30 August 2023

Orion project reference: 23-0415

<u>Technical Memorandum Water and Wastewater Servicing for No. 43-49</u> Warriewood Rd Warriewood

This is a short Technical Memorandum regarding potable water and wastewater servicing options for an existing site being No.43-49 Warriewood Rd Warriewood (Lot 1,2 DP349085, approximate area 21,448.15 square meters).

The subject property is a roughly rectangle shaped lot located off Warrriewood Rd Warriewood. The lot is currently having existing structures which will be removed as part of DA consent as can be seen in the Metromap image below (Image from 06.05.23).





A survey of the lot was made available, the reference file is "10. Plans - Survey Plans (3451-0978-6402_1)". This survey file shows that the land generally falls from Warriewood Road towards the south/southwest before flattening out somewhat in the heavily vegetated southern part of the lots.

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The current Sydney Water infrastructure assets in the vicinity of the site are a DN100 Potable Water main (DN100 CICL main, Project Number WO80565, main laid in 1925), the closest water main is located across Warriewood Road and DN100 Potable Water main (DN100 o PVC main, Project Number CASE168763PW, main laid in 2019), the closest watermain is located across Lorikeet Grove.

This wastewater main is a DN225 main (DN225 PVC main, Plan Number INDEX601_851, laid in 2021) with invert levels ranging from RL 1.22 to RL 1.61 according to the Sydney Water Hydra system. Wastewater main is DN400 main (DN400 RC main, Plan Number PRO20021251, laid in 2010) with invert levels ranging from RL0.52 to RL 0.87 according to Sydney Water Hydra system. Wastewater main is DN1800 main (DN1800 RC main, Plan Number WO36558, laid in 1973) with invert levels ranging from RL 5.51 to RL 5.6 according to Sydney Water Hydra system.

It is noted here that no guarantee is given that these figures are accurate, and any levels will have to be verified by survey on site determining exact lid levels of the structures and invert levels of the structures.

Please refer to Figure 2 on the following page for Sydney Water Hydra information.



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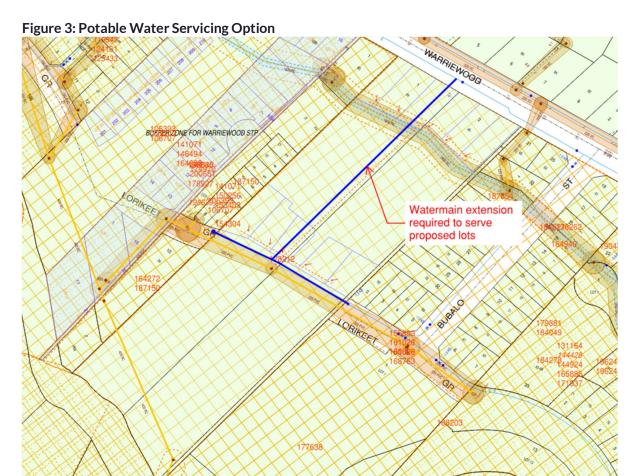
Figure 2: Sydney Water Assets





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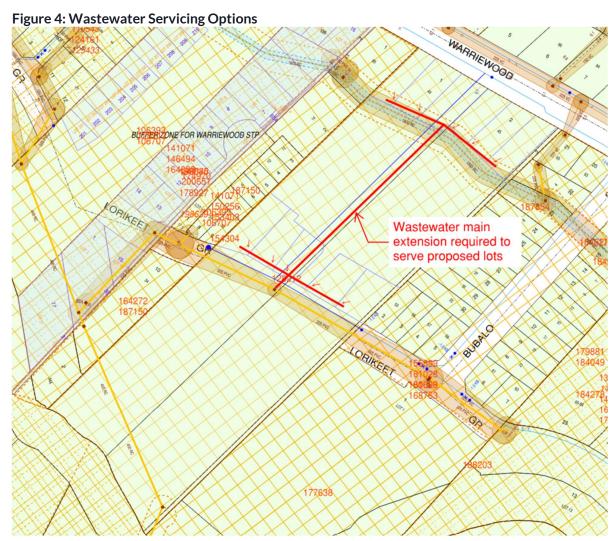
With regards to water servicing, a watermain extension is required to serve proposed development as shown in Figure 3 below.



With regards to wastewater the final development levels will determine the servicing solution.

Based on the available levels the assumption is that proposed units will drain by gravity to existing DN225 PVC sewer located across Lorikeet Grove. As noted previously exact levels of the wastewater will have to be determined by survey. Please refer to the next page for a sketch of the proposed wastewater servicing solution.

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In summary servicing options for the site are as follows:

- Potable Water extension required to service proposed lots
- Waste water extension required to service proposed lots
- We assume that existing sewer and water main has adequate capacity to drain proposed development

It is to be noted that this advice is based on experience and readily available data and is not to be taken as official Sydney Water advice.

If a written statement from Sydney Water is required regarding servicing the subject site, then the only option is to lodge a "Feasibility Application" which may take up to 60 business days and will only state if the site is in principle serviceable or not.

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Other than that, an application for S73 certificate will have to be lodged at the time of proposed development of the lot.

If there are any questions regarding this short Technical Memorandum, please do not hesitate to contact the undersigned as follows:

Yours faithfully,

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