

SHD Consulting Engineers
Nutgrove Enterprise Park
Rathfarnham
Dublin 14

20th July 2022

Re: Planning Register Reference: SD21A/0361, Additional Information Request Item No. 4

To whom it may concern,

SHD Consulting Engineers carried out a review of the planning application referenced above and the additional information requested by South Dublin County Council (SDCC), specifically the Additional Information Request Item No. 4.0 with regard to the applicants intention to use a soakaway and SDCC's request for soil percolation test results, design calculations and the proposed soakaway.

SDCC stated that;

"Any proposed soakaway shall be located fully within the curtilage of the property and shall be:

- At least 5m from any building, public sewer, road boundary or structure.*
- Generally, not within 3m of the boundary of the adjoining property.*
- Not in such a position that the ground below foundations is likely to be adversely affected.*
- 10m from any sewage treatment percolation area and from any watercourse / floodplain.*
- Soakaways must include an overflow connection to the surface water drainage network."*

Due to the location of the proposed development and the site extents, it is not feasible to position a soakaway within the curtilage of the property, if it is to meet SDCC's positioning requirements. This is justified through a combination of the first three positioning requirements as set out by SDCC.

1. The soakaway is to be located *"(...) at least 5m from any building, public sewer, road boundary or structure"*. The 4 observations below, render it impossible position the soakaway in a suitable location whilst meeting the positioning requirements as set out by SDCC.
 - a. There are existing dwellings; No 24 Tara Hill Road and No 22A St. Patrick's Cottages, located within a close proximity to the proposed development
 - b. There is an existing boundary wall structure around the properties on Tara Hill Road and St. Patrick's Cottages, which also wraps around the perimeter of the site where the proposed development is to be located.
 - c. There are existing road boundaries, namely Tara Hill Road and laneway access to the rear of the properties on Tara Hill Road and St Patrick's Cottages, which also wrap around the perimeter of the site where the proposed development is to be located.
 - d. It is understood by SHD Consulting Engineers that the public sewer line runs along the

rear gardens of the properties on Tara Hill Road and breaks out onto Tara Hill Road. Positioning the soakaway at least 5.0m from any of the elements listed above results in the soakaway being located in a position that falls within 5m from one of the other 3 elements, therefore it is not feasible to locate the soakaway in a suitable location whilst meeting the positioning requirements as set out by SDCC

2. The soakaway is to be located “(...) generally, not within 3m of the boundary of the adjoining property”. This is justified by the following observations.
 - a. If the soakaway is to be positioned so that it is 3.0m or greater away from the adjoining property it falls within a distance that is less than 5.0m from the adjacent road boundaries, structures and public sewer.
 - b. If the soakaway is to be positioned so that it is 5.0m or greater away from the adjacent road boundaries, existing structures and public sewer then the soakaway is positioned at circa 2.2m or less away from the boundary of the adjoining property.

However, this would result in the soakaway being positioned so that it would be less than 1.0m from the proposed development. This would result in the soakaway being positioned in a location that would result in the ground below the foundations of the proposed development being adversely affected, which contradicts with the third positioning requirement of soakaways as set out by SDCC.

Based above it is our opinion, that even though the Client intended to use a soakaway as stated in their application form, it is not feasible for the Client to locate the soakaway in a suitable position that meets the positioning requirements of soakaways as set out by SDCC. Therefore, based on this observation none of the items below have been submitted to SDCC for the previously proposed soakaway, in response to the Additional Information Request Item No. 4;

- Soil percolation test results
- Design calculations or dimensions
- Report showing site specific soil percolation test results and design calculations for the previously proposed soakaway in accordance with BRE Digest 365 – Soakaway Design

It is therefore our conclusion that in order not to foul the positioning requirements of soakaways as set out by SDCC, the Client must connect to the public surface drainage network and forego their original intent to install a soakaway within the curtilage of the property.

Regards,



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Structural Chartered Engineer