

## TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067 P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au E bernard@ttpa.com.au

28 August 2019 Ref: 18195

Paul Godsell Director Crawford Architects

Dear Paul,

#### Re: 874-876 Pittwater Road, Dee Why DA 2019/0505

The following responds to the traffic, driveway and basement design matters in Council's correspondence of 24 July 2019.

'Insufficient information has been provided with regard to the proposed access driveway. A long-section at both edges of the proposed access driveway, with relevant gradients, across the road reserve to the proposed carpark is required to demonstrate compliance with AS2890.'

In response to this request, longitudinal section plans at both edges of the driveway have been prepared by Crawford Architects (Appendix A). I have assessed the plans and confirm that the provisions made for grades, transitions and headroom comply with the design requirements of AS2890.1.

'The servicing of the site is proposed from a loading bay within the basement. No swept paths have been provided to demonstrate how large vehicles will enter and exit the site in a forward direction. Further, the applicant must demonstrate that Council's refuse vehicle can enter and exit the site in a forward direction.'

The basement loading bay will only be accessible by private contractors of the retail units, and the largest truck for this servicing purpose is a 6.4m long mini-waste truck (details in Appendix A) which has an operational height clearance requirement of no more than 2.6m and is able to negotiate ramps as steep as 1:4. The steepest part of the proposed ramp grade is only 1:6 and its lowest height clearance is 2.85m high thus satisfying the operating parameters of this service vehicle. Residential waste/recycle rooms are situated on the street level no more than 6.5m from the boundary and will be removed from the street by Council's waste vehicles.

Traffic Engineering | Traffic Signal Design | Road Safety Audit

In relation to swept path analysis, SP 8 and SP 9 of the previously submitted traffic report (14 May 2019, Rev E) demonstrate how a 6.4m small rigid vehicle could enter and exit the site in forwards direction. These are reproduced in Appendix B.

'The traffic generation associated with the retail component of the development has been calculated based on the number of car spaces, as opposed to RMS Guideline. As such, the peak traffic generation is considered to be underrepresented.'

The RMS traffic generation rate for retail use is intended for large shopping centres which is unlike the 12 retail tenancy units being proposed in this development scheme. Nevertheless, a category within the RMS' definition of retail which is somewhat consistent with the proposal is 'specialty retail'. The RMS traffic generation rate for specialty retail is defined as follows:

Traffic Generation per 1,000 $m^2$  GFA = 46 x Area of specialty retail ( $m^2$ )

Application of the above to the proposal of 615m<sup>2</sup> would indicate a peak traffic generation outcome for the retail component, according to the RMS guide, of 28 vtph.

In comparison to the previously assessed retail outcome of 20 vtph, the revised assessment reflects an addition of 8 vtph. The SIDRA model has been updated accordingly and the revised results which indicate all levels of service maintained i.e. negligible impact are summarised as follows while the model results are reproduced in Appendix C.

		AM			PM	
	DS	AVD	LOS	DS	AVD	LOS
Existing	0.89	23.5s	В	0.83	21.6s	В
Original Assessment	0.90	24.1s	В	0.85	23.1s	В
Revised Assessment	0.90	24.2s	В	0.85	23.2s	В

On this basis, it is my assessment that the findings and conclusion of the original assessment remain consistent and appropriate.

Yours faithfully,

Bernardyslo

Bernard Lo BE (Civil), MTrans, MIEAust Director Transport and Traffic Planning Associates

### Appendix A

### **Longitudinal Section Plans**





# Untroducing the WASTE WISE MINI



# **REAR LOADER**

Waste Wise Environmental introduced the first MINI rear loader vehicle into Australia in September 2011.

The success of the MINI rear loader has been well documented over the first 12 months of service. The ability to manoeuvre in confined areas within basement car parks, where bin rooms are located, and laneways where other vehicles find difficulty in reversing is unique, but achievable for this compact unit.

With an overall height of just 2.08 metres and length of 6.40 metres, this vehicle can enter most car parks, going down three (3) basement levels or climbing up eight (8) car park levels to empty MGB 240 litre & MGB 660 litre bins within its own height capacity. Also 360L bins

MGB 1100 litre bins will be lifted higher than the vehicle and generally find a spot within the complex to do so.

These require 2.45m clearance for loading 1100L bins

The MINI rear loader is valuable to all: architects, developers, owners corporations (space saving and cost saving) and councils (no bins at kerbside affecting the streetscape).



The Waste Wise Environmental fleet of MINI'S has successfully demonstrated its ability as the most valuable & versatile MINI rear loader on the road today. Not only in confined areas, but also under standard rear loader conditions at street level.

1300 550 408

# Vehicle Dimensions



# Truck Bin Lift Capabilities



PO Box 117 Reservoir VIC 3073 T 03 9359 1555 F 03 9359 2544 info@wastewise.com.au WWW.wastewise.com.au



1300 550 408

### Appendix B

**Swept Path Diagrams** 





### Appendix C

**SIDRA Model Output** 

#### Site: 101 [EX PITTWATER - OAKS AM]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	Turn	Demand I Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h	
East: 0	DAKS A\	/ENUE											
4a	L1	127	7.0	0.111	40.6	LOS C	3.0	22.6	0.75	0.71	0.75	26.9	
Approa	ach	127	7.0	0.111	40.6	LOS C	3.0	22.6	0.75	0.71	0.75	26.9	
NorthE	ast: PIT	TWATER RO	DAD										
24b	L3	127	7.0	0.191	19.9	LOS B	5.0	43.8	0.48	0.61	0.48	39.5	
25	T1	1927	9.0	0.897	32.0	LOS C	64.1	476.0	0.88	0.88	0.95	15.2	
Approa	ach	2055	8.9	0.897	31.2	LOS C	64.1	476.0	0.86	0.86	0.92	17.1	
South	Nest: Pl	TTWATER R	OAD										
31	T1	963	7.0	0.257	0.4	LOS A	1.7	12.4	0.12	0.10	0.12	58.0	
32a	R1	208	7.0	0.440	42.9	LOS D	10.9	81.2	0.82	0.77	0.82	26.5	
Approa	ach	1172	7.0	0.440	7.9	LOS A	10.9	81.2	0.24	0.22	0.24	39.0	
All Veh	nicles	3354	8.1	0.897	23.5	LOS B	64.1	476.0	0.64	0.63	0.68	22.5	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Move	ment Performance - Pedestrian	s						
Mov	Description	Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow bod/b	Delay	Service	Pedestrian	Distance	Queued	Stop Rate
		peu/n	Sec		peu	111		
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Peo	lestrians	105	64.3	LOS F			0.96	0.96

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2018 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Wednesday, October 17, 2018 2:22:54 PM Project: \\ttpa\_nas\FFPA\_DATA\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS.sip8

#### Site: 101 [EX PITTWATER - OAKS PM]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Move	ment P	erformance	e - Vehi	icles								
Mov ID	Turn	Demand I Total veh/h	lows= HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: (	DAKS A	VENUE	,,,	110			Voli					
4a	L1	161	7.0	0.087	23.1	LOS B	2.8	20.5	0.54	0.66	0.54	34.9
Approa	ach	161	7.0	0.087	23.1	LOS B	2.8	20.5	0.54	0.66	0.54	34.9
NorthE	East: PIT	TWATER RO	DAD									
24b	L3	91	7.0	0.194	35.0	LOS C	5.0	43.2	0.68	0.69	0.68	31.3
25	T1	1236	9.0	0.831	41.9	LOS C	39.8	295.6	0.94	0.88	0.99	12.3
Approa	ach	1326	8.9	0.831	41.3	LOS C	39.8	295.6	0.93	0.87	0.96	14.0
South\	Nest: Pl	TTWATER R	OAD									
31	T1	1495	7.0	0.398	0.4	LOS A	3.1	23.0	0.14	0.13	0.14	57.6
32a	R1	393	7.0	0.824	35.0	LOS C	19.5	144.4	0.67	0.79	0.78	29.5
Approa	ach	1887	7.0	0.824	7.6	LOS A	19.5	144.4	0.25	0.27	0.27	40.1
All Ver	nicles	3375	7.7	0.831	21.6	LOS B	39.8	295.6	0.53	0.52	0.56	24.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Move	ment Performance - Pedestrian	s						
Mov	Description	Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow bod/b	Delay	Service	Pedestrian	Distance	Queued	Stop Rate
		peu/n	Sec		peu	111		
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Peo	lestrians	105	64.3	LOS F			0.96	0.96

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2018 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Wednesday, October 17, 2018 2:22:55 PM Project: \\ttpa\_nas\FFPA\_DATA\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS.sip8

#### Site: 101 [POST-DEV PITTWATER - OAKS AM]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Phase Times)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: 0	DAKS A	VENUE										
4a	L1	151	7.0	0.131	40.9	LOS C	3.6	26.9	0.75	0.72	0.75	26.8
Approa	ach	151	7.0	0.131	40.9	LOS C	3.6	26.9	0.75	0.72	0.75	26.8
NorthE	East: Pl	TTWATER F	ROAD									
24b	L3	137	7.0	0.201	20.0	LOS B	5.3	46.2	0.48	0.62	0.48	39.4
25	T1	1927	9.0	0.900	32.7	LOS C	64.9	482.4	0.88	0.88	0.95	14.9
Approa	ach	2064	8.9	0.900	31.8	LOS C	64.9	482.4	0.86	0.86	0.92	17.0
South\	West: P	ITTWATER	ROAD									
31	T1	963	7.0	0.257	0.4	LOS A	1.7	12.4	0.12	0.10	0.12	58.0
32a	R1	218	7.0	0.548	43.2	LOS D	11.5	85.4	0.83	0.77	0.83	26.4
Approa	ach	1181	7.0	0.548	8.2	LOS A	11.5	85.4	0.25	0.23	0.25	38.6
All Veh	nicles	3396	8.1	0.900	24.1	LOS B	64.9	482.4	0.64	0.64	0.68	22.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Move	Movement Performance - Pedestrians													
Mov	Description	Demand	Average	Level of	Average Back	of Queue	Prop.	Effective						
U	Description	FIOW	Delay	Service	Pedestrian	Distance	Queuea	Stop Rate						
		ped/fi	Sec		peu	m								
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96						
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96						
All Pe	destrians	105	64.3	LOS F			0.96	0.96						

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2018 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Wednesday, November 7, 2018 7:34:28 PM Project: T:\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS 2.sip8

#### Site: 101 [POST-DEV PITTWATER - OAKS PM]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Move	Movement Performance - Vehicles													
Mov	Turn	Demand	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Aver. No.	Average		
ID		Total	ΗV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Cycles	Speed		
		veh/h	%	v/c	sec		veh	m				km/h		
East: (	OAKS A	VENUE												
4a	L1	180	7.0	0.096	22.7	LOS B	3.1	22.7	0.54	0.66	0.54	35.1		
Appro	ach	180	7.0	0.096	22.7	LOS B	3.1	22.7	0.54	0.66	0.54	35.1		
NorthE	East: Pl	TTWATER F	ROAD											
24b	L3	102	7.0	0.217	35.9	LOS C	5.6	47.9	0.70	0.71	0.70	30.8		
25	T1	1236	9.0	0.849	44.8	LOS D	41.5	308.4	0.95	0.91	1.02	11.7		
Appro	ach	1338	8.8	0.849	44.0	LOS D	41.5	308.4	0.93	0.90	1.00	13.5		
South	West: P	ITTWATER	ROAD											
31	T1	1495	7.0	0.398	0.4	LOS A	3.1	23.0	0.14	0.13	0.14	57.6		
32a	R1	404	7.0	0.842	37.3	LOS C	20.7	153.7	0.67	0.81	0.80	28.5		
Approa	ach	1899	7.0	0.842	8.3	LOS A	20.7	153.7	0.25	0.27	0.28	39.1		
All Vel	hicles	3417	7.7	0.849	23.1	LOS B	41.5	308.4	0.54	0.54	0.58	24.1		

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Move	Movement Performance - Pedestrians													
Mov	Description	Demand	Average	Level of	Average Back	of Queue	Prop.	Effective						
U	Description	ped/h	Delay	Service	pedestrian	Distance	Queuea	Stop Rate						
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96						
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96						
All Pe	destrians	105	64.3	LOS F			0.96	0.96						

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2018 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Wednesday, November 7, 2018 7:34:28 PM Project: T:\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS 2.sip8

#### Site: 101 [EX PITTWATER - OAKS AM - REV]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	Turn	Demand l Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h	
East: 0	DAKS AV	/ENUE											
4a	L1	155	7.0	0.135	40.9	LOS C	3.7	27.7	0.75	0.72	0.75	26.8	
Approa	ach	155	7.0	0.135	40.9	LOS C	3.7	27.7	0.75	0.72	0.75	26.8	
NorthE	East: PIT	TWATER RO	DAD										
24b	L3	139	7.0	0.203	20.0	LOS B	5.4	46.8	0.49	0.62	0.49	39.4	
25	T1	1927	9.0	0.900	32.9	LOS C	65.1	483.8	0.88	0.88	0.96	14.9	
Approa	ach	2066	8.9	0.900	31.9	LOS C	65.1	483.8	0.86	0.87	0.92	16.9	
South\	Nest: Pl	TTWATER R	OAD										
31	T1	963	7.0	0.257	0.4	LOS A	1.7	12.4	0.12	0.10	0.12	58.0	
32a	R1	220	7.0	0.569	43.2	LOS D	11.6	86.3	0.83	0.77	0.83	26.4	
Approa	ach	1183	7.0	0.569	8.3	LOS A	11.6	86.3	0.25	0.23	0.25	38.5	
All Veł	nicles	3404	8.1	0.900	24.2	LOS B	65.1	483.8	0.64	0.64	0.68	22.4	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Move	ment Performance - Pedestrians							
Mov		Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow	Delay	Service	Pedestrian	Distance	Queued	Stop Rate
		ped/h	sec		ped	m		
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Peo	lestrians	105	64.3	LOS F			0.96	0.96

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Tuesday, 20 August 2019 11:57:19 AM Project: T:\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS 2.sip8

#### Site: 101 [EX PITTWATER - OAKS PM - REV]

18195 - 874 - 876 PITTWATER ROAD, DEE WHY

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Move	Novement Performance - Vehicles													
Mov	Turn	Demand I	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Aver. No.	Average		
ID		Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Cycles	Speed		
East.		ven/n	%	V/C	sec		ven	m				km/n		
East: 0	JAKS AN	/ENUE												
4a	L1	184	7.0	0.098	22.7	LOS B	3.1	23.3	0.54	0.66	0.54	35.1		
Approa	ach	184	7.0	0.098	22.7	LOS B	3.1	23.3	0.54	0.66	0.54	35.1		
NorthE	East: PIT	TWATER RO	DAD											
24b	L3	102	7.0	0.217	35.9	LOS C	5.6	47.9	0.70	0.71	0.70	30.8		
25	T1	1236	9.0	0.849	44.8	LOS D	41.5	308.4	0.95	0.91	1.02	11.7		
Approa	ach	1338	8.8	0.849	44.0	LOS D	41.5	308.4	0.93	0.90	1.00	13.5		
South\	West: Pl	TTWATER R	OAD											
31	T1	1495	7.0	0.398	0.4	LOS A	3.1	23.0	0.14	0.13	0.14	57.6		
32a	R1	406	7.0	0.848	38.3	LOS C	21.1	156.7	0.67	0.81	0.81	28.2		
Approa	ach	1901	7.0	0.848	8.5	LOS A	21.1	156.7	0.25	0.27	0.28	38.7		
All Veh	nicles	3423	7.7	0.849	23.2	LOS B	41.5	308.4	0.54	0.54	0.58	24.1		

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Movement Performance - Pedestrians								
Mov		Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow	Delay	Service	Pedestrian	Distance	Queued	Stop Rate
		ped/h	sec		ped	m		
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		105	64.3	LOS F			0.96	0.96

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.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Tuesday, 20 August 2019 11:57:21 AM Project: T:\WORK18\18195 - 874 - 876 PITTWATER ROAD, DEE WHY\MODELLING\PITTWATER - OAKS 2.sip8