

APPENDIX D

Infrastructure review

MEMO

Date: 12 November 2013

To: E Brookbanks – Senior Planner

From: S Paton - Development Engineering Division
Natural Resources & Specialists Unit
Resource Consents Department - Central

Subject: Regulatory Engineering Review
Resource Consent Application – R/VCC/2006/7730/1
106 – 108 Albert St, Auckland Central

Drainage and Water Supply Infrastructure

The above application is for variations to an approved consent from 2006. The approved development entailed a mixed-use development consisting of retail and apartments. This application is now for retail, cinema and a hotel. An AEE from Mt Hobson Group Lt dated 4 November 2013 is provided along with an engineering infrastructure report from Norman Disney Young Ltd (“NDY report”) dated 31 October 2013. The following comments are further to your brief to me:

Wastewater Discharge

The NDY report quantifies the expected peak wastewater discharge from the development. Each activity (e.g. hotel, cinema, apartments etc) is categorized and average dry weather flows established for each. Peak loading is expected to be in the order of @7ℓ/sec. Analysis is also provided of the capacity of the receiving public drainage network in vicinity of the development site. Adjacent activities discharge was also factored into the calculations. Three pipelines down stream of the site were analysed for capacity, which were, line ND3593, ND33619 and 3596. Total contributing discharge is in the order of @300ℓ/sec with @129ℓ/sec residual capacity still available downstream of the site. I can advise that the calculations and conclusions are reasonable. I have also consulted with Watercare Services Ltd regarding the above discharge quantities and they have provided their approval in the form of the attached letter.

Water Supply – Internal building supply:

The NDY report details the expected peak water demand for internal use within the development. Average and peak simultaneous demand for internal water use is quantified. The report recommends storage and pumps to be added to the internal water supply reticulation. The resulting calculations and conclusions are reasonable. I have also consulted with Watercare Services Ltd regarding the above analysis for demands and they have provided their approval in the form of the attached letter.

Water Supply Fire Fighting

The NDY report provides a preliminary fire risk rating at FW3. The NDY report identifies additional storage may be required for the sprinkler system design used for the building. The NDY identifies over 40 hydrants within proximity to the site that provided for adequate distance requirements. The information in the NDY report indicates that the public water supply is likely to provide for fire fighting water supplies for the development. I have therefore recommended the advice note below for a final confirmation report to be provided upon completion of the development.

Recommended Conditions:

Fire Fighting Water Supplies

The consent holder shall be required to confirm the adequacy of the public water supply to provide for fire fighting as required by SNZ PAS 4509:2008. Confirmation shall be obtained from NZ Fire Service. This shall be provided to Auckland Council Team Leader Compliance and Monitoring – Central prior to any occupancy of the buildings. Any shortfalls in the adequacy of the public supply shall also be mitigated by the Consent Holder to the satisfaction of Auckland Council Team Leader Compliance and Monitoring – Central.

Recommended Advice Notes:

Internal Water Supply Design

The Consent Holder shall be advised of the pumping storage and boosting requirements for internal water supply designs detailed in Norman Disney Young Ltd (“NDY report”) dated 31 October 2013

Public Service Maps

The Consent holder shall be advised to consult with council’s stormwater asset group with regard to private/public reticulation in this locality particularly as public drainage plans may not be accurate for this locality.

Alterations to Public Infrastructure

Any alterations to the public drainage network require “Engineering Approval” from Auckland Council.

Watercare Services Approvals

The Consent Holder shall be advised of the requirements outlined in the Watercare Services Ltd letter dated 8 Nov 2013 from L Tandingan.

Signed:



S Paton



Watercare Services Limited

2 Nuffield Street, Newmarket
Auckland 1023 New Zealand
Private Bag 92521 Wellesley Street,
Auckland 1141

Telephone +64 9 539 7300

Facsimile +64 9 539 7334

www.watercare.co.nz

8 November 2013

Scott Paton
Senior Development Engineer
Development Engineering Division - Central
Auckland Council
Private Bag 92300
Auckland 1142

Dear Mr. Paton

Peer Review Application no. 24843 – 106 Albert St, Auckland Central

Approval is given for servicing a new high rise development (Elliot Tower) under Council reference number R/VCC/2006/7730/1 which requires extension/connection of public water and wastewater networks system.

In conjunction with the future building consent, a separate application for new wastewater and water meter connection for domestic and fire fighting water supply is required to be lodged with, and approved by Watercare Services Limited. At that time, the applicant shall confirm if the actual flow and pressure on the existing watermain could meet their demand for water supply. To facilitate the approval of the new wastewater connection, the applicant is required to provide drainage plan showing any existing and proposed connection to comply the Watercare Services Limited engineering standards.

Please note that Watercare customer charter only ensures a minimum potable supply of 25 L/min at 200kPa at the point of connection to each property which is to be located at the existing watermain where the water meter(s) to be located. Watercare Services Limited will not guarantee any fire fighting water supply to any property and it is the responsibility of the owners to provide the deficiency in the public system at their own cost. It is the owner's responsibility to provide any specific fire fighting requirements that would be stipulated in the building consent to comply SNZ PAS 4509:2008 requirements.

Yours sincerely

Luz Tandingan
Developments Engineer