Proposed Concept Plan Application
St Aloysius' College, Kirribilli

'Transport and Accessibility Impact Assessment Report

Prepared for: St Aloysius' College

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1. Introduction

This report has been prepared on behalf of St Aloysius' College to present findings of a Traffic and Accessibility Assessment of the proposed on-site multi-purpose facility and improvements to teaching areas within the Upper Pitt Street Campus of the College.

The study has assessed existing traffic conditions, parking demands, access arrangements, future traffic conditions, service vehicle provision and design compliance.

The remainder of the report is set out as follows:

- Section 2 - describes the existing traffic and parking conditions;
- Section 3 – provides a summary of the authority consultation undertaken;
- Section 4 - summarises the proposed development;
- Section 5 - reviews the potential traffic impacts of the proposal;
- Section 6 – provides commentary on other traffic and transport matters; and
- Section 7 - presents the conclusions

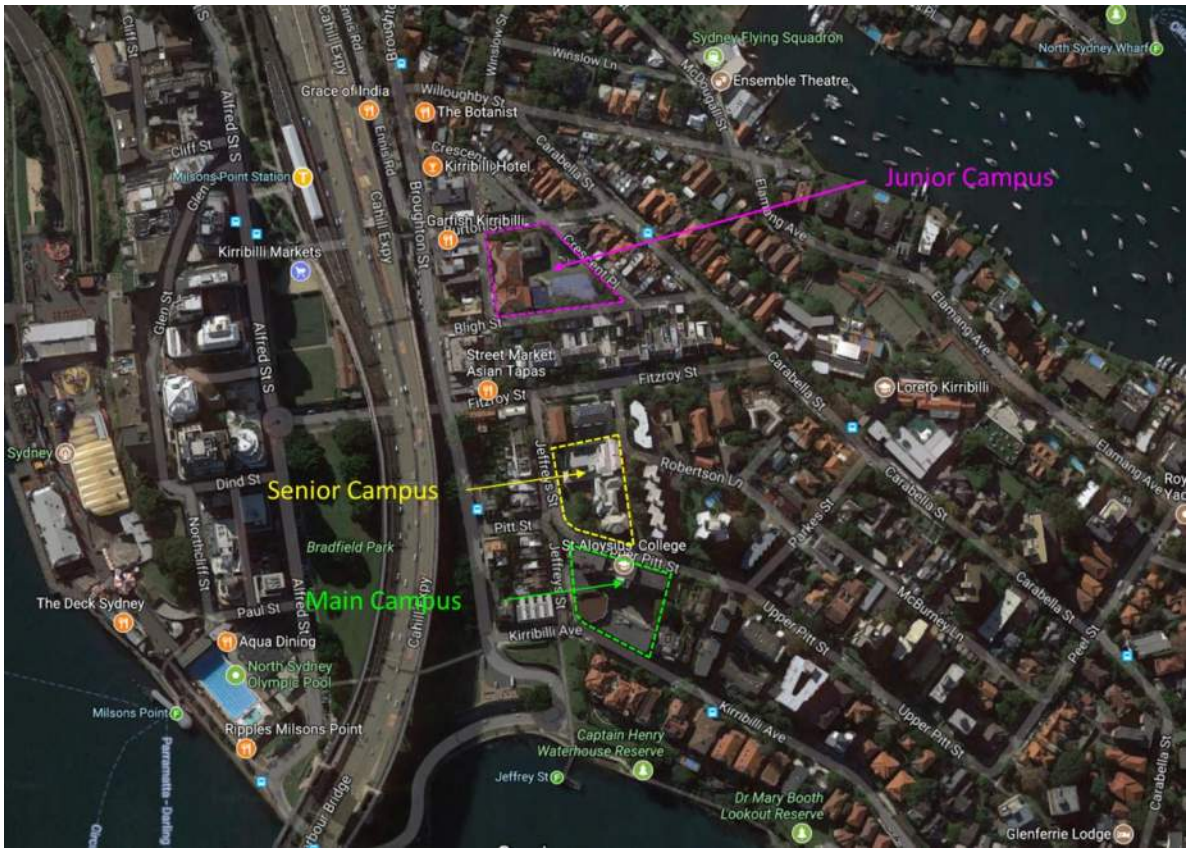
2. Existing Development / Conditions

The following presents a summary of existing site and traffic conditions.

2.1 Site Location

The College includes three distinct locations including one site which accommodates the Junior Campus of approximately 300 students and another two sites which accommodate some 900 students. The College overall include a total staff EFT (Equivalent Full Time) of approximately 181. The location of each Campus of the college is shown in **Figure 1**.

Figure 1 - Site Location



Source: Google maps

The existing campuses include:

- **29 Burton Street, Kirribilli – Junior Campus**
- **1-5 Jeffreys Street, Kirribilli – 'Wyalla' Senior Campus**
- **3 – 47 Upper Pitt Street, Kirribilli – Main Campus**

The Junior Campus is bounded by Burton Street in the north, Humphrey Place in the west, Bligh Street in the south and Crescent Place in the east.

The Senior Campus is bounded by Jeffrey Street in the west and Upper Pitt Street in the south with residential development to the east.

The Main Campus has a primary street frontage in Upper Pitt Street and bounded by Jeffreys Street in the west and Kirribilli Avenue in the south. The buildings on the northern side of Upper Pitt Street provide administration facilities for the College as a whole.

The main off-street car park of the College is provided in an open-air car park on the Senior Campus with access to / from Robertson Lane which operates as one-way southbound south of the College car park access. The car park provides a total of 16 parking spaces.

For sporting events within internal or external competitions, the College on several sporting venues within the North Sydney LGA.

Figure 2 – Existing Car Park Driveway in Robertson Lane

Given the proximity to public transport operations in the immediate area, the College does not rely on large car parks to service drop off / pick up needs which is discussed further in Section **2.6** of this report.

The College is located within a peninsular of residential development with little or no through traffic on the surrounding road system. This is discussed further below in Section 5.

The Main Campus includes a loading dock in Upper Pitt Street accessed from Jefferies Street which also provides emergency vehicle access. These arrangements will not change as part of this proposal.

The Senior Campus (Wyalla) also includes service and emergency vehicle access from Upper Pitt Street which also will not change under the current proposal.

2.2 Classification Criteria

It is usual to classify roads according to a road hierarchy in order to determine their functional role within the road network. Changes to traffic flows on the roads can then be assessed within the context of the road hierarchy. Roads are classified according to the role they fulfil and the volume of traffic they should appropriately carry. The Roads and Maritime Services (previously the RTA) has set down the following guidelines for the functional classification of roads.

- Arterial Road – typically a main road carrying over 15,000 vehicles per day and fulfilling a role as a major inter-regional link (over 1,500 vehicles per hour)
- Sub-arterial Road – defined as secondary inter-regional links, typically carrying volumes between 5,000 and 20,000 vehicles per day (500 to 2,000 vehicles per hour)
- Collector Road – provides a link between local roads and regional roads, typically carrying between 2,000 and 10,000 vehicles per day (250 to 1,000 vehicles per hour). At volumes greater than 5,000 vehicles per day, residential amenity begins to decline noticeably.
- Local Road – provides access to individual allotments, carrying low volumes, typically less than 2,000 vehicles per day (250 vehicles per hour).

2.3 Existing Road Network

Burton Street - is an east to west local street forming the northern boundary of the Junior Campus. Across the frontage of the Junior Campus it consists of a single travel lane in each direction with time restricted parallel parking on either side of the street. The street operates as one-way only eastbound between Broughton Street and Humphrey Place. A No Parking zone between the hours of 8:00am – 9:00am and 2:30pm – 4:00pm School days which accommodates five (5) vehicles is available for the parents dropping off / picking up students from the Junior Campus. Burton Street includes a carriageway width of approximately 11.0m east of Humphrey Place. Two (2) pedestrian crossings are provided in Burton Street west of the Junior Campus.

Bligh Street - is an east to west local street forming the southern boundary of the Junior Campus. With a carriageway width of approximately 7.0m, the provides one westbound lane and parallel parking on the southern side of the street. In the vicinity of the College, two (2) accessible parking spaces are provided along with two (2) spaces for GoGet vehicles. No formal pedestrian facilities are provided in Bligh Street.

Upper Pitt Street forms northern boundary of the Main Campus. It generally includes a single lane in each direction with time restricted parallel parking available east of the existing pedestrian crossing adjacent to the Main Campus. As with the Burton Street for the Junior Campus, a No Parking zone between the hours of 8:00am – 9:00am and 2:30pm – 4:00pm School days which accommodates five (5) vehicles is available immediately east of the pedestrian crossing. The street generally includes a carriageway width of approximately 11.0m. A further two (2) parking spaces for GoGet car share vehicles is located opposite the College on the northern side of Upper Pitt Street.

2.4 Staff / Student Mode of Travel Surveys

To gauge the travel behaviour of staff / students of each campus, a mode of travel survey was undertaken of the majority of students / staff across the College by year. Thus, the potential traffic generation of the development needs to be undertaken on a first principles basis and needs to consider the potential modes of travel to / from the College.

A copy of the mode of travel surveys is provided in **Appendix A** of this report. Each student / staff member surveyed also had their current year of education recorded as part of the survey.

A summary of the details / responses to the mode of travel survey is provided below:

- Of the 1,200 students and 181 staff, a total of 1,178 mode of travel survey responses were received.
- This included 169 staff responses and 1,009 student responses.
- Some 3% of the student population was not present at the College on the day of the survey

The proportion of responses by year / staff is summarised in **Table 1**.

Table 1 - Mode of Travel Survey No. Responders by Type

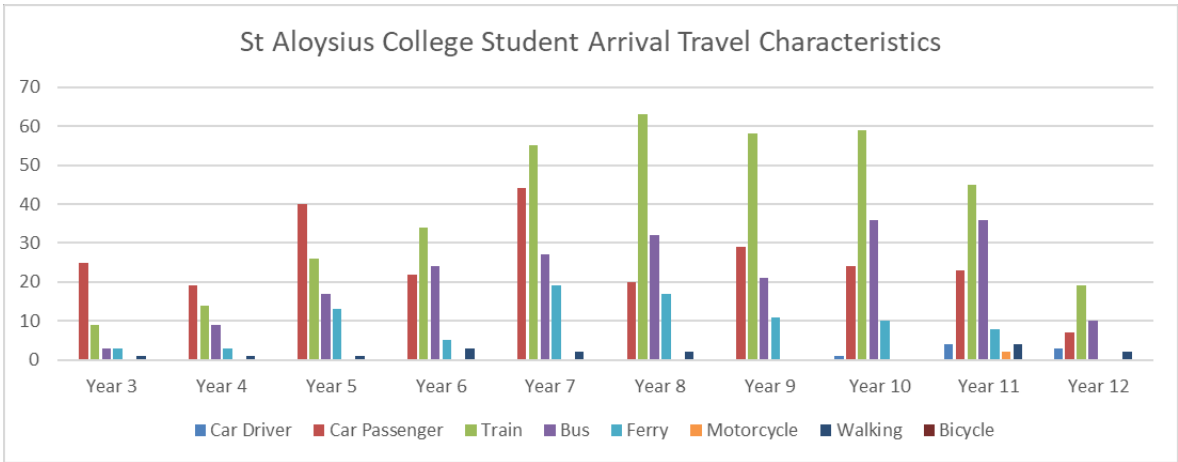
Year / Staff	No. Responders	% of total
Year 3	**41**	3.48%
Year 4	**46**	3.90%
Year 5	**100**	8.49%
Year 6	**91**	7.72%
Year 7	**147**	12.48%
Year 8	**135**	11.46%
Year 9	**132**	11.21%
Year 10	**131**	11.12%
Year 11	**128**	10.87%
Year 12	**58**	4.92%
Staff - Teaching	**115**	9.76%
Staff - Administration	**52**	4.41%
Staff - Grounds / Maintenance	**1**	0.08%
Total	**1178**	**100%**

As also stated the College is located within a short walking distance to a significant volume of public transport options. The following presents the findings of the mode of travel surveys.

2.4.1 Student Mode of Travel Surveys

The measured mode of travel by type of mode and year of the Junior and Senior Campuses are shown in **Chart 1** below.

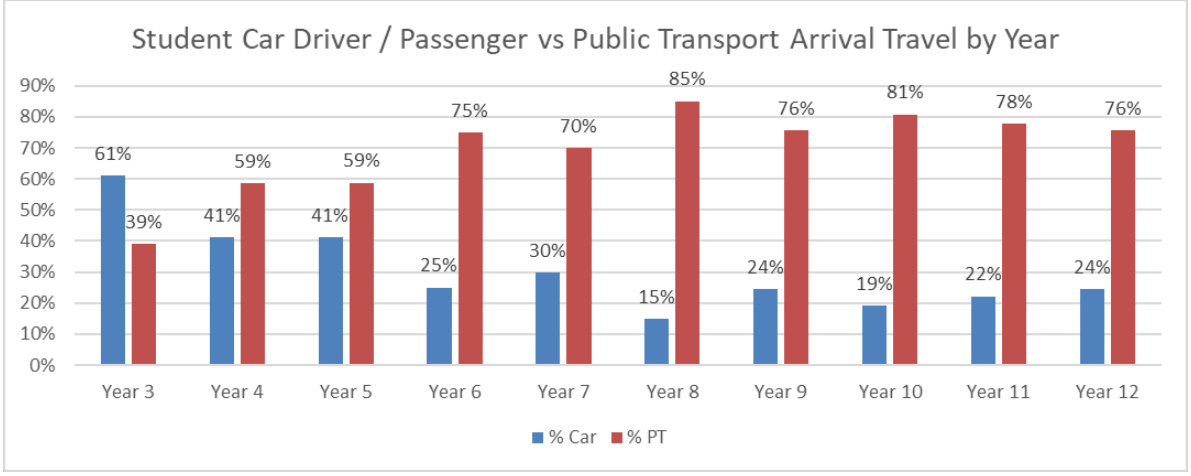
Chart 1 - Junior Campus / Senior Campus MOT Survey Results – Arriving to the College



As expected the proportion of students travelling as 'car passengers' is the greatest for the JJunior Campus compared with the MMiddle / SSenior Campuses. The mode share to public transport for Years 7-12 is the largest proportion by a significant difference.

The proportion of public transport trips compared to those trips taken by private vehicle is summarised below in

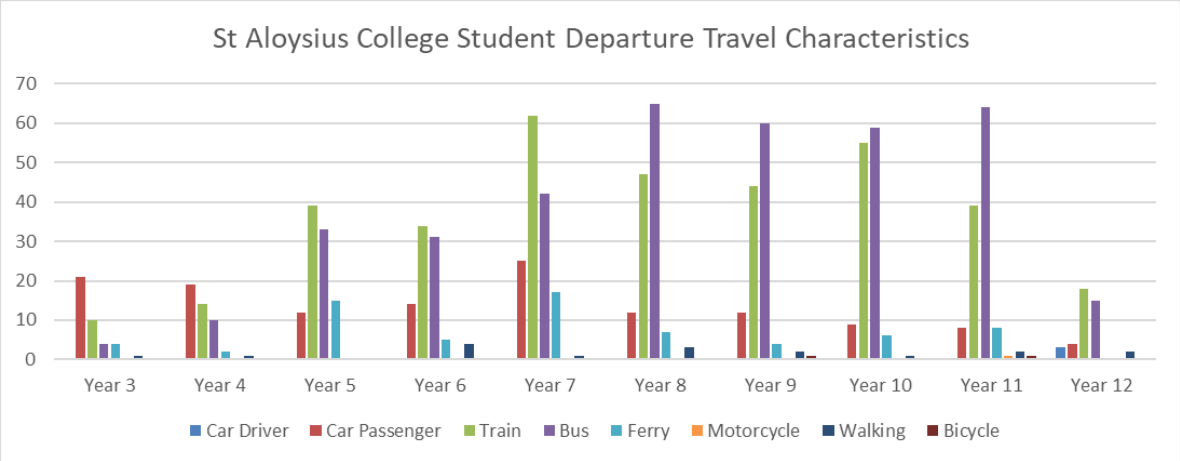
Chart 2 - Junior Campus / Senior Campus Student Proportions of Travel by PT – Arriving to the College



In all but Year 3 students the largest proportion of travel to the College was by non-private vehicle modes and in some instances equated to 80%+.

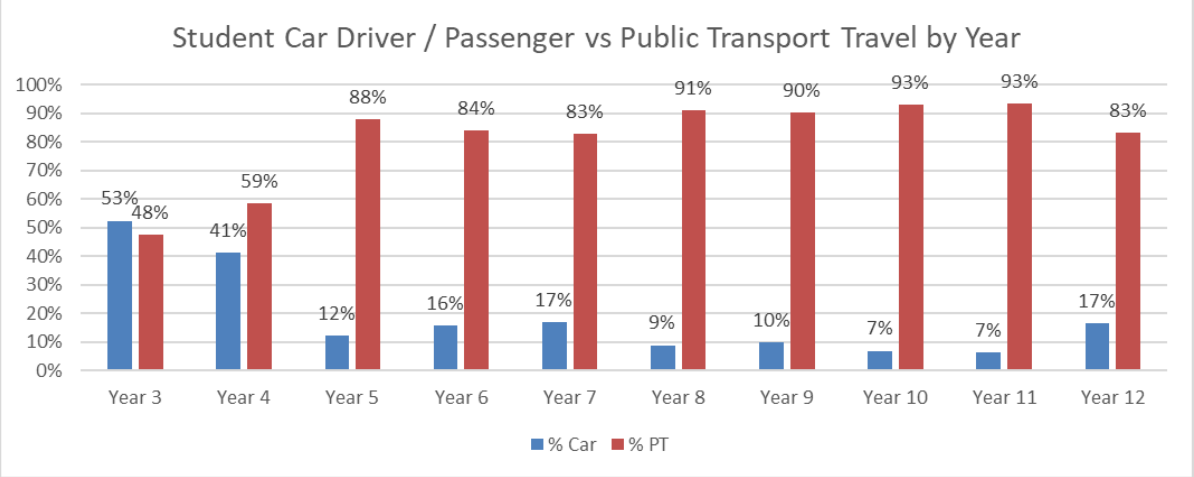
As a comparison the departure mode of travel from the College findings are shown below.

Chart 3 - Junior Campus / Senior Campus Student MOT Survey Results – Departing the College



As expected, the proportion of students who travel by public transport across each year of the College increases in the afternoon as travel occurs before the afternoon peak period. That is, students are more likely to travel with parents on their way to work in the morning than in the afternoon. Thus, the College itself does not generate a specific trip in its own right but a linked trip with a commuting trip in many cases.

Chart 4 - Junior Campus / Senior Campus Student Proportions of Travel by PT – Departing the College

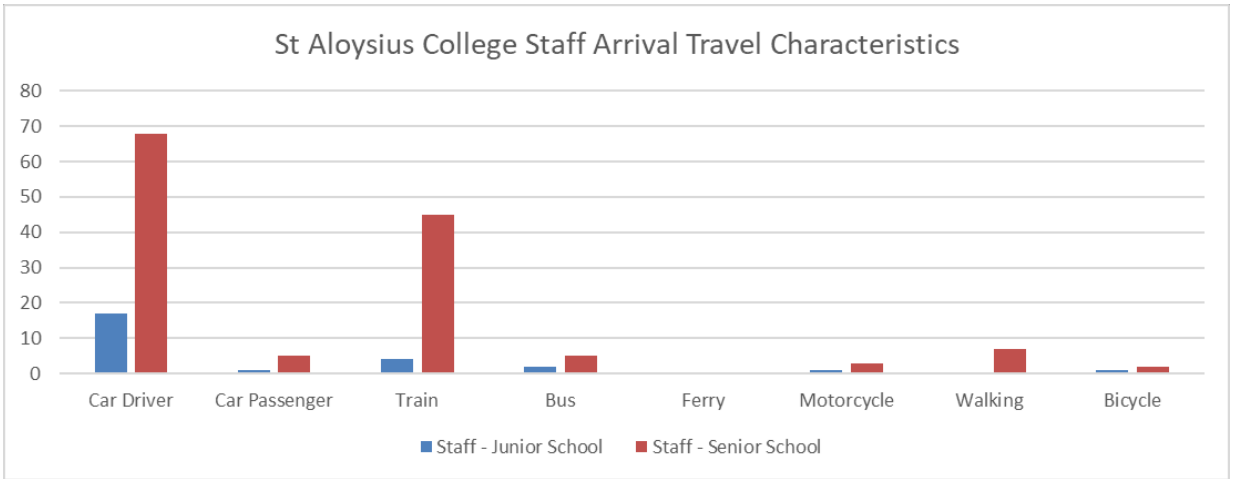


Compared with mode of travel to the College (Chart 1), the proportion of travel by public transport increases even further to no less than 83% for years 5-12. Further, the proportion of Year 3 students who travel by Public Transport increases from 39% to 48%.

2.4.2 Staff Mode of Travel Surveys

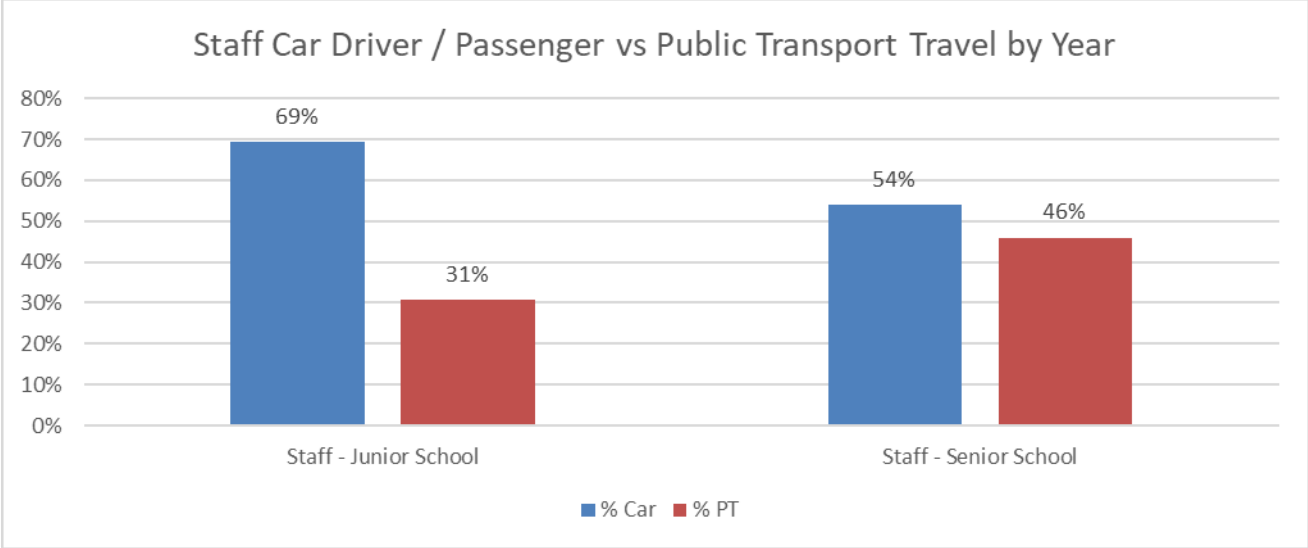
The measured mode of travel by type of mode and year of the staff as a whole is shown below.

Chart 5 - Junior Campus / Senior Campus Mode of Travel Characteristics of Staff – Arriving to the College



Of interest the predominant mode of travel to the College is by private vehicle and then by train. This is despite their being either time restrictions on-street parking or residential parking areas limiting parking to two (2) hours within a reasonable walking distance to the College. There is the potential that staff are utilising public car parks in North Sydney / Alfreds Point and paying to park all day. The proportions of private vehicle versus non-private vehicle modes of transport traveling to the College by staff is shown below.

Chart 6 - Junior Campus / Senior Campus Proportions of Travel by PT of Staff – Arriving to the College



Similarly, the departure of the College travel characteristics of staff and proportions of private vehicle versus non-private vehicle use is shown below.

Chart 7 - Junior Campus / Senior Campus Mode of Travel Characteristics of Staff – Departing the College

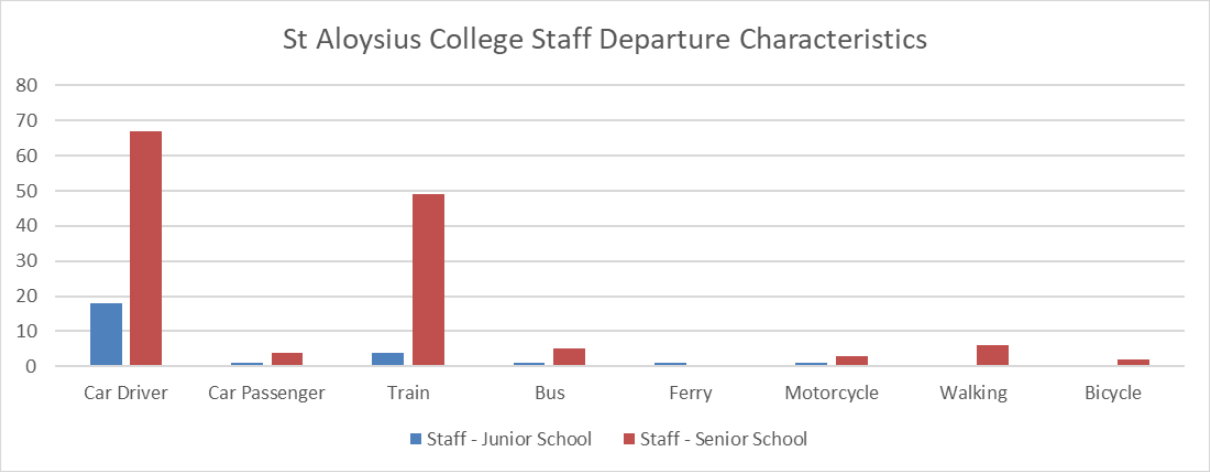
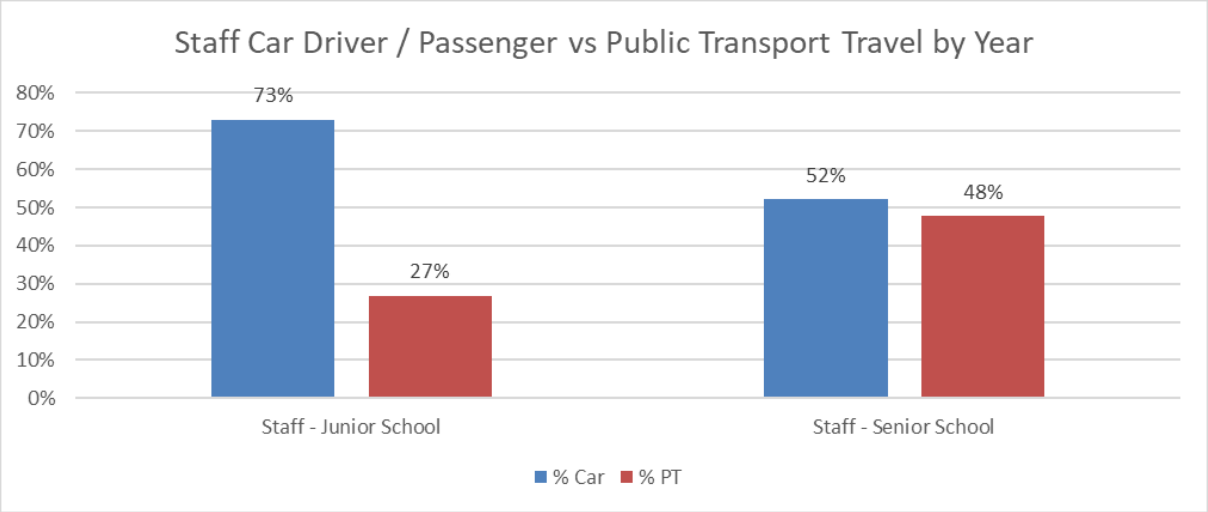


Chart 8 - Junior Campus / Senior Campus Proportions of Travel by PT of Staff – Arriving to the College



It is noted there is little change in travel behaviour of staff departing the College compared with arriving at the College.

2.5 Existing Site Traffic Generation

The RTA Guide to Traffic Generating Developments does not provide any peak hour traffic generation rates for a College (school). The estimated traffic generated by the College has been based on the mode of travel survey findings of students / staff of each Campus.

However, using the information presented in Section **2.4** of this report, a traffic generation of each Campus can be determined. That is, assuming vehicle trips generated by student car drivers, student car passengers and staff travel characteristics. It should be noted whilst this approach provides an estimate of traffic generation, the final destination of car driver trips is not precisely known.

Traffic generation estimates include student passengers who are travelling with their parents as part of their commute trip and thus the total traffic generation estimate needs to consider this linked trip occurring and not a specific College generated trip. The following presents the number of trips by mode including as car driver and as car passenger:

Table 2 – Number of Trips by Mode - AM

	Car Driver	Car Passenger	Train	Bus	Ferry	Motorcycle	Walking	Bicycle	% Car	% PT
Year 3	0	25	9	3	3	0	1	0	61%	39%
Year 4	0	19	14	9	3	0	1	0	41%	59%
Year 5	0	40	26	17	13	0	1	0	41%	59%
Year 6	0	22	34	24	5	0	3	0	25%	75%
Year 7	0	44	55	27	19	0	2	0	30%	70%
Year 8	0	20	63	32	17	0	2	0	15%	85%
Year 9	0	29	58	21	11	0	0	0	24%	76%
Year 10	1	24	59	36	10	0	0	0	19%	81%
Year 11	4	23	45	36	8	2	4	0	22%	78%
Year 12	3	7	19	10	0	0	2	0	24%	76%
Staff - Junior College	17	1	4	2	0	1	0	1	69%	31%
Staff - Senior College	68	5	45	5	0	3	7	2	54%	46%
Total	**93**	**259**	**431**	**222**	**89**	**6**	**23**	**3**		
								Student Avg	**30%**	**70%**
								Staff Avg	**62%**	**38%**

Table 3 – Number of Trips by Mode - PM

	Car Driver	Car Passenger	Train	Bus	Ferry	Motorcycle	Walking	Bicycle	% Car	% PT
Year 3	0	21	10	4	4	0	1	0	53%	48%
Year 4	0	19	14	10	2	0	1	0	41%	59%
Year 5	0	12	39	33	15	0	0	0	12%	88%
Year 6	0	14	34	31	5	0	4	0	16%	84%
Year 7	0	25	62	42	17	0	1	0	17%	83%
Year 8	0	12	47	65	7	0	3	0	9%	91%
Year 9	0	12	44	60	4	0	2	1	10%	90%
Year 10	0	9	55	59	6	0	1	0	7%	93%
Year 11	0	8	39	64	8	1	2	1	7%	93%
Year 12	3	4	18	15	0	0	2	0	17%	83%
Staff - Junior College	18	1	4	1	1	1	0	0	73%	27%
Staff - Senior College	67	4	49	5	0	3	6	2	52%	48%
Total	**88**	**141**	**415**	**389**	**69**	**5**	**23**	**4**		
								Student Avg	**19%**	**81%**
								Staff Avg	**63%**	**37%**

The traffic generated by the College and those trips which are linked to existing commuter trips can be estimated by comparing the number of passenger trips which occurred to the College versus those which occurred from the College. That is, as the afternoon College peak does not coincide typically with the commuter peak, there is a difference between the AM passenger trips and the PM passenger trips. This is summarised below.

Table 4 - First Principles Estimate of College Traffic Generation

	AM Peak		PM Peak		Difference	
	Car Driver	Car Passenger	Car Driver	Car Passenger	Car Driver	Car Passenger
Students	8	253	3	136	5	117
Staff	85	6	85	4	0	2

From **Table 4** it is estimated that:

- The College's overall generate 85 staff 'car driver' vehicle trips inbound to the College in the AM peak and outbound from the College in the PM peak;
- The College's overall generate 3 student 'car driver' vehicle trips to the College in the AM peak and outbound from the College in the PM peak;
- A total of 117 student 'car passenger' vehicle trips each way are generated by the College in the AM peak; and
- A total of 2 staff 'car passenger vehicle trips each way are generated by the College in the PM peak.

2.6 On Street Parking Demands Surveys

To gauge parking demands in and surrounding the College, parking beat surveys were undertaken between the hours of 7:00am – 9:0am and 2:00pm – 5:30pm. The surveys of parking demands versus capacity were undertaken at 30-minute intervals. Copies of these parking beat surveys are provided in **Appendix B** of this report.

By commencing the surveys at 7:00am, a measure of street parking demands not related to the College can be determined. From this, on-street parking demands of the College itself can be estimated.

It has been assumed total net increase in on-street parking at 9:15am to 9:45am represents the potential on-street parking demands generated by the College.

The locations of the parking beat surveys undertaken is shown below in **Figure 3**.

Figure 3 – Parking Beat Survey Locations

The surrounding road network surveyed included a total parking availability of **568** spaces. The parking beat surveys found the following:

- Of the 568 parking spaces surveyed, only 36 spaces did not have any time restrictions present (6.8% of the total parking available).
- Overall on-street parking demands did not change during all AM hours surveyed indicating little or no parking in the vicinity of the College by staff or students.
- At 7:00am, the total on-street parking demand was 65 vehicles out of the 586 spaces available or 11.1% of total capacity.
- The total on-street parking demand between 9:15am to 9:45am ranged from 86 – 110 vehicles or a net increase of 21-45 vehicles over and above existing housing generated on-street parking demand.
- At all times, the existing onsite car parks had some spare capacity. However, Car Park 1 had at times only one space available and it is expected this was the accessible parking space.
- Total parking demand at 3:15pm and 3:30pm was some 160 vehicles indicating a potential College generated parking demand of 95 vehicles at the peak of the afternoon College peak period.
- The afternoon estimated College parking demand on-street has completely dissipated within 15 minutes with on-street parking demands returning to levels recorded at 7:00am.

A summary of the parking beat survey findings is presented below in **Table 5** and **Table 6**.

Table 5 – Surrounding Street & College AM Parking Demands

	Available Spaces	7:00	7:30	8:00	8:30	9:00
Section 1	86	66	62	67	64	65
Section 2	28	23	21	23	23	21
Section 3	84	77	77	73	68	68
Section 4	28	27	27	25	25	28
Section 5	0	0	0	0	0	0
Section 6	47	41	43	43	44	45
Section 7	31	30	31	30	30	29
Section 8	11	9	9	10	10	10
Section 9	13	12	12	12	13	13
Section 10	0	0	0	0	0	0
Section 11	80	46	52	51	52	56
Section 12	16	15	14	13	14	14
Section 13	8	5	7	7	8	6
Section 14	5	5	4	5	5	5
Section 15	18	15	15	11	12	14
Section 16	10	9	9	9	9	9
Section 17	103	88	88	89	90	85
Total	**568**	**468**	**471**	**468**	**467**	**468**
	Demand	**82%**	**83%**	**82%**	**82%**	**82%**

Table 6 – Surrounding Street & College PM Parking Demands

	Available Spaces	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Section 1	86	64	68	62	60	48	59	50	53
Section 2	28	22	25	23	23	23	23	24	24
Section 3	84	69	69	67	64	64	56	57	59
Section 4	28	28	28	27	22	23	22	24	24
Section 5	0	0	0	0	0	0	0	0	0
Section 6	47	37	40	38	37	33	33	36	32
Section 7	31	26	26	27	29	28	28	26	24
Section 8	11	8	11	11	11	11	11	10	10
Section 9	13	12	12	11	12	12	12	13	13
Section 10	0	0	0	0	0	0	0	0	0
Section 11	80	50	43	44	33	26	30	34	39
Section 12	16	14	15	11	15	12	14	12	12
Section 13	8	6	6	7	7	6	6	5	5
Section 14	5	5	5	5	5	5	5	5	5
Section 15	18	16	11	15	15	10	9	8	13
Section 16	10	10	10	10	10	10	10	9	9
Section 17	103	74	74	75	78	80	75	78	73
Total	**568**	**441**	**443**	**433**	**421**	**391**	**393**	**391**	**395**
	Demand	**78%**	**78%**	**76%**	**74%**	**69%**	**69%**	**69%**	**70%**

From **Table 5** and **Table 6** it can be seen that overall parking demands did not increase in all streets surveyed prior to the commencement of the College. During the afternoon peak period, there was a slight decrease in overall parking demands (some 30 vehicles between 3:30pm to 4:00pm).

To gauge the locations of greatest change in parking demands pre-and post College times, the following provides a difference plot of parking demands by location versus the previous 30-minute period.

Table 7 – Parking Demand Difference Comparison per 30 Minutes – AM Period

	Available Spaces	7:00	7:30	8:00	8:30	9:00
Section 1	86	66	-4	5	-3	1
Section 2	28	23	-2	2	0	-2
Section 3	84	77	0	-4	-5	0
Section 4	28	27	0	-2	0	3
Section 5	0	0	0	0	0	0
Section 6	47	41	2	0	1	1
Section 7	31	30	1	-1	0	-1
Section 8	11	9	0	1	0	0
Section 9	13	12	0	0	1	0
Section 10	0	0	0	0	0	0
Section 11	80	46	6	-1	1	4
Section 12	16	15	-1	-1	1	0
Section 13	8	5	2	0	1	-2
Section 14	5	5	-1	1	0	0
Section 15	18	15	0	-4	1	2
Section 16	10	9	0	0	0	0
Section 17	103	88	0	1	1	-5

From **Table 7** it can be seen there is little to no difference in parking demands in the lead up and at the commencement of the College. Thus, what parking may be generated by the College appears to be occurring beyond the area of the surveys.

Table 8 – Parking Demand Difference Comparison per 30 Minutes – PM Period

	Available Spaces	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Section 1	86	64	4	-6	-2	-12	11	-9	3
Section 2	28	22	3	-2	0	0	0	1	0
Section 3	84	69	0	-2	-3	0	-8	1	2
Section 4	28	28	0	-1	-5	1	-1	2	0
Section 5	0	0	0	0	0	0	0	0	0
Section 6	47	37	3	-2	-1	-4	0	3	-4
Section 7	31	26	0	1	2	-1	0	-2	-2
Section 8	11	8	3	0	0	0	0	-1	0
Section 9	13	12	0	-1	1	0	0	1	0
Section 10	0	0	0	0	0	0	0	0	0
Section 11	80	50	-7	1	-11	-7	4	4	5
Section 12	16	14	1	-4	4	-3	2	-2	0
Section 13	8	6	0	1	0	-1	0	-1	0
Section 14	5	5	0	0	0	0	0	0	0
Section 15	18	16	-5	4	0	-5	-1	-1	5
Section 16	10	10	0	0	0	0	0	-1	0
Section 17	103	74	0	1	3	2	-5	3	-5

From **Table 8** it is noted that Section 1 and 11 exhibited the greatest change in parking demands immediately following the end of College with Section 15 also indicating a reduction in parking demands. Of these sections which include a total of 184 parking spaces, only two (2) parking spaces were unrestricted.

Overall, it is estimated that the College does not generate any significant volumes of all-day parking by students or teachers east of the Warringah Freeway. The existing No Parking zones in Burton Street (5 spaces) adjacent to the Junior Campus and in Upper Pitt Street (5 spaces) adjacent to the Main Campus provide for the drop off / pick up requirements of each Campus.

On the assumption that each zone provides 1 space 2 minutes for drop off / pick up, each zone can provide a total of 150 parking opportunities per location. From **Table 4** the estimated 117 drop off's of passengers by private vehicle would more than be accommodated within the existing No Parking zones.

2.7 Public Transport

The College site is located within easy walking distance to a significant number of public transport options for staff / students. This is reflected in the high proportions of public transport use described above.

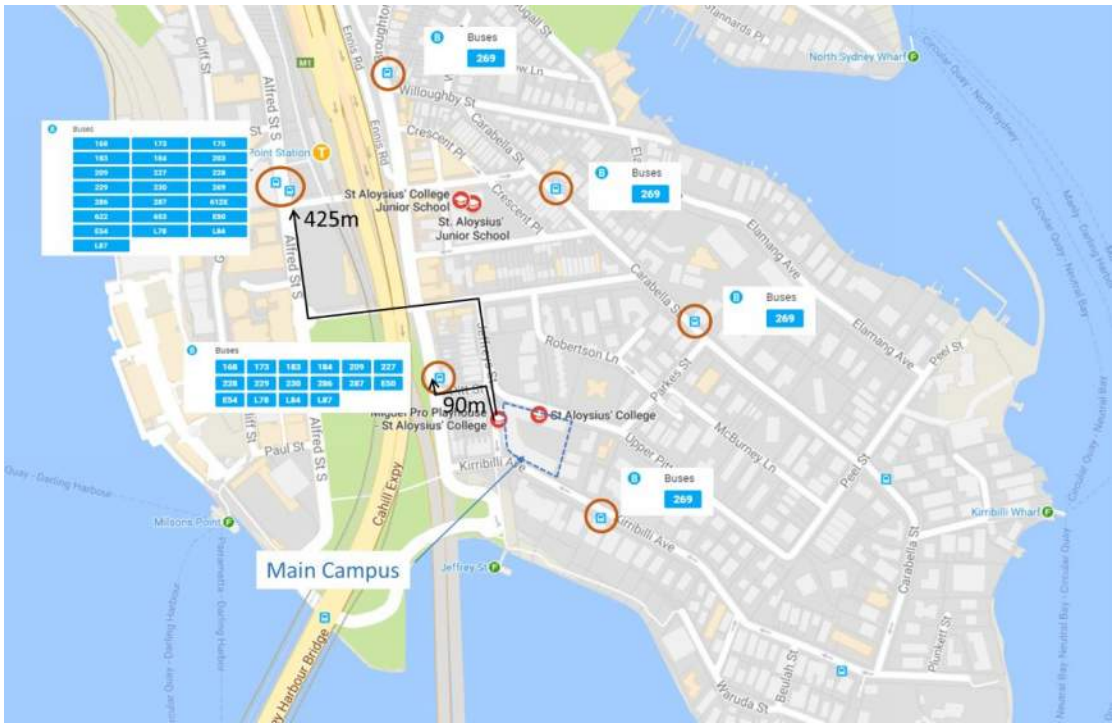
2.7.1 Bus Operations

The Colleges are located within 400m walking distance to seven (7) existing bus stops with five (5) on the eastern side of the railway line and two (2) on the western side. The bus stops in Carabella Street all provide access to the same Bus Route 269. The existing bus routes which operate in the vicinity of the Campuses are shown below in **Figure 4**:

Figure 4 – Existing Bus Routes Past the Development Site

The walking distance to existing bus stops from the Main Campus is shown below in **Figure 5**. TThe Junior and Senior campuses are both located within a shorter walking distance compared to that of the Main Campus.

Figure 5 – Existing Bus Routes Operating Within Walking Distance to Development Site



As can be seen from **Figure 5** the Main Campus is located within reasonable walking distance to a significant number of local, regional and metro bus services with the Junior and Senior Campuses located even closer to these high frequency bus stops.

2.7.2 Rail Operations

The Main Campus is located within some 400m walking distance to the Milsons Point Railway Station which provides access to T1 North Shore / Northern Line. During the morning and afternoon peak periods, this railway station provides a 3-5 minute service north and south.

2.7.3 Ferry Operations

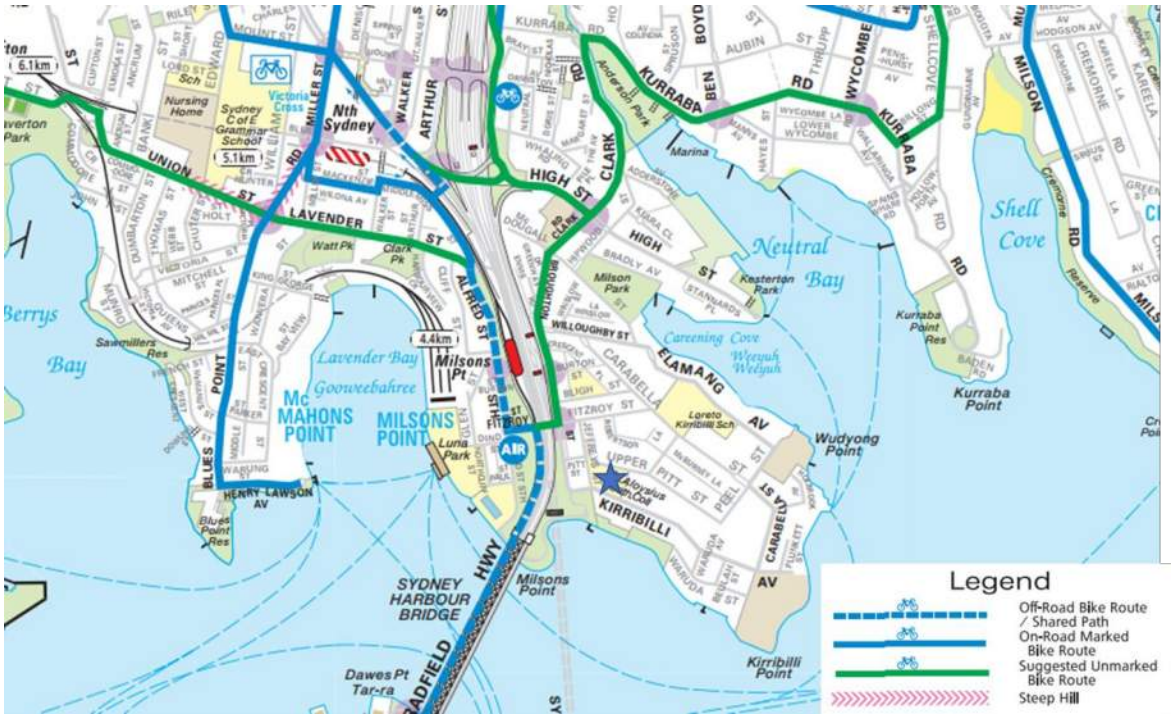
The Main Campus is also located within a 150m walking distance to the Jeffrey Street Ferry Wharf which provides direct ferry services to key employment / residential / recreational locations including Darling Harbour, Manly, Lane Cove and Circular Quay. The walking distance to the Senior and Junior Campuses to the ferry wharf is some 200m and 370m respectively.

Overall the high proportions of use of public transport by students and to a lesser extent staff is reflective of the College's location adjacent to a wide variety of high frequency public transport operations.

2.8 Bicycle Network

The existing bicycle routes / paths within reasonable distance to the three campuses is shown overleaf (**Figure 6**).

Figure 6 – Existing Bicycle Network Near College Site

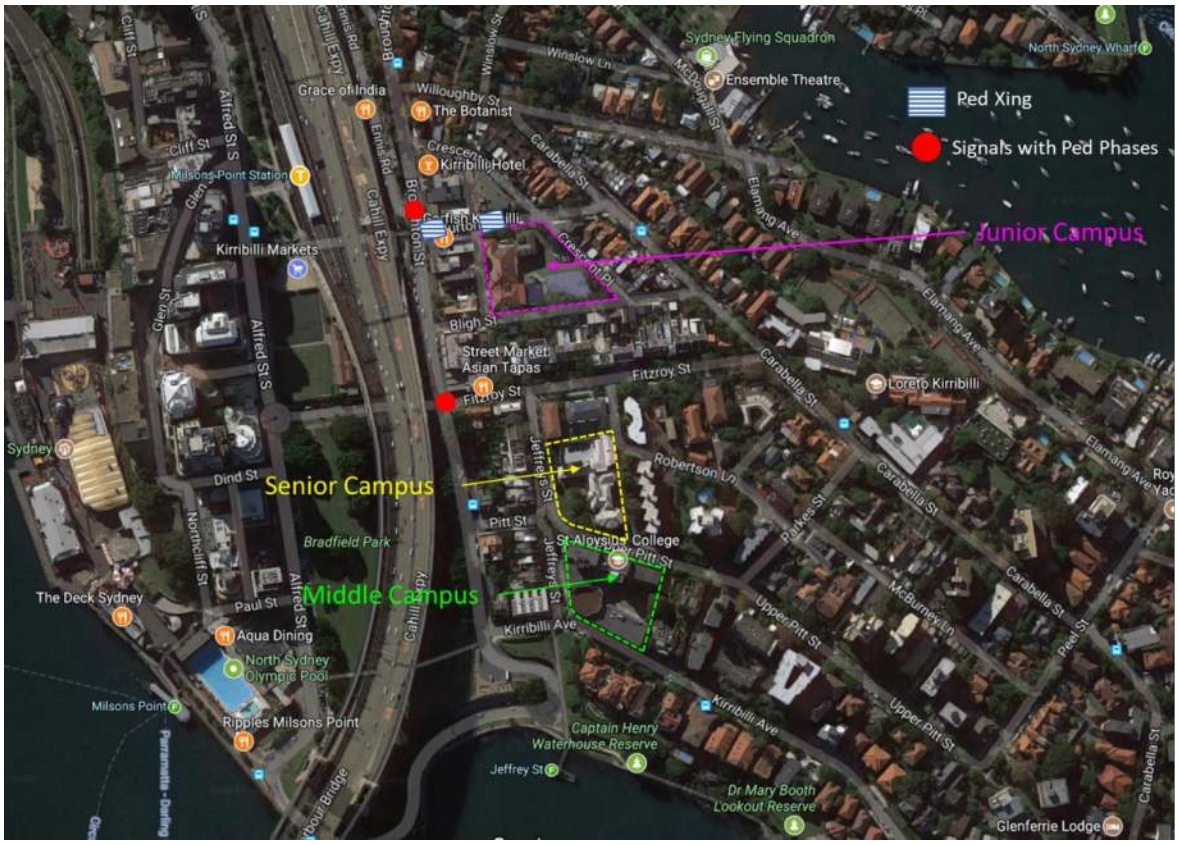


The low proportion of bicycle users within the College is somewhat reflective of the steep topography of the immediate surrounding area and no specific separate bicycle facilities / routes around the College. The Harbour Bridge bike path provides a connection to regional bike paths to the north and south.

2.9 Pedestrian Network

The existing pedestrian facilities by type linking the College to public transport operations are shown below.

Figure 7 – Existing Formal Pedestrian Crossing Facilities



The existing formal pedestrian crossing facilities linking public transport operations around the Milsons Point Railway Station and the Campuses include:

- Traffic signals with pedestrian phases at the intersection of Broughton Street / Ennis Road
- Traffic signals with pedestrian phases at the intersection of Broughton Street / Fitzroy Street
- Marked pedestrian crossing in Burton Street immediately east of Broughton Street
- Marked pedestrian crossing in Burton Street immediately east of Humphrey Place
- Marked pedestrian crossing in Upper Pitt Street immediately outside Main Campus main entrance.

To complement the above facilities all existing streets which provide frontages of the C campuses include formal pedestrian paths.

Overall all Campuses of the College enjoy a number of existing safe pedestrian crossing facilities linking public transport operations to the College.

3. Authority Consultation

As part of preparing this report, consultation with representations of both the Roads and Maritimes Services and Transport for NSW was undertaken at a meeting held 18 October 2017 at 680 George Street, Sydney.

A copy of the meeting minutes is provided in **Appendix C** of this report. In summary, representatives requested information on the following matters to be included in this report.

Item	Location
1. Document pedestrian access from nodes, and how student/ staff move from transport node to College campus;	Section 2.9
2. Document student/staff use of public transport including bus and train through mode of travel surveys	Section 2.4
3. Demonstrate how the Site will accommodate natural growth	N/A
4. Capture the existing parking/public transport conditions and identify whether it is adequate or if there are deficiencies	Section 2.7
5. Application to include student and staff numbers, as well as the base numbers for classes	Section 2.1

4. The Proposed Development

The following project description has been sourced from the SEE report by Willow Planning:

A Concept Proposal has been prepared to guide the future redevelopment of St Aloysius College. The Concept Proposal seeks consent for the staged redevelopment of the College and divides the Site into the three (3) distinct campuses:

- Site 1 – 29 Burton Street, Kirribilli – Junior Campus
- Site 2 – 1-5 Jeffreys Street, Kirribilli – Senior Campus
- Site 3 – 47 Upper Pitt Street, Kirribilli – Middle Campus

The Concept Proposal will provide a statutory framework for the long term development of the College. The proposal seeks consent for buildings envelopes and open space. The Concept Proposal will be delivered across at least two stages; this includes Stage 1 works for which detailed approval is sought for the Senior and Middle Campus as part of this application. Future stages will be subject to subsequent detailed development applications.

In summary, the Concept Proposal seeks approval for:

- Stage 1: Masterplan and Concept Approval for St Aloysius College including the three (3) existing campuses which form the Junior Campus, Middle Campus and Senior Campus in Kirribilli; and detailed built form approval for the Middle Campus and Senior Campus.
- Stage 2: Detailed Built Form approval for the Junior Campus will be sought under a future development application submitted to the relevant consent authority.

The proposed scope of works are summarised below:

Senior Campus – 1-5 Jeffreys Street, Kirribilli

- Extension of two (2) existing Level 1 learning rooms;
- Internal upgrades of teaching and learning spaces to the Wyalla building.

Middle Campus – 47 Upper Pitt Street, Kirribilli

- Demolition of existing North-East Wing, and construction of new teaching and learning precinct and infilling exiting quadrangle;
- Refurbishment of North Wing classrooms, as well as the Great Hall and chapel;
- Upgrades to existing courtyard space.

Junior Campus – 29 Burton Street, Kirribilli

- Construction of new semi subterranean sports facility, and associated undercroft area;
- Construction of additional storey to the west of the Site.

Development of the Junior Campus will be subject to a subsequent development application and will be generally consistent with the Staged SSDA.

Plans of the proposed development are provided in **Appendix D** of this report.

5. Traffic, Parking and Access Assessment

5.1 Introduction

The following presents an assessment of the potential traffic impacts of the proposal using the RTA (now known as the RMS) Guide to Traffic Generating Developments standard approach.

5.2 Development Traffic Generation

As stated above, the proposed Concept plan will not include any increase in either staff or student population servicing any of the three (3) campuses. Therefore, the net increase of traffic generated by the Concept Plan would be zero.

5.3 Parking Provision

Whilst the development will provide additional floor area within the Main Campus including a multi-purpose roof terrace, the additional floorspace will not result in *any* increase in staff or student population.

The North Sydney Development Control Plan 2013 requires 1 parking space per 6 staff for educational establishments. Therefore, the proposal which does not result in any additional staff would not require any additional parking to be provided.

It is acknowledged that the increase in floorspace which would be achieved in the Concept Plan overall would have a parking shortfall applying the requirements of DCP 2013 purely on a floorspace basis. However, with no increase in staff or student numbers the proposal would not generate any additional parking demands. Therefore, no increase in on-site parking is warranted.

The low provision of parking combined with protected on-street parking networks (through time restricted parking) acts as a management tool for the promotion of public transport use.

6. Other Matters

6.1 Construction Traffic Management Plan

A preliminary Construction Management Plan for the proposed development has been prepared by TBH Pty Ltd which seeks to address the above matters and a copy is provided in **Appendix E** of this report.

6.2 Green Travel Plan

A formal Green Travel Plan was not considered as part of the preparation of this traffic report following the positive outcomes of the mode of travel survey of staff / teachers. That is, all Campuss of the College exhibit a high proportion of public transport use in an area which is well protected from all day parking with existing restrictions. For example, student travel mode share to public transport ranges from 70-80%.

Further, the proposed development would not result in any increase in either student or staff populations across the College. In addition, the proposed works would have the benefit of reducing the need to travel to / from the campuses with improved / additional facilities provided within the College grounds.

On the basis that it was considered that a formal Green Travel Plan was considered a desirable outcome as part of these works, the requirement could form a condition of consent to be submitted at the time of Construction Certificate.

7. Conclusions

This report has reviewed the potential traffic impacts of the proposed improvement works as part of a Concept Plan application for St Aloysius' College Junior, Main and Senior College campuses, Kirribilli to provide enhanced teaching facilities and a multi-purpose hall. The findings of this review are presented below:

1. The proposed works within the Concept Plan would not result in any increase in either staff or student population at any of the three (3) campuses.
2. The site is extremely well serviced by a range of high frequency public transport options for staff and students.
3. The development would not result in any increase in net traffic generation of the College.
4. Construction vehicle access should avoid the peak morning and afternoon College periods to minimise potential conflict with the movement of students to / from existing public transport nodes.

Overall the traffic impacts of the proposal are considered acceptable.

8. Appendix A - Mode of Travel Survey Form

St Aloysius College Mode of Travel Survey - KINDERGARTEN

Student	How did you travel to school today?									How will you travel home today?								
	TRAIN	SELF DRIVE	CAR DROP OFF	MOTOR CYCLE	BUS	WALK	BICYCLE	FERRY	OTHER	TRAIN	SELF DRIVE	CAR DROP OFF	MOTOR CYCLE	BUS	WALK	BICYCLE	FERRY	OTHER
1																		
2																		
3																		
4																		
5																		
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44																		

9. Appendix B – Parking Beat Surveys

Client	Positive Traffic
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

MATRIX Traffic and Transport Data

[Location]

S1 - Carabella St
S2 - Peel St
S3 - Upper Pitt St
S4 - Parkes St
S5 - McBurney Ln
S6 - Fitzroy St
S7 - Jeffreys St
S8 - Pitt St
S9 - Robertson Ln
S10 - Robertson Ln
S11 - Broughton St
S12 - Willoughby St
S13 - Bligh St
S14 - Humphrey Pl
S15 - Burton St
S16 - Crescent Pl
S17 - Kirribilli Ave

Client	Positive Traffic
Location	S1 - Carabella St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Carabella St - East Side																
Willoughby St																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	10	10	10	10	10	10	10	10	10	10	8	8	9	10
	No Parking															
	Bus Zone	8:30am-6pm (Mon-Fri)	2	2	1	0	0	0	0	0	0	0	0	0	0	0
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	8	8	8	7	8	8	8	8	8	8	5	6	4	4
	No Parking															
near Bligh St																
	No Parking															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3-4	7	6	5	7	6	6	6	5	5	5	5	6	5	5
	No Stopping															
Fitzroy St																
	No Stopping															
	No Parking	8am-9:30am & 2:30pm-4pm (School Days)	8	0	0	5	1	2	3	8	4	0	2	5	0	3
	No Parking															
	Bus Zone	8am-6pm (Mon-Fri)	3	0	0	0	0	0	0	0	0	0	0	0	0	0
	Loading Zone	8:30am-4pm (School Days)	1	1	0	0	1	0	0	0	0	1	0	0	0	0
	No Parking	North Sydney Council Authorised Car Share Vehicles Excepted Area 100	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	4	4	4	4	4	4	3	3	3	3	3	3	4	4
	No Stopping															
Peel St																
	Total		**45**	**33**	**30**	**35**	**32**	**32**	**32**	**36**	**32**	**29**	**25**	**30**	**24**	**28**
	% Capacity			**73%**	**67%**	**78%**	**71%**	**71%**	**71%**	**80%**	**71%**	**64%**	**56%**	**67%**	**53%**	**62%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Carabella St - West Side																
Peel St																
	No Stopping															
Parkes St																
	No Stopping															
	2P	8:30am-6pm (Mon-Sun)	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	No Parking															
	No Restriction		2	2	2	2	2	2	2	2	2	2	2	2	2	2
	No Parking	8am-9:30am & 2:30pm-4pm (School Days)	7	1	1	1	1	2	2	1	0	0	2	3	1	1
	No Stopping															
Fitzroy St																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3-4	4	4	4	4	4	4	4	4	4	4	4	4	2	1
	Motorbikes		2	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Stopping															
Bligh St																
	No Stopping															
	2P	8:30am-6pm (Mon-Sun) Permit Holders Excepted Area 3	12	11	11	11	11	11	11	11	11	11	6	8	9	9
	No Stopping															
Burton St																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	12	12	11	11	11	11	10	11	10	11	7	10	10	10
	No Stopping															
Willoughby St																
	Total		**41**	**33**	**32**	**32**	**32**	**33**	**32**	**32**	**30**	**31**	**23**	**29**	**26**	**25**
	% Capacity			**80%**	**78%**	**78%**	**78%**	**80%**	**78%**	**78%**	**73%**	**76%**	**56%**	**71%**	**63%**	**61%**

Client	Positive Traffic
Location	S2 - Peel St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Peel St - South Side																
Carabella St																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	15	14	11	13	13	12	11	13	13	13	12	12	13	13
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	No Parking	Authorised Car Share Vehicles Excepted Area 100	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upper Pitt St																
	Total		**18**	**17**	**14**	**16**	**16**	**15**	**14**	**16**	**16**	**16**	**15**	**15**	**16**	**16**
	% Capacity			**94%**	**78%**	**89%**	**89%**	**83%**	**78%**	**89%**	**89%**	**89%**	**83%**	**83%**	**89%**	**89%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Peel St - North Side																
Upper Pitt St																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	4	3	3	3	3	3	4	4	4	4	4	4	3	3
	Motor Bikes Only		1	0	0	0	0	0	0	0	1	1	1	1	1	1
McBurney Ln																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	5	3	4	4	4	3	4	5	2	2	3	3	4	4
	No Stopping															
Carabella St																
	Total		**10**	**6**	**7**	**7**	**7**	**6**	**8**	**9**	**7**	**7**	**8**	**8**	**8**	**8**
	% Capacity			**60%**	**70%**	**70%**	**70%**	**60%**	**80%**	**90%**	**70%**	**70%**	**80%**	**80%**	**80%**	**80%**

Client	Positive Traffic
Location	S3 - Upper Pitt St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Upper Pitt St - South Side																
Peel St																
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	17	16	16	17	17	13	9	9	10	10	9	8	9	9
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	6	4	4	4	4	4	4	4	4	3	2	2	3	4
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	5	5	5	4	4	4	5	5	4	3	5	3	3	3
	No Parking															
	No Restriction		5	5	5	4	4	5	5	5	5	5	5	5	4	4
	No Parking															
near Parkes St																
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3-4	7	6	6	6	6	7	6	7	7	6	6	5	4	4
	Mail Zone		1	0	0	0	0	0	0	1	1	1	1	0	0	0
	No Restriction		2	2	2	2	2	2	2	2	2	2	2	2	2	2
	No Parking	8am-9am & 2:30pm-4pm (School Days)	3	2	2	2	0	0	3	3	0	0	0	0	1	1
	No Stopping															
	No Parking															
Jeffreys St																
	Total		**46**	**40**	**40**	**39**	**37**	**35**	**34**	**36**	**33**	**30**	**30**	**25**	**26**	**27**
	% Capacity			**87%**	**87%**	**85%**	**80%**	**76%**	**74%**	**78%**	**72%**	**65%**	**65%**	**54%**	**57%**	**59%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Upper Pitt St - North Side																
Jeffreys St																
	No Stopping															
	No Parking	8am-9am & 2:30pm-4pm (School Days)	3	3	3	3	0	0	2	0	0	0	0	0	0	0
	No Restriction		2	2	2	2	2	2	2	2	2	2	2	2	2	2
	No Parking	Authorised Car Share Vehicles Excepted Area 100	2	2	2	2	2	2	2	2	2	2	2	1	2	2
	2P	8:30am-10pm (Mon-Fri) Permit Holders Excepted Area 3	4	4	4	4	4	4	4	4	4	4	4	2	3	4
	No Parking															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Stopping															
Parkes St																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	9	8	8	8	8	8	8	8	8	8	8	8	6	6
	No Parking															
	Motor Bikes Only		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Parking															
	No Restriction		12	12	12	10	10	12	11	11	12	12	12	12	12	12
	No Parking															
	No Restriction		4	4	4	3	3	3	4	4	4	4	4	4	4	4
Peel St																
	Total		**38**	**37**	**37**	**34**	**31**	**33**	**35**	**33**	**34**	**34**	**34**	**31**	**31**	**32**
	% Capacity			**97%**	**97%**	**89%**	**82%**	**87%**	**92%**	**87%**	**89%**	**89%**	**89%**	**82%**	**82%**	**84%**

Client	Positive Traffic
Location	S4 - Parkes St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Parkes St - North Side																
Upper Pitt St																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	5	5	5	5	5	5	5	5	4	2	3	5	4	4
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	2	2	2	2	2	2	2	2	2	1	2	1	2	2
	No Restriction		3	3	3	3	3	3	3	3	3	3	3	3	3	3
	2P	8:30am-6pm (Mon-Fri)	4	4	4	3	3	4	4	4	4	3	3	3	3	3
	No Stopping															
Carabella St																
	Total		**14**	**14**	**14**	**13**	**13**	**14**	**14**	**14**	**13**	**9**	**11**	**12**	**12**	**12**
	% Capacity			**100%**	**100%**	**93%**	**93%**	**100%**	**100%**	**100%**	**93%**	**64%**	**79%**	**86%**	**86%**	**86%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Parkes St - South Side																
Carabella St																
	No Stopping															
	No Restriction		8	8	8	6	6	8	8	8	8	7	7	6	6	6
	No Stopping															
McBurney Ln																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	5	4	4	5	5	5	5	5	5	5	4	3	5	5
	No Parking	Authorised Car Share Vehicles Excepted Area 100	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Stopping															
Upper Pitt St																
	Total		**14**	**13**	**13**	**12**	**12**	**14**	**14**	**14**	**14**	**13**	**12**	**10**	**12**	**12**
	% Capacity			**93%**	**93%**	**86%**	**86%**	**100%**	**100%**	**100%**	**100%**	**93%**	**86%**	**71%**	**86%**	**86%**

Client	Positive Traffic
Location	S5 - McBurney Ln
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
McBurney Ln - East Side																
Parkes St																
	No Stopping															
	No Parking															
Peel St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
McBurney Ln - West Side																
Peel St																
	No Stopping															
Parkes St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Client	Positive Traffic
Location	S6 - Fitzroy St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Fitzroy St - North Side																
Broughton St																
	No Stopping															
	Loading Zone + 1/4P	Loading Zone - 6am-11am (Mon-Sun), 1/4P - 11am-10pm (Mon-Sun)	2	1	2	2	2	2	1	1	1	1	0	0	0	0
	No Stopping															
	2P	8:30am-6pm (Mon-Fri)	3	2	2	2	3	3	3	3	3	3	2	2	3	1
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	8	8	8	8	8	8	6	7	7	7	4	5	5	4
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	13	13	13	13	12	13	11	13	12	11	11	10	11	11
	No Stopping															
Carabella St																
	Total		**26**	**24**	**25**	**25**	**25**	**26**	**21**	**24**	**23**	**22**	**17**	**17**	**19**	**16**
	% Capacity			**92%**	**96%**	**96%**	**96%**	**100%**	**81%**	**92%**	**88%**	**85%**	**65%**	**65%**	**73%**	**62%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Fitzroy St - South Side																
Broughton St																
	No Stopping															
Jeffreys St																
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	8	6	6	6	7	6	5	3	3	3	4	5	6	6
	No Stopping															
Robertson Ln																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	13	11	12	12	12	13	11	13	12	12	12	11	11	10
	No Stopping															
Carabella St																
	Total		**21**	**17**	**18**	**18**	**19**	**19**	**16**	**16**	**15**	**15**	**16**	**16**	**17**	**16**
	% Capacity			**81%**	**86%**	**86%**	**90%**	**90%**	**76%**	**76%**	**71%**	**71%**	**76%**	**76%**	**81%**	**76%**

Client	Positive Traffic
Location	S7 - Jeffreys St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Jeffreys St - East Side																
Fitzroy St																
	No Stopping															
	No Parking	Authorised Car Share Vehicles Excepted Area 100	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	4	4	4	4	4	4	4	4	4	4	3	3	4	4
	No Stopping															
Upper Pitt St																
	No Stopping															
	1P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	3	2	3	2	2	2	2	2	2	3	3	3	1	0
	No Parking								1							
	1P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	3	3	3	3	3	3	2	2	2	2	2	2	2	2
	No Stopping															
Kirribilli Ave																
	Total		**11**	**10**	**11**	**10**	**10**	**10**	**10**	**9**	**9**	**10**	**9**	**9**	**8**	**7**
	% Capacity			**91%**	**100%**	**91%**	**91%**	**91%**	**91%**	**82%**	**82%**	**91%**	**82%**	**82%**	**73%**	**64%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Jeffreys St - West Side																
Kirribilli Ave																
	No Stopping															
	1P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	7	7	7	7	7	7	5	5	5	6	7	6	5	4
	Work Zone	7am-5pm (Mon-Fri) & 8am-1pm (Sat)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Stopping															
Pitt St																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	11	11	11	11	11	10	9	10	11	11	10	11	11	11
	No Stopping															
Fitzroy St																
	Total		**20**	**20**	**20**	**20**	**20**	**19**	**16**	**17**	**18**	**19**	**19**	**19**	**18**	**17**
	% Capacity			**100%**	**100%**	**100%**	**100%**	**95%**	**80%**	**85%**	**90%**	**95%**	**95%**	**95%**	**90%**	**85%**

Client	Positive Traffic
Location	S8 - Pitt St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Pitt St - North Side																
Jeffreys St																
	No Stopping															
	1P	8:30am-6pm (Mon-Sun) Permit Holders Excepted Area 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	No Parking															
	1P	8:30am-6pm (Mon-Sun) Permit Holders Excepted Area 3	2	1	1	2	2	2	2	2	2	2	2	2	2	2
	No Stopping															
Broughton St																
	Total		**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
	% Capacity			**80%**	**80%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Pitt St - South Side																
Broughton St																
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	3	2	2	2	2	2	1	3	3	3	3	3	2	2
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	3	3	3	3	3	3	2	3	3	3	3	3	3	3
	No Stopping															
Jeffreys St																
	Total		**6**	**5**	**5**	**5**	**5**	**5**	**3**	**6**	**6**	**6**	**6**	**6**	**5**	**5**
	% Capacity			**83%**	**83%**	**83%**	**83%**	**83%**	**50%**	**100%**	**100%**	**100%**	**100%**	**100%**	**83%**	**83%**

Client	Positive Traffic
Location	S9 - Robertson Ln
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Robertson Ln - West Side																
Fitzroy St																
	No Stopping															
Turn (South)																
	4P	8:30am-8pm (Mon-Fri) Permit Holders Excepted Area 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	No Stopping															
House No. 58																
	Total		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
	% Capacity			**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Robertson Ln - East Side																
Fitzroy St																
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	5	4	4	4	5	5	4	4	4	4	4	4	5	5
Turn (North)																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	5	5	5	5	5	5	5	5	4	5	5	5	5	5
	No Stopping															
Turn (East)																
	No Stopping															
	No Parking															
	No Stopping															
No Through Rd (near House No.15)																
	Total		**10**	**9**	**9**	**9**	**10**	**10**	**9**	**9**	**8**	**9**	**9**	**9**	**10**	**10**
	% Capacity			**90%**	**90%**	**90%**	**100%**	**100%**	**90%**	**90%**	**80%**	**90%**	**90%**	**90%**	**100%**	**100%**

Client	Positive Traffic
Location	S10 - Robertson Ln
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Robertson Ln - North Side																
50 Upper Pitt St																
	No Stopping															
Parkes St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Robertson Ln - South Side																
near House No. 1 (One Property)																
	No Stopping															
Parkes St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Client	Positive Traffic
Location	S11 - Broughton St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Broughton St - West Side																
Kirribilli Ave																
	No Stopping															
	Bus Zone	3pm-6pm (Mon-Fri)														
	2P	8:30-3pm (Mon-Fri) Permit Holders Excepted Area 3	20	15	17	18	20	19	8	5	5	0	0	0	0	0
	Bus Zone	8am-9:30am & 3pm-6pm (Mon-Fri)	1	0	0	0	0	0	1	1	1	0	0	0	0	0
	No Parking															
	Bus Zone	8am-9:30am & 3pm-6pm (Mon-Fri)	3	1	0	0	0	2	3	2	3	0	0	0	0	0
	No Stopping															
Fitzroy St																
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	5	5	4	3	5	5	5	5	5	5	4	3	4	5
near Bligh St																
	1P		8	6	8	7	7	7	8	8	6	7	6	7	7	8
	Bus Zone + 1P	Bus Zone - 8am-9am (Mon-Fri), 1P - 9am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	3	1	1	0	0	2	3	2	3	3	2	2	2	2
	No Stopping															
Ennis Rd																
	No Stopping															
	1/2P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	6	2	4	2	1	1	3	3	1	2	2	3	4	4
	No Stopping															
near Willoughby St																
	Total		**46**	**30**	**34**	**30**	**33**	**36**	**31**	**26**	**24**	**17**	**14**	**15**	**17**	**19**
	% Capacity			**65%**	**74%**	**65%**	**72%**	**78%**	**67%**	**57%**	**52%**	**37%**	**30%**	**33%**	**37%**	**41%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Broughton St - East Side																
Kirribilli Ave																
	No Stopping															
	No Stopping + 2P	No Stopping - 3pm-6pm (Mon-Fri), 2P - 8:30am-3pm (Mon-Fri) Permit Holders Excepted Area 3	4	1	2	3	3	3	2	2	1	0	0	0	0	0
	No Stopping + No Parking	No Stopping - 3pm-6pm (Mon-Fri), No Parking - Other Times														
	No Stopping + No Parking	No Stopping - 3pm-6pm (Mon-Fri), No Parking - Motor Bikes Only	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	No Stopping + 2P	No Stopping - 3pm-6pm (Mon-Fri), 2P - 8:30am-3pm (Mon-Fri) Permit Holders Excepted Area 3	2	1	2	2	2	2	1	0	0	0	0	0	0	1
	No Stopping															
Pitt St																
	No Stopping															
	Bus Zone															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	6	6	6	6	6	6	5	4	6	5	4	6	6	6
	No Stopping															
Fitzroy St																
	No Stopping															
	1/2P	8:30am-6pm (Mon-Fri)	4	3	3	3	3	3	2	2	3	2	1	1	2	3
Bligh St																
	No Stopping															
	Diabled		1	0	0	1	1	0	1	1	0	0	0	0	0	1
	1/4P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	3	2	2	2	0	2	2	2	2	2	1	2	2	2
	No Stopping															
	1/4P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	3	1	1	2	2	2	3	3	3	3	3	3	3	3
Burton St																
	No Stopping															
	No Stopping + Loading Zone + 1/2P	No Stopping - 6:30am-9:30am & 3:30pm-6:30pm (Mon-Fri), Loading Zone - 9:30am-3:30pm (Mon-Fri), 1/2P - 8:30am - 12:30pm (Sat)	3	0	0	0	0	0	1	1	1	1	0	0	1	0
	No Stopping + 1/2P	No Stopping - 6:30am-9:30pm, 1/2P - 9:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	3	0	0	0	0	0	1	1	2	2	2	2	2	2
	No Stopping															
Crescent Pl																
	No Stopping															
	1/2P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	2	2	2	2	2	2	1	1	2	1	1	1	0	1
	1/2P + No Parking	1/2P - 8:30am-12:30pm (Sat), No Parking - 9:30am-3:30pm (Mon-Fri)	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	No Stopping															
Willoughby St																
	Total		**34**	**16**	**18**	**21**	**19**	**20**	**19**	**17**	**20**	**16**	**12**	**15**	**17**	**20**
	% Capacity			**47%**	**53%**	**62%**	**56%**	**59%**	**56%**	**50%**	**59%**	**47%**	**35%**	**44%**	**50%**	**59%**

Client	Positive Traffic
Location	S12 - Willoughby St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Willoughby St - North Side																
Broughton St																
	No Stopping															
	No Parking															
	1/2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	5	5	5	4	4	4	5	5	4	5	4	4	4	4
	No Stopping															
Winslow St																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	5	5	3	3	4	4	4	4	3	4	3	4	4	4
	No Parking															
near Carabella St																
	Total		**10**	**10**	**8**	**7**	**8**	**8**	**9**	**9**	**7**	**9**	**7**	**8**	**8**	**8**
	% Capacity			**100%**	**80%**	**70%**	**80%**	**80%**	**90%**	**90%**	**70%**	**90%**	**70%**	**80%**	**80%**	**80%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Willoughby St - South Side																
Carabella St																
	No Stopping															
	1P	8:30am-10pm (Mon-Sun) Authorised Car Share Residents Vehicles Excepted Area 3	5	4	5	5	5	5	4	5	3	5	5	5	4	4
	1/2P	8:30am-10pm (Mon-Sun) Authorised Car Share Residents Vehicles Excepted Area 3	1	1	1	1	1	1	1	1	1	1	0	1	0	0
	No Stopping															
Broughton St																
	Total		**6**	**5**	**6**	**6**	**6**	**6**	**5**	**6**	**4**	**6**	**5**	**6**	**4**	**4**
	% Capacity			**83%**	**100%**	**100%**	**100%**	**100%**	**83%**	**100%**	**67%**	**100%**	**83%**	**100%**	**67%**	**67%**

Client	Positive Traffic
Location	S13 - Bligh St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Bligh St - North Side																
Broughton St																
	No Stopping															
Humphrey Pl																
	No Stopping															
Crescent Pl																
	No Stopping															
Carabella St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Bligh St - South Side																
Carabella St																
	No Stopping															
	No Restriction	Car Garages Entry (Way)														
	No Parking															
	1P	8:30am-6pm (Mon-Fri)	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Authorised Residents Vehicles Excepted Area 3	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	Diabled	8am-10pm (Mon-Sun)	2	0	1	1	2	0	0	0	1	1	1	1	1	1
	No Parking															
	No Parking	Authorised Car Share Vehicles Excepted Area 100	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	No Parking															
	No Stopping															
	1/4P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	1	0	1	1	1	1	1	1	1	1	1	1	0	0
	No Stopping															
Broughton St																
	Total		**8**	**5**	**7**	**7**	**8**	**6**	**6**	**6**	**7**	**7**	**6**	**6**	**5**	**5**
	% Capacity			**63%**	**88%**	**88%**	**100%**	**75%**	**75%**	**75%**	**88%**	**88%**	**75%**	**75%**	**63%**	**63%**

Client	Positive Traffic
Location	S14 - Humphrey Pl
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Humphrey Pl - East Side																
Bligh St																
	No Parking															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	2	2	1	2	2	2	2	2	2	2	2	2	2	2
	No Parking															
Burton St																
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	No Stopping															
Crescent Pl																
	Total		**5**	**5**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
	% Capacity			**100%**	**80%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Humphrey Pl - West Side																
Crescent Pl																
	No Stopping															
	No Parking															
	No Stopping															
Burton St																
	No Stopping															
Bligh St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Client	Positive Traffic
Location	S15 - Burton St
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Burton St - South Side																
Carabella St																
	No Stopping															
	1P	8:30am-10pm (Mon-Sun) & 8:30am-12:30 (Sat) Area 3	5	5	5	5	5	4	5	5	5	5	5	4	4	5
	No Stopping															
Crescent Pl																
	No Stopping															
	No Parking + 1P	No Parking - 8am-9am & 2:30pm-4pm (School Days), 1P - 9am-2:30pm (Mon-Fri) & 8:30am-12:30pm (Sat)	6	4	4	0	0	4	6	0	4	3	0	1	2	3
	No Stopping															
Humphrey Pl																
	No Stopping															
Broughton St																
	Total		**11**	**9**	**9**	**5**	**5**	**8**	**11**	**5**	**9**	**8**	**5**	**5**	**6**	**8**
	% Capacity			**82%**	**82%**	**45%**	**45%**	**73%**	**100%**	**45%**	**82%**	**73%**	**45%**	**45%**	**55%**	**73%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Burton St - North Side																
Broughton St																
	No Stopping															
Humphrey Pl																
	No Stopping															
	2P	Disabled Only	1	1	0	0	1	0	0	0	0	1	0	0	0	1
	1/2P	8:30am-6pm (Mon-Fri) & 8:30am-12:30pm (Sat)	2	1	2	2	2	2	2	2	2	2	2	2	0	2
Crescent Pl																
	No Stopping															
	No Parking	Authorised Car Share Vehicles Excepted Area 100	1	1	1	1	1	1	0	1	1	1	1	0	0	0
	No Parking															
	1P	8:30am-10pm (Mon-Fri) & 8:30am-12:30pm (Sat), Permit Holders Excepted Area 3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
	No Stopping															
Carabella St																
	Total		**7**	**6**	**6**	**6**	**7**	**6**	**5**	**6**	**6**	**7**	**5**	**4**	**2**	**5**
	% Capacity			**86%**	**86%**	**86%**	**100%**	**86%**	**71%**	**86%**	**86%**	**100%**	**71%**	**57%**	**29%**	**71%**

Client	Positive Traffic
Location	S16 - Crescent Pl
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Crescent Pl - East Side																
Bligh St																
	No Restriction															
	No Parking		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1/2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	2	2	2	2	2	2	2	2	2	2	2	2	1	1
Burton St																
	No Stopping															
	1/2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 3	7	6	6	6	6	6	7	7	7	7	7	7	7	7
	No Parking															
Broughton St																
	Total		**10**	**9**	**9**	**9**	**9**	**9**	**10**	**10**	**10**	**10**	**10**	**10**	**9**	**9**
	% Capacity			**90%**	**90%**	**90%**	**90%**	**90%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**90%**	**90%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Crescent Pl - West Side																
Bligh St																
	No Stopping															
Burton St																
	No Stopping															
Humphrey Pl																
	No Stopping															
Broughton St																
	Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	% Capacity			**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Client	Positive Traffic
Location	S17 - Kirribilli Ave
Date	Wed, 13th September 2017 (7am-9am & 14:00-18:00 (6hrs))
Description	St Aloysius Parking Survey

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Kirribilli Ave - North Side																
Broughton St																
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	5	5	5	5	5	5	3	2	2	3	4	4	4	4
	No Stopping															
Jeffreys St																
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3+4	30	27	26	27	26	28	25	24	23	22	21	22	24	21
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	8	7	7	6	7	6	6	6	6	6	5	6	6	5
	No Parking															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	1	1	1	0	1	1	1	1	1	1	1	1	1	1
	Work Zone	7am-5pm (Mon-Fri) & 8am-1pm (Sat)	2	2	2	2	2	2	2	2	2	2	1	0	0	0
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	4	4	4	4	4	3	1	1	1	2	3	1	1	1
Opposite of Waruda Ave																
	Total		**50**	**46**	**45**	**44**	**45**	**45**	**38**	**36**	**35**	**36**	**35**	**34**	**36**	**32**
	% Capacity			**92%**	**90%**	**88%**	**90%**	**90%**	**76%**	**72%**	**70%**	**72%**	**70%**	**68%**	**72%**	**64%**

Side of the Street	Parking Restriction	Time Restrictions	Availble Spaces	7:00	7:30	8:00	8:30	9:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
Kirribilli Ave - South Side																
Waruda Ave																
	No Stopping															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	14	11	11	12	11	10	12	12	11	13	13	13	13	12
	No Parking															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	2	2	2	2	2	2	1	1	1	1	2	2	2	2
	No Parking															
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	3	2	3	3	2	2	3	3	2	2	2	3	3	3
	No Stopping															
	Motor Bikes Only		2	1	1	1	1	1	2	2	2	2	2	2	2	2
	No Stopping															
	2P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 4	3	3	3	3	3	2	2	2	2	2	2	2	2	2
	Bus Zone	8am-6pm (Mon-Fri)	2	1	0	0	0	0	0	0	0	0	0	0	0	0
	2P	8:30am-10pm (Mon-Sun) Permit Holders Excepted Area 4	20	17	17	18	19	16	13	14	17	17	17	15	16	16
	No Stopping															
	1P	8:30am-6pm (Mon-Fri) Permit Holders Excepted Area 3	5	3	4	4	5	5	2	3	4	4	5	3	3	3
	No Parking	Authorised Car Share Vehicles Excepted Area 100	2	2	2	2	2	2	1	1	1	1	2	1	1	1
	No Stopping															
Broughton St																
	Total		**53**	**42**	**43**	**45**	**45**	**40**	**36**	**38**	**40**	**42**	**45**	**41**	**42**	**41**
	% Capacity			**79%**	**81%**	**85%**	**85%**	**75%**	**68%**	**72%**	**75%**	**79%**	**85%**	**77%**	**79%**	**77%**

10. Appendix C – Minutes of meeting with RMS / TfNSW Representatives

WILLOW TREE PLANNING
ACN: 146 035 707 ABN: 54 146 035 707
Suite 7, Level 7, 100 Walker St,
North Sydney NSW 2060
P 02 9929 6974
enquiries@willowtreeplanning.com.au

Meeting Agenda

Subject:	SSD 8669 – St Aloysius College
Held at:	Transport for NSW Level 3, 18 Lee Street, Chippendale
Date:	18 October 2017
Present:	Ken Ho – Transport for NSW Para Sangar – Transport for NSW Pahee Rathan – RMS Dean Brodie – Positive Traffic Andrew Pender - PMDL Ashleigh Smith – Willowtree Planning
Apologies:	Chris Wilson – Willowtree Planning Mark Ozinga – Transport for NSW Peter Brogan - Bloompark
Distribution:	All above

Agenda

ITEM	DISCUSSION	ACTION
1.0	**INTRODUCTION**	
	▪ AS introduced the project and team to TfNSW and RMS	-
2.0	**Project Overview**	
	▪ AP walked TfNSW/RMS through the design/thought process behind the proposed development., and the design concept across the three (3) campuses.	-
	▪ Parking is primarily available at the following: – Dalton Hall (Senior School): 16 car parking spaces – Junior School: 10 car parking spaces ▪ There is no parking located at Upper Pitt Street campus.	-

	▪ There is approximately 156 staff members and 1200 student across the school ground. There is no proposed increase in student/staff numbers as part of this application.	-
	▪ KH queried whether the school had existing caps on student numbers.	-
	▪ AS highlighted recent investigations have shown there are no evident caps on student numbers, as the previous major development of the Sites pre-dated student capping requirements.	-
	▪ AP mentioned that there may be fluctuations in numbers, but the overall structure of the college has not changes; the school is well subscribed.	-
	▪ **KH requested SAC confirm base numbers per class and growth in student numbers**	**PB/AP**
3.0	**Traffic**	
	▪ Proposed redevelopment is forecast to minimise the movement to and from the Site with improved on-site facilities.	-
	▪ DB discussed the current parking/traffic situation across the Site	-
	▪ KH reaffirmed as part of the EIS, provide information on what the school generates in terms of parking.	-
	▪ DB – parking beat surveys have been carried out, including a mode of travel survey for year 12 students.	-
	▪ PR recommended the implementation/consideration of a Green Travel Plan to form part of the overall application	-
	▪ DB Highlighted that the Site characteristics of the immediate locality dictates the primary mode of transport i.e. peninsula, high protection from all day parking, large number of public transport alternatives.	-
	▪ Similar traffic analysis was carried out in the Inner West, which will be used as a comparative study.	-
	▪ AP highlighted the school has a Site at Willoughby Oval	-
	▪ **TfNSW have requested confirmation on whether school uses a Charter or PT to move children from the Site to the Oval.**	AP

	▪ KH enquired whether the school has a dedicated pick up/drop off areas, as this may have implications on road safety.	-
	▪ DB confirmed that drop off/pick up is not encouraged	-
	▪ KH and PR highlighted mode of travel surveys will be required to ensure there are no issues	DB
	▪ **DB confirmed that mode of travel surveys of both students and staff of each campus would be undertaken and the findings presented in the traffic report**	DB
	▪ DB noted this requirement and assured that Council are generally the first to notify if there are any evident issues, and no issues have been conveyed at this stage	-
	▪ KH – EIS will need to be supported by data illustrating that there is no issue	-
	▪ Public transport is well utilised by staff and students	-
	▪ PR queried how movement between transport nodes and the College was managed and documented	-
	▪ DB raised the fact the Sites are spread out and there is natural dispersion of pedestrian flow demands.	-
	▪ PR highlighted the inclusion of a Construction Management Transport Plan to ensure safety during construction periods	-
	▪ DB suggested preliminary elements of a CMTP would be included in the traffic report including potential access points and routes of travel, and conditioned that a final CMTP be prepared once a contractor has been brought onboard	-
	▪ KH requests the application clearly identifies where students get on/off public transport	DB
	▪ DB confirmed located and detail will be provided as part of the EIS	-
	▪ TfNSW raised query to how construction will be timed and the impacts on the operation of the school	-
	▪ AP confirmed redevelopment will be a rolling refurbishment which will incorporate temporary learning space within existing facilities.	-

4.0	**Conclusion/Key Matters**	
	TfNSW and RMS identified the following to be included: ▪ Document pedestrian access from nodes, and how student/ staff move from transport node to College campus; ▪ Document student/staff use of public transport including bus and train through mode of travel surveys; ▪ Demonstrate how the Site will accommodate natural growth; ▪ Capture the existing parking/public transport conditions and identify whether it is adequate or if there are deficiencies; ▪ Application to include student and staff numbers, as well as the base numbers for classes	DB/AP/AS
5.0	**Other Business**	
	▪ Both TfNSW and RMS are generally supportive of the proposed development; ▪ DB – ensure the application addresses all the relevant requirements;	-
6.0	**Conclusion**	

11. Appendix D – Plans of Proposed Development

St. Aloysius' College - Development Proposal

SSDA Submission

1 Location Plan
NTS

N

Architectural Drawing Series

DAU 001	**Upper Pitt Street - Main Campus**
DAU010	Upper Pitt Street - Site Analysis
DAU015	Upper Pitt Street - Renders
DAU020	Upper Pitt Street - Shadow Diagrams
DAU101	Upper Pitt Street - Demolition Plan
DAU121	Upper Pitt Street - Proposed Plans
DAU201	Upper Pitt Street - Street Elevations
DAU301	Upper Pitt Street - Sections
DAU500	Upper Pitt Street - Materials Board
DAW 001	**Wyalla - Senior School Campus**
DAW010	Wyalla - Site Analysis
DAW015	Wyalla - Renders
DAW020	Wyalla - Shadow Diagrams
DAW111	Wyalla - Demolition Plan
DAW121	Wyalla - Proposed Plans
DAW200	Wyalla - Street Elevations
DAW300	Wyalla - Sections
DAW500	Wyalla - Materials Board
DAB 001	**Burton Street - Junior School Campus**
DAB010	Burton Street - Site Analysis
DAB015	Burton Street - Renders
DAB020	Burton Street - Shadow Diagrams
DAB100	Burton Street - Existing Plans
DAB120	Burton Street - Proposed Plans
DAB200	Burton Street - Street Elevations
DAB300	Burton Street - Sections

Client

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Fire Engineering Consultant

Arup
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Hydraulics, Mechanical, Electrical & ESD, Engineering Consultant

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BCA/Access Consultant

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Acoustic & Wind Engineering Consultant

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Archaeological Consultant

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Visual Impact Analysis Consultant

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NSW NOMINATED ARCHITECTS: ANDREW PENDER 5317 DAVID MORRIS 5865 PETER DODDRELL 5134

ISSUE	DATE	REVISION
A	19/1/18	Draft SSDA Submission

0mm 50mm 100mm

DO NOT SCALE FROM DRAWING. USE FIGURED DIMENSIONS ONLY.
CHECK ALL DIMENSIONS ON SITE BEFORE MANUFACTURE OR CONSTRUCTION.

PROJECT	St. Aloysius' College SSDA	PROJECT #	2670
CLIENT	St Aloysius' College	DWG #	DA000
DWG	Coverpage		
CLIENT REF & CONTACT	St Aloysius' College	DATE Feb 2018 / DRAWN SC / REVISION	A
		SCALE NTS / CHKD SC	

12. Appendix E – Preliminary Construction Traffic Management Plan

St Aloysius' College Masterplan Project

State Significant Development Application

Preliminary Construction Management Plan

(incl. Preliminary Construction Traffic & Pedestrian Management Plan)

8 February 2018

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1 Background

1 The SSDA submission (8669) is a State Significant Development Application under 83B of the EP&A Act, and addresses the SEARs issued by the Department of Planning on 28 August 2017, reissued 22 November 2017, for the staged redevelopment of St Aloysius' College.

2 The SSDA seeks consent for the staged redevelopment of the St Aloysius' College based on:

a. Concept approval for the building envelopes for alterations and additions and new development across the Junior, Middle and Senior School Campuses.

b. Stage 1 - detailed built form approval for the Middle and Senior School Campuses. For these two campuses the delivery will be conducted across two discrete phases as summarised below:

   i. Wyalla Senior Campus: Single storey addition to the heritage building fronting Robertson Lane, as well as internal refurbishment and upgrades of teaching and learning spaces.

   ii. Upper Pitt Street Main Campus: Demolition and rebuild of the existing four (4) storey North-East Wing fronting Upper Pitt Street, construction of new infill building in the existing quadrangle, and associated refurbishment of north-wing, south-wing, Great Hall and Chapel.

3 Stage 2 - detailed built form approval for the Junior School Campus will be at a later date and is not part of this submission.

2 Introduction

4 This Preliminary Construction Management Plan (PCMP) has been prepared as required by the SEARs issued for the SSDA for the proposed redevelopment of the St Aloysius' College Masterplan Project.

5 This PCMP is intended to describe the Project's key construction characteristics, including;

a. Detail the scope of the works to be completed including details of the various stages, e.g. Demolition, Excavation, Construction etc. and the duration of each stage.

b. Identify local traffic routes to be used by construction vehicles.

c. Identify ways to manage construction works to address impacts on local traffic routes.

d. Detail how construction workers will travel to and from the site and parking arrangements for those that drive.

e. Identify any proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres onto a public road and provide Traffic Control Plans (TCPs) prepared by an accredited RMS Red or Orange card holder to manage these temporary changes.

f. Detail the size (including dimensions), numbers and frequency of arrival of the construction vehicles that will service the site for each stage of works.

g. Provide for the standing of vehicles during construction.

h. If trucks are to be accommodated on the site, show where the construction vehicles will stand and the vehicle swept path to show that these vehicles can access and egress the site in a forward direction (including dimensions and all adjacent traffic control devices, such as parking restrictions, pedestrian facilities, kerb extensions, etc.).

i. If trucks are to be accommodated on Council property, provide a drawing showing the location of any proposed Works Zone (including dimensions and all adjacent traffic control devices, such as parking restrictions, pedestrian facilities, kerb extensions, etc.).

j. Show the location of any site sheds and any anticipated use of cranes and concrete pumps and identify the relevant permits that will be required.

k. If a crane/s are to be accommodated on site, detail how the crane/s will be erected and removed, including the location, number and size of vehicles involved in the erection/removal of the crane/s, the duration of the operation and the proposed day and times, any full or partial road closures required to erect or remove the crane/s and appropriate Traffic Control Plans (TCPs) prepared by an approved RMS Red or Orange Card holder.

l. Make provision for all materials, plant, etc. to be stored within the development site at all times during construction.

m. State that any oversized vehicles proposed to operate on Council property (including Council approved Works Zones) will attain a Permit to Stand Plant on each occasion. (Note: Oversize vehicles are vehicles longer than 7.5m or heavier than 4.5T).

n. Show the location of any proposed excavation and estimated volumes.

o. When excavation works are to be undertaken on school days, all vehicular movements associated with this work shall only be undertaken between the hours of 9.30am and 2.30pm, in order to minimise disruption to the traffic network during school pick up and drop off times.

p. Show the location of all Tree Protection (Exclusion) zones (Note: storage of building materials or access through Reserve will not be permitted without prior approval by Council).

6 This PCMP is a live document, intended to be updated by the selected Construction Contractor(s) as the Project develops.

3 Stage 1 Construction Management Planning

3.1 Construction Works

7 The Construction Works to be undertaken within Stage 1 of the SSDA comprise:

Phase 1: Senior School Campus - Staged refurbishment of "Wyalla" and partial demolition, detailed excavation and construction of a small single storey addition to the heritage building.

Phase 2: Main School Campus - Staged works to the Upper Pitt St campus, including;

a. partial demolition, detailed excavation and construction of a new four (4) storey North-East Wing fronting Upper Pitt Street;

b. minor demolition, detailed excavation and construction of a new four (4) storey infill building within the existing quadrangle; and,

c. refurbishment of the remaining north-wing, south-wing, Great Hall and Chapel.

3.2 Construction Site Areas

8 The Senior School Campus Construction site has access from Jeffreys Street, Upper Pitt Street and Robertson Lane. It has direct pedestrian access and limited vehicular access.

9 The Main School Campus Construction site has access from Upper Pitt Street and Kirribilli Avenue. It has direct pedestrian access and direct vehicular access.

10 Proposed construction site areas, including accommodation, storage and loading are shown in the Preliminary Site Management Plan contained in Annexure 1.

3.3 Construction Staging

11 It is envisaged that the construction works shall be delivered in a staged manner.

12 The current staging within each phase of Stage 1 is outline below.

3.3.1 Phase 1: Senior Campus - Wyalla (Stages 1 & 2)

13 Stage 1:

a. Site establishment, dilapidation and services surveys commence.

b. Decant the public and staff out of Stage 1 areas.

c. Erect hoardings for Stage 1 areas.

d. Use vehicle access to transport material up to L3 and L4 of Dalton Hall.

e. Refurbish Stage 1 areas.

f. Dismantle the hoarding and handover Stage 1 areas.

14 Stage 2:

a. Decant the public and staff out of Stage 2 areas.

b. Erect hoarding for Stage 2 areas and set up hoist to transport material to L2 and L3 of School.

and in conjunction,

c. Demolish existing wall in courtyard.

d. construct building envelope for one storey addition.

e. Refurbish Stage 2 areas and Install services and finishes to new area.

f. Dismantle the hoarding, site establishment and demobilise from site and handover Stage 2 areas.

3.3.2 Phase 2: Main Campus - Upper Pitt St. (Stages 1 to 6)

15 Stage 1:

a. Site establishment, dilapidation and services surveys commence.

b. Erect hoardings for Stage 1 areas

c. Decant the public and staff out of Stage 1 areas.

d. Refurbish Stage 1 areas using the existing lift to transport materials to upper levels.

e. Dismantle the hoarding and handover Stage 1 areas.

16 Stage 2:

a. Decant the public and staff out of Stage 2 areas.

b. Set up temporary site accommodation in school

c. Erect hoarding for Stage 2 areas and scaffold the demolition area

d. Demolition of the existing North-East Wing.

e. Dismantle temporary site accommodation and remobilise.

f. Detail excavation for building foundations and in-ground services.

g. Pour foundations and install in-ground services.

h. Pour the slab on ground and install crane.

i. Formwork, reinforce and pour the structure (L1, L2, L3, L4) and setup hoists/scaffolding

j. Refurbish Stage 2 areas and Install services and finishes to new area using the hoist/builder's lift to transport materials to upper levels.

k. Once the movement of heavy materials are minimised dismantle crane.

l. External hardscaping and soft landscaping.

m. Dismantle the hoarding, site establishment and demobilise from site and handover Stage 2 areas.

17 Stage 3:

a. Decant the public and staff out of Stage 3 areas.

b. Erect hoardings for Stage 3 areas

c. Refurbish Stage 3 areas

d. Dismantle the hoarding and handover Stage 3 areas.

18 Stage 4:

a. Decant the public and staff out of Stage 4 areas.

b. Erect hoardings for Stage 4 areas

c. Strengthening works to great hall structure

d. Refurbish Stage 4 areas

e. Dismantle the hoarding and handover Stage 4 areas.

19 Stage 5:

a. Decant the public and staff out of Stage 5 areas.

b. Erect hoardings for Stage 5 areas

c. Refurbish Stage 5 areas and in conjunction, construct canopy.

d. Dismantle the hoarding and handover Stage 5 areas.

20 Stage 6:

a. Decant the public and staff out of Stage 6 areas.

b. Erect hoardings for Stage 6 areas

c. Refurbish Stage 6 areas

d. Dismantle the hoarding, site establishment and demobilise from site and handover Stage 6 areas.

3.4 Construction Schedule

21 An indicative construction schedule has been prepared for the purpose of preparing this PCMP.

22 The Preliminary Construction Schedule is presented at Annexure 2.

23 It is assumed that the SSDA application will be submitted by March 2018 with Stage 1 construction commencing by November 2018.

24 It is noted that this schedule shall be updated as the project progresses and its scope evolves.

3.5 Site Establishment

3.5.1 Trees, Dilapidation Report, Existing Services Survey

25 Prior to commencing work on site a Pre-Construction Dilapidation Report will be sought. This detail survey will encompass current structural, architectural, services and heritage conditions of the existing premises, construction zones and infrastructure. The dilapidation report will cover all areas where a construction certificate would apply and include adjoining facilities.

26 Utilities and Services locaters will survey the site and surrounding areas to plot the locations of existing services.

27 Tree protection will be carried out complying with AS 4970. Protection of Trees on the sites would also be undertaken in accordance with any applicable tree protection specifications from Council.

28 Additional geotechnical investigations of existing footings will be carried out progressively following demolition of the existing buildings. It is expected that existing building materials will be salvaged for re-use and initial excavation will determine the need for any archaeological monitoring.

3.5.2 Site Fencing, Hoardings and Accommodation

29 Temporary Site fencing and gates will be installed around all internal and external construction site areas.

30 Temporary B-Class hoardings and scaffold systems will be installed to boundaries adjoining the Demolition and overhead Construction site areas.

31 Site accommodation will be established subject to the amount of personnel working on site.

32 Temporary hoardings and signage will be adopted in working areas at all times during construction.

3.5.3 Temporary Utilities and Services

33 All existing services in the construction area will be identified and located to minimise disruption to the construction works and to adjacent facilities. Thorough investigation and staging of works will be undertaken to ensure that any capping and removal of services does not affect other Stages of the facility.

34 All existing services and utilities shall be disconnected and /or diverted around building work areas prior to demolition or construction works commencing. These services works will be carried out with the relevant utilities or services provider.

35 Reticulated power and lighting installations will comply to the requirements of the WH&S Regulations, Electricity Supply Authority and the Code of Practice for Temporary Electrical Installations on Building and Construction Sites.

36 Noise, air and vibration monitoring units will be established to manage air quality and vibration movement during the demolition and construction of the Project.

3.6 Vehicle Access

37 Each of the construction sites offer a primary and alternative location for construction vehicles access. All vehicles will follow the same travel path by entering and leaving the sites via the designated primary gate.

38 Weekend and/or night loading may be required for larger deliveries for items such as structural steel framing and glass. A temporary loading area can be used following the necessary applications, notices, approvals and permits are obtained.

39 Vehicles delivering concrete, concrete pumping, reinforcement, steel can occur in designated and approved work zones or contractor laydown areas within the temporary established site boundaries.

40 Acknowledging the site is adjacent to a residential zone, a traffic management report would be prepared to prevent the parking of waiting vehicles in the adjacent areas and provides several access options for vehicle loads and marshalling areas.

41 Vehicle shaker grids and wash facilities will be used to wash down exiting vehicle tyres especially during demolition and excavation works.

3.7 Construction Personnel Access

42 The two locations for vehicle access gates for each site will also provide adjoining access for construction personnel to restrict unnecessary movements through school grounds.

43 Within the school premises, access to construction personnel shall be controlled and conform to the prevailing Working With Children requirements.

44 Unimpeded pedestrian access will be maintained where possible and if required provided under controlled conditions where pedestrian and construction paths overlap or intersect.

3.8 Cranage and Materials Handling

45 A fixed tower crane would be expected to operate on the main campus during most of the construction period.

46 It is expected that Mobile cranes will also be intermittently required to facilitate some of the loading of materials on to the sites.

47 Although lifting will most likely be from construction delivery vehicles and contractor laydown areas within the site, in some instances, crane(s) will need to be capable of lifting from construction vehicles from approved work zones.

48 Refer to Annexure 1 for indicative crane and mobile crane positions.

49 Demolition and Excavation material disposal and delivery of small items will be undertaken via designated gates at site boundaries.

50 Concrete delivery will be undertaken via trucks parked on site or in approved work zones, with others nearby in a controlled marshalling area to avoid congestion on the local streets. It is anticipated that a mobile concrete boom pump would be established on the sites as required.

51 Delivery of Structural Steel frames and beams will most likely occur using a table top semi-trailer, prime mover, and then lifted from an alternative weekend/night lifting zone.

52 Smaller building elements can be lifted from within the site or approved work zones, delivered via smaller table top trucks.

4 Supporting Construction Management Plans

4.1 Preliminary Construction Traffic and Pedestrian Management Plan

53 A Preliminary Construction Traffic and Pedestrian Management Plan (PCTPMP) has been prepared for the Project. The PCTPMP is included as Annexure 3.

54 It is anticipated that the construction contractor(s) will update the construction traffic & pedestrian management plan prior to obtaining a construction certificate.

55 Long term road closures are not envisaged however authorised short term lane closures may be required for structural steel framing deliveries which can occur out of normal work hours. The contractor will liaise and apply to the appropriate authorities to obtain permits as needed.

56 The contractor will monitor and coordinate all vehicles entering and exiting the Construction sites.

57 Appropriate traffic controls will be put in place during construction to separate construction activities from the public. In addition, traffic controllers will be engaged to manage the interface between pedestrians and to direct vehicles entering and leaving the site.

58 Any work from neighbouring properties will be managed and coordinated with these stakeholders to maintain access and amenity.

59 The number and path of vehicle movements will vary during the construction period of the project. The majority of construction vehicles will access directly onto the work sites.

60 The table below outlines the current estimated daily major construction traffic movements during Stage 1 construction:

a. Construction Phase 1

Month	Activity	Daily Average Peak
Aug-18		0
Sep-18		0
Oct-18	Decanting	2
Nov-18	Site Establishment, Soft Demo/Strip Out	2
Dec-18	Soft Demo/Strip Out, Fitout	2
Jan-19	Site Establishment, Fitout	5
Feb-19	Site Establishment, Soft Demo/Strip Out, Excavation, Structure	15
Mar-19	Soft Demo/Strip Out, Structure, Fitout, Façade	15
Apr-19	Fitout, Façade	5
May-19	Fitout	2

b. Construction Phase 2

Month	Activity	Daily Average Peak
Nov-19		0
Dec-19	Decant, Site Establishment	4
Jan-20	Site Establishment	4
Feb-20	Soft Demo/Strip Out, Fitout	4
Mar-20	Fitout	2
Apr-20	Fitout	2
May-20	Demolition, Fitout	20
Jun-20	Demolition	20
Jul-20	Demolition, Ground Works	40
Aug-20	Structure	40
Sep-20	Structure, Fitout, Façade	40
Oct-20	Fitout, Façade	20
Nov-20	Fitout	10
Dec-20	Fitout	2
Jan-21	Fitout	2
Feb-21	Fitout	2
Mar-21	Soft Demo/Strip Out	2
Apr-21	Soft Demo/Strip Out, Fitout	2
May-21	Fitout	2
Jun-21	Fitout	2
Jul-21	Soft Demo/Strip Out, Fitout	2
Aug-21	Fitout	2
Sep-21	Fitout	2
Oct-21	Fitout	2
Nov-21	Soft Demo/Strip Out	2
Dec-21	Soft Demo/Strip Out, Fitout	2
Jan-22	Fitout	2
Feb-22	Fitout	2
Mar-22	Fitout	2
Apr-22	Soft Demo/Strip Out, Fitout	2
May-22	Fitout	2
Jun-22	Fitout	2

61 It is anticipated that car parking required for construction personnel will be minimal with public transport well located and designated as the primary travel mode.

4.2 Preliminary Vibration and Noise Impact Assessment Plan

62 A Preliminary Noise Impact Assessment Plan (PNIAP) has been prepared for the Project.

63 Noise and vibration from the construction process may impact on surrounding building occupants and public amenities. Vibration could also potentially affect the existing heritage fabric of the school.

64 In order to help meet the noise and vibration requirements of the site, baseline testing will be carried out and existing operational levels identified. The identification of baseline levels will enable construction contractors' methodologies to be specifically tailored to ensure benchmarks are not exceeded. Noise and vibration monitoring will be installed on site and monitored throughout the project.

65 The Contractor will develop these management plans to manage the construction caused vibration and noise that will occur during the Project, including mitigation strategies.

66 Vibration and noise activities that will occur during construction include the following:

a. quick cut saws,
b. excavation equipment, rock hammers
c. hammer drills
d. angle grinders
e. air compressors,
f. generators
g. concrete pumps
h. diesel static crane

67 Noise mitigation strategies that could be employed include:

a. excavation, piling, shoring and retention works will be undertaken primarily using non-percussive methods where achievable given the subsurface conditions,
b. plant used intermittently during construction activities such as, trucks, excavators, cranes, piling machines will be turned off in periods between works activities rather than left idling,
c. plant and equipment selection to reduce noise where possible; plant and equipment fitted with silencers where possible,
d. erection of temporary screens to control dust and noise emissions eg hoarding to the existing building as an acoustic barrier
e. vibration and noise awareness training for all site staff including subcontractors as part of general site induction and tool-box meetings,
f. regular reviews of the program and construction methodologies to minimise the duration of noise-intensive works.
g. adherence to permitted working times with approved flexible working hours to avoid noisy work during sensitive hours and school days
h. acoustic testing of proposed methodologies

4.3 Site Safety Management and Work Method Statements

68 A Site Safety Plan and safe work method statements will be developed by the Construction Contractor to demonstrate the commitment to Work Health & Safety (WH&S) prior to construction.

69 The site safety plan is required to identify the scope of work to be undertaken, the hazards associated with the work and the risk assessment processes and risk control measures to be used in the execution of the project activities.

70 Objectives for a Site Safety Plan include the following:

a. maintain lost time injury reporting and review positive performance indicators,
b. report all incidents and near misses and develop corrective action plans,
c. conduct Senior Management and WH&S Group reviews,
d. develop required WH&S resources,
e. formalise regular senior management reviews of WH&S systems and implement relevant improvements,
f. continually develop WH&S systems, policies, procedures and WH&S Plans to comply with statutory requirements and industry best practice,
g. maintain an Audit Programme to comply with system's requirements,
h. ensure all corrective actions and Non-Conformances are closed out,
i. meet or exceed the requirements of AS 4801 certification and Federal Safety commission accreditation,
j. adopt a zero tolerance safety philosophy,
k. provide Safety Awareness and other appropriate WH&S training,
l. continue to implement ongoing induction procedures on all Projects,
m. hold regular Consultative Committee meetings, maintain minutes and record actions,
n. issue Safety Alerts to all staff and other stakeholders according to requirements,
o. conduct and record regular toolbox meetings on site.

71 A Site Safety Plan would also outline the key responsibilities for achieving the above objectives. A statement of responsibilities by the Construction Contractor would identify who will be responsible for the following:

a. undertake audits to ensure appropriate implementation of the WH&S Plan occurs,
b. coordinate WH&S training,
c. establish, implement and maintain procedures for controlling all relevant documents and data required,
d. implement WH&S matters in construction design and planning,
e. make all reasonable endeavours to ensure that the WH&S management system is established, implemented and maintained on the Project,
f. monitor and constantly review risk management to the site,
g. ensure all Work Method Statements have been received on site prior to the commencement of work.

72 The Site Safety Plan would also address the following requirements, as required:

a. ***Working with Children*** legislation and school policies.
b. WH&S training – identification of WH&S training needs of all personnel, induction training, refresher training, attendance of WH&S committee personnel at consultation training etc;

c. incident management – identifies who will be available during and outside normal working hours to prevent, prepare for, respond to and recover from illness/ injury and incidents;

d. site safety rules – As a minimum will include induction and safety training, PPE, Site access and security, emergency procedures, illness and injury, protection of personnel and the public, work at elevated areas, safe working, hazardous materials and dangerous goods etc;

e. Safe Work Method Statements – All activities assessed as having WH&S risks require a SWMS to be prepared and implemented.

4.4 Construction Environmental and Waste Management

73 An construction environmental management plan (CEMP) will be developed and executed by the Construction Contractor in accordance with relevant authorities conditions, standards and specifications prior to the Project's site commencement.

74 A CEMP would include the following items;

a. erosion and sediment control

b. water discharge from the site

c. recycling

d. noise control,

e. dust reduction,

f. waste reduction,

g. organising material removal.

75 A Waste Management Plan is required to:

a. minimise waste from site activities;

b. establish the site specific waste management requirements and improve efficiencies via waste separation, recycling and re-use measures,

c. hazardous materials - identification, separation, collection and disposal of environmental waste,

76 Where possible, excavated natural material will be reused by the contractor on site. Prior to disposal, a waste classification of the soils to be excavated will be provided.

77 Waste will be sorted on site and care will be taken to avoid cross contamination with recyclables.

78 If Hazardous Materials are found then the contractor will ensure the following;

a. In accordance with the National Occupational Health and Safety Commission's Guide to the Control of Asbestos Hazards in Building and Structures [NOHSC:2002(1988)], appropriate warning signs will be placed on the asbestos materials identified.

b. All asbestos-containing materials will be removed prior to any renovation, demolition or work taking place in an area.

c. All removal procedures should be undertaken by an experienced appropriately licensed removal contractor in accordance with the National Occupational Health and Safety Commission' s Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (2005)].

d. Monitoring for airborne asbestos in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)] will be carried out during any removal operations in accordance with Clause 50 and 51 of the WorkCover 2001 OH&S Regulation requirements.

e. At the end of removal operations all surfaces in the subject area, such as frames, floor / ground, etc., will be vacuumed then wet wiped. An industrial High Efficiency Particulate Air (HEPA) vacuum cleaner will be used. Spreading of dust into clean areas or outside the subject areas will be prevented.

f. A clearance inspection should be carried out after the removal operations are completed in accordance with WorkCover and NOHSC requirements.

79 The contractor will provide skips primarily for metal, cardboard, concrete and masonry. Recyclables to be recovered are likely to consist of off cuts of materials such as stone, pipes, timber, steel, plasterboard, tiles and miscellaneous packaging.

80 The main goal will be to reduce the total volume of waste produced, which will be achieved by effective materials procurement, supply and management. Project managers, engineers, builders and subcontractors will play a key role in achieving on-site waste reduction targets on a day-to-day basis.

4.5 Community Construction Consultation Strategy

81 For an optimal Community Construction consultation and liaison process, a Community and Stakeholder Management Strategy will be developed.

82 The Strategy will be developed from the selected construction contractors' previous experiences on similar prominent projects and will deliver a useful communication system for the Project duration.

83 The consultation objectives will include the following:

a. Establish and maintain relationships with key stakeholders,

b. Develop general public awareness and knowledge of the Project

c. Ensure key stakeholders are kept informed and satisfied of, upcoming activities, Project status, impacts arising from unforeseen events and arrangements to mitigate the impact as needed,

d. Mitigate the impact of the construction activities on the surrounding areas,

e. Manage objections by understanding the main stakeholders' needs and take necessary actions for their effective management.

84 The key stakeholder groups would include the following:

a. Staff, students and parents of St Aloysius College,

b. Contractors, sub-contractors and suppliers,

c. The local Community,

d. Heritage and Environmental groups,

e. Interested local business groups and construction sites

f. Pedestrians and users of the neighbourhood,

g. Government Authorities esp. North Sydney Council, NSW Government, the Commonwealth.

h. Local utilities and services providers

85 After identifying and prioritising stakeholders' concerns and impact, a stakeholder management plan can be created in order to notify key stakeholders, so as to keep them aligned with the Project and avoid any misunderstandings.

86 Likely issues of concern to stakeholders may include the following:

a. Containment of Noise and Dust,
b. Vibration caused from demolition, excavation and construction activities,
c. Environmental remediation,
d. Construction traffic,
e. Construction personnel,
f. Restrictions / alterations to pedestrian and traffic flow,
g. Protection of existing St Aloysius Buildings including heritage elements,
h. Protection of existing trees.

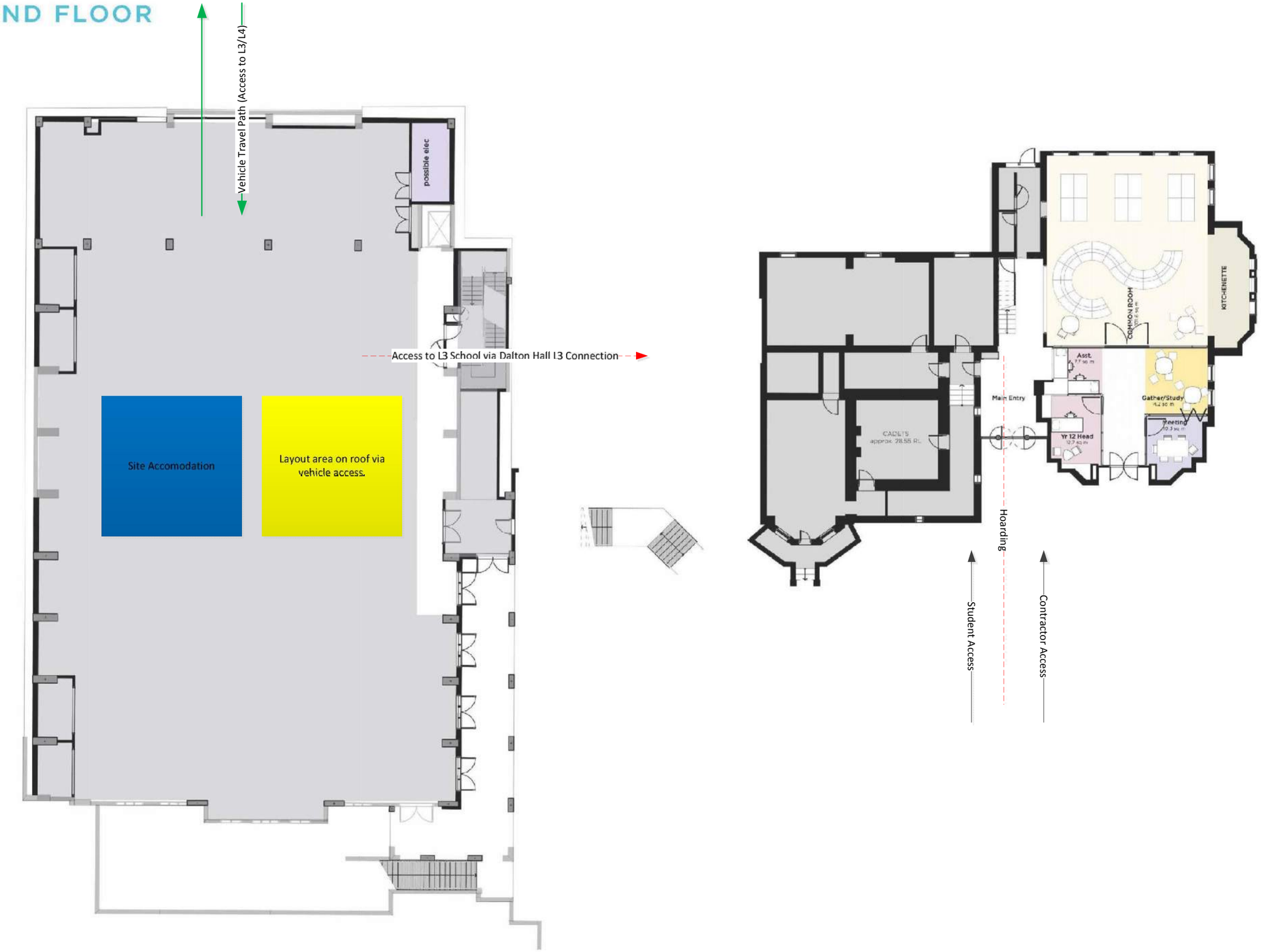
87 It is expected that the Construction Contractor will allocate liaison personnel particularly for communicating with the stakeholders on planned works or activities that require explanation and solutions to alleviate issues that may arise during the Project's construction phase.

88 The stakeholder management process would typically involve the following;

a. An initial consultation session held before the commencement of construction and letters of introduction sent to the surrounding properties, advising Project specifics, including commencement date, duration, contact details, site safety and public protection,
b. Contractor developed periodic reports issued to key stakeholders advising of imminent activities
c. A register of all stakeholder contact information and concerns developed and reviewed at the regular meetings
d. Regular communication and consultation with the relevant consent authority, or its designated representatives, in relation to the site management and impact on surrounding areas.

Annexure 1 - Preliminary Site Management Plans

GROUND FLOOR



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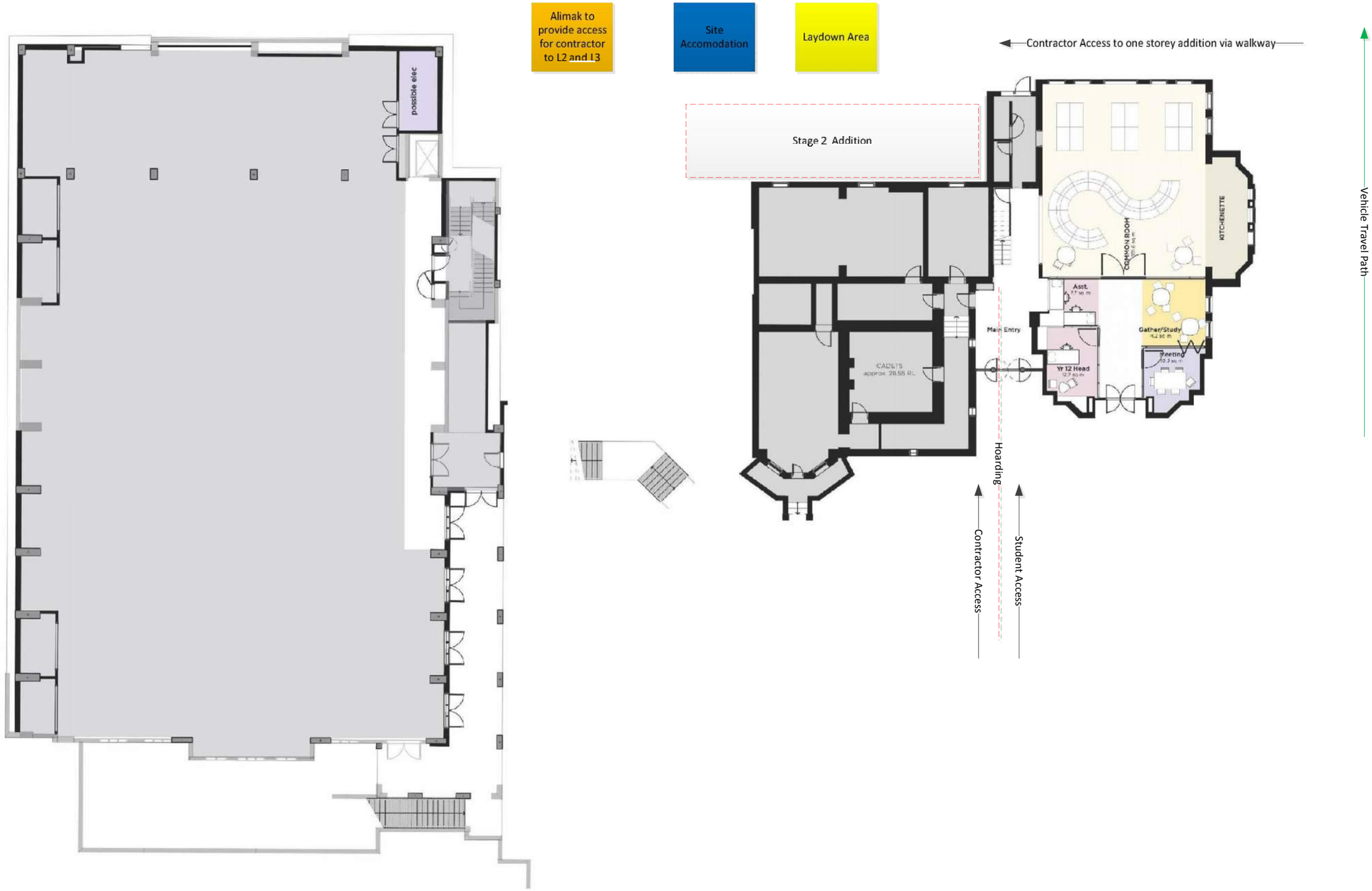
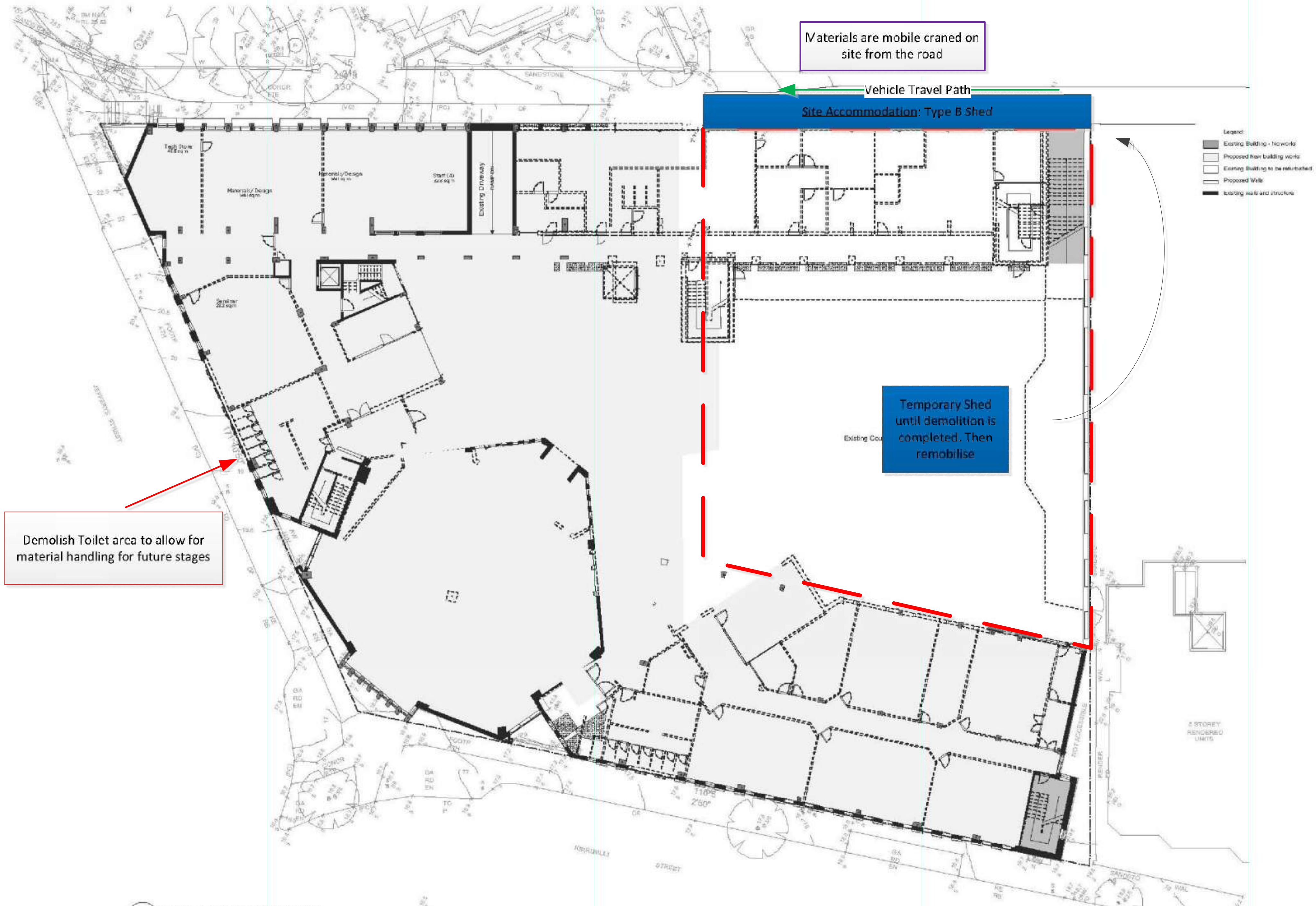


Preliminary Site Management Plan
Phase 2: Stage 2



1 Plan - GF 0 DEMO RL28.460

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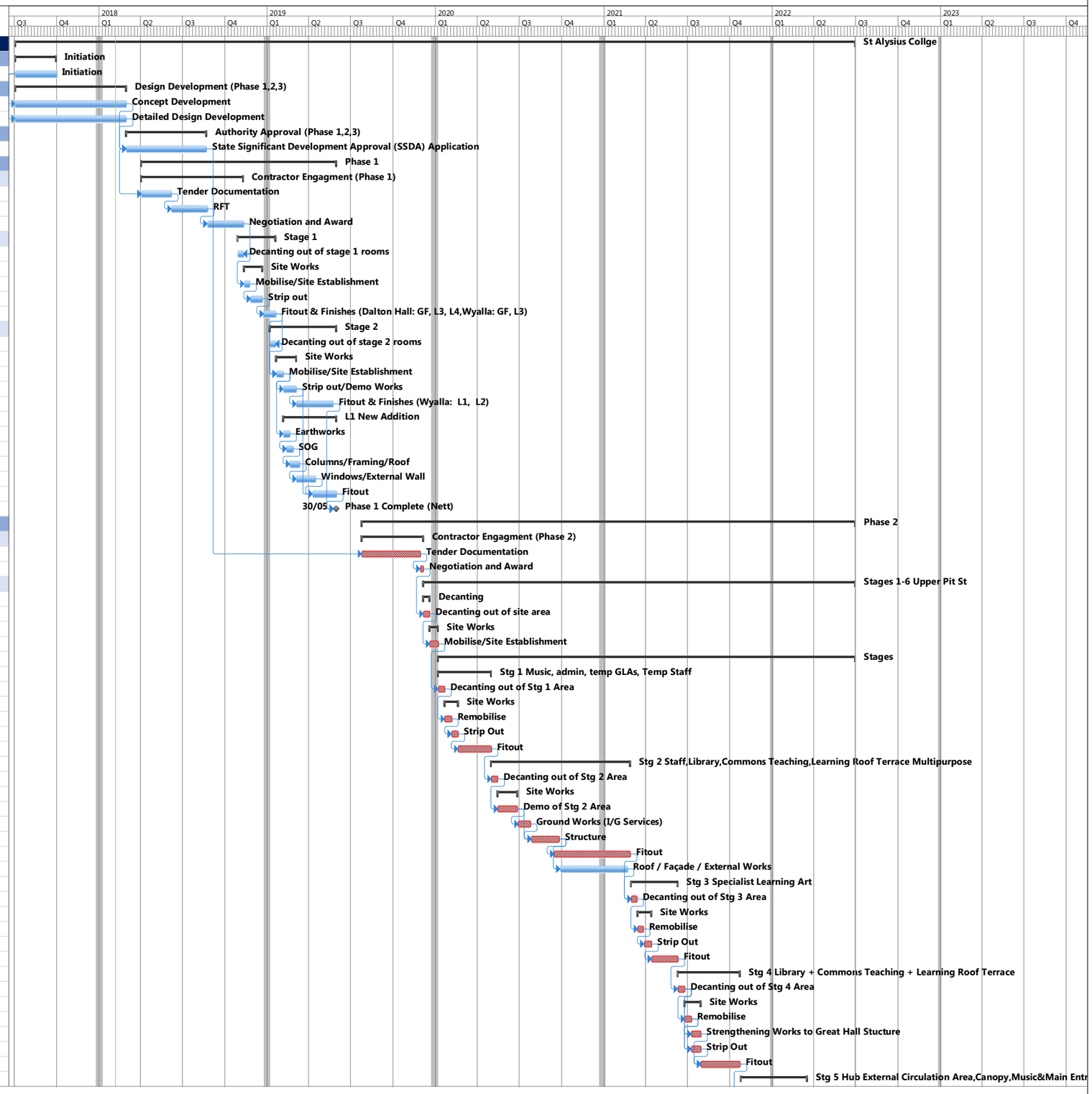
Annexure 2 – Preliminary Construction Schedule

St Aloysius' College - Masterplan Project
SSDA Stage 1 - Preliminary Construction Schedule

ID	Task Name	Duration	Start	Finish	Total Slack
1	**St Alysius Collge**	**1248 days**	**Mon 3/07/17**	**Wed 29/06/22**	**0 days**
2	**Initiation**	**65 days**	**Mon 3/07/17**	**Fri 29/09/17**	**232 days**
3	Initiation	65 days	Mon 3/07/17	Fri 29/09/17	232 days
4	**Design Development (Phase 1,2,3)**	**161 days**	**Mon 3/07/17**	**Wed 28/02/18**	**232 days**
5	Concept Development	161 days	Mon 3/07/17	Wed 28/02/18	232 days
6	Detailed Design Development	161 days	Mon 3/07/17	Wed 28/02/18	232 days
7	**Authority Approval (Phase 1,2,3)**	**120 days**	**Thu 1/03/18**	**Tue 21/08/18**	**232 days**
8	State Significant Development Approval (SSDA) Application	120 days	Thu 1/03/18	Tue 21/08/18	232 days
9	**Phase 1**	**293 days**	**Tue 3/04/18**	**Thu 30/05/19**	**773 days**
10	**Contractor Engagment (Phase 1)**	**156 days**	**Tue 3/04/18**	**Fri 9/11/18**	**773 days**
11	Tender Documentation	46 days	Tue 3/04/18	Wed 6/06/18	773 days
12	RFT	55 days	Thu 7/06/18	Thu 23/08/18	773 days
13	Negotiation and Award	55 days	Fri 24/08/18	Fri 9/11/18	773 days
14	**Stage 1**	**57 days**	**Mon 29/10/18**	**Fri 18/01/19**	**773 days**
15	Decanting out of stage 1 rooms	2 wks	Mon 29/10/18	Fri 9/11/18	154.6 wks
16	**Site Works**	**30 days**	**Mon 12/11/18**	**Fri 21/12/18**	**773 days**
17	Mobilise/Site Establishment	2 wks	Mon 12/11/18	Fri 23/11/18	154.6 wks
18	Strip out	4 wks	Mon 26/11/18	Fri 21/12/18	154.6 wks
19	Fitout & Finishes (Dalton Hall: GF, L3, L4,Wyalla: GF, L3)	17 days	Mon 24/12/18	Fri 18/01/19	773 days
20	**Stage 2**	**100 days**	**Mon 7/01/19**	**Thu 30/05/19**	**773 days**
21	Decanting out of stage 2 rooms	2 wks	Mon 7/01/19	Fri 18/01/19	154.6 wks
22	**Site Works**	**30 days**	**Mon 21/01/19**	**Mon 4/03/19**	**773 days**
23	Mobilise/Site Establishment	2 wks	Mon 21/01/19	Mon 4/02/19	154.6 wks
24	Strip out/Demo Works	4 wks	Tue 5/02/19	Mon 4/03/19	155.6 wks
25	Fitout & Finishes (Wyalla: L1, L2)	11 wks	Tue 5/03/19	Thu 23/05/19	155.6 wks
26	**L1 New Addition**	**80 days**	**Tue 5/02/19**	**Thu 30/05/19**	**773 days**
27	Earthworks	2 wks	Tue 5/02/19	Mon 18/02/19	154.6 wks
28	SOG	2 wks	Tue 12/02/19	Mon 25/02/19	154.6 wks
29	Columns/Framing/Roof	3 wks	Tue 19/02/19	Mon 11/03/19	154.6 wks
30	Windows/External Wall	6 wks	Tue 5/03/19	Mon 15/04/19	154.6 wks
31	Fitout	7 wks	Tue 9/04/19	Thu 30/05/19	154.6 wks
32	Phase 1 Complete (Nett)	0 days	Thu 30/05/19	Thu 30/05/19	773 days
33	**Phase 2**	**735 days**	**Thu 25/07/19**	**Wed 29/06/22**	**0 days**
34	**Contractor Engagment (Phase 2)**	**95 days**	**Thu 25/07/19**	**Thu 5/12/19**	**0 days**
35	Tender Documentation	18 wks	Thu 25/07/19	Thu 28/11/19	0 wks
36	Negotiation and Award	1 wk	Fri 29/11/19	Thu 5/12/19	0 wks
37	**Stages 1-6 Upper Pit St**	**640 days**	**Fri 6/12/19**	**Wed 29/06/22**	**0 days**
38	**Decanting**	**10 days**	**Fri 6/12/19**	**Thu 19/12/19**	**0 days**
39	Decanting out of site area	2 wks	Fri 6/12/19	Thu 19/12/19	0 wks
40	**Site Works**	**10 days**	**Fri 20/12/19**	**Mon 6/01/20**	**0 days**
41	Mobilise/Site Establishment	2 wks	Fri 20/12/19	Mon 6/01/20	0 wks
42	**Stages**	**620 days**	**Tue 7/01/20**	**Wed 29/06/22**	**0 days**
43	**Stg 1 Music, admin, temp GLAs, Temp Staff**	**80 days**	**Tue 7/01/20**	**Thu 30/04/20**	**0 days**
44	Decanting out of Stg 1 Area	2 wks	Tue 7/01/20	Mon 20/01/20	0 wks
45	**Site Works**	**20 days**	**Tue 21/01/20**	**Tue 18/02/20**	**0 days**
46	Remobilise	2 wks	Tue 21/01/20	Tue 4/02/20	0 wks
47	Strip Out	2 wks	Wed 5/02/20	Tue 18/02/20	0 wks
48	Fitout	10 wks	Wed 19/02/20	Thu 30/04/20	0 wks
49	**Stg 2 Staff,Library,Commons Teaching,Learning Roof Terrace Multipurp**	**210 days**	**Fri 1/05/20**	**Fri 26/02/21**	**0 days**
50	Decanting out of Stg 2 Area	2 wks	Fri 1/05/20	Thu 14/05/20	0 wks
51	**Site Works**	**30 days**	**Fri 15/05/20**	**Fri 26/06/20**	**0 days**
52	Demo of Stg 2 Area	6 wks	Fri 15/05/20	Fri 26/06/20	0 wks
53	Ground Works (I/G Services)	4 wks	Mon 29/06/20	Fri 24/07/20	0 wks
54	Structure	9 wks	Mon 27/07/20	Fri 25/09/20	0 wks
55	Fitout	23 wks	Mon 14/09/20	Fri 26/02/21	0 wks
56	Roof / Façade / External Works	20 wks	Mon 28/09/20	Fri 19/02/21	1 wk
57	**Stg 3 Specialist Learning Art**	**70 days**	**Mon 1/03/21**	**Wed 9/06/21**	**0 days**
58	Decanting out of Stg 3 Area	2 wks	Mon 1/03/21	Fri 12/03/21	0 wks
59	**Site Works**	**20 days**	**Mon 15/03/21**	**Tue 13/04/21**	**0 days**
60	Remobilise	2 wks	Mon 15/03/21	Fri 26/03/21	0 wks
61	Strip Out	2 wks	Mon 29/03/21	Tue 13/04/21	0 wks
62	Fitout	8 wks	Wed 14/04/21	Wed 9/06/21	0 wks
63	**Stg 4 Library + Commons Teaching + Learning Roof Terrace**	**95 days**	**Thu 10/06/21**	**Fri 22/10/21**	**0 days**
64	Decanting out of Stg 4 Area	2 wks	Thu 10/06/21	Thu 24/06/21	0 wks
65	**Site Works**	**25 days**	**Fri 25/06/21**	**Thu 29/07/21**	**0 days**
66	Remobilise	2 wks	Fri 25/06/21	Thu 8/07/21	0 wks
67	Strengthening Works to Great Hall Stucture	3 wks	Fri 9/07/21	Thu 29/07/21	0 wks
68	Strip Out	3 wks	Fri 9/07/21	Thu 29/07/21	0 wks
69	Fitout	12 wks	Fri 30/07/21	Fri 22/10/21	0 wks
70	**Stg 5 Hub External Circulation Area,Canopy,Music&Main Entry,Comple**	**95 days**	**Mon 25/10/21**	**Thu 17/03/22**	**0 days**

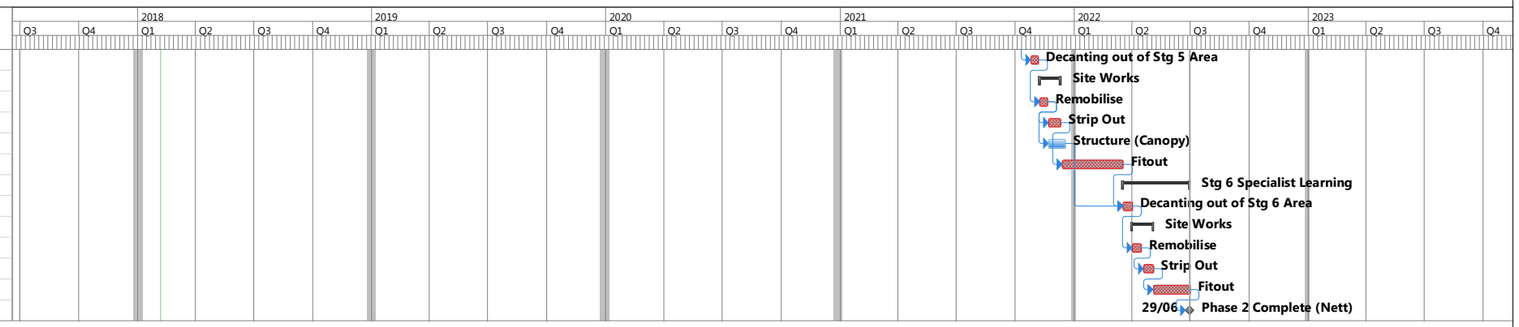


Project: St Aloysius College v1.1 Program (P1, P2)
Date: Tue 6/02/18

Task | Split | Milestone | Summary | Project Summary | Deadline | Critical Task | Critical Milestone

St Aloysius' College - Masterplan Project
SSDA Stage 1 - Preliminary Construction Schedule

ID	Task Name	Duration	Start	Finish	Total Slack
71	Decanting out of Stg 5 Area	2 wks	Mon 25/10/21	Fri 5/11/21	0 wks
72	**Site Works**	**25 days**	**Mon 8/11/21**	**Fri 10/12/21**	**0 days**
73	Remobilise	2 wks	Mon 8/11/21	Fri 19/11/21	0 wks
74	Strip Out	3 wks	Mon 22/11/21	Fri 10/12/21	0 wks
75	Structure (Canopy)	4 wks	Mon 22/11/21	Fri 17/12/21	11 wks
76	Fitout	12 wks	Mon 13/12/21	Thu 17/03/22	0 wks
77	**Stg 6 Specialist Learning**	**70 days**	**Fri 18/03/22**	**Wed 29/06/22**	**0 days**
78	Decanting out of Stg 6 Area	2 wks	Fri 18/03/22	Thu 31/03/22	0 wks
79	**Site Works**	**20 days**	**Fri 1/04/22**	**Tue 3/05/22**	**0 days**
80	Remobilise	2 wks	Fri 1/04/22	Thu 14/04/22	0 wks
81	Strip Out	2 wks	Tue 19/04/22	Tue 3/05/22	0 wks
82	Fitout	8 wks	Wed 4/05/22	Wed 29/06/22	0 wks
83	Phase 2 Complete (Nett)	0 days	Wed 29/06/22	Wed 29/06/22	0 days



Project: St Aloysius College v1.1 Program (P1, P2)
Date: Tue 6/02/18

Task | Split | Milestone | Summary | Project Summary | Deadline | Critical Task | Critical Milestone

Annexure 3 – Preliminary Construction Traffic & Pedestrian Management Plan

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

13 February 2018
Ref 17764

PROPOSED MASTERPLAN PROJECT
ST ALOYSIUS' COLLEGE, KIRRIBILLI
PRELIMINARY CONSTRUCTION TRAFFIC & PEDESTRIAN MANAGEMENT PLAN

Plan Magis
seeking excellence in learning

AD MAJORA NATUS

Introduction

This Preliminary Construction Traffic & Pedestrian Management Plan (CTPMP) has been prepared to accompany a State Significant Development Application (SSDA) to the *NSW Department of Planning* on behalf of *St Aloysius' College*, to review the traffic and parking arrangements to be implemented during Masterplan construction works during the various phases. It should be read in conjunction with the Preliminary Construction Management Plan (CMP) being submitted with the SSDA, prepared by *Tracey Brunstorm & Hammond*.

All correspondence on this matter must be addressed to The Applicant's representative:

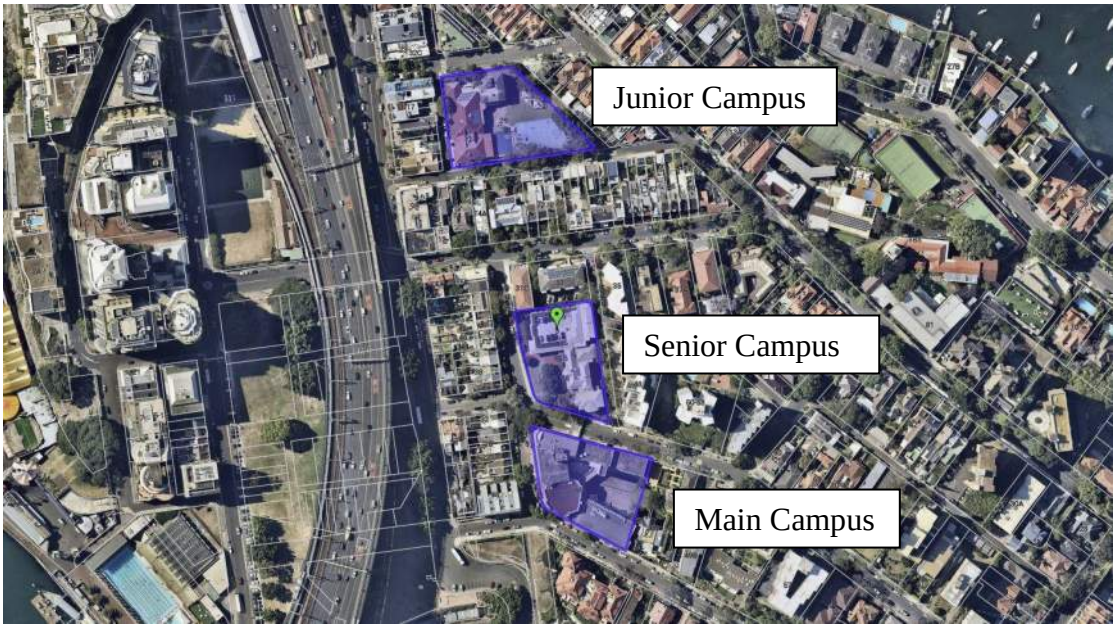
Peter Brogan
Bloompark
Suite 3, Ground Floor
41 McLaren Street
North Sydney NSW 2060
P: 9957 1473
E: pbrogan@bloompark.com.au

It should be noted that *Varga Traffic Planning* accepts full responsibility for the preparation of this Preliminary Construction Traffic & Pedestrian Management Plan, but does not accept any responsibility for its implementation which is to be undertaken by others.

Site

St Aloysius' College comprises three separate campuses; the Junior Campus which is located at 29 Burton Street, the Senior Campus which is located at 5 Jeffreys Street and the Main Campus which is located at 47 Upper Pitt Street (Figures 1 and 2).

A recent aerial image of the College and the surrounding area is reproduced below.



Source: Nearmap

The Junior Campus is located at 29 Burton Street and occupies the entire site bounded by Bligh Street, Humphrey Place, Burton Street and Crescent Place. A kiss & drop parking area is provided along the Burton Street frontage whilst a small section of 1P parking is permitted along the Humphrey Place frontage. The Crescent Place and Bligh Street frontages as well as the remainder of the Humphrey Place frontage are subject to No Stopping/No Parking restrictions. A small undercover off-street parking area is provided for staff in the south-western corner of the Junior Campus, accessed directly off Humphrey Place.

The Senior Campus has frontages to Jeffreys Street, Upper Pitt Street and Robertson Lane as well as a pedestrian stairway which connects Robertson Lane to Upper Pitt Street. A kiss & drop parking area is provided along the Upper Pitt Street frontage whilst a small section of 1P parking is permitted along the Jeffrey Street frontage. The Robertson Lane frontage as well as the remainder of the Jeffrey Street and Upper Pitt Street frontages are subject to No Stopping/No Parking restrictions. An open-air rooftop off-street parking area is provided for staff on the northern portion of Senior Campus, accessed directly off Robertson Lane.

The Main Campus has frontages to Upper Pitt Street, Jeffrey Street and Kirribilli Avenue. A kiss & drop parking area is provided along the Upper Pitt Street frontage whilst a small section of 1P parking is also permitted along the Upper Pitt Street frontage. Two small sections of 1P parking is permitted along the Jeffrey Street frontage as well as the entire length of the Kirribilli Avenue frontage. The Main Campus does not have a formal off-street parking area however on certain occasions, the central outdoor hardstand play area is used which is accessed via Jeffrey Street.

Proposed Development

The SSDA seeks consent for the staged redevelopment of the St Aloysius' College based on:

1. Concept approval is sought for the building envelopes for alterations and additions and new development across the Junior, Middle and Senior School Campuses.

2. Detailed built approval is sought for Middle and Senior School Campuses. For these two campuses the delivery will be conducted across two clear phases as summarised below:

   - **Wyalla Senior Campus:** Single storey addition to the heritage building fronting Robertson Lane, as well as internal refurbishment and upgrades of teaching and learning spaces.

   - **Upper Pitt Street Main Campus:** Demolition and rebuild of the existing four (4) storey North-East Wing fronting Upper Pitt Street, construction of new infill building in the existing quadrangle, and associated refurbishment of north-wing, south-wing, Great Hall and Chapel.

Stage 2 detailed built approval for the Junior School Campus will be at a later date and not part of this submission.

The wording and description is in accordance with Section 83B of the EP&A Act, as well as the SEARs issued by the Department of Planning on 28 August, 2017, and revised 22 November 2017. The overall submission is a Staged Development Application under 83B of the EP&A Act for the staged redevelopment of St Aloysius College (Concept). In accordance with Section 83B(b) of the EP&A, consent is also sought for:

Stage 1:
Ports are
- Concept Approval for all three campuses;
- Detailed built form approval of Upper Pitt Street Main Campus and Wyalla Senior Campus.

As such, in accordance with the above the following is required to capture the proposed:

- Concept Approval Plans for Middle, Senior and Junior School – this is similar as to what was originally prepared for the SEARs Request.
- Detailed Built Form Architectural Plans for the redevelopment of the entire Upper Pitt Street Campus and Wyalla Campus.

Stage 2 will require lodgement of another DA/SSDA for delivery of detailed built form approval for the Junior Campus in accordance with stage 1 concept approval.

Construction Schedule

The construction activities are expected to be undertaken over a duration of several years as set out below. Building and construction works are proposed from 7:00am to 5:00pm Monday to Friday and 8:00am to 1:00pm Saturday as per Council's standard hours. Notwithstanding, demolition and excavation works are proposed from 8:00am to 5:00pm Monday to Friday only. No work is to be carried out on Sundays or Public Holidays unless prior approval is granted by North Sydney Council.

CONSTRUCTION PROGRAM – APPROXIMATE DURATIONS		
Phase	**Work**	**Duration**
1	Senior Campus	October 2018 to May 2019
2	Main Campus	December 2019 to June 2022

Loading & Unloading

Demolition and excavated spoil material will be loaded into bogey trucks no larger than a standard 8.8m medium rigid truck via designated gates at the site boundaries.

Construction material delivery trucks, including concrete pumping, will occur within the site where possible or from potential Works Zones typically using small and medium rigid trucks. It is envisaged that a tower crane will be installed on the Main Campus for the majority of the construction period to transfer materials onto the site. Mobile cranes may also be required intermittently throughout the construction program.

As necessary, RMS-accredited traffic controllers will be in place at all times during truck movements to ensure the safety of pedestrians and minimise disruption to local traffic.

The site manager will co-ordinate the work such that two deliveries do not occur at the same time, unless they can be both accommodated on site or within the potential Works Zones.

All materials are to be stored on site. At no time are materials to be stored on any road or Council property unless prior approval is granted by North Sydney Council.

Potential Works Zones

As on-site space is limited it may be necessary for Works Zones to be applied for at some (or many) stages throughout the course of the works. A plan has been prepared which illustrates the existing parking restrictions in the vicinity of the Senior Campus and Main Campus as well as locations for potential Works Zones.

Some of these potential Works Zone locations are where existing Kiss & Drop areas are situated. As it is intended to minimise as much disruption as possible to normal day-to-day College activity, any loss of Kiss & Drop area as a consequence of a Works Zone will need to be provided elsewhere. Note, Works Zones will not be proposed in existing No Stopping locations.

Any Works Zone parking restrictions would apply during working hours only and will be provided specifically for the set down and pick up of materials, not for the parking of private vehicles associated with the site.

Hoarding

Phase 1: Senior Campus – Given the small scale of the proposed development, B-Class overhead hoarding is not considered necessary. Secure A-Class hoarding will however be installed around the perimeter of the site to prevent unauthorised access and protect the public

Phase 2: Main Campus – Given the demolition and construction work required for the proposed development, B-Class overhead hoardings are considered necessary along Upper Pitt Street and Kirribilli Avenue.

Sediment Control

All practicable measures must be taken, including the use of “truck scrubbers”, to ensure that vehicles leaving the site do not deposit mud or debris on the road. Any mud or debris deposited on the road must be cleaned up immediately in a manner that does not pollute waters (i.e. by sweeping or vacuuming).

Neighbouring Properties

All neighbouring properties are to have their access maintained at all times. All nearby residents and businesses will be updated on a regular basis and at key construction stages with respect to the construction process, particularly in relation to construction vehicles movements, and be provided with a phone number to contact the site manager.

Furthermore, the site manager must liaise with the site managers of any nearby construction sites to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and spoil truck routes. Along with Council's and other statutory requirements, a minimum seven (7) days notification should be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.

Construction Truck Routes

All heavy vehicles involved in the demolition, excavation and construction of the proposed development would approach and depart the site as indicated on Figure 3.

The site manager will ensure that the route map is prominently displayed on the site and that all contractors and employees are given a copy of the route map and understand their obligations as part of their site induction procedure.

Light traffic roads and those subject to load or height limits will be avoided as well as minimising heavy vehicle movements during school peak periods. Whilst working on site can occur during the abovementioned construction hours, the site manager will endeavour to restrict truck loading/unloading *outside* peak school drop-off/pick-up periods.

Truck Movements

A detailed estimation of the truck movements during Phase 1 & Phase 2 is provided within the Preliminary CMP and summarised below:

1. Phase 1: Senior Campus – average peak of 15 truck movements per day
2. Phase 2: Main Campus – average peak of 40 truck movements per day

Demolition works would typically involve approximately 4 to 5 trucks carrying out approximately 2 to 3 loads per day. This would not be every day as they would not be loading out every day of the demolition period.

Major concrete pours would typically take approximately 4 to 6 hours to pour with 8 trucks per hour or 40 to 50 truck movements per day. Smaller pours would have a similar amount of truck movements per hour however the duration would be a lot shorter say 2 to 4 hours maximum.

General deliveries would occur intermittently throughout the project with the major deliveries being reinforcing steel, plasterboard and bricks. The remainder would generally comprise smaller truck deliveries. Special deliveries (i.e. long and/or large) may require out-of-hours or special conditions which will be subject to North Sydney Council prior approval.

Site Fencing, Hoarding & Amenities

Temporary site fencing and signage will be installed around all internal and external work areas. In addition, B-Class overhead hoarding and scaffolding will also be installed above the footpath areas for adjoining overhead demolition and construction work areas.

Site accommodation and amenities requirements will vary depending on the construction phase however will be accommodated within the College grounds or above the B-Class hoarding.

In this regard, it is expected that all external footpaths surrounding the three campuses will remain open to pedestrians at all times. If a footpath is required to be closed at any stage, a Pedestrian Management Plan may be required which will be submitted to Council for approval prior to the closure.

Traffic Control Plan

An indicative Traffic Control Plan has been prepared which illustrates the traffic arrangements to be implemented during kerbside loading/unloading activities. Key features of the Traffic Control Plan are:

- advance warning signs alerting approaching traffic of the presence of possible road works and traffic controllers ahead

- B-Class hoarding with scaffolding above the footpath outside the works area which will allow for the footpath to remain open at all times and protect the public

- two traffic controllers situated outside the kerbside loading/unloading area who will have the following primary responsibilities:

    1. to ensure the safety of pedestrian movements in the vicinity of the works area so that no pedestrian enters the path of a heavy vehicle,

    2. to control heavy vehicle movements into and out of the kerbside loading/unloading area. The traffic controllers should wait for a safe gap in the passing traffic and pedestrian flows before allowing the vehicle to depart,

    3. to control local traffic past the kerbside loading/unloading area when trucks are present as traffic will need to be reduced to single lane due to the physical roadway width, and

    4. to momentarily stop traffic whilst material is craned off the truck onto site.

- all construction vehicles should park as close to the kerb as possible thereby allowing local traffic, including emergency service vehicles, to pass at all times.

The Traffic Control Plan has been prepared generally in accordance with the former RTA's publication *Traffic Control at Works Sites (2010)* and the Standards Australia publication *AS1742.3: Traffic Control Devices for Work Sites on Road.*

Permits

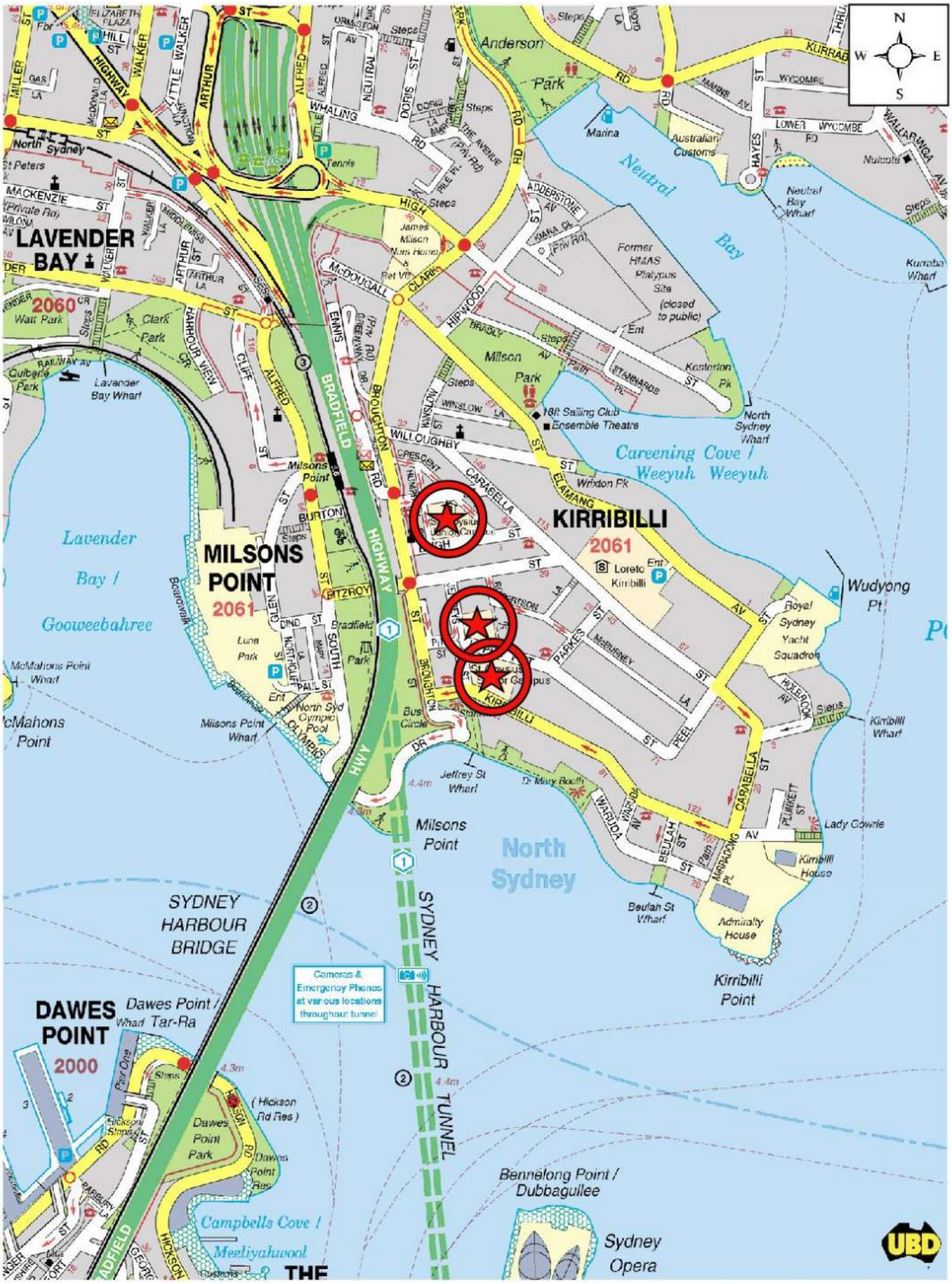
All necessary permits such as hoarding, crane, roadway/footpath/nature strip occupation etc. will require separate approval from North Sydney Council or the relevant authority. Any related task-specific Traffic Control Plans will be prepared by the responsible contractor at the time of the works and provided under separate cover.

Tradesmen and Contractor Parking

Due to site constraints, no on-site parking will be available for building contractor staff. The availability of public transport and lack of on-site parking will encourage the use of public transport and minimise traffic and parking impacts as a consequence of the construction process. In this regard it is noted that Milsons Point Railway Station is situated within easy walking of the site.

Site Inductions

The requirements of the approved Construction Traffic & Pedestrian Management Plan will need to be followed by the demolition, excavation and construction contractors, builders, owner and any subcontractors. The site manager will ensure that site inductions occur on a regular basis or as deemed necessary.



VARGA TRAFFIC PLANNING Pty Ltd

Traffic and Parking Consultants

LOCATION

FIGURE 1

VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

SITE & EXISTING TRAFFIC CONTROLS
FIGURE 2

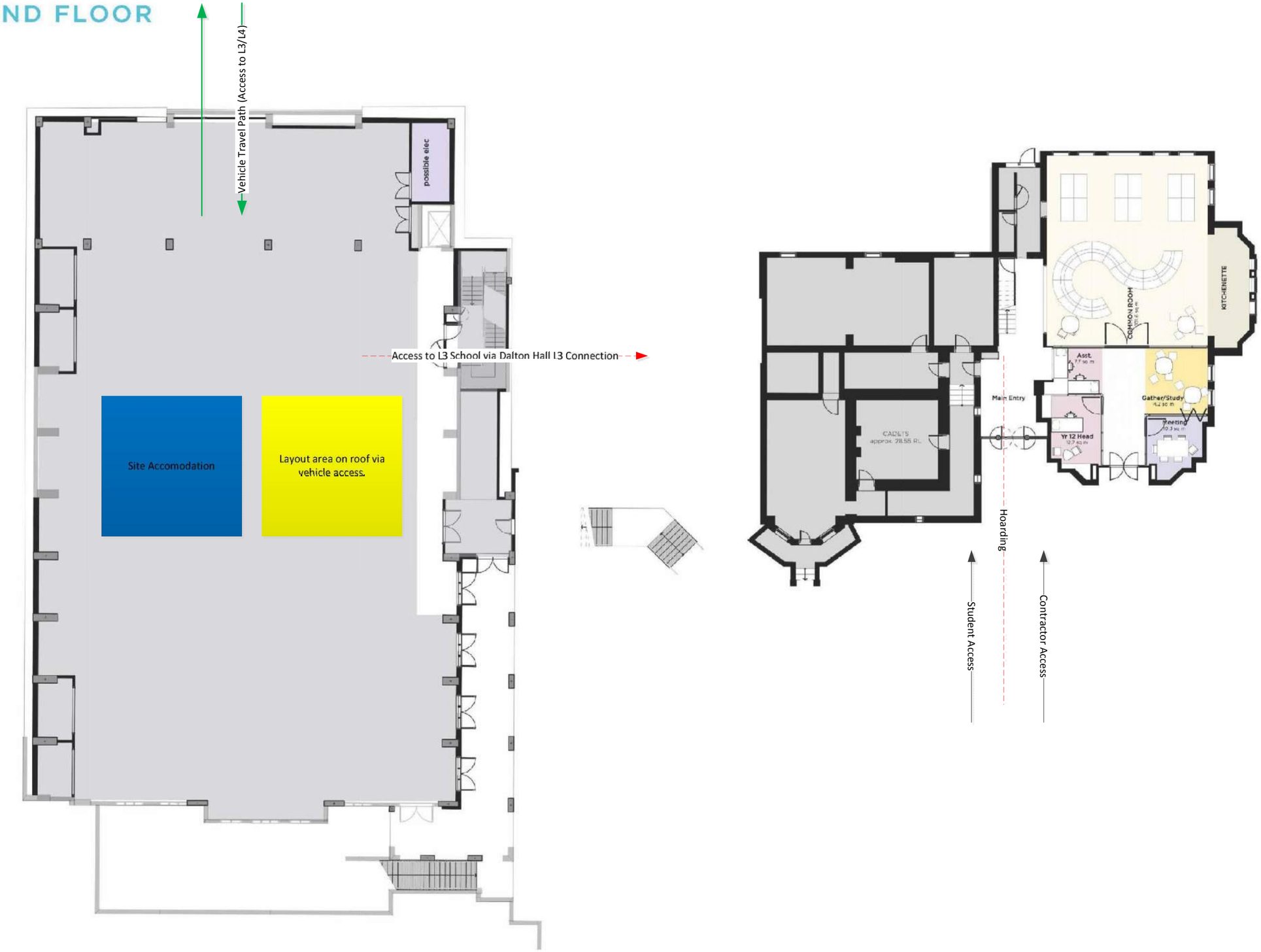
VARGA TRAFFIC PLANNING Pty Ltd

Transport, Traffic and Parking Consultants

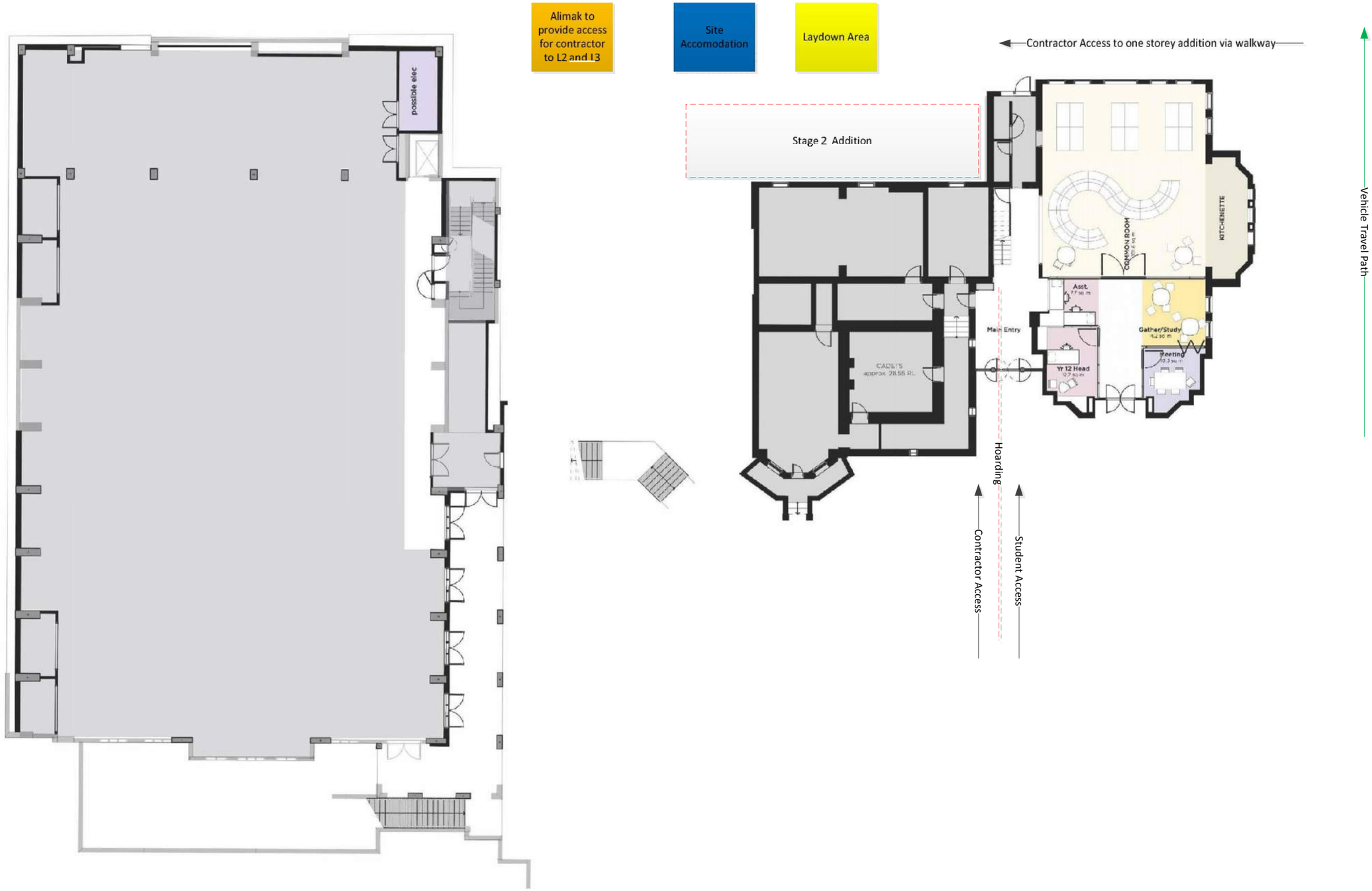
HEAVY VEHICLE ROUTE MAP

FIGURE 3

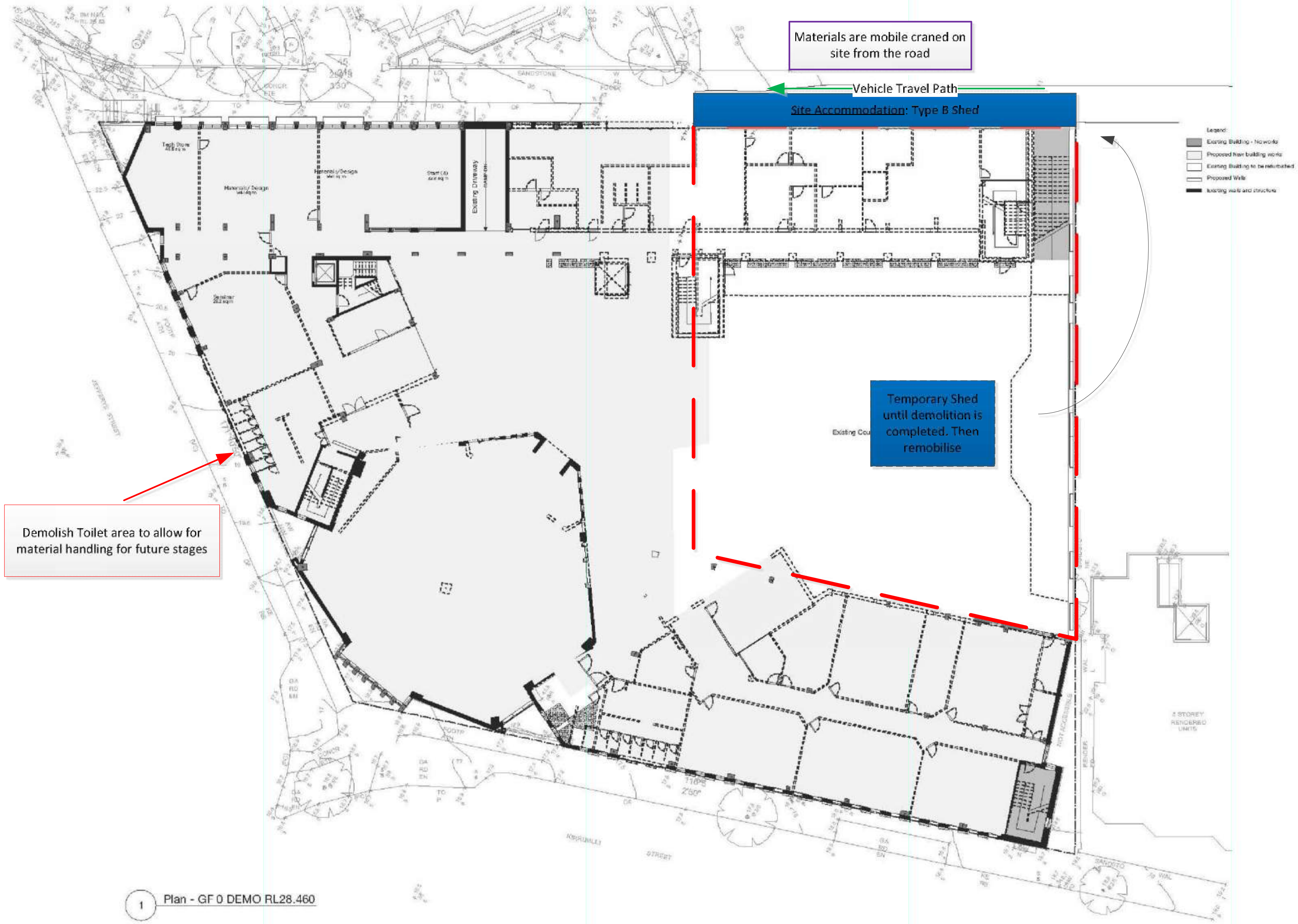
GROUND FLOOR



GROUND FLOOR



Preliminary Site Management Plan
Phase 2: Stage 2



DRAFT

PMDL ARCHITECTURE INTERIORS MASTERPLANNING

pmdl.com.au

St. Aloysius' College SSDA

St Aloysius' College

Plan - GF 0 DEMO RL28.460

2670

DAU104

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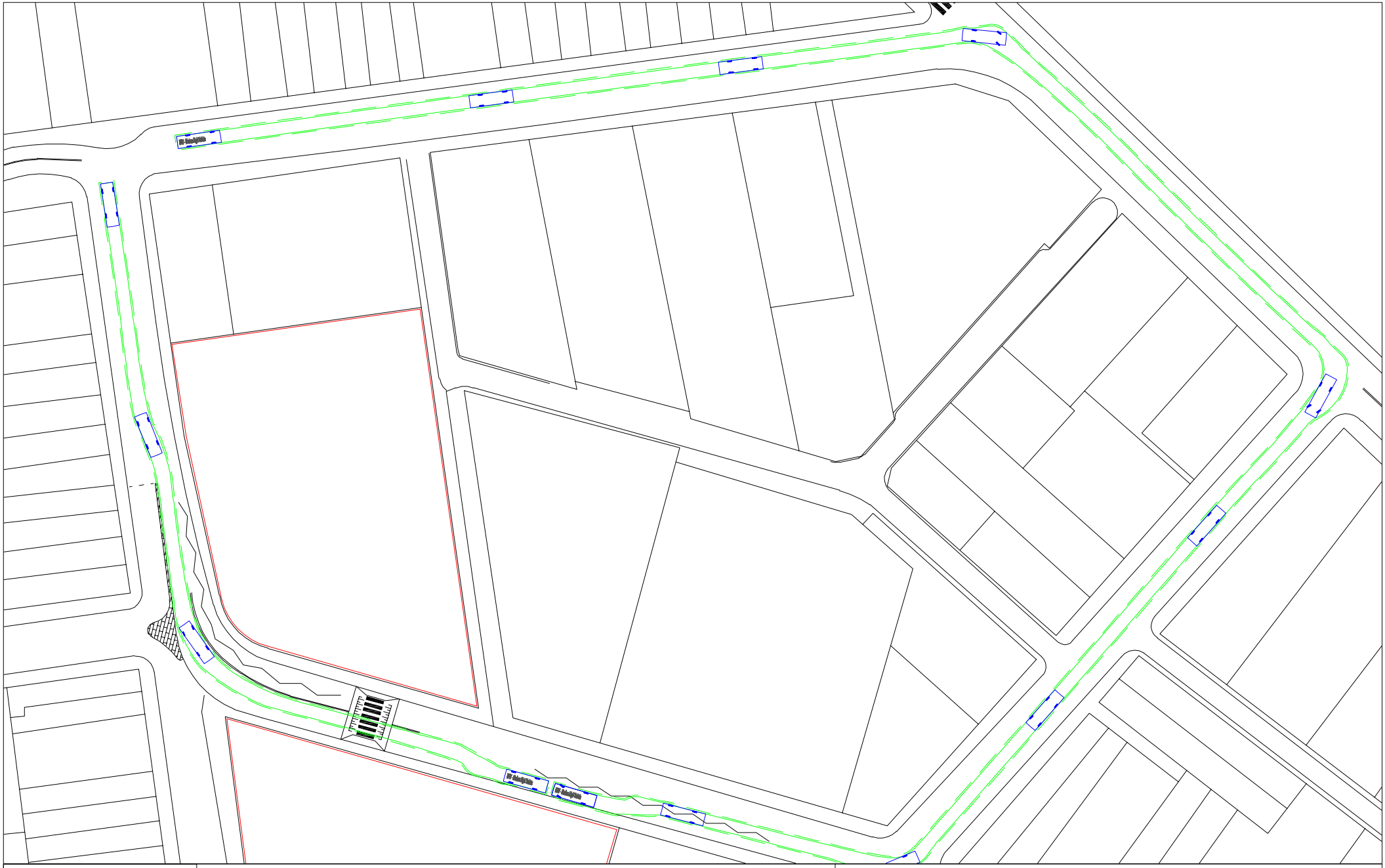

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20 Young Street
Neutral Bay, NSW 2089

Phone +61 2 9904 3224
PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
EXISTING SCHOOL RE-DEVELOPMENT

N

DRAWING TITLE
8.8M MRV TRUCK TURNING PATH
During Kerbside Loading / Unloading

1:1000 @ A4

ADDRESS
St Aloysius College, Kirribilli

PROJECT NO.
17764

DATE DRAWN
2017-12-20

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

Notes: Check regularly that signs are in correct position and clearly visible to approaching traffic

Check regularly that signs have not been obscured by parked cars

Signs are to be covered or removed at the end of the working day

LEGEND

Traffic Controller

Single Sided Sign

FITZROY STREET

CARABELLA STREET

ROBERTSON LANE

ROBERTSON

ONE-WAY

Existing rooftop car park to be partially used as loading/unloading area

Rooftop car park access driveway

Existing pedestrian pathway

SENIOR CAMPUS

JEFFREYS STREET

BROUGHTON STREET

PITT STREET

T1-5

PREPARE TO STOP

T1-18

T1-200

40m

UPPER

Traffic reduced to single lane past loading/unloading area

Truck

Truck

B-Class Overhead Hoarding

MAIN CAMPUS

KIRRIBILLI AVENUE

ONE-WAY

PARKES STREET

McBURNEY LANE

PITT STREET

LANE STREET

TRAFFIC CONTROL PLAN

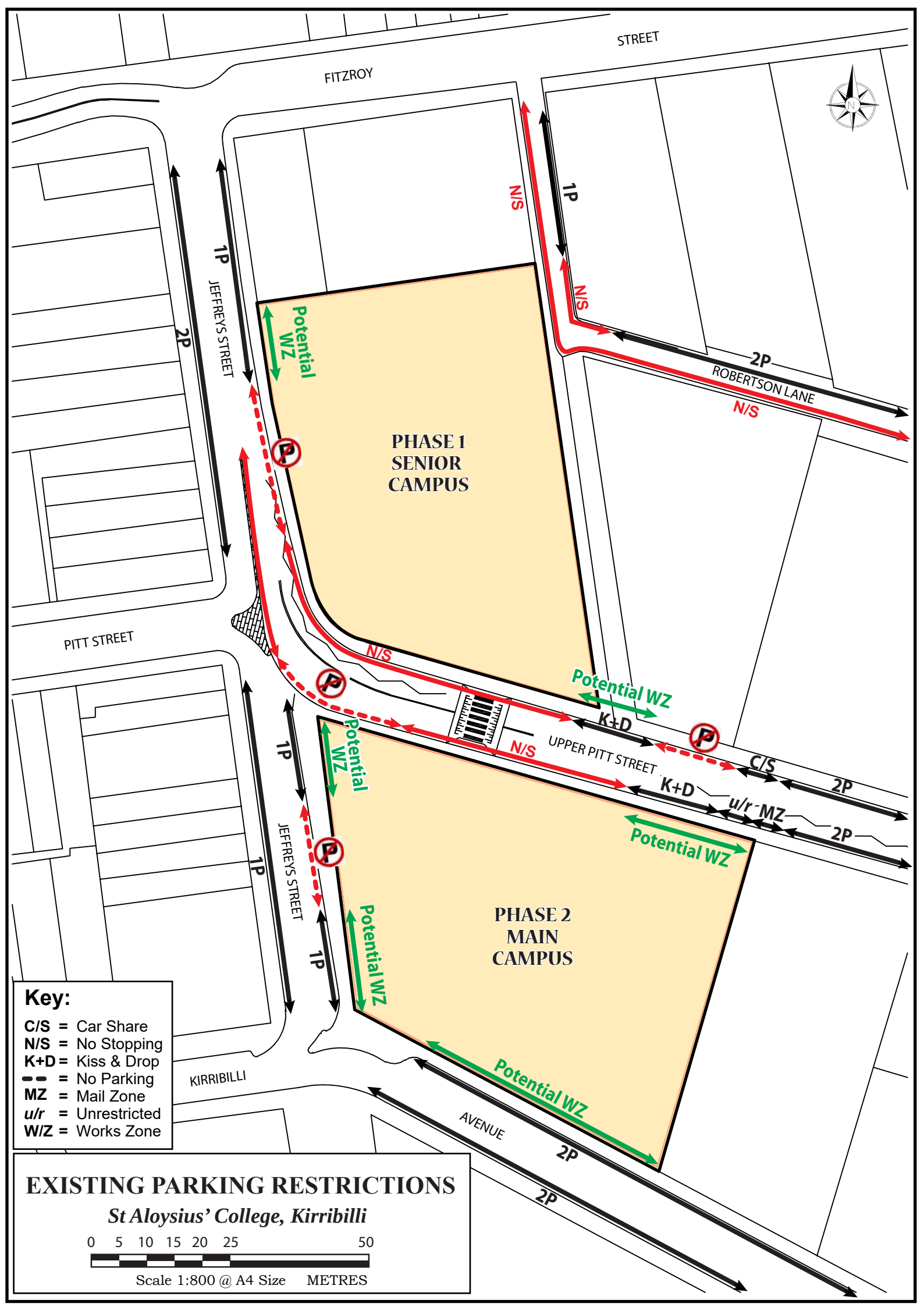
PROPOSED TRAFFIC ARRANGEMENTS DURING TYPICAL KERBSIDE LOADING & UNLOADING

St Aloysius' College, Kirribilli

0m 25m 50m

Scale 1:800 @ A3 Size

"Prepare A Works Zone Traffic Management Plan" No. 0042139480


FITZROY STREET
JEFFREYS STREET
PITT STREET
ROBERTSON LANE
UPPER PITT STREET
KIRRIBILLI AVENUE
PHASE 1 SENIOR CAMPUS
PHASE 2 MAIN CAMPUS
Potential WZ
N/S
1P
2P
K+D
C/S
u/r
MZ
Key:
C/S = Car Share
N/S = No Stopping
K+D = Kiss & Drop
= No Parking
MZ = Mail Zone
u/r = Unrestricted
W/Z = Works Zone
EXISTING PARKING RESTRICTIONS
St Aloysius' College, Kirribilli
0 5 10 15 20 25 50
Scale 1:800 @ A4 Size METRES