365 MARSHALL MOUNT ROAD UTILITY INVESTIGATION REPORT

MKR00156

OCTOBER 2024

Prepared For:











TABLE OF CONTENTS

1	INTRODUCTION	3
1.1	Site Description	3
1.2	Proposed Development	6
2	WATER AND SEWER SERVICES	7
2.1	Water	7
2.2	Sewer	7
3	ELECTRICAL SERVICES	9
4	TELECOMMUNCATIONS	10
5	GAS SERVICES	12
6	CONCLUSION	13





1 INTRODUCTION

Maker ENG Pty Ltd (Maker) has been engaged by CAVI Property Group (CAVI) to provide professional services in support of a Planning Proposal/Neighbourhood Plan at 365 & 297 Marshall Mount Road.

The site is currently zoned C4 Environmental Living under the Wollongong Local Environmental Plan 2009 and is subject to a minimum Lot Size of 4,999m². By contrast the existing R2 Low Density Residential land to the north-west is subject to a Minimum Lot Size of 449m². This report has been prepared to accompany a Planning Proposal and Neighbourhood Plan for the land holding which will deliver a broader range of housing which is site responsive and responds to servicing capabilities.

Generally, the Planning Proposal seeks to adopt an implied lot size of 1,000m² over the western portion of the land (365 Marshall Mount Road) and retain the current 4,999m² minimum lot size of the eastern portion of the land (297 Marshall Mount Road). This will deliver a transition in the lot size and housing arrangements. The Neighbourhood Plan will address more detailed design outcomes as prescribed under the Wollongong DCP consistent with the lot sizes sought under the Planning Proposal.

One of the primary considerations during the planning phase of this project involves determining the ability of the site to be serviced by utilities including sewer, water electricity, telecommunications and gas. The purpose of this report is to inform the suitability of the site for development with regards to the provision of services.

1.1 SITE DESCRIPTION

The subject site for the planning proposal is comprised of the C4 zoned land within 365 Marshall Mount Road (Lot 8 DP 626078); however, for the purpose of this utilities investigation the broader Timber Glades Neighbourhood Plan area, which also includes portions of 297 Marshall Mount Road (Lot 5 DP 24143) and 377 Marshall Mount Road (Lot 2 DP 105826) has been considered. The site is the southernmost extent of Stage 5 Yallah Marshall Mount of the West Dapto Urban Release Area. Refer to **Figures 1 & 3** below for context of the site's locality within the West Dapto Urban Release Area.

The north-western portion of 365 Marshall Mount Road, which is zoned R2 and falls within the adjacent lowna Neighbourhood, will ultimately be separated from the subject site by the future Marshall Mount Bypass Road. Refer to **Figure 2** below for information regarding the zonings across the site.

365 and 297 Marshall Mount Road are typically separated by a crest that loosely follows the boundary. 365 Marshall Mount Road generally grades northwest towards Marshall Mount Road, while 297 Marshall Mount Road grades in a southeasterly. There are a number of existing watercourses and dams contained within both sites. The sites generally consist of open grassland with scattered trees throughout.





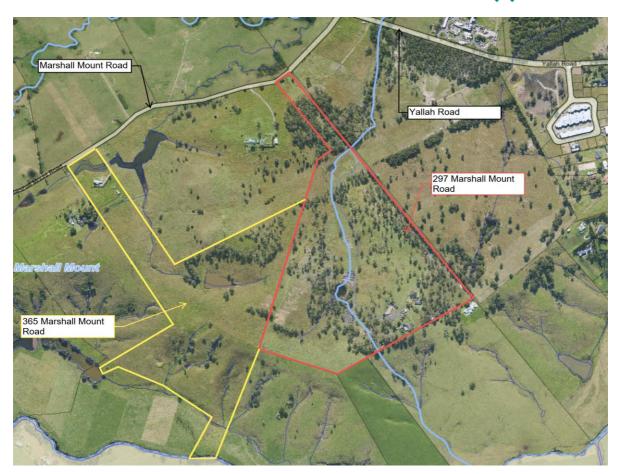


Figure 1: Site Locality

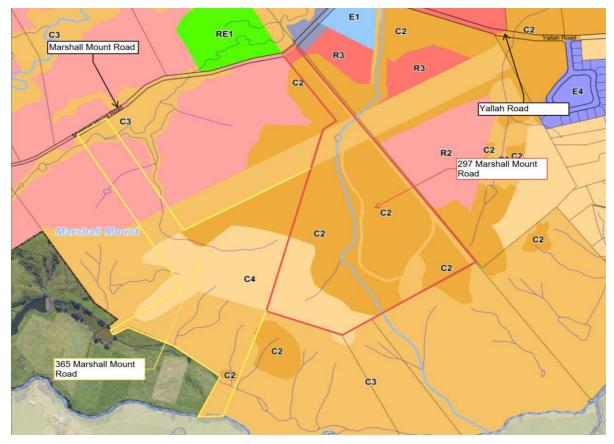


Figure 2: Site Zoning





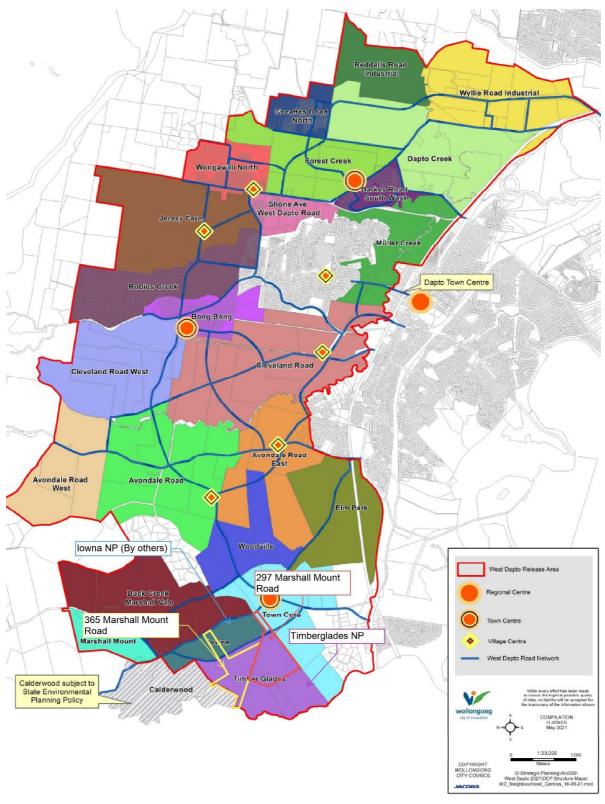


Figure 3: Site Context Plan





1.2 PROPOSED DEVELOPMENT

The proposed development is contained within the C4 zoning across 365, 377 & 297 Marshall Mount Road, while the Planning Proposal is seeking a lot size reduction solely within the C4 zoned land within 365 Marshall Mount Road. The ultimate development consists of 72 large residential allotments within 365 Marshall Mount Road, and a further 11 large environmental living allotments (min. lot size 5000m2) within 297 & 377 Marshall Mount Road.

The conceptual lot layout is depicted in Figure 4 below.

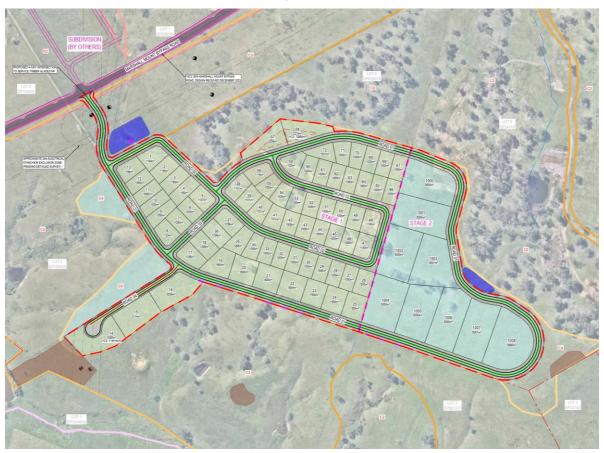


Figure 4: Conceptual Layout





2 WATER AND SEWER SERVICES

Sydney Water is the utility service authority responsible for the management and delivery of water and sewer reticulation services in the West Dapto Stage 5 Urban Release Area. Whilst the study area does not currently have access to existing sewer or water services; the Stage 5 Urban Release Area, inclusive of the subject site, are part of Sydney Water's Growth Servicing Plan, with delivery of trunk services planned for completion by the end of 2026.

CAVI, as a major landholder within Yallah Marshall Mount, have been an active member of the YMM Sydney Water Developer group, which was set up to ensure open communication and coordination between Sydney Water and the developers in the precinct. Through this group CAVI has been collaborating with Sydney Water to ensure the subject site will be appropriately serviced as outlined below.

2.1 WATER

Based on a review of Dial Before You Dig (DBYD) plans and Sydney Water Planning documents it is evident that there are no existing potable water services in the vicinity of the site.

As part of their Growth Servicing Plan, Sydney Water propose to deliver a trunk potable water network to service the West Dapto Stage 5 Urban Release Area. As is depicted in **Figure 5** below, Sydney Water will deliver the trunk 300mm diameter main within Marshall Mount Road to the north of the subject site, with the developer to provide any required lead-ins as well as the local network services within the subject development.

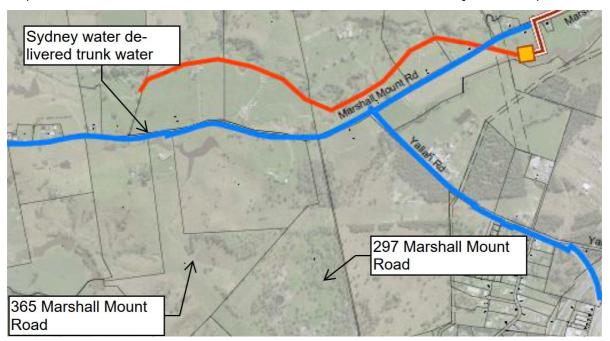


Figure 5 - Proposed Potable Water Services

2.2 SEWER

Similar to potable water, there is currently no existing sewer in the immediate vicinity of the subject site, with Sydney Water proposing to provide trunk sewer to accommodate the Stage 5 Urban Release Area.

As is depicted in **Figure 6**, Sydney Water will deliver the trunk sewer up to 300mm diameter within Yallah-Marshall Mount, including the YMM sewer pump station and associated rising main network. The upstream extent of the Sydney Water delivered main





is the eastern boundary of 386 Marshall Mount Road within the Duck Creek corridor. The sewer lead-in from 365 Marshall Mount Road and 297 Marshall Mount Road is to be developer delivered. This is being actively coordinated by the developer group in the Yallah Marshall Mount precinct to ensure successful delivery of the sewer lead-in.

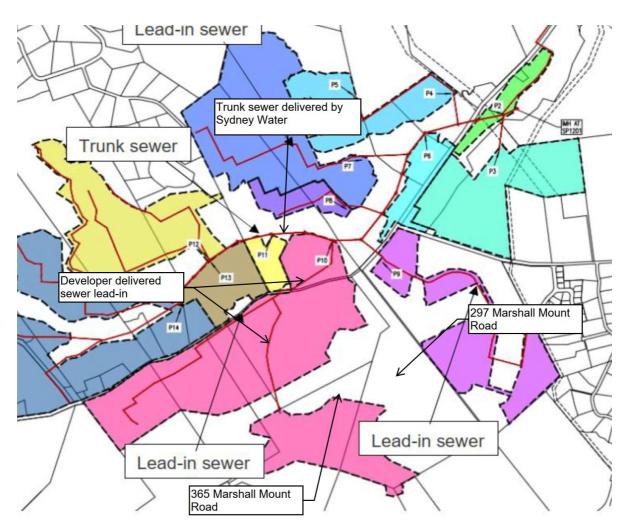


Figure 6 - Proposed Sewer Services

Proposed lots 14-16 and all lots within 297 Marshall Mount Road generally grade away from the proposed lead-in gravity sewer and will not drain to Sydney Water's network. As such, these lots will require on-lot effluent management systems and have been sized appropriately to accommodate this.

The balance of the proposed lots within 365 Marshall Mount Road are able to be drained by gravity to Sydney Water's wastewater network, with Sydney Water confirming that their network has been designed to cater for this network.





3 ELECTRICAL SERVICES

Endeavour Energy is the utility service authority responsible for the management and delivery of electrical services in the West Dapto Stage 5 Urban Release Area. Developments in the vicinity of the subject site are currently serviced by Endeavour Energy's overhead network. Review of Endeavour Energy's connection mapping indicates the presence of 11kV overhead distribution line along Marshall Mount Road. Furthermore, a high-voltage Transgrid transmission line runs through the site towards Calderwood.

It is expected that the development would be connected to electrical services via the overhead 11kv distribution line; this would require further investigation by an L3 electrical designer and liaison with Endeavour Energy. The connection will also depend on electrical works undertaken as part of nearby developments, including those within the Iowna NP as shown in **Figure 2**. Any upgrades to the electrical network required by Endeavour Energy for capacity reasons will be provided as necessary at later stages in the project.





4 TELECOMMUNCATIONS

Telecommunications services are within the vicinity of the subject site and are available on Marshall Mount Road. A DBYD was conducted that shows telecommunications cables being present on the south side of Marshall Mount Road (refer to **Figure 7**). Maker expects that telecommunication connection to the subject site can be facilitated via this existing network; however, further communication with Nextgen will need to be undertaken as the design progresses to ensure there is sufficient capacity in the network to facilitate the connection.

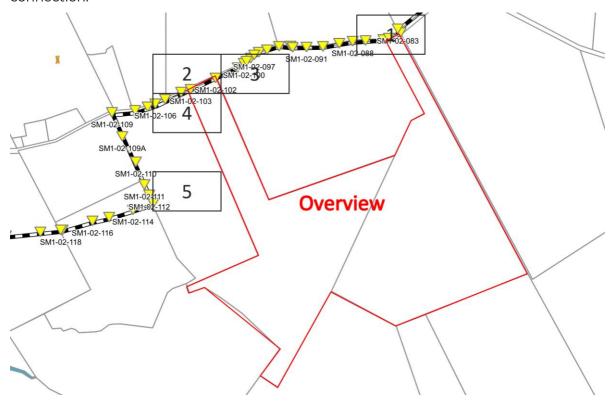


Figure 7 - Existing Telecommunications Infrastructure

DBYD investigations also revealed the presence of an Optus Fibre Optic cable traversing the site as shown in **Figure 8**. Maker note this as a project constraint and will undertake further investigation during detailed design stages to determine whether relocation will be required and will ensure that consultation with Optus is undertaken throughout the process.





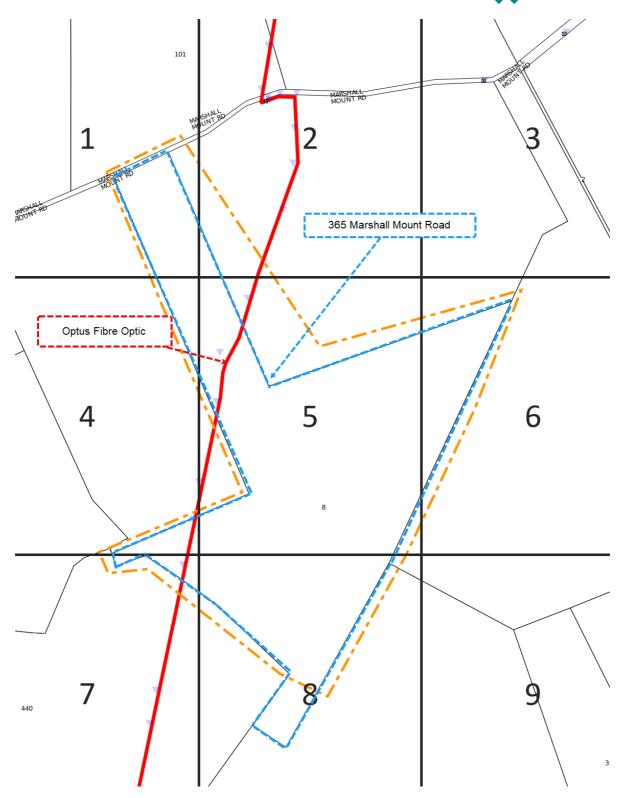


Figure 8 – Optus Fibre Optic Cable





5 GAS SERVICES

Jemena is the utility service authority responsible for the management and delivery of gas services in the vicinity of the subject site. Jemena have planned for future capacity and services for the West Dapto Urban Release Area. Gas will be supplied to the development via the extension of existing services within the Yallah-Marshall Mount area consistent with the standard procedures of the gas authority. Maker expects that gas connection will occur in concurrence with neighbouring developments. Any required lead-ins to existing gas mains shall be identified and undertaken as part of the works.

It is noted that the Eastern Gas Pipeline (EGP) is located south of 297 Marshall Mount Road. The proposed development will not impact the EGP in any way.





6 CONCLUSION

Desktop investigations have been undertaken to assess the serviceability of the proposed development at 365 & 297 Marshall Mount Road. In general, utility services will be upgraded as necessary to meet the needs of the Stage 5 West Dapto Urban Release Area.

All utility capacities mentioned in this report are indicative of the utility capacities at the time of enquiry. Confirmation of the capacity to service the site with all utilities mentioned in this report requires a formal supply offer for the request of services from respective service authorities.

The ability for the site to be serviced by Sydney Water's proposed potable and wastewater networks in particular, have been a key driver in determining the feasibility of the proposed minimum lot size reduction.

Office Locations

Maker ENG Wollongong Office Level 3, 280 Keira Street Wollongong NSW 2500 P: 02 4228 4401

Maker ENG VIC Torquay Office 4/110 Geelong Road Torquay VIC 3228

www.makereng.com.au

Management Systems

Quality and safety are extremely important to Maker ENG and as such we are certified to the following Australian Standards:

- ISO 9001:2015 Quality Management Systems
- ISO 45001:2018 Occupational Health and Safety Management Systems
- ISO 14001:2015 Environmental Management Systems

