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TRAFFIC AND PARKING IMPACTS REPORT FOR A DEVELOPMENT APPLICATION FOR A PROPOSED RESIDENTIAL DEVELOPMENT AT Nos. 75-77 FOAMCREST AVENUE NEWPORT NSW 2106

Property address	75-77 Foamcrest Avenue, Newport NSW 2106
Client	Richard Cole Architecture
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Date	09/12/2020
Job No.	20106
Report No.	20106 Rep 01

Item	Report
Site location	Refer to Figure 1.
Existing land	75 Foamcrest Avenue
use	 One (1) single storey residential dwelling
	77 Foamcrest Avenue
	 One (1) single storey residential dwelling
Proposed	Double storey residential development
development	 7 apartments
	 3 two-bedroom apartments
	 4 three-bedroom apartments
	• Basement car park
	 17 car parking spaces





Figure 1. Site location.



Item	Report		
	Existing traffic and parking situation		
Street	Refer to Figure 2.		
characteristics	The key roads around the proposed development are described below.		
	• Foamcrest Avenue		
	 Local road 		
	 2 travel lanes and parking opportunities on both sides 		
	• Neptune Road		
	Local collector road		
	 2 travel lanes and parking opportunities on both sides 		
	• Coles Parade		
	 Local road 		
	 1 travel lane and parking opportunities on southern side 		
	Ocean Avenue		
	 Local road 		
	 2 travel lanes and parking opportunities on both sides 		
	• Barrenjoey Road		
	 State road (MR 164) 		
	 2-4 travel lanes and parking opportunities on both sides 		
	 Other streets in the surrounding area are local/local collector roads. Street conditions are typical for a residential area, with low to moderate traffic volumes. 		
	 General speed limit is 50 km/h on local streets around the site. 		
	Public transport		
	 The site has very good public transport provision, with 5 bus routes being within close walking distance. 		
	• Refer to Figure 3.		
Bus	 There are bus stops located within close walking distance, approximately 250 metres from the site, on both side of Barrenjoey Road. 		
	• Bus route 188		
	 City QVB to Avalon Beach (Express Service) 		
	 No services operate during the morning and afternoon peak hours. 		
	 Mona Vale to City Wynyard (Express Service) 		
	 No services operate during the morning and afternoon peak hours. 		
	• Bus route 188X		
	 City Wynyard to North Avalon Beach (Express Service) 		
	 No services operate during the morning peak hours. 		
	 11 services operate during the afternoon peak hours. 		
	 North Avalon Beach to City Wynyard (Express Service) 		
	 10 services operate during the morning peak hours. 		
	No services operate during the afternoon peak hours.		
	• Bus route 189X		
	 City Wynyard to Avalon Beach (Express Service) 		
	 No services operate during the morning peak hours. 		
	 3 services operate during the afternoon peak hours. 		



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		Avalon Beach to City Wynyard (Express Service)	
		• 3 services operate during the morning peak hours.	
		 No services operate during the afternoon peak hours. 	
• Bus route 190X		Bus route 190X	
		City Wynyard to Palm Beach (Express Service)	
		1 service operates during the morning peak hours.	
		 No services operate during the afternoon peak hours. 	
		 Palm Beach to City Wynyard (Express Service) 	
		2 services operate during the morning peak hours.	
		2 services operate during the afternoon peak hours.	
	0	Bus route 199	
		 Manly to Palm Beach 	
		 13 services operate during the morning peak hours. 	
		 12 services operate during the afternoon peak hours. 	
		Palm Beach to Manly	
		 14 services operate during the morning peak hours. 	
		 12 services operate during the afternoon peak hours. 	
		• The morning peak hours are considered to be between 6:30 a.m. and 9:30 a.m. and the afternoon peak hours are considered to be between 3:30 p.m. and 6:30 p.m.	





Figure 2. Street characteristics.





Figure 3. Public transport.



Item	Report
Planning control	Northern Beaches Council
document	 Pittwater 21 Development Control Plan 2014
	 Section B – General controls
	Requirement Compliance
	B6.1. Access Driveways and works on the public road reserve
	General Requirements
	Access Driveways include the driveway Noted pavements, gutter crossings, supporting retaining walls, suspended slabs and related structures located on the public road reserve between the road edge and property boundary as illustrated in Appendix 10 -Driveway Profiles.
	An Access Driveway to the standards as set out Complies below must be provided for:
	any new development;
	 any alterations and additions where the sum of the additional Gross Floor Area (GFA) of the dwelling exceeds 30 m²; and
	 where additional car parking spaces and/or garages are proposed.
	Where there is an existing driveway and the Not applicable applicant proposes to retain the existing driveway, the applicant will be required to demonstrate compliance with this control.
	Access Driveway Design
	The design of all Access Driveways shall be in accordance with the current edition of following Australian Standards:
	 Australian Standard AS/NZS 2890.1- Complies with AS/NZS 2890.1:2004 2004: Parking Facilities – Part 1: Off- Street Car Parking.
	 Australian Standard AS/NZS 2890.2- Not applicable 2002: Parking Facilities – Part 2: Off- Street Commercial Vehicle Facilities except as qualified in this control.
	Number of Access Driveways per Allotment
	The number of permissible Access Driveways to an allotment is as follows:
	 where the frontage of an allotment to Not applicable a local public road is less than 30m, one only access driveway.
	 where the frontage of an allotment to One (1) access driveway is proposed. a local public road is 30m or more, a second access driveway will be complies considered on merit.
	 where the allotment has a frontage to Not applicable second local public road, one additional access driveway to the second local road frontage will be considered on merit, based on Council's consideration of the site constraints.
	Council, under the <i>Local Government Act 1993</i> , Noted may direct as to which frontage access is to be gained where traffic safety issues are a consideration.



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	Requirement	Compliance
	Shared Driveways and Access Driveways located in front of adjoining properties	
	Shared Access Driveways shared between adjoining private properties and Access Driveways located in front of adjoining properties will be considered on merit, based on Council's consideration of the site constraints.	Not applicable
	Access Driveway for Service Vehicles to Loading Dock	
	Access Driveways providing access for service vehicles to loading docks must be separated from access used by the general public for access to public parking areas.	Not applicable
	Access Driveways providing access for service vehicles to loading docks shall, where practical, be located on a rear public road frontage providing separation from pedestrian activity.	Not applicable
	Where Access Driveways are located on the same frontage, the minimum distance between an Access Driveway for service vehicles and an Access Driveway for the general public shall be 5 metres from the inside edge to the inside edge of the Access Driveways.	Not applicable
	Access Driveway Location	
	Access Driveways shall be designed and located to provide adequate sight distance to maximise pedestrian and vehicular safety as follows:	Complies with AS/NZS 2890.1:2004
	 minimum clear distance along the road frontage edge of kerb of 50 metres for 40 and 50 kph speed limit roads measured from a point on the centreline of the driveway 2.5 metres from the face of kerb; and 	
	• minimum clear distance along the frontage footway of 5 metres, measured from a point on the centreline of the driveway 2.5 metres from the edge of footway area closest to property boundary.	
	For corner allotments, the closest point of the Access Driveway shall be located at the maximum practical distance from the intersection of adjoining roads, being no closer than 6m from the tangent point at the kerb.	Not applicable
	For corner allotments adjacent to traffic signals, the location of the Access Driveway will be subject to the approval of the Roads and Maritime Services as the authority responsible for traffic signal facilities.	Not applicable
	For developments in commercial centres where separate entry/exit vehicular access is required, access driveways for entry and exit are to be separated by a minimum distance of 2 metres.	Not applicable
	The location of the Access Driveway is to maximise the retention of trees and native vegetation in the public road reserve.	Complies

Access Driveway Width

The maximum width of an Access Driveway for The proposed development is classified as a



ltem	Report	
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	dual occupancies, dwellings houses, secondary dwellings, exhibition homes, rural works dwellings and tourist and visitor accommodation shall be as follows:	residential flat building.
		Due to the driveway being a single lane driveway and due to a bend at the entry to the car park, there is a need to manage opposing traffic movements.
		Management of the opposing movements is proposed by means of a traffic signal system.
		To ensure that no queuing occurs on the street, the first 6.0 m of the driveway are proposed to be widened to 5.5 m.
		The driveway design complies with AS/NZS 2890.1:2004
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Distance Building Line to Boundary	Width at Boundary	Width at Kerb
Nil to 3.5m	Width of car parking area or garage opening	Width of car parking or garage opening plus 0.5m
Greater than 3.5m to 6.5m	4.0m	4.5m
Greater than 6.5m	3.0m	3.5m

Access Driveway width can be varied subject to As above. a merit based consideration.

Access Driveway Profile and Gradient

Access Driveway profiles shall conform to the Complies with AS/NZS 2890.1:2004 profiles as illustrated in Appendix 10 - Driveway Profiles.

Access Driveway Construction and Finishes

All Access Driveways shall be constructed with Capable of compliance at the Construction an impervious pavement and gutter crossing Certification stage. construction.

Gutter crossings are to be in plain concrete. Capable of compliance at the Construction Certification stage.

Access Driveways are to be in plain concrete. Capable of compliance at the Construction Cosmetic Access Driveways on a public road Certification stage. reserve are not permitted.

Access Driveways are to match with the Complies adjacent constructed footpaths or alternatively adjacent constructed footpaths are to be adjusted to provide a continuous surface with no trip points with a maximum 1:14 (V:H) transition.

The Access Driveway is to be structurally Complies adequate for its intended use.

Suspended driveways must not use the existing Not applicable road structure for support.

Ancillary Structures within the Road Reserve

Ancillary structures within the Road Reserve Not applicable will be supported for the purposes of structurally supporting the access driveway only. Ancillary structures include retaining walls.

Encroachment into the road reserve is to be Complies minimised.

Where retaining walls and structures are Capable of compliance at the Construction visible from a public place, preference is given Certification stage. to the use of textured finishes of dark earthy tones or sandstone-like finishes.

All structural elements within the Road Reserve To be addressed by others



Item	Report	
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	must be certified by a Structural Engineer.	
	In addition, where the land is identified on the Landslip Hazard Map, the design of all structural elements must satisfy the Landslip Hazard Controls.	Not applicable
	Access Driveway – Stormwater Drainage	To be addressed by others
	Access Driveway and Public Utilities Costs	
	The cost for Access Driveways construction and maintenance and adjustment of any utility service is the responsibility of the Applicant.	Noted
	B6.2. Internal Driveways	
	General	
	An Internal Driveway must be provided for in:	Complies
	Any new development;	
	 Development where additional car parking spaces and/or garages are required by Council's plans or policies; 	
	 Any alterations and additions where the sum of the additional Gross Floor Area (GFA) of the dwelling exceeds 30 m2; and 	
	 Development where additional car parking spaces and/or garages are proposed. 	
	If the applicant proposes to retain the existing driveway, the applicant will need to demonstrate compliance with the outcomes and driveway standards of this control.	Not applicable
	Internal Driveway	
	Internal Driveway Profiles	
	Internal Driveways are to be designed and constructed to provide safe access and shall have a maximum gradient of 1:5 (V:H). Recommended maximum gradient of an Internal Driveway for a distance of 2m on the approach to a garage, parking area or carport is 1:20 (V:H). There must be a minimum 2 metre long transition between the driveway and the garage/parking area/carport in accordance with the standards.	Complies with AS/NZS 2890.1:2004
	For Internal Driveways on steeply sloping or difficult sites, gradients may be increased up to 1:4 (V:H) over a maximum 20 metre length.	Complies with AS/NZS 2890.1:2004
	Provision is to be made for vehicles to enter and leave the site in a forward direction, where:	All vehicles enter and leave the site in a forward direction.
	 The internal driveway grade exceeds 1:4 (V:H); 	Complica
	 The land abuts a roadway subject to high pedestrian use (e.g. School, Commercial Centre); 	
	• Driveways are more than 30m in length; and	
	The driveway enters onto a classified road.	
	Internal Driveway Stormwater Drainage	To be addressed by others



Item	Report	
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	Internal Driveway Construction/Finishes	
	Internal Driveways shall have a stable surface for all weather construction. Internal Driveways where visible from a public road or public place are to be constructed of materials that blend with the environment and of dark earthy tones or natural materials.	Capable of compliance at the Construction Certification stage.
	Internal Driveway Design for all other uses than dual occupancies, dwelling house, secondary dwellings, exhibition homes, rural works dwellings and tourist and visitor accommodation.	
	The design of all Internal Driveways and ramps shall be in accordance with the current edition of the following Australian Standards:	
	 Australian Standard AS/NZS 2890.1- 2004: Parking Facilities – Off-Street Car Parking. 	Complies with AS/NZS 2890.1:2004
	• Australian Standard AS/NZS 2890.2- 2002: Parking Facilities – Off-Street Commercial Vehicle Facilities except as qualified in this control.	Not applicable
	Driveway width for dual occupancies, dwellings, secondary dwellings, exhibition homes, rural works dwellings and tourist and visitor accommodation.	Not applicable
	Internal Driveway and Driveway Corridor Width for all other development than dual occupancies, dwellings, secondary dwellings, exhibition homes, rural works dwellings and tourist and visitor accommodation	
	Internal Driveways shall be designed and constructed to the minimum practical pavement width needed to facilitate access and turning movements.	Complies
	Internal Driveways shall be designed and constructed to minimise the area of impervious pavement within the land. Track style driveways are encouraged where practical.	Capable of compliance at the Construction Certification stage.
	Turning movements are to be in accordance with the turning paths for a B85 vehicle (Australian Standard AS/NZS 2890.1-2004: Parking Facilities – Part 1: Off-Street Car Parking).	Complies with AS/NZS 2890.1:2004
	B6.3. Off-street vehicle parking requirements	
	The minimum number of vehicle parking spaces to be provided for off-street parking is as follows for dual occupancies, dwelling houses, secondary dwellings, exhibition homes, rural workers' dwellings and tourist and visitor accommodation:	Not applicable
	For a Secondary Dwelling a minimum of 1 space is required in addition to existing requirement for the principal dwelling (based on number of bedrooms in principal dwelling).	Not applicable
	Minimum dimensions of internal space for on- site parking are:	Complies with AS/NZS 2890.1:2004



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Requirement		Compliance	
Single car parking spaces on hard stand and Single Carport		2.4 metre x 5.5 metre with 0.3m minimum clear space each side for access to doors	
Enclosed garage(internal dimension)		3.0 metre x 6.0 metre, with 2.4 metre minimum width entry	
Multiple side by side carport and enclosed garage(internal dimension)		5.7 metre x 6.0 metre for 2 adjacent vehicles + 2.7 metre width for each additional vehicle with, 2.4 metre minimum width entry per vehicle space	

The maximum cross-fall in any direction for an Not applicable open car parking space is 1:20 (V:H).

For all other uses, the minimum number of vehicle parking and service spaces to be provided within the development site for new development and extensions to existing development is to be in accordance with the following:

- The total number of spaces as set out As below. in TABLE 1 below;
- PLUS the number of on-street parking Not applicable spaces lost as a direct result of the development due to access and traffic facilities requirements.

TABLE 1: Onsite Car Parking requirements

Development Type	Minimum Number of. Car Spaces		
Multi Dwelling Housing, Residential	1 bedroom dwellings	1 space per dwelling	
Flat Buildings and Shop-Top	2 or more bedroom dwellings	2 spaces per dwelling	
Housing:	Adaptable Housing in accordance with control C1.9 of	1 space per dwelling in accordance with AS	
	the Pittwater 21 Development Control Plan.	4299-1995: Adaptable Housing.	
	The provision of parking for people with disabilities must be provided at a rate of 3% of the require		
	parking spaces, excluding parking required for Adaptable Housing.		
	Separate visitor parking is to be provided at a rate of 1 space per 3 dwellings rounded up.		
	Provision must be made for garbage collection, removalist vans and emergency vehicles.		
	For developments with 10 or more dwellings, a vehicle wash bay is to be provided.		

Car parking required	Car parking proposed	
2 spaces per two or more bedroom dwellings	14 spaces are proposed.	
• 7 x 2 = 14 spaces	Complies	
1 visitor space per 3 dwellings	3 spaces are proposed.	
• 7/3 = 2.3, say 2 spaces	Complies and exceeds	
Total parking required	17 spaces are proposed.	
• 14 + 2.3 = 16.3, say 16 spaces	Complies and exceeds	
Accessible car parking required	Accessible car parking proposed	
3% spaces to be accessible • 17 x 3/100 = 0.5, say 1 space	As per the advice from the accessibilit consultant (Michael Moutrie of Accessibl Building Solutions), it is noted that the width of all the garages (6000 mm) provide sufficier space to load/unload as if it were a share zone. As such, the garages can effective double up as both a car parking space or shared zone if required.	
	Satisfactory.	
	Provision for garbage collection, removalist vans and emergency vehicles	
	There will be no changes to the existing waste collection. Kerbside waste collection is proposed.	

Vans and emergency vehicles (demonstrated in the 'Appendix' by a B99 vehicle as per AS/NZS



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	2890.1:2004) can access the basement car park when required.
	Satisfactory.
Car wash bays required	Car wash bays proposed
The proposed development has 7 dwellings.	Nil spaces are proposed.
• No wash bay is required.	Complies
Bicycle Storage	
For residential development (other than a dwelling house, dual occupancy, secondary dwellings, exhibition homes and rural workers' dwellings), secure bicycle storage facilities must be provided within the building at the rate of 1 bicycle rack per 3 dwellings.	As below.
Bicycle parking required	Bicycle parking proposed
The proposed development has 7 dwellings. • 7/3 = 2.3, say 2 spaces	It is proposed that storage areas within the private garages be used for bicycle parking if required.
	Satisfactory.
For Business/Industrial development or additions comprising of 200m ² GFA or more, secure enclosed bicycle storage facilities must be provided within the building at the rate of 1 bicycle rack per 1000m ² GFA, or a minimum of 4 bicycle racks, whichever is the greater.	Not applicable
Motor Cycle Parking	
For Business/Industrial development or additions comprising of 200m ² GFA or more, provision is to be made for motor cycle parking at a rate of 1 motor cycle parking space per 100 motor vehicle spaces.	Not applicable
Shop Top Housing	Not applicable
On-Site Car Parking Facilities	
The design of all parking areas shall be in accordance with the current edition of the following Australian Standards:	
 Australian Standard AS/NZS 2890 12004: Parking Facilities Part 1: Off Street Car Parking; 	Complies with AS/NZS 2890.1:2004
Australian Standard AS/NZS 2890.2- 2002: Parking Facilities – Part 2: Off- Street Commercial Vehicle Facilities;	Not applicable
• Australian Standard AS/NZS 2890.3- 1993: Parking Facilities Part 3: Bicycle Parking Facilities; and	Not applicable
• Australian Standard AS/NZS 2890.6- 2009: Parking Facilities – Part 6: Off- Street Parking for People with Disabilities except as qualified in this control.	Not applicable
Surface Car Parking Areas	Not applicable
Residential Car Parking for Residential Flat Buildings, Shop Top Housing, Mixed Use Development, Multi Dwelling Housing and Seniors Housing	
The following are applicable in respect of	



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	residential car parking areas:	•
	• Where there are dwellings with two (2) or more bedrooms in a development, tandem parking spaces may be permitted where all of the following criteria are met:	Not applicable
	 Two (2) parking spaces have been allocated per two (2) or more bedroom apartments; 	
	 The proportion of tandem parking spaces does not exceed 10% of the total residential parking for two (2) or more bedroom units; and 	
	°	
	B6.5. Access Driveways and Works on Road Reserves on or Adjacent to a Main Road	
	Approval for works on the public road reserve under Section 138 of the Roads Act 1993	
	Applicants will be required to obtain approval under Section 138 of the <i>Roads Act</i> 1993, providing authorisation for works on the main road to construct an Access Driveway and associated structures located on a public road reserve except in the case for a Dwelling House where there is existing kerb and gutter and the proposed driveway is of slab or paving on ground construction requiring minimal alteration of the existing ground level.	Noted
	The issue of the approval for works on a public road reserve to be undertaken by the Applicant, will be subject to development consent for the adjacent land being issued by the Council.	Noted
	Egress from an Access Driveway	
	All Access Driveways with access to a Main Road shall be designed to ensure vehicles enter and leave in a forward direction.	Complies
	Access to Alternative Public Road	
	An Access Driveway from allotments adjoining a Main Road is not permitted where alternative access to a local road is available or can be made available via a right-of-way or easement.	Not applicable
	Access Driveways in Newport Commercial Precinct and Mona Vale Commercial Precinct	Not applicable
	B6.7. Transport and Traffic Management	
	Transport and Traffic Planning	
	Where development generates pedestrian, cyclist, traffic and transport requirements in excess of the capacity of the existing road and transport network, the capacity of the surrounding public infrastructure and transport network is required to be upgraded to at least match the additional demands generated by the development.	Not applicable
	Any improvement works external to the development site, required to ensure the development complies with this control, must	Not applicable



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	be provided as part of the development at the full cost to the applicant.	
	All traffic assessments are to be undertaken in accordance with the Roads and Maritime Services <i>Guidelines for Traffic Generating Developments</i> or similar guidelines.	Complies
	All proposed traffic facilities must comply with the Roads and Maritime Services and/or relevant Australian Standards.	Complies
	An assessment of the impact of traffic generated by the proposed development on the local street system must be undertaken.	Complies
	Adequate vehicular entrances to and exits from the site are to be provided so that vehicles using those entrances and exits will not endanger persons using adjoining roads.	Complies
	Adequate space is to be provided within the site of the building or development for the loading, unloading or fueling of vehicles, and for the picking up and setting down of passengers.	Visitor spaces can be used for loading/unloading, fuelling of vehicles and picking up/dropping off passengers. Satisfactory.
	Traffic and Transport Facilities and Public Utilities Costs	
	The cost for traffic and transport facilities and adjustment of any utility service is the responsibility of the Applicant.	Noted



Item	Report		
	 Traffic impacts		
Traffic	Base traffic generation rates		
generation	 From RMS (2002) Guide to Traffic Generating Developments 		
	Updated data from TDT 2013/04a		
	Existing traffic generation		
	 75 Foamcrest Avenue 		
	 Weekday peak hour vehicle trips – one (1) single storey residential dwelling – 0.85 trips per dwelling 		
	 1 x 0.85 = 0.85, say 1 trip 		
	 77 Foamcrest Avenue 		
	 Weekday peak hour vehicle trips – one (1) single storey residential dwelling – 0.85 trips per dwelling 		
	• 1 x 0.85 = 0.85, say 1 trip		
	• Total		
	• 1 + 1 = 2 trips		
	Traffic generated by proposed development		
	 Medium density residential flat building 		
	 Weekday peak hour vehicle trips – 0.4 to 0.5 per dwelling (up to two bedrooms) 		
	3 two-bedroom dwellings		
	• $(0.4 \text{ x } 3)$ to $(0.5 \text{ x } 3) = 1.2$ to 1.5 trips during the peak hour		
	 Weekday peak hour vehicle trips – 0.5 to 0.65 per dwelling (three or more bedrooms) 		
	4 three-bedroom dwellings		
	• (0.5 x 4) to (0.65 x 4) = 2 to 2.6 trips during the peak hour		
	• Total		
	• (1.2 + 2) to (1.5 + 2.6) = 3.2 to 4.1, say 3 to 4 trips		
	Additional traffic generation		
	 Weekday peak hour vehicle trips 		
	• (3 to 4) - 2 = 1 to 2 trips		
Safety	Accident statistics		
	 Accident statistics from RMS NSW indicate no crashes in 5 years. Safety risks are very low and do not preclude a residential development at the proposed location. 		
	Refer to Figure 4.		
	 It is also important to note that the proposed access to the site is not on the main road and is 110 metres from the Foamcrest Avenue / Neptune Road intersection. 		
Conclusion	 Additional traffic generation is very minor and will have no noticeable impact on the existing road network operation nor on road safety. 		





Figure 4. Crashes map - near the site and in the area.



Conclusions

- Proposed parking provision
 - Complies with the Council's Development Control Plan requirements.
- Traffic impacts
 - The additional traffic from the proposed development will be minimal and will have no noticeable impacts on the street network operation.
- Design of access, car parking and servicing facilities
 - Complies with the relevant Standards.
 - The proposed development is supportable on traffic and parking grounds.

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References:

Pittwater 21 Development Control Plan 2004 RMS (2002) Guide to Traffic Generating Developments AS/NZS 2890.1: 2004: Parking Facilities Part 1: Off Street Car Parking



Appendix

Bus routes Car park design checks and vehicle turning diagrams

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Bus Route 188
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Bus Route 188X



Bus Route 189X







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Bus Route 199
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