

BEFORE THE HEARING COMMISSIONERS NAPIER

IN THE MATTER of the Resource Management Act 1991 (the Act)

AND

IN THE MATTER of the application for residential subdivision and development at 16 and 38 Willow Bank Avenue Napier

**HEARING
REFERENCE**

Evidence of

On behalf of Napier City Council

Dated 28 April 2021

Introduction

1. My name is Gary William Schofield and I am employed by Napier City Council in the role of Team Leader 3 Water Strategic Planning.
2. I hold a Bachelor of Engineering (Hons) from the University of Canterbury (2001).
3. I have been a Chartered Engineer with Engineers New Zealand since 2004 and a Chartered Engineer with the Institution of Civil Engineers (UK) since 2011.
4. I have 20 years of experience as a civil engineer particularly in water, wastewater and stormwater; design and construction and strategic planning in both local government (3 years) and private consultancy roles (17 years) working indirectly for 3 Waters operators.
5. I confirm I have read the “Code of Conduct for Expert Witnesses” contained in the Environmental Court Consolidated Practise Note 2014. In particular, unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts know to me that might alter or detract from the opinions I express.

Scope of Evidence

6. It is my role as the 3 Waters Engineer is assess Recourse Consent Applications regards to water, wastewater and stormwater servicing or aspects that are likely to affect these and general compliance with the:
 - (a) current Napier City Council Code of Practice for Subdivision and Land Development (CoP) at the resource consent and Engineer Approval stage.
 - (b) Te Awa Structure Plan
 - (c) health and safety implications of design
 - (d) industry best practice

Summary of Conclusions

7. I can confirm based upon our investigation and reports to date that servicing for the development can be provided and enable development as proposed by the Te Awa Structure Plan subject to Engineering Approval and resolving the outstanding matters.

Water

8. Water Demand: A dwelling occupancy of 1.25 has been used for the water demand calculations for the internal lot. No justification has been provided for using this rate which is lower than the code of practice. Page G-56 of the CoP states:

“G1.7 water demand and fire flows

(a) Residential Demand

(i) Demand shall be based on not less than 2.5 people per dwelling unit or lot. Where lot layouts are unknown but zoning indicates future urbanisation then the designer shall allow for 12 lots per hectare gross. These are gross areas including roads but excluding major reserves.”

9. Connection Points: Connection of the development shall be from the local bulk main (existing and proposed) DN200 PVC water main on the eastern side of Eriksen Road. Modelling of the water network by consultants Stantec has indicated this this connection location is suitable along with other upgrades in the network. NCC is moving to dedicated trunk mains to better manage the network and improve water quality and safety, therefore connection to the larger trunk main in Eriksen Road is not appropriate.

Wastewater

10. Wastewater Pump Station: Proposed positioning of the wastewater pump station at the intersection of the development and Eriksen Road is problematic. While the requirement for the wastewater pump station to be in a separate Lot is technically met, it does not meet the other requirements in the CoP, by providing a safe work site for operators or public, buffer zone, parking and manoeuvring for operator vehicles

and is likely to impinge on the sight lines of the intersection. No evidence has been offered to confirm sightlines. The wastewater operators will need to access the pump for operation and maintenance tasks with small trucks and/or utes. Access to the pump station shall be available directly from a public road. Page H-83 and H-84 of the CoP states:

H1.7.2.1. *“(f) Provide safe working conditions for operation and maintenance personnel.”*

“H1.7.3. Site

Pumping stations shall be located on a separate lot in the subdivision. The lot shall be of adequate size to facilitate the parking and manoeuvring of trucks, tankers, cranes and other vehicles used for maintenance. A sealed access way of not less than 3 metres width shall be provided to the nearest public road. The whole section on which the pumping station is located shall be fenced and provided with a locked gate, and be of sufficient size to accommodate a replacement pump-station, if required to be constructed in the future. The selection of the site shall take into consideration the provision of sufficient buffer from houses, built-up areas and future development. The site shall be suitably landscaped in consultation with the Council.”

The proposed pump station location is highly likely to reduce the safety of:

- Motorists, especially those turning into or out of the proposed intersection
- Operations and maintenance staff
- General public using the road reserve or what they presume to be road reserve.

No safety and design risk assessment has been provided demonstrating the design where reasonably practicable is without risks to the health and safety of persons.

Section 39 of The Health and Safety at Work Act 2015 states:

“S39 Duty of PCBU who designs plant, substances, or structures

- 1) *This section applies to a **PCBU (a designer)** who conducts a business or undertaking that designs—*
 - a. *plant that is to be used, or could reasonably be expected to be used, as or at a workplace; or*
 - b. *a substance that is to be used, or could reasonably be expected to be used, at a workplace; or*
 - c. *a structure that is to be used, or could reasonably be expected to be used, as or at a workplace.*

- 2) *The designer must, so far as is reasonably practicable, ensure that the plant, substance, or structure is designed to be without risks to the health and safety of persons—*
 - a. *who, at a workplace, use the plant, substance, or structure for a purpose for which it was designed; or*
 - b. *who handle the substance at a workplace; or*
 - c. *who store the plant or substance at a workplace; or*
 - d. *who construct the structure at a workplace; or*
 - e. *who carry out any reasonably foreseeable activity (such as inspection, cleaning, maintenance, or repair) at a workplace in relation to—*
 - i. *the manufacture, assembly, or use of the plant for a purpose for which it was designed, or the proper storage, decommissioning, dismantling, or disposal of the plant; or*
 - ii. *the manufacture or use of the substance for a purpose for which it was designed, or the proper handling, storage, or disposal of the substance; or*
 - iii. *the manufacture, assembly, or use of the structure for a purpose for which it was designed, or the proper demolition or disposal of the structure; or*
 - f. *who are at or in the vicinity of a workplace and who are exposed to the plant, substance, or structure at the workplace or whose health or safety may be*

affected by a use or an activity referred to in any of paragraphs (a) to (e)."

11. Wastewater connection Point: Two connection points shall be provided to allow for operational flexibility and network maintenance downstream of the development, where flows to be diverted between the existing pressure main and existing gravity wastewater network.

Stormwater

12. Stormwater Quality - Long Term: The application does not offer any stormwater treatment for the long term other than (assumed) in road stormwater sumps. Stormwater treatment to treat and capture at least the first flush and gross pollutants would be appropriate for residential subdivision. Page I-109 of the CoP states:

"The Council may require a Developer to construct suitable structures on a stormwater system to minimise the release of any contaminants in order that the Council can comply with its discharge consents." NCC does not currently have any consented stormwater quality requirements for this catchment, however in the future under the Te Awa Structure Plan a new stormwater pump station is required in the Te Awa stormwater pond. A new pump station would require resource consent, which is likely to include stormwater quality requirements.

Conclusion

13. Overall, I believe that these above issues can be resolved through further information and iterations of plans, including the vesting of infrastructure and the transport corridor. However, without the vesting of the transport corridor and as a result, the three waters infrastructure I would not be able to support the application in the current form.

Gary William Schofield