

Our Ref: 20027101B-220118

18 January 2022

EQ Constructions Pty Limited
Level 8, 43 Bridge Street
HURSTVILLE NSW 2220

Attention: Mr David Zhao

Dear David,

**RE: 8 FOREST RD, WARRIWOOD PROPOSED RESIDENTIAL DEVELOPMENT,
(N0440/15) – S4.56 TRAFFIC AND PARKING REVIEW**

As requested, MLA Transport Planning (MLA) has conducted a traffic and parking assessment to accompany a S4.56 application to be lodged with Northern Beaches Council. The S4.56 application will seek approval to amend the approved proposed development granted in Development Application No. N0440/15 (as modified). Our findings are contained herein.

Background

In October 2015, a development application (N0440/15) was lodged with Pittwater Council (now Northern Beaches Council) seeking approval for a proposed subdivision of land and the construction of a residential development incorporating 81 dwellings at the subject site. The proposal comprised 66 residential apartments in four 3-storey residential flat buildings with 14 townhouses in a 3-storey multi dwelling housing building as well as the retention of the existing dwelling house.

The proposed development includes a combined basement car park beneath the residential flat buildings containing a total of 190 car parking spaces (including 16 adaptable residential car parking spaces and four accessible visitor car parking spaces) and one car wash bay. In addition, the existing dwelling is proposed with a new double garage located adjacent to it.

Following a deemed refusal, an appeal (16/151186) was lodged with the Land and Environment Court (LEC). With consideration of expert advice, the LEC upheld the appeal in May 2017.

There have been several S4.56 approvals following approval of the original development application.

A new S4.56 application is being prepared for submission seeking approval to amend certain elements of the original approved development.

This letter addresses the traffic and parking implications arising from the current proposed S4.56 modifications. The traffic and parking assessment is discussed below.

Proposed S4.56 Modifications

This S4.56 application seeks approval to amend the approved apartment mix, while retaining the approved overall number of dwellings i.e. a total of 81 dwellings. The proposed changes to the apartment mix mainly involve converting some of the 1 and 3-bedroom apartments into 2 and 4-bedroom apartments. Table 1 compares the approved dwellings against those proposed in this S4.56 application.

Table 1: Comparison of Approved Development with Proposed Modifications

Land Use	Approved Development (No. of Dwellings)	Proposed S4.56 Modifications (No. of Dwellings)	Change
Existing Dwelling			
- 2-Bedroom	1	1	No Change
- Sub-Total	1	1	No Change
Apartments			
- 1-Bedroom	8	1	-7
- 2-Bedroom	8	17	+9
- 3-Bedroom	49	34	-15
- 4-Bedroom	1	14	+13
- Sub-Total	66	66	No Change
Townhouses			
- 1-Bedroom	0	0	No Change
- 2-Bedroom	0	0	No Change
- 3-Bedroom	14	14	No Change
- Sub-Total	14	14	No Change
Total	81	81	No Change

It is also proposed to undertake modifications to the layout of the approved basement car park as follows:

- provide lock-up garages for the townhouses with direct access to the individual townhouses
- relocate the central car parking area between Buildings A and B to be with the parking for the townhouses
- minor adjustments to the basement footprint, and
- increase overall parking spaces by four car parking spaces from 190 to 194 car parking spaces.

The car park layout arising from the above proposed modifications will continue to be generally consistent with the approved car park layout.

Parking Effects of Proposed S4.56 Modifications

Car Parking Requirement

Car parking requirements for the revised proposed development has been assessed against Northern Beaches Council's Pittwater 21 Development Control Plan (DCP), specifically Section B6 Access and Parking. The parking assessment based on DCP requirements is presented in Table 2.

Table 2: Car Parking Assessment

Land Use	No. of Dwellings	DCP Minimum Parking Rates	Minimum Car Parking Requirements
Existing Dwelling			
- 2-Bedroom	1	2.0 spaces per dwelling	2.0
- <i>Sub-Total</i>	-	-	2.0
Apartments			
- 1-Bedroom	1	1.0 space per dwelling	1.0
- 2-Bedroom	17	2.0 spaces per dwelling	34.0
- 3-Bedroom	34	2.0 spaces per dwelling	68.0
- 4-Bedroom	14	2.0 spaces per dwelling	28.0
- Visitor Parking	66	1.0 space per 3 dwellings	22.0
- <i>Sub-Total</i>	-	-	153.0
Townhouses			
- 3-Bedroom	14	2.0 spaces per dwelling	28.0
- Visitor Parking	14	1.0 space per 3 dwellings	4.7
- <i>Sub-Total</i>	-	-	32.7
Total (Say)	-	-	155

The above assessment indicates that the DCP requires the revised proposed development to provide a minimum of 155 car parking spaces comprising:

- 161 resident car parking spaces, and
- 27 residential visitor car parking spaces.

Adequacy of Car Parking Spaces

It is proposed to provide a total of 194 car parking spaces comprising:

- 167 resident car parking spaces (including 16 adaptable car parking spaces), and
- 27 visitor car parking spaces (including four accessible car parking spaces).

As such, the proposed parking provision complies with the minimum DCP parking requirement and is therefore satisfactory.

Adaptable/Accessible Parking Requirement

The DCP requires adaptable dwellings to be provided with one adaptable car parking space per adaptable dwelling. This requirement is consistent with Consent Condition #19 in the approval.

The revised proposed development continues to have 16 adaptable dwellings consistent with the approved development. On this basis, the revised proposed development is required to provide 16 adaptable car parking spaces for residents.

In relation to residential visitor parking, the DCP requires provision of parking for people with disabilities to be provided at a rate of three per cent of the required parking spaces (excluding parking required for adaptable housing). The revised proposed development is required to provide 27 visitor car parking spaces. On this basis, the revised proposed development is required to provide one accessible visitor car parking space.

The revised proposed development includes 16 adaptable car parking spaces for residents and four accessible visitor car parking spaces. As such, the proposed provision of adaptable/accessible car parking spaces exceeds the DCP requirements and therefore complies with the DCP requirements. As such, the quantum of proposed adaptable/accessible car parking spaces is satisfactory.

Car Wash Bay

The DCP requires residential developments with 10 or more dwellings to provide a car wash bay.

The revised architectural car park plan indicates a designated car wash bay area has been provided. The proposed car wash bay has dimensions of 3.5m wide by 5.4m long with a bund area. Therefore, this is also satisfactory.

Bicycle Parking Requirement

Bicycle parking requirement for the revised proposed development has been assessed against those stipulated in the DCP. In this regard, the DCP requires residential developments (not including a dwelling house) to provide secured bicycle parking at a rate of one bike rack per three dwellings. The DCP has no specific bicycle parking requirement for visitors.

As such, the revised proposed development with 66 residential apartments and 14 townhouses is required to provide a total of 27 bicycle parking spaces. It is proposed to comply with this requirement.

Motorcycle Parking Requirement

The DCP has no specific requirements for the provision of motorcycle parking spaces for residential developments.

Service Vehicle Requirements

The DCP also does not have any specific requirement for the provision of loading bays for service vehicle. However, it is noted that the approval permits servicing of the proposed development to occur on accessways provided within the overall development site.

In addition, an 18m diameter turning area was proposed in the original development application to facilitate the turning around of service vehicles. The turning area is located near the north western corner of the site. The revised proposed development proposes to retain this turning area for service vehicle consistent with the approved development.

Traffic Effects of Proposed S4.56 Modifications

The revised proposed development will continue to accommodate 81 residential dwellings consistent with the approved development with 194 car parking spaces. The proposed car parking provision in the revised development will result in an increase of four car parking spaces above the approved number of car parking spaces.

As noted previously, the proposed development of the subject site was approved following an appeal being upheld in the LEC. The LEC proceedings considered evidence from expert traffic engineers (Mr Calum Hutcheson for the Applicant and Mr John Coady for the Respondent (Northern Beaches Council)).

The traffic experts have conducted their own independent traffic assessment. These are presented in Table 3.

Table 3: Traffic Estimates and Adopted Traffic Generation Rates for Approved Scheme

Proposed Land Use	Quantity	Mr Calum Hutcheson		Mr John Coady	
		Trip Rates (2-way vehicle trips per dwelling)	Trips (2-way vehicle trips per peak hour)	Trip Rates (2-way vehicle trips per dwelling)	Trips (2-way vehicle trips per peak hour)
Detached Dwellings	1	0.85	1	0.85	1
Townhouses	14	0.575	8	0.65	9
1/2 Bedroom Apartments	6	0.45	3	0.5	3
3/4 Bedroom Apartments	60	0.575	35	0.65	39
Total	81	-	46	-	52

From the above, it is noted that the traffic experts in the LEC proceedings have adopted similar traffic generation rates to estimate the traffic generation potential of the approved scheme.

Furthermore, it is noted that whilst Council's traffic expert Mr John Coady's adopted traffic generation rates are slightly higher, the adopted traffic generation rates from both traffic experts relate to the number of dwellings.

As the revised proposed development will continue to provide 81 dwellings consistent with the approved development, it is expected that the level of development traffic arising from the revised proposed development will also remain consistent with that estimated by the traffic experts during the LEC proceedings. That is, the revised proposed development would continue to generate 46 to 52 vehicles per peak hour.

In relation to the additional four car parking spaces (above the approved car parking) in the revised scheme, it is not expected that these additional four car parking spaces would generate any additional development traffic during the peak periods. However, for analytical purposes an estimate of the additional development traffic (if any) arising from the additional four car parking spaces has been estimated as follows.

In the LEC proceedings, Council's traffic expert suggested traffic generation rates of 0.5 to 0.65 vehicle trips per peak hour per dwelling depending on the size of the dwellings. It is noted these traffic rates have been obtained from the *Guide to Traffic Generating Developments, 2002* and as noted previously they relate to the number of dwellings.

In addition to traffic generation rates, the Guide to Traffic Generating Developments, 2002 also provides parking rates for the same type of residential dwellings which are:

- 1 space for each 1-bedroom unit, plus
- an additional 1 space per each 5 x 2-bedroom unit or part thereof, plus

- an additional 1 space per each 2 x 3 or more bedroom unit or part thereof.

Using the above parking rates, the traffic generation rates have been converted from one that relates to the number of dwellings to one that relate to the number of car parking spaces provided.

Thus, the traffic generation rates of 0.5 to 0.65 vehicle trips per peak hour per dwelling have been converted into an average traffic generation rate of 0.41 vehicle trips per peak hour per car space.

As such, the additional four car parking spaces can be expected to generate an additional 2 vehicle trips per peak hour. The additional development traffic is considered to be low and is not expected to create any material to the surrounding intersections.

In light of the above, the revised proposed development would not create any additional traffic effects on the surrounding road network worse than the approved development. The nearby intersections would continue to operate as originally planned.

Proposed Design Modifications to the Basement Car Park

It is proposed to undertake modifications to the approved basement car park. However, it is noted that the proposed revised basement car park layout would continue to be generally consistent with that approved. The proposed modifications are as follows:

- provide lock-up garages for the townhouses with direct access to the individual townhouses
- relocate the central car parking area between Buildings A and B and combine with the parking for the townhouses
- minor adjustments to the basement footprint, and
- increase overall parking spaces by four car parking spaces from 190 to 194 car parking spaces.

MLA's review of the amended plans confirms that the car parking spaces continue to have dimensions of 2.4m wide by 5.4m long with aisle width of 5.8m which comply with the Australian Standard AS2890.1:2004 as Class 1A car parking facility. The proposed accessible car space and associated shared area have dimensions 2.4m wide by 5.4m long which comply with AS2890.6:2009, while the adaptable car parking spaces have dimensions of 3.8m wide by 5.4m which comply with the AS4299.

The design review of the car park also assessed the following design elements:

- an additional of width of 0.3m has been provided for car spaces adjacent to a wall
- all columns are located outside of the parking space design envelope
- blind aisles have been provided with an extension of 1.0m beyond the last car parking space
- single sided aisles (where one side is confined by a vertical obstruction higher than 0.15m) have been provided with an additional 0.3m in width, and
- minimum clear head heights of 2.2m for general car parking spaces and 2.5m for accessible parking spaces have been provided within the basement car park as required by AS2890.1 and AS2890.6.

From the above, the design the car parking spaces complies with the design requirements set out in the relevant Australian Standard for car parking facilities, namely AS2890.1:2004, AS2890.6:2009 and AS4299. As such, the design of the basement car park is satisfactory.

Summary and Conclusion

MLA has conducted a traffic and parking review for the subject proposed Section 4.56 application to modify the approved development at 8 Forest Road, Warriewood.

The proposed modifications in this S4.56 application involves amending the apartment mix, while retaining the overall 81 dwellings approved in the original DA. Some design modifications to the basement car park are also proposed.

In terms of the proposed parking provision, the revised proposed development would continue to provide parking in compliance with the DCP and consistent with the approved development. As such, the proposed parking provision is satisfactory.

In terms of the traffic effects of the proposed modifications, the review indicates that the revised proposed development would generate the same level of development traffic to the approved development. As such, the revised proposed development would not create traffic impacts worse than the original approved scheme. Following the completion of the revised proposed development, the surrounding road network would continue to operate as originally planned.

Overall, the traffic and parking aspects of the planning proposal are considered to be satisfactory.

Yours sincerely,



Michael Lee
Director