



21 September 2020

Ms Penny Murray
Partner
ADDISONS
Level 12
60 Carrington Street
Sydney NSW 2000

Dear Penny,

691 Pittwater Road, Dee Why NSW 2099
Parking demand and trip generation

1. I refer to your request for additional information in relation to parking and traffic impacts of the proposed redevelopment at the above address. The proposed redevelopment comprises a change of use from the existing business premises (a bank) to a 64-unit boarding house with small office and retail components. I have previously prepared a traffic and parking impacts assessment for the above development, a copy of which I am attaching to this report for reference.
2. The additional information in this report is in response to queries raised by the Sydney North Planning Panel. My advice is outlined below.
3. In my advice I rely on the latest set of drawings by BKA Architects (attached to this report).
4. At present, the only site frontage with access from a public or a private road is on Pittwater Road. No vehicular access into the site is provided from Pittwater Road.
5. It is anticipated that in the future an easement or right of way (ROW) laneway will be provided to the northern side of the site, with a connection to St David Avenue via the existing rear access driveway of No. 701 Pittwater Road. It is not known at this stage when the ROW would become available.
6. Provision for waste collection services will therefore need to be considered for the short term (prior to the ROW availability) and long term (with the ROW) scenarios. The following arrangements are proposed.
7. Short term – no vehicular or motorcycle access to the site
 - a) No car parking is proposed on site (10-11 spaces are required for the residential component of the proposed development based on research, no minimum requirement in SEPP – refer to further detail in item d) below)
 - two (2) car share spaces are proposed off-site, equivalent of 10 car parking spaces – refer to further information below
 - b) No motorcycle parking is proposed (12 are required by SEPP)
 - c) 34 bicycle spaces are proposed (12 are required by SEPP)
 - d) Reasons for support of the proposed short-term arrangement
 - As was demonstrated in my previous report (attached for reference), the existing approved development does not provide any car parking. It is submitted that the existing car parking provision deficit be applied as a credit for the proposed development. It was demonstrated that the proposed redevelopment would result in a reduction of the existing car parking deficit by 14 spaces.
 - Council officers agreed to apply the parking credit to the commercial and retail components of the proposed development, but not to the residential component (21 spaces). The rationale was that, firstly, this was a new land use component and, secondly, it required all day parking. It must be noted, however, that the approved bank retail and office components generated all-day parking requirements for staff. For the office component, this

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requirement was reduced from 9.2 to 4.7 spaces (by 4.5 spaces) and for the retail area by at least 6 spaces (say 10 staff for the retail section with 60% of them driving to work). The total all-day parking demand reduction can thus be estimated as 10-11 vehicles. The actual additional long-term demand for the residential component would thus be 21 minus (10-11) = 10 to 11 spaces.

- On-street parking accumulation surveys showed abundance of vacant parking spaces within walking distance from the site.
- There is a double GoGet pod located within convenient walking distance from the site. This car share facility will be available to the future residents, just like any other member of the public.
- The proponent now offers to provide two (2) car parking spaces in a lease agreement at No. 5 Mooramba Road. These spaces are proposed to be converted into private car share spaces, available for the residents of the proposed development only and managed by the boarding house manager. The two (2) car share spaces will effectively provide a replacement for 10 standard car spaces.
 - In a recent LEC judgement, with regard to a proposed boarding house at No. 10 Naree Road, Frenchs Forest, Commissioner Timothy Horton has found that each car share space provides for 5 cars.

91 While I acknowledge the Respondent's argument that the basis for the figure provided by GoGet is not publicly available and so cannot be verified, I accept Mr Sannikov has arrived at the figure of five vehicles by applying a moderating factor and by reference to a local government policy, albeit in an inner city environment, and for these reasons I accept that the function of a car share vehicle would be to effectively replace five privately owned vehicles.

- In the same Judgement quoted above, Commissioner Horton has handed down the following findings in relation to the car parking provision that were below the SEPP ARH maximum rates:

(2) Secondly, being located in an accessible area with employment hubs in close proximity, that affordable housing for key workers is intended to support, I accept that some occupants are likely to be attracted to the development for its proximity to those places of employment that would not demand of them ownership of a car.

(3) Thirdly, in my view it is reasonable to expect potential occupants of the building will consider the availability of car parking in the context of their own needs when evaluating the suitability of this development as a place to reside. Those prospective occupants with a car, but without a guaranteed space in which to park it, may opt for accommodation elsewhere. Those without a car may be attracted by having access to a carshare vehicle for those times when one is needed.

- The proposed bicycle parking provision greatly exceeds that required by SEPP. There is a modern trend for a greater use of power-assisted bicycles, which can be considered as vehicles filling the niche between pedal cycles and fully powered motorcycles. They provide an opportunity to ride for people who may not be capable of pedalling a standard pedal bike for longer distances or uphill. In this way, they provide an alternative to motorcycles. Surplus bicycle spaces can be used for power-assisted bicycles, replacing motorcycle parking provision to some extent.

8. Long term – when the rear lane access becomes available

- a) Eight (8) car parking spaces are proposed on site, including 2 car share spaces – equivalent to a total of $(2 \times 5) + 6 = 16$ car spaces (10-11 spaces are required for the residential component of the proposed development based on research, no minimum requirement in SEPP)
- b) 13 motorcycle spaces are proposed (12 are required by SEPP)
- c) 15 bicycle spaces are proposed (12 are required by SEPP)

9. The same considerations apply for the long-term arrangements as those detailed above for the short-term arrangements, noting that the long-term arrangements achieve full compliance with the SEPP requirements.

10. In relation to traffic impacts, I was requested to provide further explanation for point 15 b) of my previous report, which read as follows.

b) The proposed development will significantly improve the traffic situation. Trip generation from boarding houses is likely to be mostly in the morning and afternoon commuter peak hours. It is likely that there will be a decrease in terms of car based trips as compared with the approved bank use, which, by its nature generates trips throughout the day.

11. The Commonwealth Bank branch which occupied the site previously, provided retail banking services. It dealt directly with the customers, similarly to other retail (non-banking) land uses. The retail component of the bank was located on the ground floor.

12. Bank offices on the first floor operate similarly to other commercial land uses.

13. The patterns of a retail bank activity is shown below (banks near the site, sourced from Google data)



Figure 1. Typical bank activity patterns in Dee Why.

14. The above graphs demonstrate that the level of activity (number of customers) grows after the time of opening to its peak in late morning / early afternoon and then decreases towards the end of business hours.

15. Trip generation rates for the existing and the proposed developments were calculated as demonstrated in Table 1 below (as per RMS (2002) Guide).

Table 1. Peak hour vehicular trip generation rates.

		morning peak		afternoon peak	
		rate per 100 sqm	No. of trips	rate per 100 sqm	No. of trips
Existing	floor area				
Bank (office)	368.8	1.6	6	1.2	4
Bank (retail banking)	587.6	5	29	5	29
Total			35		34
		morning peak		afternoon peak	
		rate per 100 sqm	No. of trips	rate per 100 sqm	No. of trips
Proposed	floor area				
Office	186.8	1.6	3	1.2	2
Retail	82.4	5	4	5	4
Total			7		6
		rate per unit	No. of trips	rate per unit	No. of trips
Boarding house	64	0.19	12	0.15	10
Discount for 33% parking	0.33		4		3
Total			11		10

16. The current proposal does not contain any off-street parking and therefore no vehicular trip generation is expected to occur directly from the site. Customers and staff of the retail and commercial uses are expected to use public car parking facilities (this is the same arrangement as for the existing uses but at a much lesser scale).

17. The proposed retail and commercial components have substantially reduced floor area compared with the approved uses and thus their trip generation during the commuter peak hours will be less with the proposed development (reduced from 35 to 7 trips in the morning peak hour and from 34 to 6 trips in the afternoon peak hour).

18. The proposed boarding house is classified as a high density residential development by TfNSW (RMS) Guide to

Traffic Generating Developments. The applicable commuter peak hour trip generation rates are 0.19 and 0.15 trips / unit for the morning and afternoon commuter peak hours respectively. This rate is based on a typical situation where all units are provided with parking. For the proposed boarding house a reduction factor needs to be applied to account for 33% car ownership.

19. The total commuter hour trip generation is substantially less for the proposed development compared with the existing approved use. It is of importance that whilst for the retail component (the largest trip generator for the existing approved use) the peak hour trip generation is lower than that during the day, the residential development's trip generation pattern is the opposite – higher traffic generation during the peak hours and less during the day. The trip generation patterns for high density residential developments in similar locations are shown in **Figure 2** (source: RMS Study of high density residential developments).

Figure 14 - Site 1 Vehicle Trip Generation (Weekday)

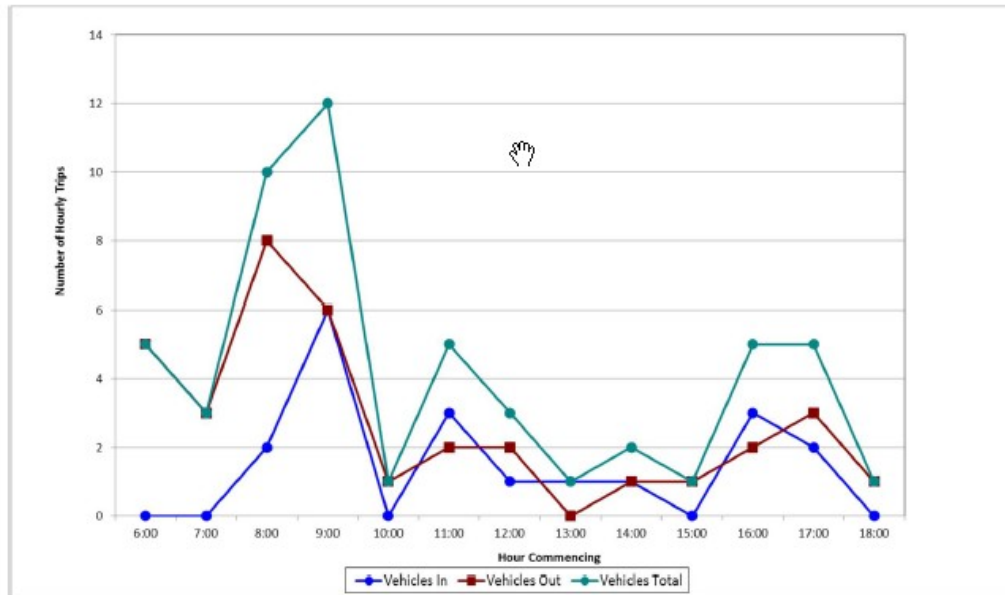


Figure 18 - Site 2 Vehicle Trip Generation (Weekday)

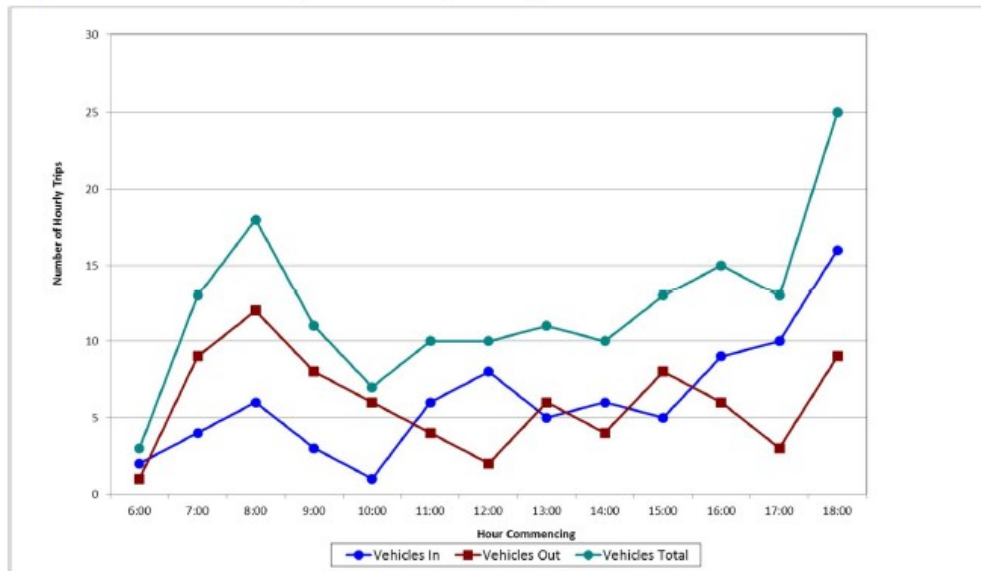
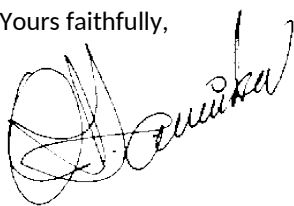


Figure 2. Patterns of trip generation from RMS surveys - high density residential (St Leonards and Chatswood).

20. Therefore, not only the peak hour trip generation will be lower, it will be further reduced during the day.
21. Based on the previous analysis and the additional information presented in the present report, I remain of the opinion that the proposed redevelopment is supportable on traffic and parking grounds.

Please do not hesitate to contact the undersigned should you require further information.

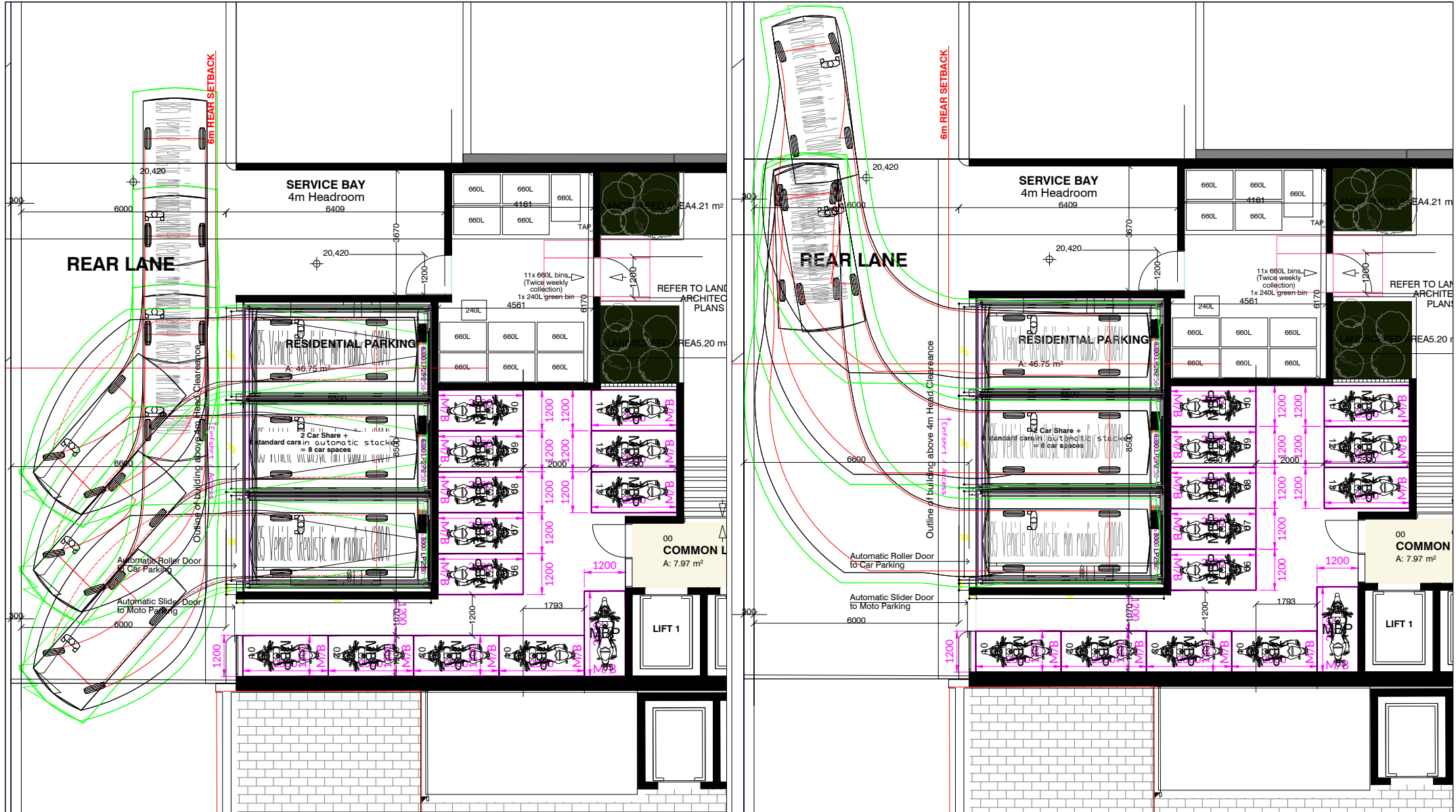
Yours faithfully,



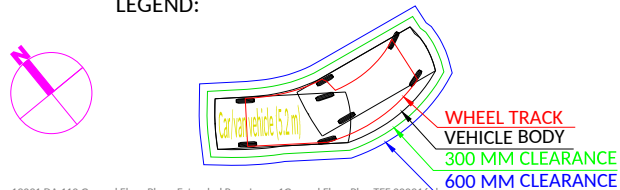
Oleg I. Sannikov
Director
MEngSc (Traffic Engineering)
MIEAust PEng
FAITPM

Attachments:

Vehicle turning diagrams for the amended design
TEF report dated 17 March 2020.



LEGEND:



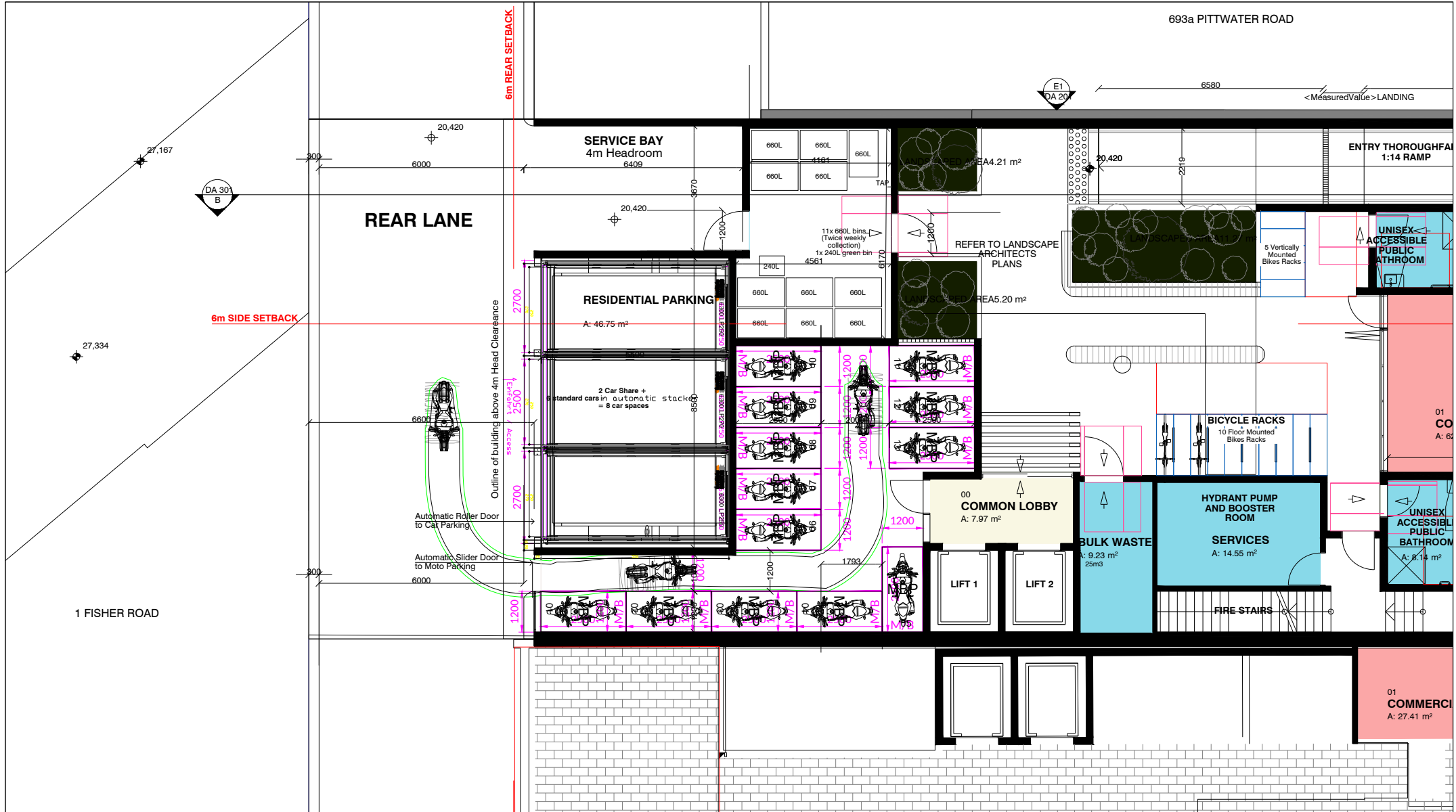
Dwg No 19091/01 Rev. A 16/09/2020

Client:
Gannet Developments

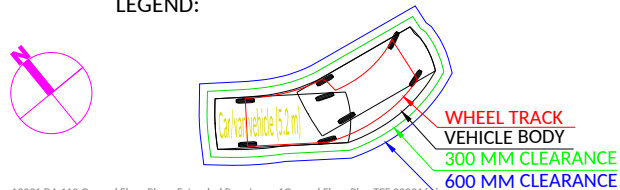
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Proposed car park layout
Design checks as per AS/NZS 2890 series

SCALE 1:150@A4



LEGEND:



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Client:
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691 Pittwater Road, Dee Why NSW 2099

Proposed car park layout
Design checks as per AS/NZS 2890 series

SCALE 1:150@A4

17 March 2020

General Manager
Northern Beaches Council
PO Box 82
Manly NSW 1655

Dear Sir/Madam,

691 Pittwater Road, Dee Why NSW 2099

1. I refer to a request from Mr Hamish Humphreys of Gannet Developments for a traffic engineering assessment of the proposed redevelopment at the above address. The proposed redevelopment comprises a change of use from the existing business premises (a bank) to a 64-unit boarding house with small office and retail components. My assessment is outlined below.
2. The latest previous Development Approval for use as a business premises was granted on 22 July 2016 (DA 2016/0589). The original DA2008/0562 for alterations and additions to a business premises was approved on 16 May 2008.
3. Council's assessment report for DA 2016/0589 states as follows.

Presently there is no on-site car parking for the subject site. Surrounding allotments consisting from Nos. 671 to 701 Pittwater Road also do not have on-site car parking - with the exception of a small laneway to the rear of Nos. 671 to 681 Pittwater Road which appears to accommodate several cars in a stacked arrangement.

The subject site relies on the provision of street parking along Pittwater Road and the Council owned car park accessed via Civic Drive and bordered by Pittwater Road to the east, St David Avenue to the south and Civic Drive to the west.

The provision of on-street car parking on Pittwater Road allows patrons of the bank to park in these facilities for a short-term period.

The subject site is also in close proximity to the Dee Why Main bus stop which services the greater Northern Beaches area.

4. No car parking spaces are allocated to the approved development.
5. The approved development has a gross floor area (GFA) of 956.5 m², split between two floors (customer service area on the ground floor and offices on the first floor).
6. Current parking requirements for the approved land uses, set out in the Warringah Development Control Plan (WDCP) 2011 Appendix 1 - Car parking requirements, are reproduced in a table below (it must be noted that the original approval in 2008 was under the provisions of WDCP 2000 which contained the same car parking rates as WDCP 2011).

Office and Business	
Use	Requirement
Business premises	1 space per 40 m ² GFA excluding customer service/access areas, plus for customer service/access areas 1 space per 16.4 m ² GFA.

7. If calculated as per the WDCP rates, the car parking requirements for the existing development are as follows:
 - a) Customer service area (ground floor): $587.6/16.4 = 35.8$ spaces
 - b) Office area (first floor): $368.8/40 = 9.2$ spaces
 - c) Total: $35.8 + 9.2 = 45$ spaces
8. There is, therefore, a historical parking deficiency of 45 spaces that should be applied as

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a credit for any development application sought for the use of the premises.

9. Parking requirements for the components of the proposed development, set out in the WDCP 2011 Appendix 1 – Car parking requirements are reproduced below.

Residential	
Use	Requirement
Backpackers' accommodation, Boarding house, Group home	Comparisons must be drawn with developments for a similar purpose.
Office and Business	
Use	Requirement
Office premises	1 space per 40 m ² GFA.
Retail and Commercial	
Use	Requirement
Shop (includes retail / business component of shop top housing, retail premises and neighbourhood shop)	<p>1 space per 16.4 m² GLFA (6.1 spaces per 100 m² GLFA).</p> <p>The above rate may be varied in shopping centre complexes, such as shopping malls, where multi-purpose trips predominate, in accordance with the following:</p> <ul style="list-style-type: none"> for 0-10,000 m² GLFA - 6.1 spaces per 100 m² GLFA for 10,000-20,000 m² GLFA - 5.6 spaces per 100 m² GLFA for 20,000-30,000 m² GLFA - 4.3 spaces per 100 m² GLFA for more than 30,000 m² GLFA - 4.1 spaces per 100 m² GLFA

10. The car parking requirements for the proposed development can be calculated as follows:

a) **Boarding house:**

- In 2019, a research report on occupants of recent boarding house developments was commissioned by the Southern Sydney Regional Organisation of Councils (SSROC) and carried out by UNSW. The report outlined the results of surveys at 237 boarding houses in City, Inner and Outer suburbs. It is the present author's opinion that this report provides the best basis for comparison as required by the WDCP.
- The research report showed that the car ownership at boarding houses was 33% of the number of households. Based on this rate, the car parking requirement for the proposed 64-unit boarding house is $64 \times 0.33 = 21.1$ spaces.

b) **Office:**

- The total GFA for the proposed office spaces are 186.8 m². The car parking requirement for the offices is thus $186.8/40 = 4.7$ spaces.

c) **Retail area:**

- The total GFA for the proposed retail area is 82.4 m². The car parking requirement for this component is thus $82.4/16.4 = 5$ spaces.

d) The total requirement for all 3 components is $21.1 + 4.7 + 5 = 30.8$ say **31 spaces**.

11. No car parking spaces are proposed. However, if the above calculated credit of 45 spaces for the existing car parking deficiency is applied, then the proposed redevelopment will result in a reduction of the existing car parking deficit by

a) 31 (required) – 0 (provided) – 45 (credit) = **14 car parking spaces**.

12. The current bicycle parking requirements for the proposed building, set out in the WDCP 2011 part C3(A) – Bicycle parking and end of trip facilities are outlined below.

MINIMUM BICYCLE Parking REQUIREMENTS		
Land Use	Column 1 High–Medium Security Level*	Column 2 High–Low Security Level**
Boarding House	1 per 10 beds	Visitors: 1 per 20 beds
Business and Retail Premises	1 per 200m ² GFA	Visitors: 1 per 600m ² GFA
Office Premises	1 per 200m ² GFA	Visitors: 1 per 750m ² GFA over 1000m ²

13. The bicycle parking requirements for the proposed development are thus as follows.

- a) Boarding house (64 units / 119 beds)
 - residents: $119/10 = 11.9$ spaces.
 - visitors: $119/20 = 6.0$ spaces.
- b) Office (190.2 m²)
 - employees: $186.8/200 = 0.9$ spaces.
 - visitors: not applicable (less than 750 m²)
- c) Retail (81.3 m²)
 - employees: $82.4/200 = 0.4$ spaces.
 - visitors: $82.4/600 = 0.1$ spaces.
- d) Total: $11.9 + 6.0 + 0.9 + 0.4 + 0.1 = 19.3$ say **20 spaces**

14. Thirty-four (34) bicycle spaces are proposed. This provision complies with and substantially exceeds the WDCP requirement. Bicycle servicing facilities are also proposed near the bicycle racks.

15. The proposed car and bicycle parking provision and likely traffic impacts are also considered to be satisfactory for the following reasons.

- a) The site has good public transport provision, being 30 and 50 metres walking distance from two bus stops. The bus stops serve 19 bus routes with frequent services (146, 158, 169, 185, 199, E54, E60, E69, 151, 178, 180, 188, B1, E78, E79, E80, E83, E85 and L90).
- b) The proposed development will significantly improve the traffic situation. Trip generation from boarding houses is likely to be mostly in the morning and afternoon commuter peak hours. It is likely that there will be a decrease in terms of car based trips as compared with the approved bank use, which, by its nature generates trips throughout the day.
- c) There are considerable on-street parking opportunities for the residents during the typical peak demand hours (outside of business hours). Refer to the survey analysis on page 6.
- d) It is important to note that surrounding developments mostly comprise commercial and retail uses. Therefore, residents of the proposed development will have less competition for on-street parking outside of business hours.

16. A pre-lodgement meeting (application number PLM2019/0229) was held by the Northern Beaches Council and the client. Concerns raised by the Northern Beaches Council related to traffic and parking are reproduced below.

Traffic Engineering

Council's Traffic has provided the following comments regarding the proposal.

- The existing approved development is a commercial/business use. The nature of its parking requirements are that of short term, high turnover.
- The proposed development consists of boarding houses as well as commercial/office spaces.
- Based on the existing approval, (like for like) the business component will not require dedicated spaces within the site.
- However, introducing a different use (the boarding house component) will require all associated parking to be accommodated onsite. This is because the nature of boarding house parking is long term which cannot be accommodated in the local streets.
- Further, the rate adopted under the Affordable Housing SEPP in February 2019 is 0.5 spaces per boarding room. Therefore the site will require the following parking allocations:
 - o 32 spaces for residents/tenants (Including at least 1 accessible space)
 - o 1 Manager Space
 - o 3 visitor spaces (DCP)

The fact that the site provides no parking cannot be supported by Council's Traffic Engineer.

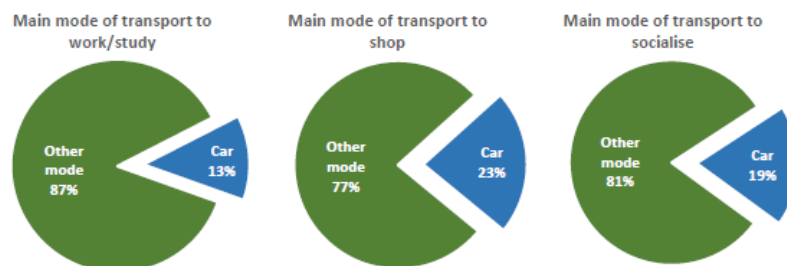
17. Amendments were made to the previous architectural drawings, submitted for the pre-DA meeting with the Council. The current drawings indicate that there is an opportunity to provide three (3) car parking spaces (refer to TEF drawings 19091/01 to 19091/03) after a rear access lane, proposed by Council, becomes available.

18. Council's Traffic Engineer's comments make a reference to the State Environmental Planning Policy (Affordable Rental Housing (SEPP ARH)) 2009 provisions. The car parking provision for boarding houses in the SEPP ARH are reproduced overleaf.

- (2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:
- (e) **parking**
if:
- (i) in the case of development carried out by or on behalf of a social housing provider in an accessible area—at least 0.2 parking spaces are provided for each boarding room, and
 - (ii) in the case of development carried out by or on behalf of a social housing provider not in an accessible area—at least 0.4 parking spaces are provided for each boarding room, and
 - (iia) in the case of development not carried out by or on behalf of a social housing provider—at least 0.5 parking spaces are provided for each boarding room, and
 - (iii) in the case of any development—not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site,
19. The minimum provision of 32 parking spaces, requested by the Council, was calculated using the rate from Clause 29 of SEPP ARH. However, it must be taken into account that SEPP ARH **does not** set out minimum parking rates **to be complied with**. Instead, SEPP ARH defines parking provision standards which, if achieved, cannot be used by a consent authority to refuse consent. In other words, SEPP ARH provides the maximum rates that can be requested by the authority, not the minimum rates to be provided.
20. SEPP ARH provides further clarification in this regard in Clause 29(4) as follows: “(4) A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2)”.
21. It must be noted that the Land and Environment Court NSW (LEC NSW) has previously granted an approval to a boarding house located at 727 Pittwater Road, Dee Why (2018/281364). This site is located within the same Dee Why CBD area. The approved boarding house (with 25 units) had very limited car parking provision (3 spaces) which was much lower than the maximum rate set out in the SEPP (ARH) 2009. However, the LEC NSW considered the car parking provision satisfactory.
22. In another recent LEC judgement, with regard to a proposed boarding house at No. 10 Naree Road, Frenchs Forest, Commissioner Timothy Horton has handed down the following findings in relation to the car parking provision that were below the SEPP ARH maximum rates:
- (2) Secondly, being located in an accessible area with employment hubs in close proximity, that affordable housing for key workers is intended to support, I accept that some occupants are likely to be attracted to the development for its proximity to those places of employment that would not demand of them ownership of a car.
 - (3) Thirdly, in my view it is reasonable to expect potential occupants of the building will consider the availability of car parking in the context of their own needs when evaluating the suitability of this development as a place to reside. Those prospective occupants with a car, but without a guaranteed space in which to park it, may opt for accommodation elsewhere. Those without a car may be attracted by having access to a carshare vehicle for those times when one is needed.
23. It is important to note here that, firstly, the above findings would fully apply to the currently proposed boarding house, and, secondly, that the proposed development is in a much better location than that at No. 10 Naree Road in relation to employment, essential services and public transport.
24. The potential need to own vehicles by the tenants of the proposed development is significantly reduced by the site's proximity to essential services. The site is located within walking distance to a large shopping centre (including grocery shopping), fast food outlets, banks, post office, medical centres, pharmacies and a church. There is a number of leisure and entertainment facilities (e.g. cafes, restaurants, traditional hotels, parks and the Stony Range Regional Botanic Garden) within walking distance as well. The Dee Why beach can be easily accessed both on foot and using a bicycle.
25. The UNSW report surveyed boarding houses in SSROC Council areas, including Sutherland Shire LGA, Canterbury-Bankstown LGA and Bayside LGA. Public transport infrastructure in these areas is not significantly

different, particularly if one considers the actual location of the proposed site, essentially in the middle of the Dee Why CBD, with good public transport provision and good access to facilities as described above. In this regard, it is important to note the results of the UNSW surveys.

Figure 3 Main modes of travel by purpose



26. As shown in the charts above, non-car modes of transport constitute in the order of 80% for travel to shop and to socialise. With most of the shopping and leisure facilities within walking distance from the proposed development it can be realistically assumed that the non-car travel mode share for the proposed development would be similar if not greater to those reported by the UNSW study.
27. It is also important to note that neither the DCP, nor the RMS (2002) Guide require any bicycle parking provision. The potential low income tenants of the proposed development are likely to own motorcycles, scooters and bicycles instead of cars. The proposed development provides parking for 34 bicycle spaces. Some of these spaces can be used by scooters. It is reasonable to expect that more than adequate bicycle / scooter provision would replace the need to use cars.
28. It is also of significant importance that the Northern Beaches Council recently introduced amendments to both the WLEP and WDCP. These amendments came into force on 28 February 2020. The Council recognises the specific criteria of the Dee Why Town Centre through the following objectives.

Warringah Local Environmental Plan 2011

Current version for 1 March 2020 to date (accessed 17 March 2020 at 12:12)

[Part 7](#) > [Clause 7.13](#)



7.13 Mobility, traffic management and parking

(1) The objectives of this clause are as follows—

- (a) to ensure improved vehicle access and circulation in the Dee Why Town Centre through good design and the management of traffic flows within the existing and new roads servicing the centre,
- (b) to ensure increased road network capacity and improved vehicle circulation through the Dee Why Town Centre,
- (c) to encourage alternative forms of transport from private vehicle use,
- (d) to minimise the disruption of pedestrian movement and safety,
- (e) to reduce the visual scale of parking, loading and waste collection facilities.

29. The proposed development complies with the above objectives by maximising the use of alternative forms of transport from private vehicle use. By doing so, it puts less vehicular traffic on the street network (thus having lesser impact on its capacity), reduces conflicts with pedestrian movements and visual impacts of parking.
30. Section 7 “Traffic and Parking” of Part G1 Dee Why Town Centre of the WDCP, in line with the WLEP, sets out the following objectives.

7 Traffic and Parking

Objectives

- To encourage walking, cycling, public transport and car sharing.
- To encourage integrated basement car parking areas with shared access in suitable locations.
- To reduce overall building bulk and scale (particularly within podiums) by locating parking underground.
- To ensure the security of residential parking areas in mixed use developments.

31. The proposed development complies with the first and, presumably, the main objective by minimising provision for private cars whilst at the same time maximising provision for cycling. The proposed design promotes a mode-shift away from car dependency and encourages walking, cycling and public transport use.

32. Section 8 “Car share” of Part G1 Dee Why Town Centre of the WDCP sets out the following objectives.

8 Car Share

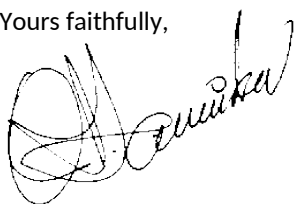
Objectives

- To provide off-street parking opportunities for car share.
- To reduce the reliance on private car ownership.
- To reduce traffic impacts and pressure on street parking.
- To support the reduction of car trips and encourage the use of sustainable transport.
- To facilitate public use of car share vehicles.

33. The future proposed three (3) car parking spaces at the rear of the site can be allocated to car share services (all 3 or some spaces). This would be consistent with the objectives of Section 8 “Car share” above and will negate or substantially reduce a need for private car ownership. The car share allocation would fully address the WDCP objectives.
34. In the meantime, before rear access would be available, some residents may still own a car (this is likely to be a very small number of residents, considering all the reasons presented above). It can be reasonably assumed that such residents would be employed not near the proposed development. They would require long term parking primarily outside of typical business hours (overnight). On-street parking areas have time restrictions, however these do not apply during the typical residential demand periods.
35. Parking demand surveys were conducted to check the availability of car parking spaces near the site.
36. The parking demand survey was conducted on Saturday March 7, 2020, representing typical peak demand periods for the proposed residential use and retail developments in the same area.
- The parking demand survey was conducted between 7:00 a.m. and 8:00 p.m.
37. The survey locations are shown in **Figure 1** at the end of this report.
- a) Within the public car park (CP1), there is a 3 hour parking restriction from 8:00 a.m. to 7:00 p.m. from Monday to Saturday.
 - b) Generally, the on-street parking restrictions are as follows.
 - 30 minutes parking restrictions: 8:30 a.m. to 3:00 p.m. from Monday to Friday and 8:30 a.m. to 12:30 p.m. on Saturday
 - 1 hour parking restrictions: 8:30 a.m. to 6:00 p.m. from Monday to Friday and 8:30 a.m. to 12:30 p.m. on Saturday.
38. The survey results are demonstrated in **Table 1** attached to this report.
39. The survey results for the business peak were as follows.
- a) The peak occurred at 11:00 a.m.
 - b) There were 53 spaces vacant in the public car park (CP1) during the peak.
 - c) There were 34 spaces vacant within 250 metres walking distance (on-street) from the site during the peak.
 - d) There were 87 spaces vacant within all areas during the peak.
40. During the typical peak parking demand for residential developments (before 9:00 a.m. and after 5:00 p.m), the results were as follows.
- a) There were at least 57 spaces vacant (to a maximum of 95) in the public car park (CP1).
 - b) There were at least 14 spaces vacant (to a maximum of 26) on-street within 150 metres walking distance from the site.
 - c) There were at least 16 spaces vacant (to a maximum of 29) on-street within 150 to 250 metres walking distance from the site.
 - d) There were at least 87 spaces vacant (to a maximum of 150) within all areas.
41. Ample parking opportunities exist during the typical residential peaks to cater for the likely additional parking demand by the proposed boarding house. Occasional short-term parking demand from residents during the business hours (for those residents leaving to work later or returning earlier) is also well catered for by car parking areas with time restrictions.
42. The proposed redevelopment is supportable on traffic and parking grounds.

Please do not hesitate to contact the undersigned should you require further information.

Yours faithfully,



Oleg I. Sannikov
Director
MEngSc (Traffic Engineering)
MIEAust PEng
FAITPM

Attachments:

- Excerpts from the UNSW report.
- Three (3) diagrams prepared by TEF Consulting

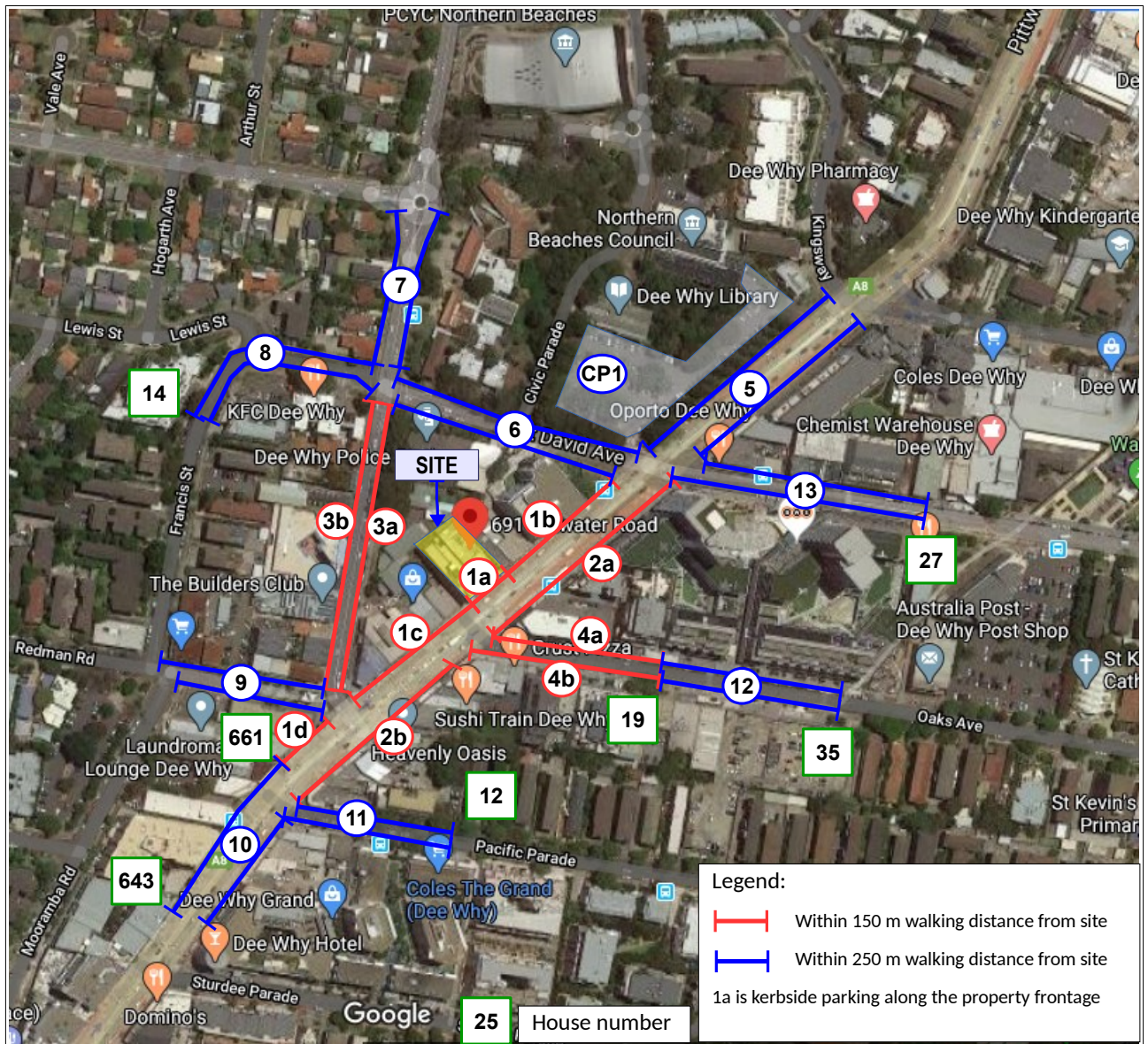


Figure 1. Parking survey locations.

Table 1. Parking survey results.

Saturday	Number of parked cars																						
07/03/20	Parking Location																			Total			
Time	CP1	1a	1b	1c	1d	2a	2b	3a	3b	4a	4b	5	6	7	8	9	10	11	12	13	1a-4b	5-13	All
7:00	70	1	9	2	No parking	No parking	1	6	12	10	10	1	8	No parking	3	5	3	1	23	7	51	51	172
8:00	67	1	6	2			1	12	13	9	10	6	8		3	6	4	3	17	9	54	56	177
9:00	105	0	8	2			0	12	14	10	10	11	8		3	6	4	3	17	5	56	57	218
10:00	107	1	7	2			3	12	15	10	11	6	6		3	5	6	2	13	5	61	46	214
11:00	109	0	7	2			4	11	14	10	12	8	7		3	6	8	2	13	5	60	52	221
12:00	86	1	8	3			5	12	9	10	11	8	6		2	6	12	2	15	4	59	55	200
13:00	78	1	6	2			3	14	10	10	10	11	8		2	6	11	2	16	4	56	60	194
14:00	73	1	5	2			4	12	18	9	11	7	5		2	6	9	3	15	4	62	51	186
15:00	63	0	6	2			3	9	13	9	10	7	6		3	6	6	2	16	3	52	49	164
16:00	55	0	6	3			2	13	12	10	8	4	6		3	6	8	3	11	4	54	45	154
17:00	67	0	2	3			2	9	11	10	10	5	7		3	6	6	1	12	4	47	44	158
18:00	75	0	1	2			3	9	15	10	10	2	6		3	5	9	3	17	4	50	49	174
19:00	74	1	2	3			5	11	17	10	10	7	6		3	5	8	4	17	4	59	54	187
20:00	68	0	2	2			5	7	12	9	12	2	6		3	6	8	4	15	4	49	48	165
No of spaces	162	1	9	3	NP	NP	5	15	18	10	12	20	8	NP	3	6	10	4	18	4	73	73	308

Saturday	Number of vacant parking spaces																						
07/03/20	Parking Location																			Total			
Time	CP1	1a	1b	1c	1d	2a	2b	3a	3b	4a	4b	5	6	7	8	9	10	11	12	13	1a-4b	5-13	All
7:00	92	0	0	1	No parking	No parking	4	9	6	0	2	19	0	No parking	0	1	7	3	-5	-3	22	22	136
8:00	95	0	3	1			4	3	5	1	2	14	0		0	0	6	1	1	-5	19	17	131
9:00	57	1	1	1			5	3	4	0	2	9	0		0	0	6	1	1	-1	17	16	90
10:00	55	0	2	1			2	3	3	0	1	14	2		0	1	4	2	5	-1	12	27	94
11:00	53	1	2	1			1	4	4	0	0	12	1		0	0	2	2	5	-1	13	21	87
12:00	76	0	1	0			0	3	9	0	1	12	2		1	0	-2	2	3	0	14	18	108
13:00	84	0	3	1			2	1	8	0	2	9	0		1	0	-1	2	2	0	17	13	114
14:00	89	0	4	1			1	3	0	1	1	13	3		1	0	1	1	3	0	11	22	122
15:00	99	1	3	1			2	6	5	1	2	13	2		0	0	4	2	2	1	21	24	144
16:00	107	1	3	0			3	2	6	0	4	16	2		0	0	2	1	7	0	19	28	154
17:00	95	1	7	0			3	6	7	0	2	15	1		0	0	4	3	6	0	26	29	150
18:00	87	1	8	1			2	6	3	0	2	18	2		0	1	1	1	1	0	23	24	134
19:00	88	0	7	0	0	4	1	0	2	13	2	0	1	2	0	1	0	14	19	121			
20:00	94	1	7	1	0	8	6	1	0	18	2	0	0	2	0	3	0	24	25	143			

Note: negative numbers indicate vehicles parked illegally

Research Paper by NSW University's City Futures Research Centre

The University of New South Wales undertook a research paper to assess the effectiveness of Division 3 (Boarding Houses) under the Affordable Rental Housing SEPP 2009.

Key Takeaways:

1. The research showed boarding houses accommodate a demographic who have a very low reliance on cars and car ownership. The statistics showed that less than 23% of occupants used a car regularly and 74% of boarding rooms were occupied by a single tenant only.
2. Page 7 of the report states that the policy changes requiring the provision of increased off street parking in boarding houses will typically mean excavation and underground parking will be required. This in turn increases the costs of delivery and undermines the feasibility of a boarding house relative to other potential land uses.
3. Figure 2.3 on page 8 and data on page 9 speak further to the fact that over two thirds of occupants do not own vehicles and that access to public transport is of a high important in reducing reliance on private means of transportation.
4. The research also shows that 91% of tenants were employed or in tertiary study with two-thirds already holding tertiary qualifications – speaking to the type of occupant and opposing the general view of local communities that the occupants will be “undesirables”.

Key points have been highlighted and included on the following pages and the full document is available in **Appendix D**.

We have reached out to NSW Planning on numerous occasions to seek access to the research relied upon in the implementation of the changes to parking and 12 room limit in the R2 zone and have had no success. It is unclear if supporting data was researched or relied upon at all at this stage.



Built Environment

City Futures Research Centre

Occupant Survey of Recent Boarding House Developments in Central and Southern Sydney

A research report commissioned by Southern Sydney Regional Organisation of Councils (SSROC)

Dr Laurence Troy, Dr Ryan van den Nouwelant & Prof Bill Randolph

June 2019



Executive Summary

Since 2009, boarding house developments have been permitted, even incentivised, in some locations under Division 3 of the Affordable Rental Housing SEPP. Their purpose, as outlined in Department of Planning material accompanying the SEPP's introduction, is to provide accommodation that is accessible to tenants who could find it difficult to obtain mainstream rental accommodation, reduce social housing waitlists and provide a market-based form of transitional housing. However, there has been little assessment of the extent to which dwellings produced under the provisions of the SEPP align with these intentions.

This report summarises the findings of a survey of occupants of recent boarding house developments in the Southern Sydney Regional Organisation of Councils (SSROC) region. The survey was hand delivered to all operational boarding houses approved under the SEPP, excluding purpose-built student accommodation (PBSA) across the SSROC region. The purpose of the survey was to address five research questions:

1. Have boarding house approvals resulted in the construction of new boarding houses?

Overall, of the estimated 6,000 boarding rooms approved (excluding PBSA), around half were deemed operational. More pertinently, and discussed below, very few were akin to 'traditional' boarding houses.

Previous research by City Futures (Troy *et al* 2018) identified 334 approvals for new or expanded boarding houses. Of this, some 17 were identified as PBSA, (based on landowner, applicant or operator) and a further 29 approvals relating to a site with multiple approvals. Of the 288 other boarding houses, only 237 were deemed to be operational, based on bond lodgement, registration under the Boarding House Act and inspection aerial photography via Nearmap for construction works. Hand delivery of survey invitations further reduced the evident number of operating boarding houses to 195, to which invitations were delivered.

2. What is the profile of occupants of recent boarding house developments?

Overall, occupants of boarding houses were much closer in profile to typical renters than to traditional boarding house occupants or social housing waitlists.

While diverse, they were overwhelmingly employed or in tertiary studies (91%), with two-thirds already holding a tertiary qualification. They were mostly (65%) overseas born (though not all recent arrivals), mostly (63%) under 35 years old, and evenly split along gender lines (54% female). Only one third of occupants owned a car and even fewer (less than 23%) used a car regularly. And boarding rooms were typically occupied exclusively by a single tenant (74%) or with a partner (19%).

3. What are the housing needs of those occupants, and the suitability of boarding houses in meeting them?

Much like the tenant profile, the boarding room profile was much closer to private rental studios than traditional boarding houses typified by communal living arrangements.

The vast majority (86%) were rented out under formal tenancy agreements (cf. lodgings). A similar proportion were self-contained, with private bathrooms and kitchens, and in some cases partially furnished (less than 50%, varied by furnishing). Around half had access to common areas and onsite management (41%). Very few had access to a car space (16%). Boarding houses were well located and, importantly, location and neighbourhood factors were more important than building or apartment factors in resident consideration and satisfaction.

4. Are boarding rooms a satisfactory long-term accommodation option?

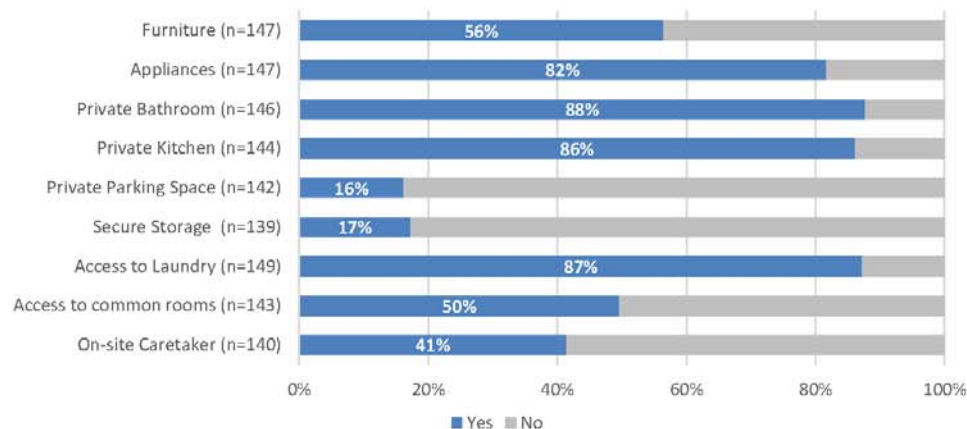
These amenities would be a higher standard than that available to occupants of older, more traditional, boarding houses. However, very few occupants evidently come from that clientele.

Compared with traditional apartment rentals, the main benefits to offset the much smaller private space are evidently the location, modern clean buildings, furnishings, common areas (like laundry) and onsite management.

reporting access to common rooms (50%). Just over half of respondents (56%) reported furniture being provided with the dwelling, while 82% reported some appliances, such as a fridge or microwave, being provided. In other words, this suggests that the majority of dwellings are coming with some level of furnishing beyond what you might typically expect from a standard vacant rental dwelling. Very few respondents had access to private parking, which is to be expected based on the level of car parking provision required under the AHSEPP.

Figure 1 Dwelling layout and amenity provision

Does your studio come with the following things?



One of the requirements of the AHSEPP is that boarding houses cannot be strata subdivided and as such it was a little unclear on what the status of each of the dwellings are in relationship to overall dwelling counts. Our approach was to try and understand whether dwellings were functionally operating as independent units comparable to a standard apartment. 85 (36%) of the buildings visited had separate letterboxes for each of the dwellings, suggesting at least the potential for separate unit addresses.

Less than half (39%) appeared to be new buildings, with a further 16 sites visited (6.7%) currently under construction. This suggests that the majority of development applications appear to be in relation to existing buildings, either because they were already operating as a boarding house or are in the process of being converted. This is reflected in observations that around 46% of all buildings visited were indistinguishable from the surrounding development typology.

Cars, Parking and Transport

As noted in the introduction, one aspect of the boarding house provisions that have undergone multiple amendments since its introduction relate to the provision of off-street parking for residents. This stems from concerns that the higher-intensity of land-use, which boarding houses likely represent over the previous land-use would place additional strain on on-street parking availability.

The justification for these concessions – while not explicit in this particular policy (but see amendments to the apartment design guide) – stem from the recognition that providing off-street parking for boarding houses will typically mean underground parking that requires extensive excavation and storm-water management. Underground parking adds significant costs to a development, so would undermine the feasibility of a boarding house, relative to other potential land-uses/developments, on a given site.

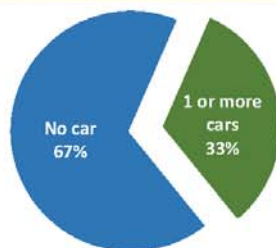
The results of the survey were quite clear, with two thirds of tenants not owning a car (Figure 2). While not a perfect comparison, this is a comparable proportion to private renters in studio apartments across Greater Sydney,

as reported in the 2016 census.¹ Given the sample size, it is not possible to extract reliable statistics for a sub-sample. However, the survey responses did indicate that the proportion of tenants that did not own a car was higher closer to the city and lower (but still a majority of respondents) further from the city.

In terms of the match between providing off-street parking and car ownership, the current requirement that one-space-for-two-rooms be provided is in excess of that evidently needed. Prior to the 2018 amendments, one-space-for-five-rooms was required for boarding rooms within 400m of a public transport node, and two-spaces-for-five-rooms was required in other areas. A qualitative interpretation of the distribution of survey invitations and responses suggest that this is close to actual ownership rates, and close to the difference in ownership rates across the study area. Again, though, it should be noted that the exact location of each respondent was not recorded, so the ownership rates within/beyond the public transport nodes cannot be confirmed directly.

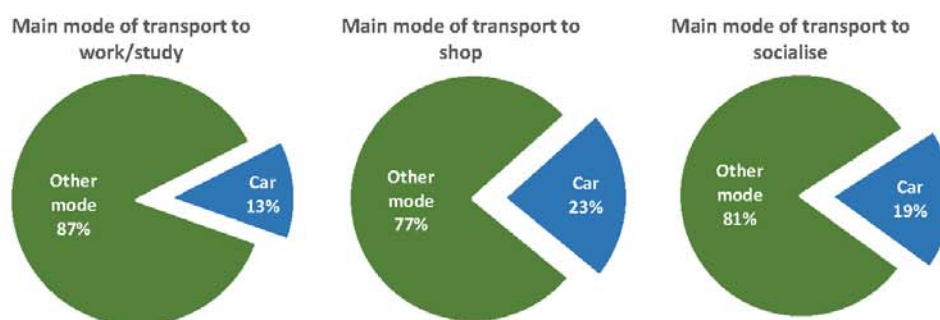
Figure 2 Car ownership

How many cars are owned by your household



Beyond the planning objective of meeting demand for private car ownership close to public transport nodes, is one of managing demand in areas with high levels of public transport provision. In this regard, a more important finding is that the proportion of respondents that identified something other than a private car as their primary means for getting to work/study, for getting to the shops, and for leisure activities exceeded the two-thirds figure of those without a car (see Figure 3). This translates to between, roughly, one third (for leisure activities) and two thirds (for work/study commutes) of car owners not primarily using their cars for these activities.

Figure 3 Main modes of travel by purpose



¹ The count of Greater Sydney GCCSA households renting (excluding those renting from state housing authority or community sector organisation) an apartment (all categories described as a 'flat') with no bedrooms (i.e. including bed-sitters) was 6,762. Of those households, the count owning no motor vehicles was 4,511.

Occupant Survey of Recent Boarding House Developments in Central and Southern Sydney

This speaks to the important role of public transport in reducing the evident need for private means of transport. A parallel consideration needs to be made on the provision of other public amenities and services that are needed to offset the absence of private provision within a boarding house development. This includes public parks to offset the lack of private open space, and even local retail and hospitality sectors to offset the lack of full kitchens to store and prepare meals.