

STAGES 1 AND 5 (IN PART) OF ROTOKAURI NORTH

This memorandum is prepared in support of the application prepared by Green Seed Consultants Limited under the Covid 19 Recovery (Fast-track Consenting) Act 2020 for two stages, being Stage 1 and Stage 5 (in part) of a larger residential subdivision known as Rotokauri North, from a traffic engineering perspective.

Stage 1 and Stage 5 (in part) are referred to as the “*proposed development*” within this memorandum. The proposed development is located at the northern end of the existing Rotokauri Structure Plan (referred to as the “Site”).

Commuter have previously prepared an Integrated Transportation Assessment (ITA) for the entire Rotokauri North area, as well as a revised modelling assessment in July 2021. This memorandum addresses traffic engineering and transport related aspects of the proposed development.

1 INTRODUCTION

The proposed development is for approximately 400 new residential lots with access provided via a new single lane roundabout onto State Highway 39 (SH39), connecting to a Collector and Local road network extending into the Site. All Collector roads proposed within the Site will be designed to allow for public transport access to enable bus routes to be established in the future (when necessary). Following discussions with the New Zealand Transport Agency (NZTA) Waka Kotahi, it is understood that the location and form of the intersection onto SH39 is generally considered appropriate and it is further noted that the intersection location aligns with that planned within the existing Rotokauri Structure Plan.

The Site is well located with regard to vehicle connections to and from the wider Hamilton and Auckland regions. The SH1 / Koura Drive interchange is located in close proximity to the Site (less than a three-minute drive) and connects the Site to the Waikato Expressway Northbound (NBD) and Southbound (SBD) ramps as well as the Hamilton suburbs located to the east of SH1.

The following outlines the key transportation aspects of the project.

2 ACTIVE MODE FACILITIES

A connection to the ‘Waikato Expressway Cycle Path’ is provided at the eastern end of Te Kowhai Road (non-State Highway section of Te Kowhai Road). This facility runs parallel to SH1 and connects the Site (via Te Kowhai Road) to numerous existing walking and cycling facilities on the eastern side of SH1. While some localised off-road shared path is provided at the approaches to the Te Kowhai Road / Burbush Road roundabout, there is currently a gap between the Waikato Expressway Cycle Path and Te Kowhai Road / Burbush Road roundabout as no walking or cycle facilities are currently provided along Te Kowhai Road.

The ITA and subsequent assessment recommend “closing this gap” by providing a 3m shared path along one side of Te Kowhai Road, thereby enabling a continuous route between the SH39 / Burbush Road roundabout and Waikato Expressway Cycle Path. In addition, a walking / cycling connection

from any stage in the development (including Stage 1 and 5) to the SH39 / Burbush Road roundabout is recommended to be provided. This will enable new residents of the development to walk / cycling safely and efficiently from the site to the Waikato Expressway Cycle Path (and beyond).

3 TRAFFIC MODELLING

As noted, an ITA has been prepared for the wider PC7 site with additional modelling undertaken subsequent to the ITA to understand the effect of the development on the surrounding roads, including Burbush Road and Exelby Road (rural roads).

Traffic modelling has been undertaken using the current version of the TRACKS (Waikato Regional Transport Model), to determine the level of anticipated traffic generation resulting from PC7 development within the Rotokauri North area for the years 2021 (with 150 dwellings) and 2041 (full buildout of the PC7 site with 2,000 dwellings) respectively. The 2021 scenario includes 150 dwellings with a single connection onto SH39 (similar to the proposed development).

The following summarises an assessment of the modelling results considered relevant to the proposed development:

- The proposed single lane roundabout on SH39 is expected to operate at a Level of Service "A" (at full build out of the PC7 site) therefore can comfortably accommodate the volumes predicted as a result of the proposed development.
- The modelling results indicate a development of 400 dwellings within the Site would be expected to generate approximately 29-30 vph along Burbush Road and Exelby Road (pro-rata of the 150 dwellings) or one vehicle every 2 minutes. This volume of traffic is not considered to warrant an upgrade of these corridors. However, it is noted that an upgrade of Burbush Road and Exelby Road (south of Burbush Road) to widen the road to a collector standard of 7.7m sealed width (currently 5.5-6.0m sealed width) will likely be required following the establishment of 500 dwellings within the PC7 site. It is however noted that this is dependant on development of other areas in Rotokauri (as they also add traffic to these links).
- Based on the above, no upgrades are required to the existing roads as a result of the proposed development.

4 SUMMARY

Based on the above assessment, it is considered that the proposed development of 400 residential lots with a connection at SH39 can be accommodated within the existing road network, without requiring any upgrades to existing roads or causing unacceptable traffic effects.