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Rory
617 New North LTD

617 New North Road, Kingsland – Ministry for the Environment Fast Track Application – Civil Engineering

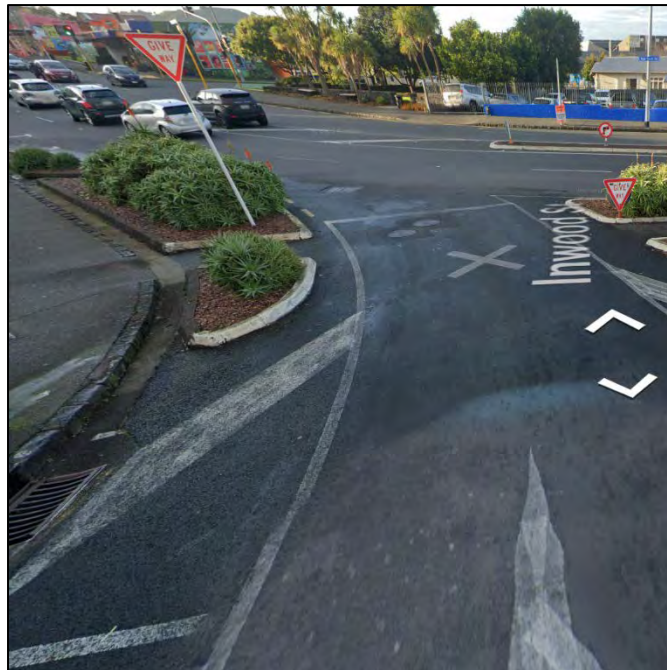
This letter has been written to provide comment on Three Waters Civil Engineering matters relevant to the Fast-Track Application for 617-619 New North Road, Kingsland, Auckland.

Stormwater

It is unclear from Auckland Council (AC) Geomaps where the existing site discharges to the public stormwater network. The site contours fall from north to south towards New North Road with the nearest obtainable gravity connection being existing manhole 3000089357 (AC GeoMaps SAP ID) located at the corner of New North Road and Inwood Street which is approximately 30 m west from the site. It is anticipated that this manhole drains into a Soakage System 2001099950 (AC Geomaps SAP ID) located adjacent.

The development proposes to install a new public stormwater manhole outside the southern boundary and a new public stormwater pipeline to connect into the existing public stormwater manhole 3000089357. Soakage testing at the existing soak hole and a stormwater capacity assessment based on maximum probable development and climate change will be undertaken to ensure the proposed development can be served within its capacity. Should the downstream capacity be identified as inadequate, then 10-year detention will be proposed to mitigate the effect of the proposed development. There is a suitable location within the parking area to install any large underground tanks if they are required. The site is not subject to a Stormwater Management Area Flow (SMAF) control under the Auckland Unitary Plan.





Stormwater: Existing stormwater soakage system on the corner of New North Road and Inwood Street.

Based on AC Geomaps, the site is not located on any floodplains. However, there is a significant overland flow path (OLFP) of catchment between 1ha to 3ha running along the northern side of New North Road, i.e. immediately outside the southern site boundary where the new vehicle crossing is proposed. Although the ground floor of the proposed development consists of no habitable space, the OLFP assessment will be undertaken to determine the minimum FFL for the commercial and parking spaces meet the requirements set out in the AUP.

Wastewater

It is unclear from AC Geomaps where the existing site discharge to the public wastewater network. There is an existing 150mm diameter public wastewater pipe running outside of the southern site boundary which is likely to convey the site currently.

The proposed development will discharge into this existing wastewater pipe by installing a new wye junction.

A CCTV inspection will be undertaken to determine the existing condition and confirm the material as well as the diameter of the pipe. Should the condition of the pipe be poor, appropriate actions will be taken in consultation with Watercare.



Wastewater: Existing 0.15m dia. wastewater line in the road reserve of New North Road.

A wastewater infrastructure assessment will be undertaken in accordance with the Watercare Wastewater Code of Practice for Land Development and Subdivision (November 2019, version 2.2) for the downstream network to ensure sufficient capacity for the proposed development.

Water Supply

There are existing 100mm dia and 200mm dia public watermain running north and south of the site respectively. In the existing scenario, it appears that the northern half of the site is connected to 100mm dia while the southern half is connected to 200mm dia watermain.

As per Watercare Code of Practice for Land Development and Subdivision Table 6.2 Empirical guide for principal main sizing, a 200mm dia pipe has the capacity to provide up to 400 lots with supply and is expected to provide potable water use and Firefighting requirements. A site-specific hydrant test will be undertaken to confirm the required flow and pressure are supplied within the existing watermain.



Water Supply: Existing water supply lines shown in the road reserve of both New North Road (0.2m dia.) and Western Springs Road (0.1m dia.).

Firefighting requirements for the site come from the Standards New Zealand New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ 4509:2008 Section 4.4 Table 1&2 which requires the first available hydrant to be <135m from the front door of every dwelling and a second available hydrant to be <270m from the front door of every dwelling. In addition to this, the NZ Building Code C/AS7 2.2.1b requires a maximum hose run distance from the nearest truck parking point or hydrant to be 75m from the farthest point within the dwelling. Parking locations for trucks require a minimum 4.0m wide legal access. Given the locality of hydrants in the surrounding area, the site will comply with the relevant requirements.

Conclusion

Three waters servicing can be provided via connections to the existing servicing networks within New North Road. Stormwater servicing can be provided via a network extension from the existing soakage pit 2001099950 to the development site, while wastewater and water supply can both be provided from the existing network in the road reserve of New North Road.

Should you have any questions in relation to any of the above, please feel free to contact the undersigned on 0226914939 or via email joshua@civix.co.nz.

Kind Regards,

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