

Job Ref: 23-004

27/04/2023

Planning/Environmental Dept,
South Dublin County Council,
County Hall,
Tallaght,
Dublin

Re: Conditions to Grant for the Planning Ref. No. SD21A/0246

Applicant: Beckett Developments Ltd.

Site Address: Palmyra, Whitechurch Road, Rathfarnham, Dublin 16

To Whom it Concerns,

This is to state that Hydrocare Environmental Ltd. has been retained by the applicant to issue a response to Items 7 and 10 of the conditions to grant planning permission for the proposed development, ref. no. SD21A/0246. The proposed development will consist of the construction of 8 houses, all associated on and off development works, landscaping, boundary treatments, removal of existing street boundary screen wall and the provision of vehicular and pedestrian access to an infill site of ca. 0.226Ha. at Grangebrook Avenue, Palmyra, Whitechurch Road, Rathfarnham, Dublin 16.

7(a) Please see appended herewith the Stormwater Drainage Report detailing surface water attenuation calculations for the proposed development. This report details the total permeable and impermeable surfaces, the SUDS features, and the attenuation volume required for each of the 8 no. dwellings.

7(b) Please see appended herewith the Stormwater Drainage Report which includes a layout drawing and long section of the proposed SUDS features for this development.

7(c) As the greenfield runoff rate for this development site is 1.48l/s, this would require that the outfall flow rate from each dwelling house be restricted to 0.185l/s in order to satisfy the criteria. However, it is not practical to restrict the individual outfall flow rates to less than 0.5l/s due to the increased risk of blockage. This is half of the outfall flow rate for each site compared to the surface water drainage system previously designed by others for this development under the ref. no. SD21A/0246.

We were in contact Mr. Brian Harkin Engineer DCC to discuss this proposal. We were requested to submit a Stormwater Drainage Report for this proposed development for discussion and pre-agreement. A copy of the Stormwater Drainage Report was sent to Mr. Brian Harkin, Engineer on 13th March 2023.

8(a) A Screening Flood Risk Assessment has been carried out for this proposed development. The screening flood risk assessment established that there will be a minimum freeboard of 7.26m between the lowest FFL and the highest fluvial flood water level. Please see appended herewith the Screening Flood Risk Assessment.

8(b) The water supply and drainage infrastructure will comply with the requirements of Irish Water and will be in accordance with the connection agreement.

8(c) The foul and surface water drainage systems will be completely separate during both installation and use. No surface water will discharge to the public foul sewer or to a combined sewer. All new precast surface water manholes will have a minimum thickness surround of 150mm Concrete Class B. Please see the Stormwater Drainage Report appended herewith.

8(d) All works for this development will comply with the Greater Dublin Regional Code of Practice for Drainage Works, please see Stormwater Drainage Report appended herewith.

10. Please see the Stormwater Drainage Report appended herewith which details the SUDS features and the treatment train approach for this development. This includes a tree pit for each development which in regular rainfall events will allow for infiltration to the ground within the development site prior to discharge to the public storm drain.

This incorporates tree-pits and a permeable paving system as a form of treatment train approach incorporating biodiversity and amenity values to the SUDS proposal, promoting infiltration to the ground within the development before discharging to the public storm drain at a controlled outfall flow rate. The tree-pits were not included within the storage volume calculations. The storage volume provided by the tree-pits will be in addition to the gravel attenuation blankets underlying the permeable paving system.

Similarly, the infiltration to the ground via the tree-pits and the base were not included in the attenuation volume calculations. However, any infiltration within the ground will further reduce the surface water runoff from the proposed development to the public storm sewer.

The Stormwater Drainage Report appended herewith contains a maintenance plan and schedule for the proposed surface water drainage system.

We hope the above is to your satisfaction.

Yours sincerely,



Daniel Nolan, BA BAI, MSc Environmental Engineering, FETAC Site Assessor, MIEI