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Dear Jim

PRELIMINARY TRAFFIC ASSESSMENT REPORT – 224 GREAT SOUTH ROAD, REMUERA

Further to your request, we are pleased to provide this traffic assessment in respect to the proposed residential development at 224 Great South Road in Remuera.

1 INTRODUCTION

The proposal seeks to establish a residential development on a number of properties located at 224 Great South Road, 49-51, 53 and 53A Omaha Road, Remuera. The development will comprise approximately 205 residential units and some non-residential spaces totalling approximately 1,943 m² GFA.

Up to approximately 315 parking spaces will be provided to support the development including podium parking and basement parking. Some stacked parking will be provided. Vehicle access will be from Omaha Road (main access) with limited access to Great South Road (mobility parking and service deliveries).

This report assesses the transport-related matters of the proposal, including:

- A description of the site and its surrounding transport environment;
- A description of the key transport-related aspects of the proposed development;
- The likely trip generating potential of the site and effects on the road network;
- The parking and loading provisions of the development and compliance with Unitary Plan standards, and
- The proposed form of access arrangements for vehicles and pedestrians, and compliance with Unitary Plan standards.

These and other matters are addressed in detail in this preliminary traffic assessment report. A full Transportation Impact Assessment (TIA) as well as a Construction Traffic Management Plan (CTMP) will be provided as part of the full Consent Application.

2 SITE LOCATION

The site is located at 224 Great South Road, 49-51, 53 and 53A Omahu Road, Remuera. Figure 1 shows the location of the site in relation to the surrounding road network.

Figure 1: Site Location



Great South Road is approximately 10 km long and connects the suburb of Newmarket in the north to Otahuhu in the south. The cross section of Great South Road is comprised of two vehicle lanes in each direction, with the kerbside northbound lane marked as a bus lane during the morning peak hour and the southbound kerbside lane used for on street parking. Great South Road is classified as an Arterial Road under the Unitary Plan and has a posted speed limit of 50 km/hr.

Omahu Road is classified as a 'Primary Collector' under the Waka Kotahi One Network Road Classification. It is approximately 800 m long and connects Great South Road in the south to Remuera Road in the north. The cross section of Omahu Road is comprised of one vehicle lane in each direction with on street parking on both sides. The posted speed limit of Great South Road is 50 km/hr.

The site is zoned 'Residential – Terrace and Apartment Building Zone' (THAB zone) in the Unitary Plan¹.

¹ Auckland Unitary Plan

3 TRAFFIC VOLUMES

Traffic data obtained from Auckland Transport² has been obtained to understand the existing vehicle volumes on Great South Road and Omaha Road. Great South Road (between Omaha Road and Aratonga Avenue) carries a 5-Day Average Annual Daily Traffic (AADT) volume of 20,529 vehicles per day (August 2019). The counts show the morning peak volume is 1,963 vehicles per hour (vph) and the evening peak volume of 1,882 vph. These volumes are typical of an Arterial Road.

Omaha Road carries a 5-Day Average Annual Daily Traffic (AADT) volume of 7,343 vehicles per day (October 2019). The counts show the morning peak volume is 1,052 vehicles per hour (vph) and the evening peak volume of 824 vph. These volumes are typical of a Collector Road.

4 PUBLIC TRANSPORT SERVICES

The site is within close to Remuera Train Station (3-5-minute walking distance, 180 m) which operates on the Southern Line. The Southern Line connects Britomart to Pukekohe and has a 10 minutes frequency during peak travel times.

The nearest pair of bus stops are located on Great North Road approximately 100 m south of the site, a 1-minute walking distance. A signalised pedestrian crossing is located directly in front of the site on Great South Road, which provides a safe crossing location for residents and visitors accessing the northbound bus stop.

The nearest bus stops provide service to bus routes 70 which is a frequent service³ and connects Botany, Pakuranga, Panmure, Elerslie, Newmarket, and the City.

Figure 2 shows the public transport services in the local area⁴.

² at.govt.nz/about-us/reports-publications/traffic-counts

³ at.govt.nz/about-us/reports-publications/traffic-counts

⁴ At least every 15 minutes, 7am-7pm, 7 days a week. Early mornings and evening may have lower frequencies.

Figure 2: Public Transport Routes



The proposed development is very well connected from a public transport perspective and provides residents genuine public transport services for travel to and from the site.

5 ROAD SAFETY ASSESSMENT

An assessment of the surrounding area's safety record has been carried out using the CAS database, for the five-year period between 2016 and 2020 plus any crashes entered into the system for 2021. The search included all reported crashes on Great South Road between Patey Street and Aratonga Avenue, as well as Omaha Road between Great South Road and Lillington Road.

A total of 28 crashes were identified, 25 of which occurred Great South Road. The crashes are summarised as follows:

- 15 crashes (1 severe, 5 minor, 9 non-injury) occurred as a result of a vehicle failing to give way;
- Six crashes (1 minor, 5 non-injury) were the result of one vehicle rear ending another vehicle;
- One crash (minor) involved a 12 year old cyclist, where the cyclist turned in front of a vehicle;
- Two crashes (1 minor, 1 non-injury) involved pedestrians crossing heedless of traffic;
- The remaining four crashes occurred as a result of a vehicle u-turning (non-injury), losing control due to sunstrike (non-injury), overtaking (non-injury), and hitting a parked vehicle (minor).

Figure 3 shows a collision diagram illustrating the location of the crashes.

Figure 3: Collision Locations



Four of the 15 give way crashes occurred at driveways, all on Great South Road. These crashes were either minor (3) or non-injury (1) crashes, with obstructed visibility due to parked vehicles the reason for one of the crashes, and human error being the primary reason for the other three crashes. The crash history does not indicate any safety issues with vehicles turning to or from private driveways, with the four driveway crashes recorded having low severity and being typical of a high vehicle volume corridor.

6 PROPOSED DEVELOPMENT

The proposal seeks to establish a mixed-use development on a number of properties located at 224 Great South Road, 49-51, 53 and 53A Omaha Road, Remuera. The development will comprise approximately 205 residential units and some non-residential spaces totalling approximately 1,943 m² GFA.

Vehicle access to the site will be provided via two driveways, one on Omaha Road and one on Great South Road (minimal use for service deliveries and mobility parking). Private waste collection is proposed with rubbish stored on-site and small trucks undertaking collections on-site.

Figure 4 shows the proposed development.

Figure 4: Proposed Development.



Auckland Transport maintains a designation across the full extent of the site's frontage onto Great South Road, with the Great South Road corridor part of an upgrade programme. The applicant will ensure this designation can be met and is proposing to locate buildings adjacent to Great South Road to allow for the designation.

Auckland Transport are currently progressing upgrades to Great South Rad in this location. It is understood that the forecasted design period for the upgrade programme is 2-4 years, with the design potentially including the removal of the central median. The future cross section of Great South Road is still being developed; however, Auckland Transport are considering 24/7 bus lanes and protected cycle lanes. The future TIA for the site will review the design of the Great South Road access and consider the potential future cross section of this corridor.

7 PARKING

7.1 NUMBER OF PARKING SPACES

For sites in the 'THAB zone', parking rates from Table E27.6.2.3 (area 1) of the Unitary Plan apply. For all residential dwellings in the THAB zone, there is no minimum parking requirement and no maximum parking requirement.

The commercial component is required to provide a minimum of 1 parking space per 30 m², with no maximum, assuming the retail provided is not large format retail or office. Given the proposed

development includes approximately 1,943 m² GFA of commercial space, 65 parking spaces are required.

The proposal includes up to approximately 315 parking spaces and therefore meets the minimum parking requirement, with the proposal not being subject to a maximum requirement. Subtracting the required commercial spaces from the parking provision results in approximately 250 parking spaces for the 205 residential units. This equates to 1.2 parking spaces per unit which is considered appropriate (and can be reduced through detailed design).

7.2 BICYCLE PARKING

The Unitary Plan requires that secure bicycle parking is provided at a rate of 1 per dwelling for every dwelling without a dedicated garage. Secure bicycle parking is also required for the commercial space, with the requirement being dependent on the type of commercial provided. The design should show where resident bicycle parking will be provided and how it will be accessed.

Visitor bicycle parking is required for sites with more than 20 dwellings, at a rate of 1 visitor parking space per 20 dwellings. The proposed development is comprised of approximately 205 dwellings and therefore is required to provide 10 short-stay visitor bicycle spaces for residential visitors. Visitor parking is also required for the commercial space, again dependent on the type of commercial activity provided.

7.3 LOADING

The Unitary Plan loading requirement for residential developments is calculated based on the total Gross Floor Area of the residential units. One loading bay is required for residential activity with a GFA between 5,000m² and 20,000 m² and two spaces are required for site with a GFA between 20,000 m² and 90,000 m². Commercial spaces between 300 m² and 5000 m² are required to provide 1 loading space.

This loading spaces provided should be shown on the site plan and are required to be 3.5 m wide, 8 m long and have a 3.8 m vertical clearance.

Waste bins are proposed to be collected on-site within the internal car park and should be identified on the plans.

8 ACCESS

8.1 PEDESTRIANS

As discussed in Section 4, the site is well located with respect to public transport with Remuera Train Station located within a short walk as well as frequent bus services on Great South Road. Located on an arterial road and near a train station, there are a number of retail and commercial services within walking distance of the site.

A signalised pedestrian crossing is located directly in front of the site, providing a safe location for pedestrians to cross Great South Road. Excellent pedestrian connectivity should be provided across the site, and careful consideration should be given to the vehicle access design.

To improve pedestrian safety on Omaha Road, consideration should be given to providing a raised table (with associated narrowing) across Omaha Road near Great South Road.

8.2 VEHICLE

Vehicle access to the site will be provided via two driveways, one on Omaha Road and one on Great South Road (minimal use for service deliveries and mobility parking). In the short term both accesses are proposed to be unrestricted.

Based on observations, the Great South Road access can be positioned with appropriate separation from the nearby pedestrian signals and can utilise the painted flush median to turn right. When (and if) the right turns bay / median is removed then it is recommended that this access be restricted to left in left out. In this regard it is recommended that the Omaha Road access be designed as the main access.

SIDRA modelling of the intersection of Great South Road and Omaha Road will be undertaken to understand how the proposed accesses are anticipated to integrate with the road network. This will be included as part of the TIA and will give consideration to the site's close proximity to the train station as well as the anticipated corridor improvements along Great South Road.

There is an existing pohutakawa tree located on the site frontage along Omaha Road. The footpath on Omaha Road is approximately 4.0 m which allows vehicles to travel past the tree trunk and improves the sightlines. Furthermore, given the tree is well established the canopy is above driver's sightlines.

9 AUCKLAND COUNCIL/TRANSPORT CONSULTATION

A pre-application meeting was held for the project on 9 March 2021, with representatives from Auckland Council and Auckland Transport. The following summarises the transportation items identified at the meeting and Commute's response to these items.

Auckland Council/Transport Comment	Commute Response
The upgrade of Great South Road potentially involves removing the existing flush median to better accommodate improved cycling and public transport infrastructure alongside introducing a 24/7 bus lane. Because of this planned outcome, the applicant has been advised to take into account the removal of the flushed median as part of any traffic impact assessment ("TIA").	The main site access is off Omaha Road with only loading and disability parking accessed off Great South Road. The TIA will assess the operation of the Great South Road access both with and without the central median.
The applicant was advised to reconsider the access strategy for the subject site and explore design solutions such as providing for a solid median to help regulate a left in / left out only solution where the vehicle crossing is provided onto Great South Road and/or investigating whether two-way movement onto Omaha Road would be feasible.	The TIA will assess the operation of the Great South Road access both with and without the central median. This will include an assessment of the access with full turning movements as well as restricted turning movements both from operational and design perspectives.
Concerns have also been raised by Council officers with respect to the performance of Omaha Road & Great South road, considering the potential for right hand turns, and associated delays, into Great South Road from Omaha Road.	SIDRA modelling of this intersection will be included in the TIA.

Council officers have recommended that the trip generation calculations take into account the accessibility to nearby public transport options, namely the bus corridor and rail, and anticipated patronage.	The sites location, density, and mixed-use character will be taken into account when the trip generation calculations and undertaken.
Council officers highlighted that the subject site lies on a frequent transport network for public transport. Therefore, there is a fundamental need to ensure that any existing connections/services are not affected by the proposal in terms of delays and levels of service.	Given the main access is located on Omaha Road the proposed development has been designed to minimise the direct impact on Great South Road. An assessment of the developments impact on bus services on Great South Road will be included in the TIA, based on the SIDRA modelling results for Great South Road / Omaha Road intersection.
There is an existing mid-block pedestrian crossing located in close proximity to the proposed access off Great South Road. AT have requested that an assessment of the adverse effects upon the existing crossing be provided within the TIA.	An assessment of the development's effects of the existing mid-block crossing will be included in the TIA.
Careful consideration is required around road safety, particularly to ensure that the proposal is designed to align with the intent of "Vision Zero". In this vein, a key area of concern is in relation to how right hand turns out of the subject site will be managed.	As part of the access assessment, the operation and safety of right turns will be considered especially relating to the Great South Road access.
Council officers queried whether there was any ability for the applicant to improve upon the connectivity to the Remuera train station towards the north, and to ensure that pedestrian and cyclist movement throughout the site is carefully considered and reflected within the design.	The project team will review the pedestrian connectivity between the site and the train station and note the suggested improvement in pedestrian safety in Section 8.1 previously.
In terms of bicycle parking, Council officers queried whether the applicant was intending to provide the minimum required number of indicated that they would continue to liaise with AT's Connected Communities team around this issue.	The project team will review the bicycle parking provision however this is expected to meet / exceed minimum requirements.

10 CONCLUSION

From a preliminary review of the proposal to develop a mixed use development at 224 Great South Road, Remuera, the following can be concluded:

- The site is well connected from a public transport perspective;
- The crash history does not indicate an issue with vehicle movements to and from private properties on Great South Road and Omaha Road;
- The proposal meets the parking requirement for the site with sufficient commercial parking spaces proposed;
- Bicycle parking and loading provisions are required and should be shown on the site plan;

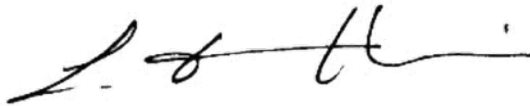
- A Vehicle Access Restriction applies to the site given the Great South Road access fronts an arterial road. In the short term both accesses are anticipated to operate unrestricted, however in the long term the Great South Road is recommended to operate as left in and left out in the event that the central median be repurposed.
- The design should reflect that the Omaha Road access is the main access.

A full Transportation Impact Assessment (TIA) as well as a Construction Traffic Management Plan (CTMP) will be provided as part of the full resource consent application.

Yours sincerely

Commute Transportation Consultants

Leo Hills



Director

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