Environmental Health Referral Response - unsewered land

Application Number:	DA2020/0392

Date:	23/07/2020
Responsible Officer	Georgia Quinn
Land to be developed (Address):	Lot 2414 DP 752038 , 19 Morgan Road BELROSE NSW 2085

Reasons for referral

This application seeks consent for development upon unsewered land.

And as such, Council's Environmental Health and Protection officers are required to consider the likely impacts.

Officer comments

The following points are as a result of a wastewater report analysis by environmental health, and must be addressed by the applicant (recommended to be answered by a suitably qualified and experienced qualified wastewater consultant) prior to stringent conditions being included in a potential recommendation for approval:

1) What is the collection well to be used for? Potable water or wastewater overflow?

2) Proposal to have separate greywater and blackwater. However, the documents provided show only a two tank AWTS. How does the applicant propose to separate blackwater and greywater? What mechanisms / tanks will be used?

3) According to NSW greywater reuse policy, (underground) water tanks and wastewater tanks must be 15 m apart. In the diagram provided with the wastewater report, a water tank and the wastewater tanks are located in the same area. Are the tanks to be located above or below ground?

4) Master and working plans differ from wastewater report diagram –water tank and wastewater tank locations need to be finalised so it is clear what and where water management reuse items / mechanisms are being installed.

5) Where were bore holes / soil samples made on site?

6) Soil DLR has been maximised (at 30) -therefore minimizing the overall size of the absorption beds according to report calculations. Realistically, the DLR is lower and thus the size of the primary beds need to be increased according with the number of people using the system (set conservatively at 7).

7) Acidic soils found across the site -a limiting factor. What effect will this have on soil permeability and clay dispersion within a typical wastewater solution. An Emerson Aggregate Test may need to be done on existing soils. Does gypsum need to be added for effective evapotranspiration and nutrient absorption to occur?

8) What is the proposed depth of the pressure-dosed absorption beds? Depth to bedrock is a concern at 600 mm. According to the Sydney Catchment Authority – *Designing and Installing On-site*

Wastewater Systems, usually there must be a soil buffer of at least 300 mm between the bottom of the absorption bed and bedrock. In this case, a pressure dosed bed would likely be within 100 mm of bedrock and result in wastewater dispersal rather than evapotranspiration.

9) Once construction is completed, will there be enough exposure of sunlight to have effective evapotranspiration via a **raised pressure-dosed absoprtion beds**?

10) Setbacks are below the (AS/NZS) guidelines with respect to property boundaries and dwelling location to disposal areas. **Applicant will need to consider either reducing or modifying the footprint of the buildings to enable re-location of the absorption beds away from property boundaries and other hard structures.**

11) How will the reserve areas be used? What are the diversion mechanisms and when will the water divert?

Environmental Health again recommend refusal as the wastewater proposal is not commensurate with the scale of development on a highly constrained site. Thus, not complying with even the minimum requirements of any guideline.

Recommendation

REFUSAL

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Environmental Health and Protection Conditions:

Nil.