# PROPOSED MIXED USE (PREDOMINANTLY RESIDENTIAL) DEVELOPMENT

### 8 STEVENSON CRESCENT, ALBANY, AUCKLAND

# FAST TRACK APPLICATION

## TRAFFIC / TRANSPORTATION ASSESSMENT



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#### 1 INTRODUCTION

Mansion Rear Ltd has engaged Traffic Engineering and Management Ltd (TEAM) to provide advice in relation to the traffic and transportation effects of a proposed mixed use (predominantly residential) development at 8 Stevenson Crescent in Albany, Auckland.

My name is Keith Bell and I am a senior associate and the technical director of traffic engineering at TEAM. I have been involved in the transportation industry for 38 years and have worked in central and local government and for traffic engineering consultancies.

The following is a summary of the traffic and transportation-related effects of the proposed development.

#### 2 THE PROPOSAL

The proposed development will involve an area of 25,112m<sup>2</sup> and envisages the following development:

- 112 Terrace houses;
- 26 apartment units;
- retail units (550m<sup>2</sup> GFA).

The retail component of the proposed development will be located within the ground floor of the apartment buildings. The activities are expected to be of a complementary nature which would assist to serve the proposed residential activity in the area (i.e., Dairy, Cafe, work from home).

On that basis the proposed retail component is highly unlikely to be a destination that people drive to; rather, it will serve the existing residential catchment in the immediate vicinity of the subject site and existing traffic passing the site on Dairy Flat Highway.

The layout of the proposed developments is provided as an attachment to this report.

#### 2.1 Internal Roading

The roading within the site will be provided in three tiers, comprising the primary road, secondary roads and private access lanes. The final configuration of the internal roads will be agreed with Auckland Council and Auckland Transport. with the following configurations proposed at this juncture.

The primary road will be the only vehicle connection to Stevenson Crescent and will extend through the site from south (at Stevenson Crescent) to the north. The road will have a 16-metre width, which will provide:

- A 3-metre-wide traffic lane for each direction of travel;
- A 1.8-metre-wide footpath on each side;
- A 2.2-metre-wide front berm that will provide parking bays/street trees; and
- A 1.0-metre-wide back berm.



The secondary roads will intersect with the primary road. These roads will have a 12 to 14-metre width, which will provide:

- A 3-metre-wide traffic lane for each direction of travel;
- A 1.8-metre-wide footpath on each side; and
- A 0.9-metre-wide back berm.

The private access lanes will be 7.0 metres wide which is a suitable width for manoeuvring to and from parking. The configuration will include a 5.5-metre-wide carriageway and a 1.5-metre-wide berm to separate properties from the carriageway.

It is intended that the primary and secondary roads will be vested with Auckland Council, while the lanes will remain in private ownership and be managed by a resident's association or similar.

We have undertaken a preliminary assessment of the roading layout and consider that the proposed configurations are suitable for their intended uses and can accommodate the following:

- Residential vehicle access, and suitable manoeuvring for parking;
- Kerbside rubbish collection and the ability for the rubbish truck to turn around onsite;
- Access for loading and deliveries;
- Emergency access;
- Good pedestrian amenity;
- Suitable environment for cycling; and
- Street trees and landscaping.

#### 2.2 Parking

Sufficient parking will be provided across the site. Insofar as the quantity of parking provided will accommodate the demands of the development, no overflow parking will occur to Stevenson Crescent or Dairy Flat Highway.

Parking will be allocated to individual dwellings either within the individual property or within parking areas accessed by private lanes. Parking bays will also be provided along both sides of the primary road for resident/visitor use.

All parking will be designed to meet the dimensional requirements of the Auckland Unitary Plan.

Cycle parking will be provided for each unit, with these cycle facilities predominately provided for residents and visitors, and for the small commercial offerings located within the development.

#### 2.3 Traffic Generation

We have undertaken a Sidra Intersection analysis which shows that the traffic generated by the development and the likely distribution of vehicle movements will be easily accommodated by the existing configuration of the Stevenson Crescent/Dairy Flat Highway intersection.

We also note that the anticipated traffic generation of the site will be easily accommodated by the Dairy Flat Highway, which has become a secondary highway since the extension of the northern motorway to Puhoi.



#### 3 The Surrounding Road Environment

The subject site has road frontage to Stevenson Crescent which is a relatively short road that terminates as a cul-de-sac at the northern end of the road.

The southern end of Stevenson Crescent connects with Dairy Flat Highway, with a 'Stop' control on the Stevenson Crescent leg of the intersection.

The configuration of Dairy Flat Highway comprises a through lane in each direction separated by a wide central median, which incorporates a right turn pocket for traffic turning right in to Stevenson Crescent.

The intersection is located within a 50km/h speed restriction.

Peak hour traffic movements on Dairy Flat Highway in the vicinity of Stevenson Crescent have a typical commuter profile, with a significant bias towards Auckland during the morning peak period and a similar bias away from Auckland during the evening peak period.

The development will have a similar commuter peak profile and, on this basis, will integrate well with the existing surrounding traffic environment, without the need to cross opposing dominant traffic movements.

#### 3.1 Vehicle Connections

As discussed previously, we have undertaken an assessment of the existing road network surrounding the site and the ability for the network to accommodate the traffic generated by the proposed development.

We have undertaken a Sidra Intersection analysis which shows that the traffic generated by the development and the likely distribution of vehicle movements can be easily accommodated by the existing configuration of the Stevenson Crescent/Dairy Flat Highway intersection.

We also note that the anticipated traffic generation of the site will be easily accommodated by the Dairy Flat Highway, which has become a secondary highway since the extension of the northern motorway to Puhoi.

#### 3.2 Passenger transport connections

There are limited passenger transport services in the vicinity of the site, with a single bus route passing the site. The bus stop serving the bus route is a short distance to the east of the site on Dairy Flat Highway.

However, there are a number of bus routes that connect with Albany Village, which is an acceptable walking or cycling distance from the site.

Given the ability to walk or cycle to frequent passenger transport services in the Albany Village, we consider the development to have adequate access to passenger transport services.



#### 3.3 Pedestrian and Cycle Connections

An existing network of footpaths connects the subject site (and other developments) with the Albany Village commercial area to the east of the site.

However, there are existing physical constraints along the network, which results in width-related pinch points which do not meet contemporary standards.

It is intended to work with Auckland Transport towards improving the existing footpath network (i.e., by adding additional width) to provide better connectivity for the subject site and the other residential development that is located between the subject site and Albany.

It is anticipated that with the proximity of the site to Albany Village and The Avenues Neighbourhood Centre that walking and cycling would be convenient, and trip generation rates from the development may be less than conventional trip generation standards as a result of this. Direct and convenient pedestrian and cycle access to Albany Village and Albany metropolitan centre is a locational attribute of the site.

It is also noted that Auckland Transport is intending to upgrade the section of Dairy Flat Highway between Stevenson Crescent and Albany Village. We expect that this upgrade will also include improvements for cyclists and pedestrians, as described on the Auckland Transport website. The following notes and map have been sourced from the Auckland Transport website.

This project is included in the Auckland Transport 'Regional Land Transport Plan'. The project name is 'Dairy Flat Highway/The Avenue intersection'

#### **Dairy Flat Highway**

• Upgrade a section of Dairy Flat Highway between Stevensons Crescent and Albany Highway.

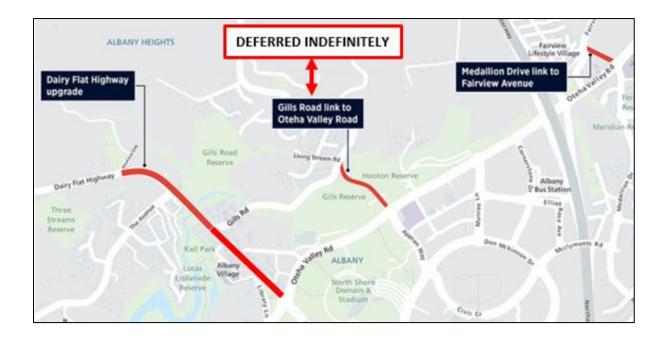
Dairy Flat Highway is a key transport connection in a planned growth area and provides indirect access to the northern motorway interchange via Oteha Valley Road and direct access to the Albany Village and Dairy Flat to the north.

Changing land use, population growth, and planned housing developments are adding pressure on transport infrastructure in the north of Auckland. The Albany area has seen rapid growth in the past 20 years, changing from a rural environment on the fringe of Auckland city, to a growing urbanized environment on the outer edge of the city boundaries.

With growth happening quickly in the area, we can offer certainty to both existing and future property owners as to which land can be upgraded. New housing and commercial areas can then be built knowing where the transport infrastructure to support it will be.

These projects will further improve connections from local roads to main arterial networks, introduce improved walking and cycling amenities, provide an improved urban design, and enhance safety for all road users.





#### 4 Summary

The proposed internal roading configurations are considered to be suitable for the intended environment and proposed use and will provide a high level of connectivity and amenity.

The proposed vehicle and cycle parking provision is considered to be excellent and will not result in any overflow parking to Stevenson Crescent and Dairy Flat Highway.

The traffic generated by the development and the likely distribution of vehicle movements will be easily accommodated by the existing configuration of the Stevenson Crescent/Dairy Flat Highway intersection and the wider road network. No intersection upgrades are identified as necessary.

It is intended to work with Auckland Transport towards improving the existing footpath network to provide better connectivity for the subject site and the other residential development that is located between the subject site and Albany.

It is also noted that Auckland Transport intends to upgrade the section of Dairy Flat Highway between Stevenson Crescent and Albany Village. We expect that this upgrade will also include improvements for cyclists and pedestrians. Should this work not eventuate, then minor footpath widening (on the northern side of Dairy Flat Highway) would be recommended to improve pedestrian amenity.

Please contact me if you require further information.

Yours faithfully

TRAFFIC ENGINEERING & MANAGEMENT LTD



