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40-42 NEWCOMBE STREET, DRYSDALE

Infrastructure Servicing Report



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1. Introduction

This Infrastructure Servicing Report for the land at 40-42 Newcombe St & 41-47 Elgin St, Drysdale, has been prepared by St Quentin Consulting Pty Ltd at the request of Barwon Water.

St Quentin Consulting provides property and land development consulting services including surveying, town planning and engineering services, urban infrastructure design, contract administration and inspection services for residential, industrial and commercial development projects, having been an established consulting practice since 1984.

This report is based on the proposed subdivision plan provided by Peter Van Wyk from Barwon Water.

The investigation included a review of the existing services within or surrounding the proposed development site and augmentations and upgrades necessary to service the proposed development.

The following servicing authorities contacted were:

Gas	Ausnet Gas Services
Telecommunications	Telstra
Water Supply	Barwon Water
Sewer Supply	Barwon Water
Stormwater Drainage	City of Greater Geelong
Roads	City of Greater Geelong
Electricity	Powercor

2. Existing Site Conditions

40-42 Newcombe Street, Drysdale, is a Barwon Water facility on which is located a water pumping station which services the surrounding areas of Drysdale. This site is approximately 4000 square meters in size and is fronted by an unsealed Newcombe Street and unmade Elgin Street. Further to this, Barwon Water are looking to acquire 41-47 Elgin Street which consist of a further 4000 square meters.

Both these sites generally fall from the North to the South at a generally uniform grade.



Proposed development layout plan.

Barwon Water have identified an un-used portion of their site which (together with 41-47 Elgin Street) they are looking to re-zone with 10 residential lots proposed while retaining a parcel of land with the existing pumping station located on it.

3. Road Network

The City of Greater Geelong is the responsible authority for the existing roads which fronts the site on two sides.

Proposed access for 9 of the new lots will be via Elgin Street. It is anticipated that the proposed lots fronting Elgin Street will trigger the requirement to construct this street from the intersection with Newcombe Street to across the frontage of the new lots.

For the new lot fronting Newcombe Street, it is expected that the associated road works would only be the construction of vehicular lot access to councils standards.

4. Drainage

The City of Greater Geelong is the responsible authority for the existing drainage infrastructure which fronts the sites in Newcombe and Elgin streets.

Open swale drainage along Newcombe street is located on the high side of the property and unlikely to be suitable to drain into. Council correspondence also indicates an undersized municipal drainage reserve on the southern boundary (low side) which council has identified as having insufficient capacity for the major flows.

Council has identified a requirement to set aside a 5m strip along the southern boundary of the Barwon Water property at 40-42 Newcombe street to vest in council as a drainage reserve. This requirement to provide the 5m drainage reserve may impact on the number of lots able to be obtained from the development of this parcel of land. The property at 41-47 Elgin street already has this 5m drainage reserve along its southern edge via a previous development this land was a part of.

Any upgrade to Elgin Street would require the construction of pit and pipe network which would assist in also servicing the proposed new lots. The new pit and pipe network would need to cater for the upstream catchment in the sizing of the pipes and would discharge the flows into the drainage reserve to the south.

Council has indicated that undertaking any works within this drainage reserve will likely require approval from the Corangamite Catchment Management Authority.

It is understood that the City of Greater Geelong will require the developer to address site storm water quality and quantity as a part of this development.

Addressing storm water quality requires that site runoff is treated to achieve current best practice pollutant removal targets. It is anticipated that these requirements of council will be able to be met through making a contribution payment directly towards council's local treatment schemes.

Addressing storm water quantity requires that site runoff is detained to the predevelopment runoff for a nominal 5 year storm frequency. It is anticipated that this would be provided in the form of a detention volume and could take a number of forms including installation of a below ground tank, oversized pipe or the provision of a rainwater tank to any dwelling constructed on the lots. The ultimate proposed form of detention would need council consent.

5. Sewerage

Barwon Water is the responsible authority for reticulated sewerage in this location.

There is existing 225mm gravity sewer located in the drainage reserve to the south of the site. A gravity sewer main would need to be extended up the hill to provide gravity sewer the proposed new lots.

Undertaking these works within the drainage reserve would likely need the approval of the Corangamite Catchment Management Authority.

6. Water (Potable)

Barwon Water is the responsible authority for potable water in this location.

There is currently an existing 100mm water main on the eastern side of Elgin street fronting this property. It would be expected that the new lots within Elgin street could source their water supply from the installation of new 20mm water services to this main.

There is also currently a 300mm AC trunk main within Newcombe Street which *cannot* be used to supply water to the new lot fronting Newcombe street. A new watermain will need extending across the frontage to this lot in order to supply it with water.

7. Gas Supply

Ausnet Gas Services is the authority responsible for the supply of gas via infrastructure provided by Tenix. An existing gas main fronts the Barwon Water property along Newcombe Street only.

It is anticipated that an application for gas reticulation would be required upon undertaking the development with the gas extended down along Elgin Street to provide a supply to the new lots. This would be undertaken at the same time as the road upgrade with the civil contractor providing a trench for the gas infrastructure to be installed within by others.

It is anticipated that the owners of the new lots would make applications to the gas suppliers following purchase of the blocks to have gas connected to their properties.

8. Telecommunications

Telstra is the responsible authority for the telecommunications assets in this location.

There are existing underground Telstra assets within Newcombe Street on the northern side. An extension of the existing Telstra network assets along Elgin street to the south will be required to service the new lots which are not currently fronted by Telstra.

It would be expected that lot 1 can be serviced by the existing assets fronting the property with the future owners making direct application to Telstra to have the lot connected as it is built upon.

The telemetry for the pump station is wireless and the infrastructure for this will not be disrupted by any of the potential works associated with this development.

9. Electricity Supply

Powercor is the responsible authority for the electricity in this location.

There are existing overhead electrical assets within Newcombe Street on the northern side and in Elgin Street on the western side. There are also existing underground electrical cables on the eastern side of Elgin Street.

A routine extension of the electrical infrastructure will be required to provide new service pits installed on the common boundary corner. In Newcombe Street, a pit will be installed on the common corner of the new lot 1 and the water pump station reserve. Similarly, extensions will be required in Elgin Street to provide service pits on the common lot boundaries of lots 5/6, 3/4, 7/8, 9/10 and on the corner of lot 2.

10. Summary

Based on the servicing advice provided by the various authorities, there are no servicing constraints to the development of these ten new lots.

Advice from Barwon water is that;

- the pump station has a water source directly connected to the internal pipework and as such would not require a new connection to the 300mm watermain and
- the telemetry for the pump station is wireless so there will not be any need to alter any existing telecommunications.