Sent:	27/01/2021 2:47:11 PM
Subject:	DA2020/1758
Attachments:	DA2020_1758_HARVEY.pdf;

Please see attached my objection to the associated DA.

Regards,

Joseph Harvey
50 Beatrice Street
Balgowlah heights

Re: DA2020/1758

I refer to the above development application and would like to lodge an objection.

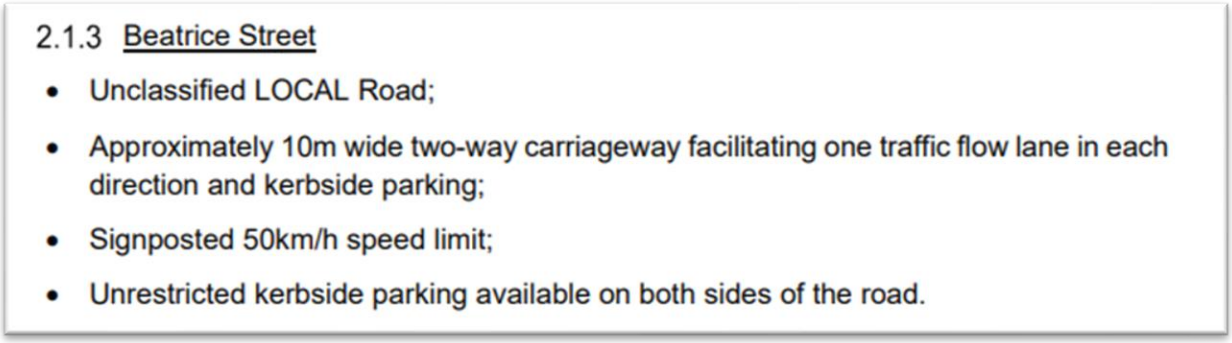
I live at 50 Beatrice Street with my wife and two young daughters, aged 3 and 5. They will be attending Balgowlah Heights Public School from 2022.

I believe there are numerous reasons that the application should be rejected, such as need within the local area for another childcare centre, and overall size of the proposal. I will outline in depth only the reasoning behind the strongest part of my objection: increased traffic and its effect on road safety.

As anyone from this area will tell you, traffic congestion/parking at drop off and pickup time is already a major concern around Balgowlah heights Public School (BHPS). The associated increase in traffic and reduced road safety for this proposal are enough to make approval of this development at best irresponsible, and at worst, negligent.

I have several concerns regarding the proposal report titled TRAFFIC AND PARKING IMPACT ASSESSMENT OF PROPOSED CHILD CARE CENTRE AT 11 LEWIS STREET, BALGOWLAH HEIGHTS by McLaren Traffic Engineering & Road Safety Consultants, dated 17th December, 2020.

- **On Page 3 of 16**



2.1.3 Beatrice Street

- Unclassified LOCAL Road;
- Approximately 10m wide two-way carriageway facilitating one traffic flow lane in each direction and kerbside parking;
- Signposted 50km/h speed limit;
- Unrestricted kerbside parking available on both sides of the road.

Beatrice Street is not 10m wide near the proposal. This ignores the fact that the parking and pedestrian traffic for the school extends through to Beatrice Street. In fact, the school traffic speed limit extends to this region. Beatrice Street south of Ernest Street is only 7m wide. This means that parking on either side of the road effectively turns it into a one-way road. There is a walkway from the back of BHPS that means any increase in traffic on Lewis Street will presumably increase traffic on Beatrice Street for pickup and drop off, as it is already an easier process. Combine this with it being a regular bus route for route 162, and it means

people drive through this area aggressively as it is, swerving in and out between parked cars and avoiding oncoming traffic lest they get stuck waiting. Ask any bus driver of the route and I have no doubt they will concur that increased car parking and traffic at drop off and pickup in this area would create safety issues.

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> Automatic Traffic Count (ATC) surveys were undertaken over a period of seven days from the 17th November 2020 to 24th November 2020 (inclusive) across both directions of travel of Lewis Street at the proposed site driveway location to determine the existing characteristics of Avoca Drive in terms of:
>
> - Peak traffic volumes and speeds;
> - Daily traffic volumes and speeds;
> - Classification of vehicles.

Unsure what Avoca Drive is referencing, apart from the fact that this may have been taken from another report.

Followed by

TABLE 1: 7-DAY TUBE SURVEY RESULTS

Road	Direction	Peak Hour Volume		Average Daily Volume	85th Percentile Speed	Heavy Vehicles
		Time	Volume			
Lewis Street	Northbound	Weekday AM (8am – 9am)	135	742	46.5km/h	3.1%
		Weekday PM (3 pm – 4 pm)	92			
		Weekend (9am – 10am)	36	418	48.4km/h	1.6%
	Southbound	Weekday AM (8am – 9am)	81	590	48.6km/h	3.4%
		Weekday PM (3 pm – 4 pm)	46			
		Weekend (12pm – 1pm)	41	413	51.5km/h	1.5%
	Combined	Weekday AM (8am – 9am)	217	1332	47.4km/h	3.2%
		Weekday PM (3 pm – 4 pm)	139			
		Weekend (12pm – 1pm)	76	822	49.7km/h	1.5%

So let me understand this? Supposedly at the site driveway location, literally the house next door to a school, 85th percentile speeds for traffic during school drop off and pick-up times average, AVERAGE, 7km/hr over the speed limit. If anyone has spent anytime at BHPS during this time, I think it would be hard to present this table with a straight face. Makes you wonder how much of the report was ‘accidentally’ associated with Avoca Drive?

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4.1 Traffic Generation

Traffic generation rates for the relevant land uses are provided in the *Roads and Maritime Services (RMS) Guide to Traffic Generating Developments (2002)* and recent supplements and are as follows:

3.11.3 Child care centres

Long-day care

7.00-9.00am *0.8 peak vehicle trips per child*

2.30-4.00pm *0.3 peak vehicle trips per child*

4.00-6.00pm *0.7 peak vehicle trips per child*

The resulting traffic generation is summarised in **Table 4**.

TABLE 4: ESTIMATED TRAFFIC GENERATION

Use	Scale	Peak	Generation Rate	Trips[1]
Long-day care	57 Children	AM	0.8 per child	46 (23 IN , 23 OUT)
		PM	0.7 per child	40 (20 IN , 20 OUT)

Note: (1) Assumes 50/50 spilt of inbound and outbound traffic.

As shown, the expected traffic generation associated with the proposed development is in the order of **46** vehicle trips in the AM peak period (23 IN , 23 OUT) and **40** vehicle trips in the PM peak period (20 IN, 20 OUT). Note that this traffic generation is considered to be conservative as it does not incorporate the traffic generation of the existing site use.

It is noted that it is conservative to expect that 10% of enrolled children will have a sibling attending the neighbouring Balgowlah Heights Public School and as such, will not contribute to additional traffic generation associated with the site as the parent will already be in the road network to drop off their primary school-aged child.

The 10% correlation rate, therefore, means that the traffic generation associated with 51 children are accessing the site. By applying the same traffic generation rates as above, this is equivalent to 41 vehicle trips in the AM peak hour period (21 IN, 20 OUT), and 36 vehicle trips in the PM peak hour period (18 IN, 18 OUT). Nevertheless, for conservative analysis, the full scale of traffic generation of the proposed child care centre has been assessed for its impact on the road network as below.

When one actually looks deeper into the suggested traffic volume associated with a 57 children, the rates used in the report are quite old. In fact further research shows that the estimated traffic generation in the 2002 RMS guide come from surveys in 1992. See below an excerpt from the RMS report referenced by the traffic report.

3.11.3 Child care centres

Overview

Surveys were undertaken in 1992 of pre-school, long day-care and before / after school care centres in the Sydney region. The best indicator of peak traffic generation was found to be the number of children that attended each centre. The time that traffic activity was at a peak varied with the differing operating hours of the child care centres. Pre-school centres typically had peaks in the periods 8.00-9.00 am and

2.30-4.00pm. Long day-care centres typically had peaks in both commuter peak periods. Before/after school care centres generally have their highest peak activity in the afternoon commuter peak period. The vehicle generation rates given below are the mean peak generation rates for each centre type in the periods specified. As these figures are mean figures, rates may be higher or lower, depending on the circumstances.

Rates

Table 3.6
Traffic generation rates

Centre Type	Peak Vehicle Trips / Child		
	7.00-9.00am	2.30-4.00pm	4.00-6.00pm
Pre-school	1.4	0.8	-
Long-day care	0.8	0.3	0.7
Before/after care	0.5	0.2	0.7

Factors

The centres surveyed had between 25-60 children attending pre-schools, between 29-66 children in long day-care and between 22-55 children in before / after school care. The gross floor area was the next best indicator of traffic generation. The centres surveyed had gross floor areas in the range 145-470 m^2 for pre-schools, 160-595 m^2 for long day-care and 52-150 m^2 for before / after care. The mean floor area per child was 6.7 m^2 for pre-schools, 7.8 m^2 for long-day care and 3.2 m^2 for before / after care.

The mean proportions of children transported to each centre type by car was 94% for the pre-schools, 93% for the long day-care and 75% for the before /after school care.

Parking demand was highest for the pre-school and lowest for the before / after school care, averaging over all centres 0.23 cars per child at any one time, with the average length of stay for all centres being 6.8 minutes.

Note the way it is phrased between this RMS report and the traffic report. The RMS says the peak reached is 0.8 trips per child. The traffic report suggests the total amount of traffic within the 7-9am peak period is 0.8. It just doesn't equate to the same thing.

Note also that the report also suggests an average of 93% of children are transported by car. And yet, the maths within the traffic report for LEWIS st suggest between 7 and 9am each day, only 23 drop offs. Where/when are the other 30 odd children arriving?

The same report also includes:

5.12.3 Child care centres

Definition

A *child care centre* is a building or place used for child care as defined in Part VII of the Child Welfare Act, 1939.

The centre can provide pre-school care, long day care, before / after school care or a combination of the above.

Parking

Off-street parking must be provided at the rate of one space for every four children in attendance.

Given the short length of stay (the RTA's surveys found an average length of stay of 6.8 minutes), parking must be provided in a convenient location, allowing safe movement of children to and from the centre.

Consideration could be given to reducing the parking required if convenient and safe on-street parking is available (e.g. indented parking bays), provided that the use of such parking does not adversely affect the amenity of the adjacent area.

Driveways

See Table 6.1 and Table 6.2 for information relating to driveways.

Surveys

The report *Land Use Traffic Generation - Data and Analysis 21 - Child Care Centres* outlines research undertaken on the traffic and parking characteristics of child care centres.

Presumably they have chosen to not pay attention to the off street car parking for 1 in every four children proposed by the same report they reference. When reading the description above, it is clear they intend this to be available car spots for parents, not included in the spots for workers. Using this maths, LEWIS street would be required to provide 14 car spots for parents. Not 6.

Also, transport has evolved since 1992. Active travel to school has declined over the last 40 years from 75 to 25% of trips (see https://www.abc.net.au/news/2020-10-20/walk-to-

school-children-transport-traffic-health-safety/12660300). We now rely on cars for transporting our children far greater than previously. It is not a trend I support, but it is a fact.

RMS has even now conducted further studies on this type of development as they recognise how much things have changed. I draw your attention to “ROADS AND MARITIME SERVICES TRIP GENERATION SURVEYS CHILD CARE CENTRES” from 2015.

See links below.

DATA COLLECTION DOCUMENT AT:

https://media.opengov.nsw.gov.au/pairtree_root/95/67/b1/c9/23/62/46/9c/bb/e5/ff/2a/bd/38/60/17/obj/164789.pdf

REPORT AT:

https://media.opengov.nsw.gov.au/pairtree_root/e0/67/05/10/fb/27/47/e2/bb/59/8e/b1/3b/fa/e9/f0/obj/164790.pdf

Within the documents linked above, I draw your attention to SITE S4. It is the only surveyed Long Day Care Centre (LDCC) within the report that exists within a residential area, similar to the proposal.

2.2.4 Site S4 Acre Woods Childcare, Roseville

Table 2.5 Survey site details – Site S4.

Name of the development	Acre Woods Childcare			
Address	81 Clanville Rd, Roseville NSW 2069			
Date(s) of Survey	3-5.06.2015, 9.06.2015, 15.06.2015			
Day	Opening hours	No. of employees	No. of licenced places	No. of on site parking spaces
Monday	7:30am - 6:00pm	15	90	18
Tuesday	7:30am - 6:00pm	15		
Wednesday	7:30am - 6:00pm	15		
Thursday	7:30am - 6:00pm	15		
Friday	7:30am - 6:00pm	15		
Saturday	Closed			
Sunday	Closed			
Building area	GFA, m^2	Levels	GFA per level, m^2	Facility Type
Total GFA, m^2	743	1	743	LDCC
Total site area, m^2	3014			
Surrounding land uses	Low density residential dwellings.			
On-street Parking Regime	There is a No Stopping sign between the speed hump on Clanville Road and Archibold Road. The remainder of Clanville Road has unrestricted parking opportunities. Archibold road has unrestricted parking opportunities.			
Frontage Road Characteristics	Clanville Road has two travel lanes and two parking lanes. Archibold Road has 4 travel lanes (2 of which can be used as parking lanes).			
Accessibility score[1]	144	Accessibility discount factor		0.4

Table 3.14 Site S4 Acre Woods Childcare, Roseville - Survey Results – Hourly data - rolling at 15 minute intervals – Tuesday 09/06/2015.

DATE 9 June 2015	Acre Woods Childcare Roseville - 81 Clanville Rd, Roseville NSW 2069										Grand Total		Frontage Road			Parking Demand				
1-hour Data											1-hour Data									
WEATHER Fine	Children Drop-Off and Pick-Up								Staff and Other[1]		Trips									
	IN				OUT															
TIME	Drive	Walk	Other	Total	Drive	Walk	Other	Total	In	Out	Car	Non-car	NB	SB	Total	General	Staff	Disabled	Street	Total
AM																				
6:30 to 7:30	3	0	1	4	0	0	0	0	2	0	5	1	255	956	1211	5	3	0	0	8
6:45 to 7:45	8	0	1	9	4	0	0	4	3	0	15	1	456	1469	1925	8	3	0	0	11
7:00 to 8:00	18	0	1	19	12	0	0	12	3	0	33	1	751	1958	2709	11	5	0	0	16
7:15 to 8:15	32	0	0	32	29	0	0	29	3	1	65	0	994	2161	3155	9	5	0	0	14
7:30 to 8:30	42	1	0	43	37	0	0	37	2	1	82	1	1132	2162	3294	12	5	0	0	17
7:45 to 8:45	40	1	0	41	39	0	0	39	1	1	81	1	1045	2083	3128	10	6	0	0	16
8:00 to 9:00	47	1	0	48	54	0	0	54	1	2	104	1	845	1831	2676	5	6	0	0	11
8:15 to 9:15	34	1	0	35	38	0	0	38	1	1	74	1	640	1488	2128	6	6	0	0	12
8:30 to 9:30	27	0	0	27	35	0	0	35	1	1	64	0	532	1205	1736	5	7	0	0	12
PM																				
14:30 to 15:30	6	0	0	6	4	0	1	5	0	0	10	1	1341	822	2163	2	7	0	0	9
14:45 to 15:45	6	0	0	6	4	1	1	6	0	0	10	2	1409	888	2297	2	7	0	0	9
15:00 to 16:00	6	0	0	6	4	1	0	5	0	0	10	1	1461	930	2391	2	6	0	0	8
15:15 to 16:15	7	0	0	7	5	1	0	6	0	0	12	1	1525	940	2465	3	6	0	0	9
15:30 to 16:30	9	0	0	9	7	1	0	8	0	0	16	1	1527	929	2456	4	6	0	0	10
15:45 to 16:45	12	0	0	12	10	1	0	11	0	0	22	1	1533	878	2411	4	6	0	0	10
16:00 to 17:00	34	0	0	34	25	1	0	26	0	0	59	1	1607	901	2508	11	4	0	0	15
16:15 to 17:15	38	0	0	38	31	1	0	32	0	0	69	1	1621	925	2546	10	4	0	0	14
16:30 to 17:30	41	0	0	41	43	2	0	45	0	0	84	2	1670	952	2622	2	4	0	0	6
16:45 to 17:45	42	0	0	42	42	2	0	44	0	0	84	2	1721	1010	2731	4	2	0	0	6
17:00 to 18:00	25	0	0	25	36	2	0	38	0	0	61	2	1709	1032	2740	0	2	0	0	2

[1] Includes deliveries and couriers for car trips ONLY, no non-car trips for staff and other business visitors were recorded at all survey sites.

Table 2.1 Details of the selected survey sites and summary of the survey results.

	Sydney Sites												Regional Sites	
Site ID	Site S1	Site S2	Site S3	Site S4	Site S5	Site S6	Site S7	Site S8	Site S9	Site S10	Site S11	Site S12	Site R1	Site R2
Name of the development	Wattle Grove Long Day Care Centre	Acre Woods Childcare	Billy Kids Bilgola Early Learning Centre	Acre Woods Childcare	Hilda Booler Kindergarten	KU Maybanke Preschool	Wattle Grove Public School Out of School Hours Care	Kegworth Out of School Hours Care	YMCA Malabar Out of School Hours Care	Duffy's Corner Occasional Child Care Centre	Redfern Occasional Care	Balmain/Rozelle Occasional Care	Nords Wharf Community Pre School	WOOSH Care
Centre type	LDCC	LDCC	LDCC	LDCC	PS	PS	OSHC	OSHC	OSHC	OC	OC	OC	PS	OSHC
Site address	8-10 Burdekin Court, Wattle Grove NSW 2173	22-24 College Street, Gladesville NSW 2111	100 Plateau Road, Bilgola Plateau NSW 2107	81 Clanville Rd, Roseville NSW 2069	Jubilee Park, Eglinton Road, Glebe NSW 2037	99 Harris Street, Pyrmont NSW 2009	Cressbrook Drive, Wattle Grove NSW 2173	Cnr Tebutt St & Lords Road, Leichhardt NSW 2040	231-239 Franklin St, Chifley NSW 2036	419a Beauchamp Road, Maroubra NSW 2035	55 Pitt Street, Redfern NSW 2016	370 Darling Street, Balmain NSW 2041	44 Government Road, Nords Wharf NSW 2281	Woodport Public School Corner Entrance Road and Ernest Street, Erina NSW 2250
Day and date of survey(s)	Mon, 01/06/15	Wed, 03/06/15	Wed, 03/06/15	Wed-Fri, 3-5/06/15 Tue, 09/06/15 Mon, 15/06/15	Thu, 18/06/15	Thu, 25/06/15	Mon, 01/06/15	Mon, 22/06/15	Wed-Thu, 24-25/06/15	Thu, 18/06/15	Thu, 18/06/15	Mon-Tue, 22-23/06/15	Wed, 24/06/15	Thu, 18/06/15
Duration of survey - frontage road	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	7:00-10:00 14:00-17:30	7:00-10:00 14:00-17:30	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:00-17:30	6:30-9:30 14:30-18:00
Duration of survey - site trip generation	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	7:00-10:00 14:00-17:30	7:00-10:00 14:00-17:30	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	6:30-9:30 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:30-18:00	7:00-10:00 14:00-17:30	6:30-9:30 14:30-18:00
Surrounding land uses	Commercial / retail.	Commercial / retail.	Commercial / retail.	Low density residential dwellings.	Low density residential and parklands.	Commercial / retail and residential dwellings.	Low density residential housing and public school.	Low density residential, Kegworth Public School and Leichardt Marketplace.	Low density residential, retail, Malabar Medical Centre and Cromwell Park.	Low density residential housing.	Commercial / retail.	Commercial/retail, industrial site and medical centre.	Low density residential.	Commercial / retail and low density residential.
Frontage road - AM peak period (weekday)	8:00-9:00	8:00-9:00	8:30-9:30	multi-day[3]	8:30-9:30	8:45-9:45	8:30-9:30	8:00-9:00	6:30-7:30	8:00-9:00	8:30-9:30	8:30-9:30	8:30-9:30	8:00-9:00 8:15-9:15
Frontage road - PM peak period (weekday)	15:15-16:15	15:15-16:15	15:00-16:00	multi-day	14:45-15:45	15:30-16:30	15:15-16:15	16:45-17:45	16:30-17:30	16:45-17:45	16:15-17:15	16:15-17:15	15:00-16:00	14:45-15:45
Development details:														
Year opened	1992	2003	2007	2004	not provided	not provided	2004	2003	2003	1990	not provided	not provided	1989	1996
Total site area (m²)	1304	1309	2318	3014	1312	1014	882	202	303	1368	1049	317	475	112
Total GFA (m²)	514	1041	302	743	387	197	882	202	303	295	768	317	165	112
No. of licensed places for children	45	90	56	90	40	30	75	105	70	29	36	25	20	70
No. of employees	12	10	10	15	6	5	4	11	6	6	10	4	3	5
Vehicle trips:														
Centre peak hour vehicle trips (in+out) AM	**27**	**80**	**40**	**93**	**39**	**11**	**42**	**39**	**38**	**30**	**8**	**16**	**25**	**4**
Time of Centre peak hour vehicle trips (AM)	7:30-8:30 7:45-8:45	7:30-8:30	8:00-9:00	multi-day[3]	8:30-9:30	8:30-9:30	6:45-7:45	7:15-8:15	8:00-9:00	8:00-9:00 8:15-9:15	8:30-9:30 8:45-9:45 9:00-10:00	8:30-9:30 8:45-9:45 9:00-10:00	8:45-9:45	6:30-7:30 6:45-7:45 7:00-8:00
Centre peak hour vehicle trips per licensed place (AM)	0.60	0.89	0.71	1.03	0.98	0.37	0.56	0.37	0.54	1.03	0.22	0.64	1.25	0.06
Centre peak hour vehicle trips per 100m2 of total GFA (AM)	5.25	7.68	13.25	12.52	10.08	5.58	4.76	19.31	12.54	10.17	1.04	5.05	15.15	3.57
Centre peak hour vehicle trips (in+out) PM	**31**	**73**	**46**	**77**	**32**	**11**	**36**	**53**	**18**	**40**	**26**	**6**	**22**	**34**
Time of Centre peak hour vehicle trips (PM)	16:30-17:30	17:00-18:00	16:00-17:00	multi-day	14:15-15:15	14:00-15:00 14:15-15:15	16:45-17:45	16:15-17:15	16:45-17:45 17:00-18:00	15:45-16:45	15:00-16:00	14:30-15:30 14:45-15:45	14:30-15:30	17:00-18:00
Centre peak hour vehicle trips per licensed place (PM)	0.69	0.81	0.82	0.86	0.80	0.37	0.48	0.50	0.26	1.38	0.72	0.24	1.10	0.49
Centre peak hour vehicle trips per 100m2 of total GFA (PM)	6.03	7.01	15.23	10.36	8.27	5.58	4.08	26.24	5.94	13.56	3.39	1.89	13.33	30.36
Vehicle trips during adjacent road's peak hour (AM)	**18**	**72**	**39**	**58**	**39**	**9**	**6**	**22**	**4**	**30**	**6**	**16**	**24**	**8**
Vehicle trips per licensed place during adjacent road's peak hour (AM)	0.40	0.80	0.70	0.64	0.98	0.30	0.00	0.21	0.06	1.03	0.17	0.64	1.20	0.00
Vehicle trips per 100m² of GFA during adjacent road's peak hour (AM)	3.50	6.92	12.91	7.81	10.08	4.57	0.00	10.89	1.32	10.17	0.78	5.05	14.55	0.00
Vehicle trips during adjacent road's peak hour (PM)	**23**	**27**	**14**	**50**	**28**	**4**	**13**	**50**	**16**	**2**	**0**	**0**	**14**	**2**
Vehicle trips per licensed place during adjacent road's peak hour (PM)	0.51	0.30	0.25	0.56	0.70	0.13	0.17	0.48	0.23	0.07	0.00	0.00	0.70	0.03
Vehicle trips per 100m2 of GFA during adjacent road's peak hour (PM)	4.47	2.59	4.64	6.73	7.24	2.03	1.47	24.75	5.28	0.68	0.00	0.00	8.48	1.79
Parking:														
No. of on site parking spaces	13	14	10	18	0	0	0	0	0	0	10	5	4	22
Peak parking accumulation	13	16	9	14	7	6	5	12	12	10	3	7	6	6
Peak parking accumulation per licensed place	0.29	0.18	0.16	0.16	0.18	0.20	0.07	0.11	0.17	0.34	0.08	0.28	0.30	0.09
Peak parking accumulation per 100m² of total GFA	2.53	1.54	2.98	1.88	1.81	3.05	0.57	5.94	3.96	3.39	0.39	2.21	3.64	5.36
Time of peak parking accumulation	8:30-9:30	7:45-8:45 16:15-17:15	8:30-9:30	multi-day	15:30-16:30	9:00-10:00	16:15-17:15	15:45-16:45	16:00-17:00	15:15-16:15	multiple hours	8:30-9:30	8:15-9:15	17:00-18:00

For 90 children, they had a total between 7-9am of 137 car trips, 67 in and 70 out. Or in other words, 1.52 total trips per child licence of the centre. **That would equate to 87 total trips in the 7-9am morning for LEWIS st**., almost double the 46 suggested within the traffic report. The difference is startling.

They had a peak vehicle AM hour in+out trip total of 1.03 of licenced places, which would equate to a PEAK 59 trips/hr to the Lewis Street proposal, a peak vehicle PM hour in+out trip total of 0.86 of licenced places, which would equate to 49 trips to the Lewis Street proposal. Also, a peak parking accumulation of 0.16 per licenced place, which would equate to 10 parking spaces being required by parents.

Using LDCC and Pre school only data from the recent survey

Table 3.3 Summary of trip and parking rates (LDCC and PS only).

LDCC and PS only	Min	Max	Avg	St Dev
Development details:				
Total site area (m^2)	475	3014	1535	851
Total GFA (m^2)	165	1041	478	317
No. of licensed places for children	20	90	53	28
No. of employees	3	15	9	4
Vehicle trips:				
Centre peak hour vehicle trips (in+out) AM	11	93	45	30
Centre peak hour vehicle trips per licensed place (AM)	0.37	1.25	0.83	0.30
Centre peak hour vehicle trips per 100m^2 of total GFA (AM)	5.25	15.15	9.93	3.89
Centre peak hour vehicle trips (in+out) PM	11	77	42	25
Centre peak hour vehicle trips per licensed place (PM)	0.37	1.10	0.78	0.22
Centre peak hour vehicle trips per 100m^2 of total GFA (PM)	5.58	15.23	9.40	3.73
Centre vehicle trips during adjacent road's peak hour (AM)	9	72	37	22
Centre vehicle trips per licensed place during adjacent road's peak hour (AM)	0.30	1.20	0.72	0.31
Centre vehicle trips per 100m^2 of GFA during adjacent road's peak hour (AM)	3.50	14.55	8.62	4.12
Centre vehicle trips during adjacent road's peak hour (PM)	4	50	23	15
Centre vehicle trips per licensed place during adjacent road's peak hour (PM)	0.13	0.70	0.45	0.22
Centre vehicle trips per 100m^2 of GFA during adjacent road's peak hour (PM)	2.03	8.48	5.17	2.41
Parking:				
No of public car spaces	0	18	8	7
Peak parking accumulation	6	16	10	4
Peak parking accumulation per number of licensed places	0.16	0.30	0.21	0.06
Peak parking accumulation per 100m^2 of total GFA	1.54	3.64	2.49	0.78

The above results indicate a strong relationship between the numbers of licensed places for children and Centre peak hour vehicle trips (both AM and PM).

There are also numerous other relevant conclusions in comparing the data from 2015 to 1992, such as

- LDCC having a slightly higher peak trip generation
- Centres of 40-65 children should have 1 car space for every 5 children (current proposal includes 1 per every 9.5)
- The regular occurrence of parents using on-street parking for pick up and drop off even when off street parking was available.

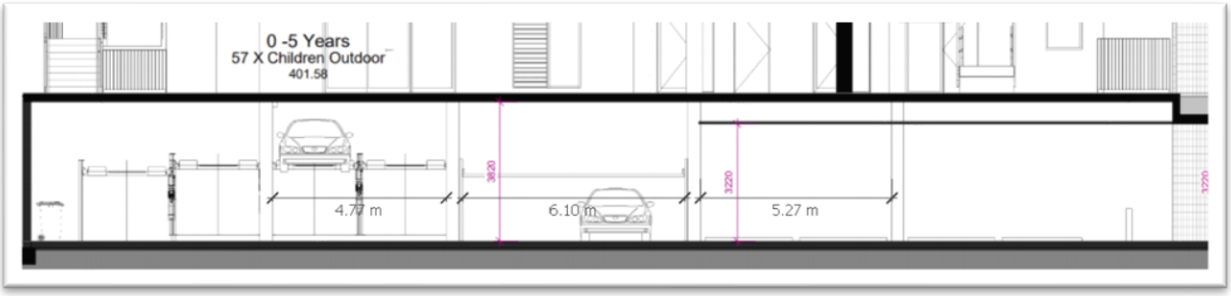
This all combines to show the proposed traffic generation and therefore traffic impact suggested in the report for the proposal are VERY outdated, based on old surveys that have been replaced by the RMS publishers themselves.

- **Page 10 and 11 of 16.**

5 CONCLUSION

The following outcomes of this traffic and parking impact assessment are relevant to note:

- The Manly DCP requires a total of **11** staff spaces to be provided whilst the proposal includes **10** staff car parking spaces within a proposed basement carpark, representing a numerical shortfall of one (1) staff space from the DCP requirements. Based on ABS Census data, the site would require nine (**9**) staff spaces, such that the provision of **10** staff spaces is acceptable.



The overall proposed car space design is borderline ridiculous. They propose ten, one less than council requires. They suggest six of these will be on top of car stackers. These ignore standards regarding clearance. They then propose that parents will be utilising 2 parking spots below car stackers. One presumes all 12 of the cars involved in car stacking are sedans I guess? If you drive a SUV as a parent, you are now using one of the 4 remaining car spots. Not forgetting that one of those 4 is a disabled spot. So we are now down to 3 spots. This is the most simple way of representing what a gross overdevelopment of the site the proposal represents.

3.6.1 Required Changes

3.6.1.1 Car Stacker Design

The detailed headroom clearance for the visitor spaces underneath the relevant car stacker are less than 2.2m. Additionally the available widths for most of the designated staff car stackers detailed on the plans are less than the minimum required 2.4m. The length of the

car stackers appears to be less than the minimum required 5.4m such that the subsequent positioning of vehicles on and/or in the stackers is unclear. These details will be required to be modified to provide compliant dimensions. It has been advised that the car stackers illustrated within the assessed plans were only indicative and may not accurately reflect the finished product to be used in the proposed development.

It is recommended that a condition of consent be imposed that states that a compliance certificate be issued by a traffic engineer prior to a construction certificate being issued to confirm that the car park is compliant with the relevant standards and required changes outlined in **Section 3.6**.

Whilst the plans have been assessed to comply with the relevant standards, subject to the required changes outlined above, it is usual and expected that a design certificate be required at the Construction Certificate stage to account for any changes following the development application.

I disagree that this something that should be dealt with through a condition of consent. Much of the objection raised focusses on the ability to deal adequately with generated traffic. To suggest the developers can go ahead but 'work it out in the future' is not acceptable. I believe the current design is skirting the issues it will have to deal with, by assuming all workers cars will fit in the car stackers, and 40% of able bodied parents of the centre will also drive sedans and be happy to park in a zone with clearance of under 1900mm.

- ANNEXURE B. It is hard to decipher, but the traffic report makes reference to pedestrian counts out the front of the proposal site. I presume the table below represents these, as they don't actually explain in detail pedestrian movement other than at LEWIS and ERNEST

st intersection. For example, from the table below, what else would average 1 movement an hour between 12 and 5 in the morning. Reading from the table, between 7-9am, total pedestrian traffic crossing the driveway at the site on a weekday averages 329 movements.

PEDESTRIAN COUNTS AT THE SITE DRIVEWAY

TRANS TRAFFIC SURVEY

Site Lewis St

Direction Both directions

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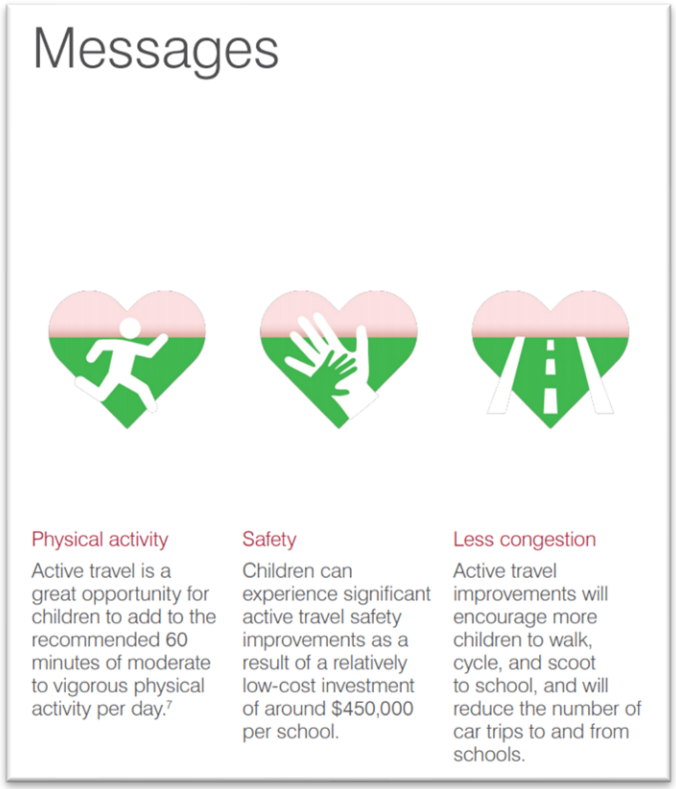
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 days		Weekday		Weekend	
Date	23/11/2020	17/11/2020	18/11/2020	19/11/2020	20/11/2020	21/11/2020	22/11/2020	Total	Average	Total	Average	Total	Average
AM Peak	08:00	08:00	08:00	08:00	08:00	10:00	11:00	N/A	08:00	N/A	08:00	N/A	10:00
PM Peak	17:00	15:00	17:00	17:00	15:00	12:00	17:00	N/A	17:00	N/A	15:00	N/A	12:00
00:00	0	2	0	1	2	3	5	13	2	5	1	8	4
01:00	1	1	0	0	1	1	0	4	1	3	1	1	1
02:00	0	0	1	0	0	0	4	5	1	1	0	4	2
03:00	1	0	0	0	2	0	2	5	1	3	1	2	1
04:00	2	0	0	1	0	1	2	6	1	3	1	3	2
05:00	7	10	6	8	5	7	2	45	6	36	7	9	5
06:00	26	36	36	38	31	16	15	198	28	167	33	31	16
07:00	116	112	117	104	112	34	29	624	89	561	112	63	32
08:00	233	202	213	220	216	50	44	1178	168	1084	217	94	47
09:00	76	100	87	87	77	59	65	551	79	427	85	124	62
10:00	52	62	67	60	60	79	62	442	63	301	60	141	71
11:00	55	78	72	72	57	61	67	462	66	334	67	128	64
12:00	36	62	49	73	59	86	65	430	61	279	56	151	76
13:00	60	58	64	60	57	64	54	417	60	299	60	118	59
14:00	95	88	92	96	73	68	64	576	82	444	89	132	66
15:00	137	131	140	128	158	46	58	798	114	694	139	104	52
16:00	91	121	96	97	92	67	61	625	89	497	99	128	64
17:00	138	128	147	134	125	64	66	802	115	672	134	130	65
18:00	58	70	103	81	75	61	54	502	72	387	77	115	58
19:00	35	34	50	43	38	38	25	263	38	200	40	63	32
20:00	21	22	8	21	37	13	13	135	19	109	22	26	13
21:00	25	9	9	13	23	13	8	100	14	79	16	21	11
22:00	1	4	20	8	12	16	3	64	9	45	9	19	10
23:00	2	4	7	7	9	15	3	47	7	29	6	18	9
Total	1268	1334	1384	1352	1321	862	771	8292	1185	6659	1332	1633	822
% Heavy	3.39%	3.52%	4.05%	3.55%	3.10%	1.74%	1.30%	3.14%		3.53%		1.53%	

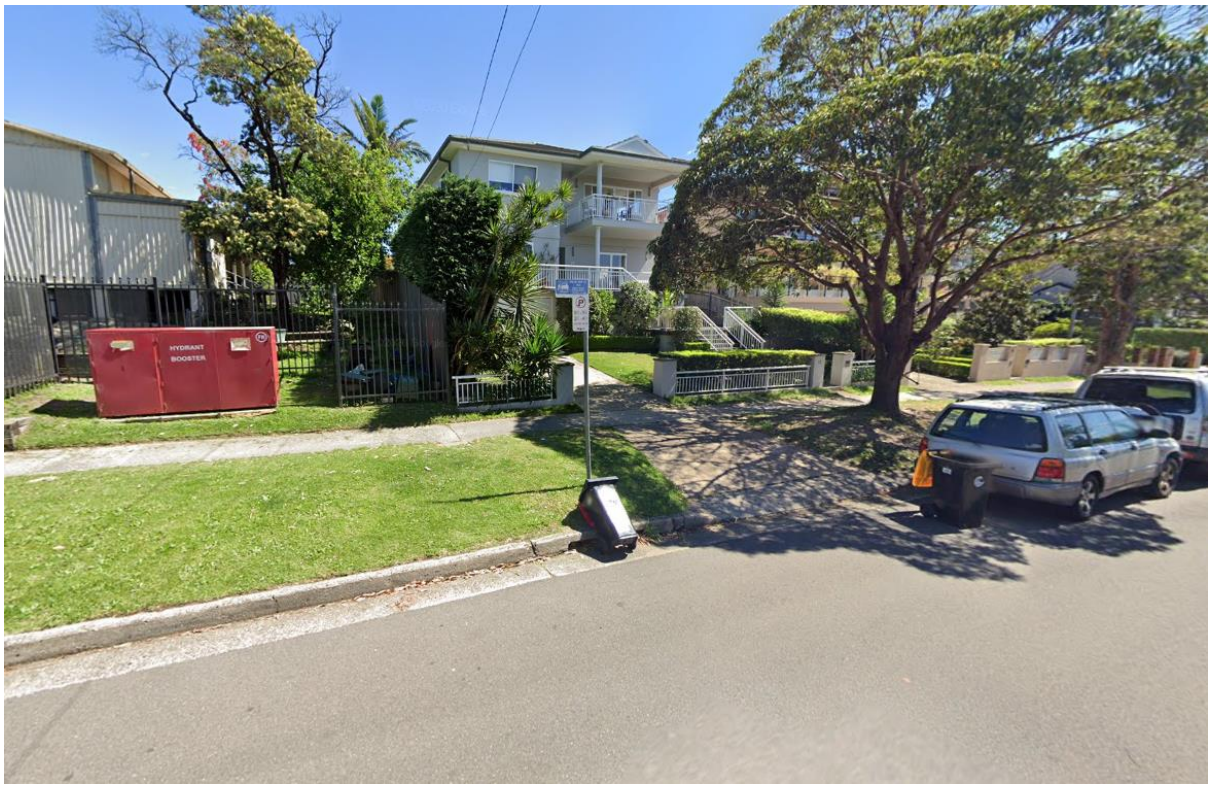
In summary, the area is already under pressure from too much traffic at school drop off and pickup times, with traffic flow being interrupted by parked cars and others searching for parking/avoiding buses. The presented traffic report uses old/incorrect data to suggest everything is fine. Using improved data for comparison, this proposal will see a total of 87 car trips across the pedestrian walkway on the west side of LEWIS street which carries 329 pedestrians will occur every weekday morning between 7 and 9am. Horrible to think of, and we aren't even short of childcare centres.

Against that backdrop, I also draw your attention to a 2019 report commissioned by the Heart Foundation regarding active travel to school.

https://www.healthyactivebydesign.com.au/images/uploads/Active_Travel_to_School.pdf



And that is what it comes down to. This proposal seems intent on making it harder for our children to make their own safe way to and from school. - part of growing up that we all remember. And here we are considering whether we should essentially force parents to drive children the short walk, because we can't prioritise young people's pedestrian safety. And then more parents drive because its unsafe. And then its more unsafe. Ridiculous



329 pedestrians, many just children, meeting 87 cars at this point between 7 and 9 in the morning, 200 times a year.

Seems silly to approve that sort of daily conflict, doesn't it? Would only be a matter of time until something bad happens.

Thank you for your consideration,

Joseph Harvey

50 Beatrice Street