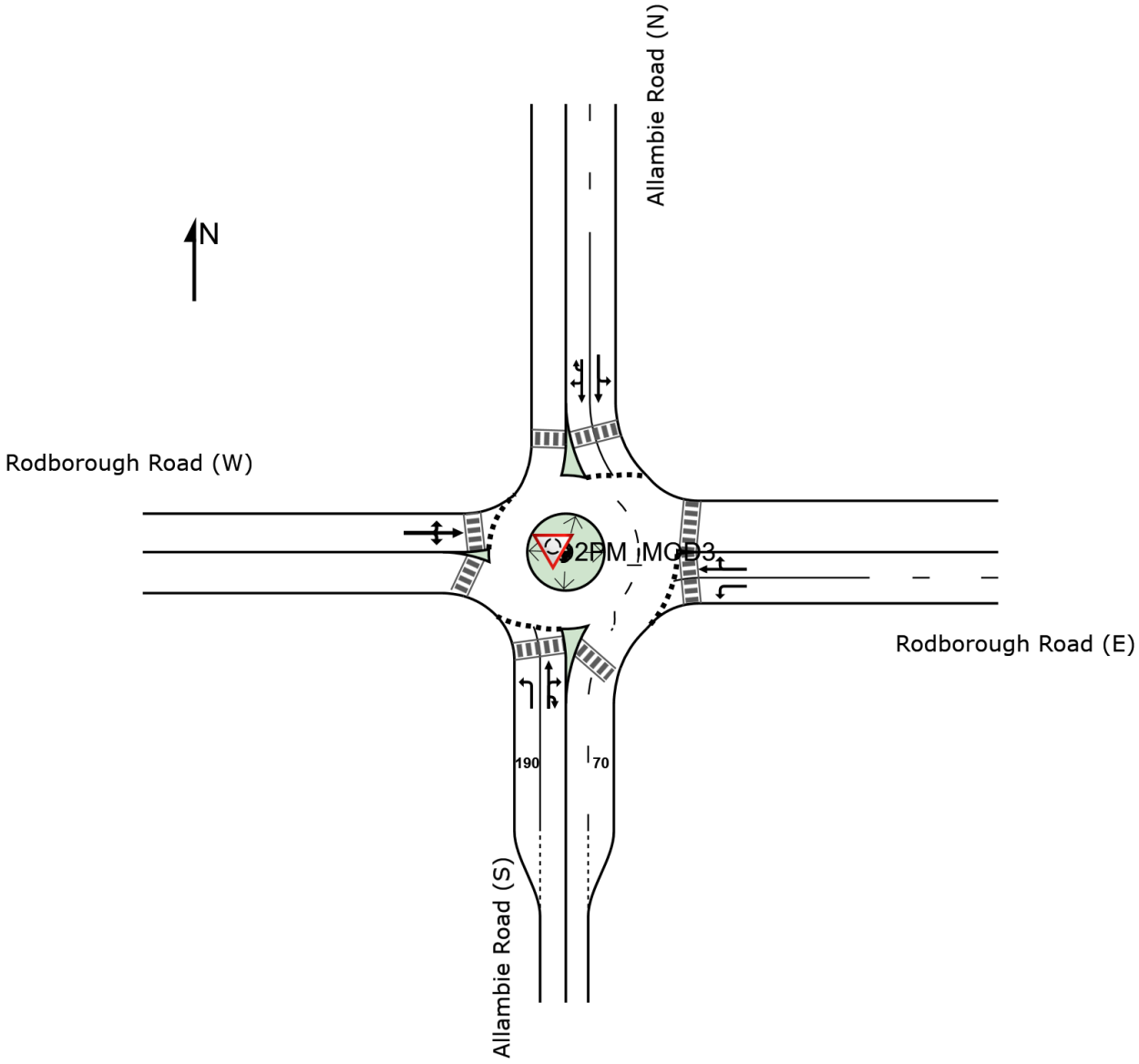
Site: 2PM_MOD3 [ALL_ROD_28_PM_MOD3 (Site Folder: PM_MOD3)]

Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

NA
Site Category: (None)
Roundabout

Site Layout

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



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: Allambie Road (S)															
1	L2	All MCs	160	9.9	160	9.9	0.216	7.9	LOS A	1.5	11.0	0.64	0.62	0.64	40.5
2	T1	All MCs	353	2.4	353	2.4	0.652	9.2	LOS A	5.1	36.7	0.92	0.65	1.02	36.4
3	R2	All MCs	56	3.8	56	3.8	0.652	12.4	LOS A	5.1	36.7	0.92	0.65	1.02	41.8
3u	U	All MCs	1	0.0	1	0.0	0.652	13.9	LOS A	5.1	36.7	0.92	0.65	1.02	36.4
Approach			569	4.6	569	4.6	0.652	9.1	LOS A	5.1	36.7	0.84	0.64	0.91	38.6
East: Rodborough Road (E)															
4	L2	All MCs	69	4.5	69	4.5	0.137	15.2	LOS B	1.1	8.1	0.82	0.66	0.82	34.0
5	T1	All MCs	24	8.7	24	8.7	0.496	15.1	LOS B	4.1	29.2	1.00	0.71	1.12	34.2
6	R2	All MCs	196	2.7	196	2.7	0.496	18.0	LOS B	4.1	29.2	1.00	0.71	1.12	31.3
Approach			289	3.6	289	3.6	0.496	17.1	LOS B	4.1	29.2	0.96	0.70	1.05	32.2
North: Allambie Road (N)															
7	L2	All MCs	191	4.4	191	4.4	0.245	5.6	LOS A	1.6	11.3	0.23	0.53	0.23	42.5
8	T1	All MCs	769	2.2	769	2.2	0.557	5.5	LOS A	6.0	43.0	0.28	0.49	0.28	32.1
9	R2	All MCs	63	11.7	63	11.7	0.557	8.7	LOS A	6.0	43.0	0.28	0.49	0.28	36.6
9u	U	All MCs	8	0.0	8	0.0	0.557	10.2	LOS A	6.0	43.0	0.28	0.49	0.28	32.1
Approach			1032	3.2	1032	3.2	0.557	5.8	LOS A	6.0	43.0	0.27	0.50	0.27	36.5
West: Rodborough Road (W)															
10	L2	All MCs	33	3.2	33	3.2	0.089	7.9	LOS A	0.3	2.2	0.66	0.70	0.66	32.0
11	T1	All MCs	2	0.0	2	0.0	0.089	7.9	LOS A	0.3	2.2	0.66	0.70	0.66	41.8
12	R2	All MCs	5	0.0	5	0.0	0.089	11.1	LOS A	0.3	2.2	0.66	0.70	0.66	32.0
Approach			40	2.6	40	2.6	0.089	8.3	LOS A	0.3	2.2	0.66	0.70	0.66	33.2
All Vehicles			1931	3.7	1931	3.7	0.652	8.5	LOS A	6.0	43.0	0.55	0.57	0.59	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

Roundabout 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.

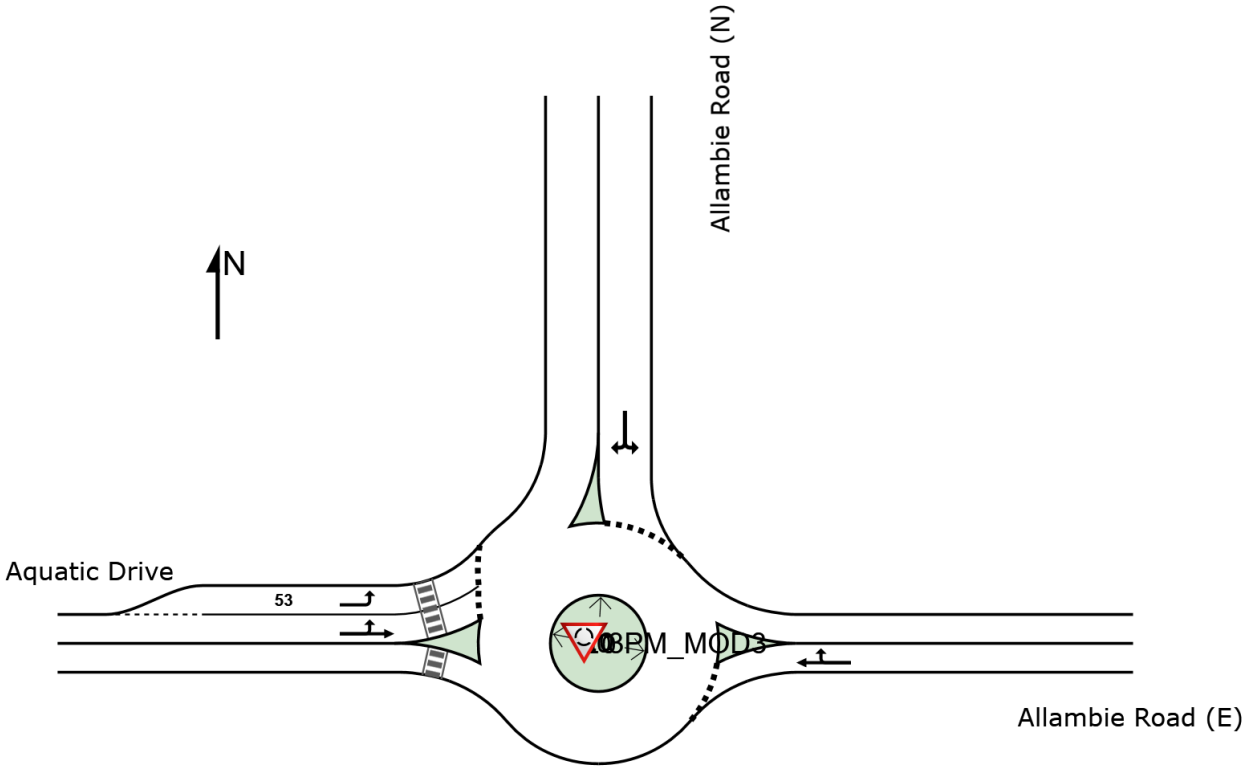
Site: 3PM_MOD3 [ALL_AQU_28_PM_MOD3 (Site Folder: PM_MOD3)]

Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

NA
Site Category: (None)
Roundabout

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	129	3.3	129	3.3	0.540	7.0	LOS A	5.0	36.6	0.66	0.64	0.66	47.5
6	R2	All MCs	433	4.4	433	4.4	0.540	10.3	LOS A	5.0	36.6	0.66	0.64	0.66	47.5
Approach			562	4.1	562	4.1	0.540	9.5	LOS A	5.0	36.6	0.66	0.64	0.66	47.5
North: Allambie Road (N)															
7	L2	All MCs	621	2.5	621	2.5	0.835	9.4	LOS A	12.0	86.0	0.87	0.69	0.98	35.7
9	R2	All MCs	154	2.7	154	2.7	0.835	12.6	LOS A	12.0	86.0	0.87	0.69	0.98	35.7
Approach			775	2.6	775	2.6	0.835	10.0	LOS A	12.0	86.0	0.87	0.69	0.98	35.7
West: Aquatic Drive															
10	L2	All MCs	400	3.7	400	3.7	0.629	10.3	LOS A	7.0	50.7	0.89	0.78	1.05	16.3
11	T1	All MCs	171	3.1	171	3.1	0.629	10.2	LOS A	7.0	50.7	0.92	0.80	1.11	16.2
Approach			571	3.5	571	3.5	0.629	10.3	LOS A	7.0	50.7	0.90	0.79	1.07	16.3
All Vehicles			1907	3.3	1907	3.3	0.835	9.9	LOS A	12.0	86.0	0.82	0.70	0.91	38.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

Roundabout 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: 4PM_MOD3 [ALL_MOR_28_PM_MOD3 (Site Folder: PM_MOD3)]

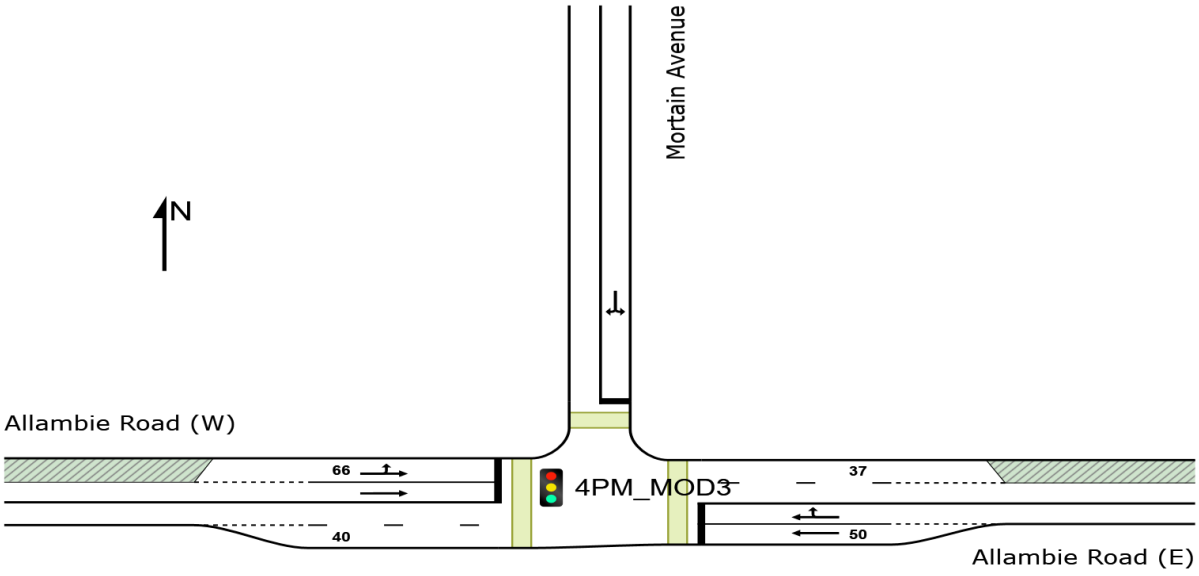
Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

NA
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 78 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn
Input Phase Sequence: A, B
Output Phase Sequence: A, B
Reference Phase: Phase A
Offset: NA

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	527	3.6	527	3.6	0.501	8.2	LOS A	9.8	70.4	0.57	0.52	0.57	45.7
6	R2	All MCs	60	1.8	60	1.8	* 0.501	26.2	LOS B	9.8	70.4	0.64	0.60	0.64	35.0
Approach			587	3.4	587	3.4	0.501	10.0	LOS A	9.8	70.4	0.57	0.53	0.57	43.7
North: Mortain Avenue															
7	L2	All MCs	32	0.0	32	0.0	0.182	32.0	LOS C	2.0	13.9	0.88	0.70	0.88	13.7
9	R2	All MCs	28	0.0	28	0.0	* 0.182	30.4	LOS C	2.0	13.9	0.88	0.70	0.88	13.7
Approach			60	0.0	60	0.0	0.182	31.2	LOS C	2.0	13.9	0.88	0.70	0.88	13.7
West: Allambie Road (W)															
10	L2	All MCs	46	2.3	46	2.3	0.136	11.6	LOS A	2.4	16.8	0.40	0.43	0.40	38.7
11	T1	All MCs	778	2.4	778	2.4	0.544	7.6	LOS A	13.4	95.7	0.55	0.51	0.55	49.5
Approach			824	2.4	824	2.4	0.544	7.9	LOS A	13.4	95.7	0.54	0.51	0.54	48.4
All Vehicles			1472	2.7	1472	2.7	0.544	9.7	LOS A	13.4	95.7	0.57	0.52	0.57	44.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.
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 Green.
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.

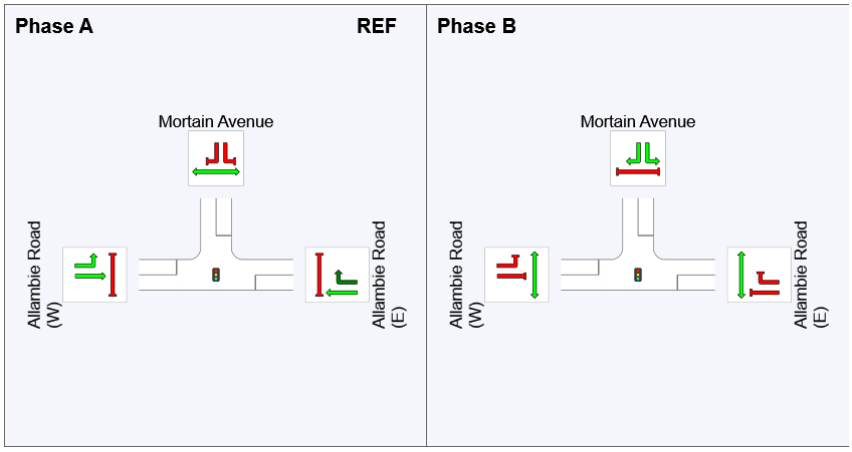
* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Allambie Road (E)											
P2	Full	53	33.3	LOS D	0.1	0.1	0.93	0.93	200.0	200.0	1.00
North: Mortain Avenue											
P3	Full	53	33.3	LOS D	0.1	0.1	0.93	0.93	200.0	200.0	1.00
West: Allambie Road (W)											
P4	Full	53	33.3	LOS D	0.1	0.1	0.93	0.93	200.0	200.0	1.00
All Pedestrians		158	33.3	LOS D	0.1	0.1	0.93	0.93	200.0	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

Phase Timing Summary

Phase	A	B
Phase Change Time (sec)	0	57
Green Time (sec)	51	15
Phase Time (sec)	57	21
Phase Split	73%	27%
Phase Frequency (%)	100.0[1]	100.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

Site: 5PM_MOD3 [ALL_FLE_28_PM_MOD3 (Site Folder: PM_MOD3)]

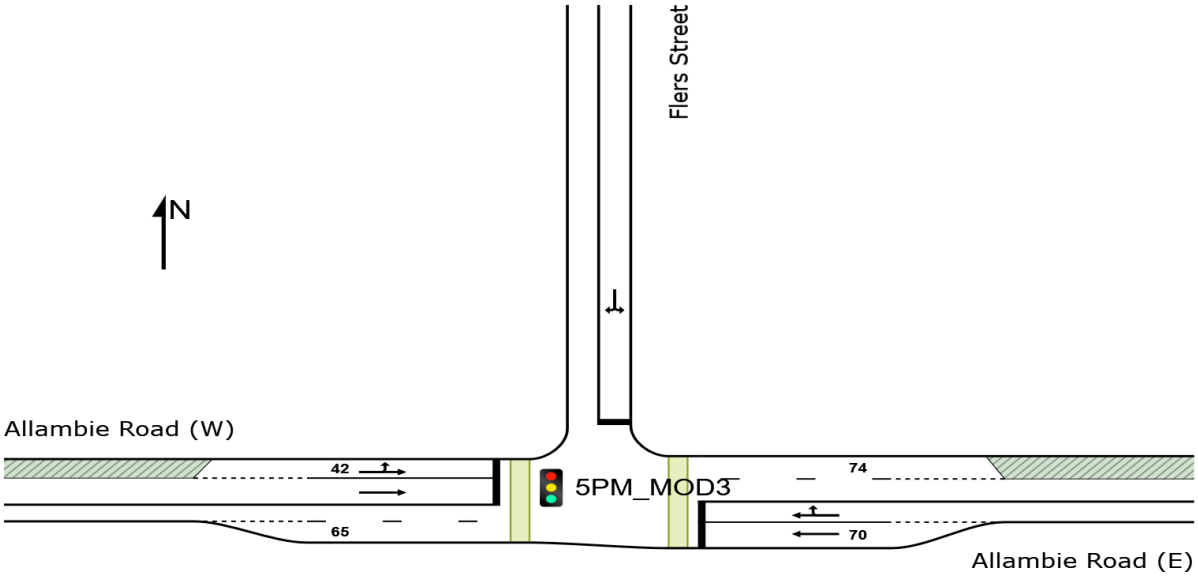
Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

NA
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 85 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Leading Right Turn
Input Phase Sequence: A, B
Output Phase Sequence: A, B
Reference Phase: Phase A
Offset: NA

Site Layout

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



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
East: Allambie Road (E)															
5	T1	All MCs	556	3.4	556	3.4	0.369	6.4	LOS A	7.5	54.0	0.45	0.40	0.45	27.0
6	R2	All MCs	23	4.5	23	4.5	* 0.369	17.2	LOS B	7.5	54.0	0.48	0.44	0.48	29.1
Approach			579	3.5	579	3.5	0.369	6.8	LOS A	7.5	54.0	0.45	0.40	0.45	27.1
North: Flers Street															
7	L2	All MCs	19	0.0	19	0.0	0.135	37.0	LOS C	1.4	10.5	0.88	0.71	0.88	15.2
9	R2	All MCs	21	10.0	21	10.0	* 0.135	35.3	LOS C	1.4	10.5	0.88	0.71	0.88	8.9
Approach			40	5.3	40	5.3	0.135	36.1	LOS C	1.4	10.5	0.88	0.71	0.88	12.3
West: Allambie Road (W)															
10	L2	All MCs	26	0.0	26	0.0	0.186	9.1	LOS A	3.5	24.7	0.39	0.36	0.39	35.7
11	T1	All MCs	798	2.2	798	2.2	0.463	7.2	LOS A	11.2	80.3	0.47	0.43	0.47	36.1
Approach			824	2.2	824	2.2	0.463	7.2	LOS A	11.2	80.3	0.47	0.42	0.47	35.8
All Vehicles			1443	2.8	1443	2.8	0.463	7.9	LOS A	11.2	80.3	0.47	0.42	0.47	33.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.
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 Green.
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.

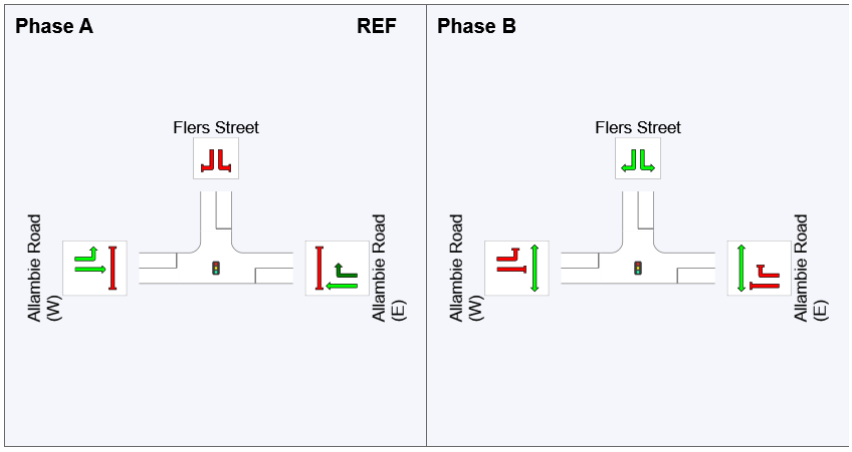
* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Allambie Road (E)											
P2	Full	53	36.8	LOS D	0.1	0.1	0.93	0.93	203.5	200.0	0.98
West: Allambie Road (W)											
P4	Full	53	36.8	LOS D	0.1	0.1	0.93	0.93	203.5	200.0	0.98
All Pedestrians		105	36.8	LOS D	0.1	0.1	0.93	0.93	203.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

Phase Timing Summary

Phase	A	B
Phase Change Time (sec)	0	64
Green Time (sec)	58	15
Phase Time (sec)	64	21
Phase Split	75%	25%
Phase Frequency (%)	100.0[1]	100.0[1]

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

1 Phase Frequency has been given with User-Specified Phase Times.

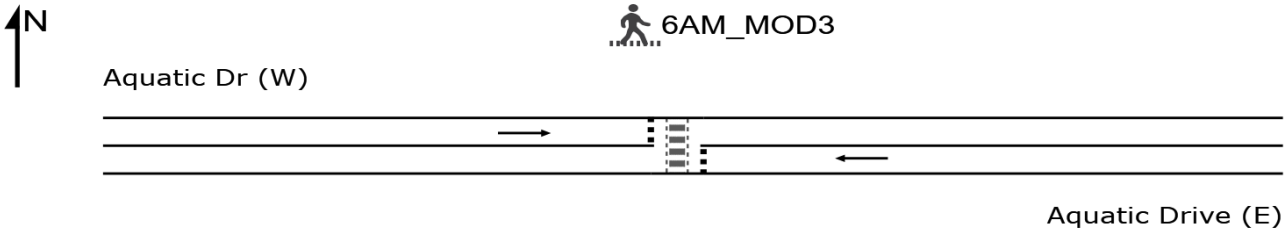
Site: 6AM_MOD3 [AQU_28_PM_MOD3 (Site Folder: PM_MOD3)]

Network: 2 [PM_MOD3 (Network Folder: PM_MOD3)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Site Layout

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



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
East: Aquatic Drive (E)															
8	T1	All MCs	282	3.0	282	3.0	0.202	3.7	LOS A	0.8	6.0	0.38	0.57	0.38	50.9
Approach			282	3.0	282	3.0	0.202	3.7	LOS A	0.8	6.0	0.38	0.57	0.38	50.9
West: Aquatic Dr (W)															
2	T1	All MCs	571	3.5	571	3.5	0.422	5.6	LOS A	2.5	18.0	0.48	0.63	0.53	50.3
Approach			571	3.5	571	3.5	0.422	5.6	LOS A	2.5	18.0	0.48	0.63	0.53	50.3
All Vehicles			853	3.3	853	3.3	0.422	5.0	NA	2.5	18.0	0.44	0.61	0.48	50.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data 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.

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: Akçelik M1.

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.

Appendix C – Draft School Transport Plan

Vision and objectives

No change

Mode share targets

No Change

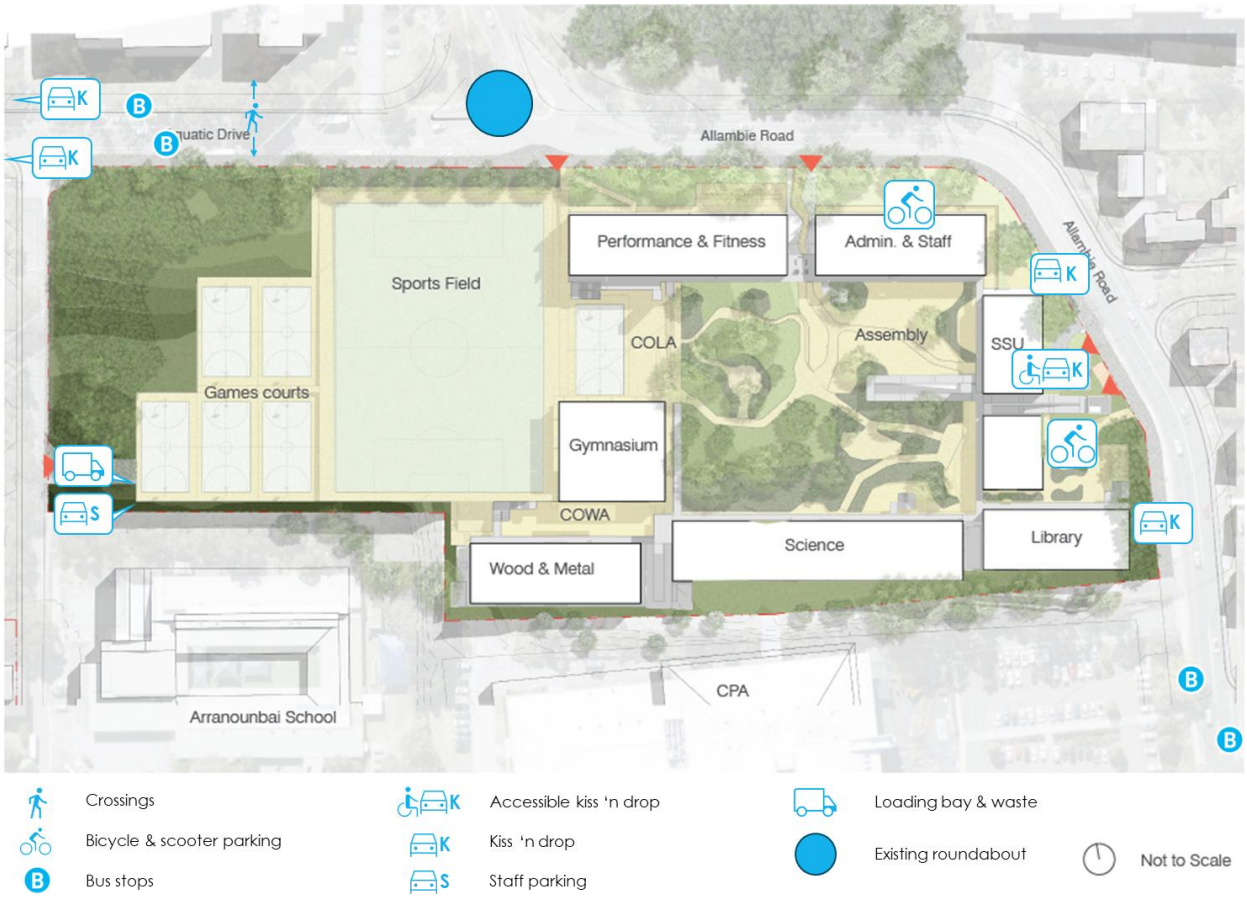
Adopted policies and procedures

No change

School transport operations

A summary of the key transport access arrangements is provided in **Figure 2**.

Figure 2 Transport access summary



Source: Architectus & Annotations by SCT Consulting, 2025

Each element of the transport access including the controls proposed is discussed in the subsequent sections.

Gate locations

No change.

Walking access

Surrounding the site is a 2.5m shared path along the northeast and eastern perimeter on Allambie Road, which widens to between 3 and 4m along Allambie Road.

Footpaths are available along key roads such as Allambie Road, Aquatic Drive and Warringah Road.

A crossing supervisor will be provided during pick up and drop off while the temporary zebra crossing is in place.

Bicycle / scooter access

No change.

Bus zones

Three bus stops serve the school (**Table 4**).

Table 4 School bus stops

Location	Bus services that stop here
Allambie Rd opposite Sunlea Place (northbound services, no crossings required)	Routes 174X, 142 and 280
Allambie Rd at Sunlea Place (southbound services, cross at the midblock island refuge)	Routes 174X, 142 and 280
Aquatic Dr after Allambie Rd south side (no crossings required)	Route 142
Aquatic Dr after Allambie Rd north side (need to cross at Allambie Road)	TBC

Source: Transport for NSW, SCT Consulting, 2025

School bus services should be relocated to service the school. When further details are available regarding which stop they terminate/start at, the above table will be updated.

Support unit access

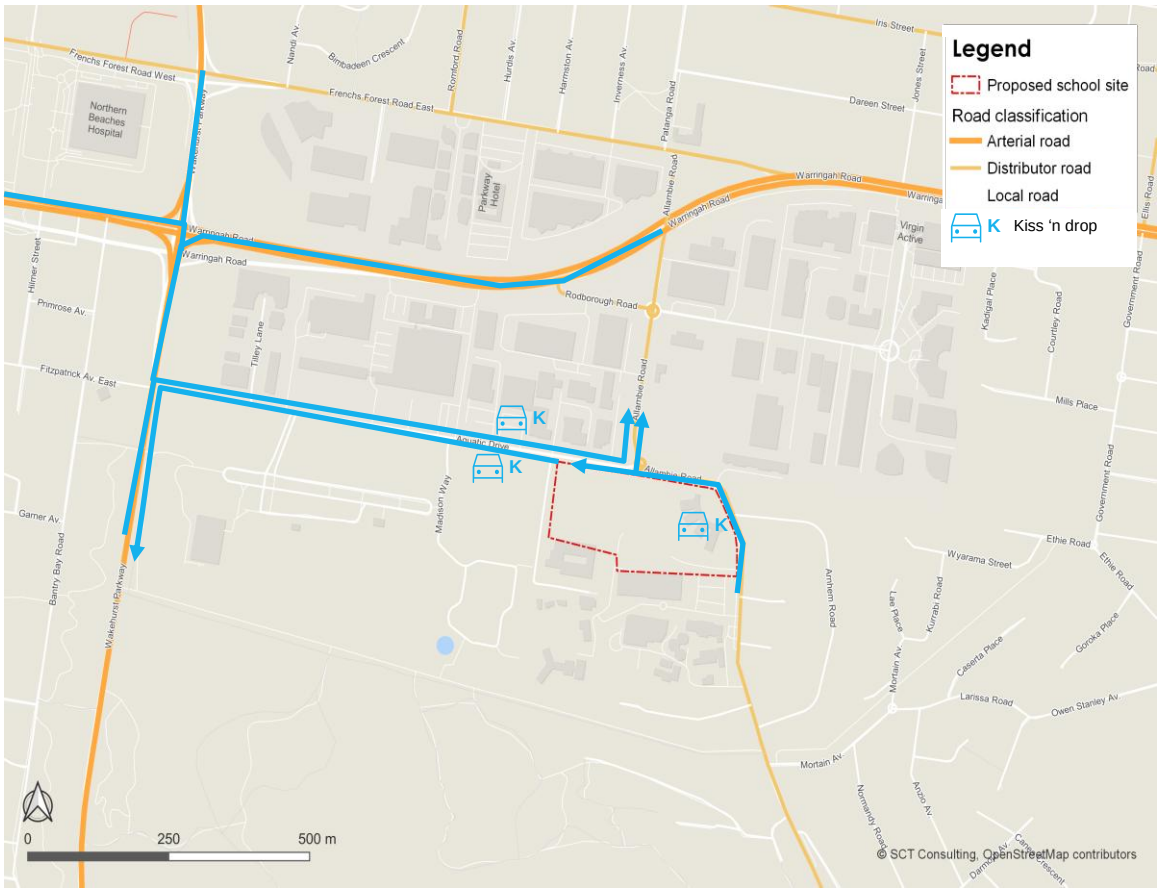
No change.

Kiss and drop

The main Kiss and Drop location will be along the northern and southern side of Aquatic Drive as well as the western side of Aquatic Drive. Existing road space will be used with signage installed to indicate the allowed length of stay and operational hours.

Access to the kiss ‘n drop should be via routes shown in **Figure 3**.

Figure 3 Access to site by kiss ‘n drop (blue)



Staff car park

No change.

Waste and deliveries

No change.

Day-to-Day operations

No change.

Event transport operations for Share our Space, hall hire and excursions

No change.

Communication Plan

Channels

No change.

Messages

Messages issued by the travel coordinator role should aim to inform students, parents, and staff about the active and public transport options available to them and their associated benefits. To this end, the following are suggested examples that can be followed:

Message
Walking to school safely Walking to school with your child is the best way to teach them about safe pedestrian behaviours. Consider accompanying your student to school until they are comfortable (or too embarrassed) to have you join them.
We must not be complacent! Children are most likely to be injured close to home, often in their street or their driveway. Children can often talk about keeping safe long before they can behave safely. Accidents can occur at any time, anywhere and to anyone. **As adults, we are responsible for young children's safety around traffic whether they are pedestrians, passengers, or playing.**
DO ✓ • Look out for cars entering or leaving driveways • Take your time whenever you're crossing a road • Keep an eye on drivers **DON'T ✗** • Use your mobile phones while walking with your child • Cross the road in unsafe places
Bike safely for you and your children • Children under 16, and one supervising adult, are allowed to ride on the footpath • Always wear a helmet, even when it is a short ride • Watch out for cars entering or leaving driveways • Take extra care near busy roads like the Warringah Road
You and your kids can incorporate more walking into your daily travel to school. Consider: • Encourage your children to walk rather than being dropped off • Get to know the bus route, timetable and pick routes with spare seats • If you have to drive, park the car a few blocks away from the school – they can walk the rest of the way Active kids are healthy kids! Regular exercise reduces the chances of a multitude of health problems including heart disease, obesity, and diabetes.

Message

School speed zones

The dates below are the gazetted school days for *YEAR* so please make sure you're observing the 40km/h speed limit:

Term 1: *XX* January to *XX* April

Term 2: *XX* April to *XX* June

Term 3: *XX* July to *XX* September

Term 4: *XX* October to *XX* December

Message

- On average, up to 30,000 people across NSW have their tickets checked every day
- While most people pay the correct fare, some people don't do the right thing
- The chances of getting caught are high because officers will be travelling across the whole transport network and at different times of the day

When everyone pays their fares, it means there is more money to spend on extra services and new infrastructure, and we can better plan for future services and develop accurate real-time information for you.

It's now easier than ever to pay for public transport because contactless payments are available on all public transport in NSW.

Remember, it is an offence to travel on public transport in NSW without being in possession of a valid ticket.

Tap on every time to avoid a hefty $200 fine (maximum fine amount of $550).

Driving and parking safely near the school

Help your children be safe by:

- drop your child off and pick them up on the school side of the road
- never call out to them from across the road - it is very dangerous
- always take extra care in 40km school zones
- follow all parking signs - these help keep your child as safe as possible
- park responsibly even if it means you have to walk further to the school gate
- never double park - it is illegal and puts children at risk
- never do a U-turn or a three-point turn outside the school as it puts children at risk of harm
- model safe and considerate pedestrian and driver behaviours to your child
- always give way to pedestrians, particularly when entering and leaving driveways.

Kiss 'n Drop

To reduce congestion and to ensure the safe collection of your child:

- Please only come after XXXpm
- Slow to a stop in the Kiss 'n Drop areas
- Communicate with your child about which side of the road they should expect you on
- Wait in your car for your student to arrive

Make walking to school fun!

Here are a couple of ways to make the walk to school a bit more fun:

- Organise for your children to walk/cycle/scoot to school with some of their friends
- Reward – the right incentives might be all it takes!
- Make it a competition. See if you or your children can do more steps each day.

Message
Walking is great exercise Did you know that more than 80% of the world's adolescent population is not active enough (World Health Organisation)? Children between 5 to 17 years need several hours of light exercise a week – like walking! Walking can work wonders. It can help prevent heart disease, stroke, type 2 diabetes, and high blood pressure. It increases energy levels, strengthens your immune system, and improves mood. We could all benefit from more steps each day.

Travel Access Guide

No change.

Data collection and monitoring

Data collection

No change.

Program evaluation

No change.

Reporting findings

No change.

Governance framework

No change.

Travel Coordinator roles and responsibilities

No change.

Internal school

No change.

External state and local transport

No change.