Drainage Design Statement for Darfield Design & Access Submission

Foul & Surface Water Drainage:

Due to the nature of the site being formerly “Green field” and the consequential requirements of limited storm water discharge imposed by Yorkshire Water (YW), the maximum discharge from the development will be restricted to 5l/s (TBC). Storm water attenuation tanks will be sized to accommodate all flows in excess of the 5l/s (or otherwise stipulated).

The Phase II Site Investigation included permeability testing carried out within soakaway pits. Inline with BRE365 the percolation test results are described as unsuitable for the use of soakaways. The nearest watercourse is the River Dove located some 0.15km away. Due to the distance between the site and the watercourse and the unsuitability of the soakaways it is proposed that the site will discharge surface water to the Public Storm Sewer located within George Street (TBC). YW will be contacted and a request made for a new connection to the Public Sewer.

It is anticipated the Client will request and offer as much infrastructure for adoption post completion as possible. To satisfy the requirements of YW/Highways adoption policy the attenuation will be required to be in the form of either oversized pipes and/or box culvert sections. The attenuation will be required to be positioned in either the adopted highways or an open space with an easement agreement. The current layout does not lend itself to the latter.

It is proposed that foul water from the development will connect to the Public Foul Sewer located with George Street (TBC).

All drainage serving two or more properties will be offered for adoption.

At this stage it is anticipated that both Foul and Storm systems will discharge to the Public Sewers by gravity, however should levels dictate that a gravity fed solution is not achievable then it will be necessary to include two separate pumping stations (Foul & Storm).
Note: Adopted pumping stations require designated areas for access/maintenance and pumped wells must be positioned a minimum 15m from a habitable room.

Billinghurst George & Partners will liaise with YW/BMBC Highways representatives in regard to the provision, location and construction of any attenuation tank(s).

The development will be required to comply with code for sustainable homes SUR1. Therefore a reduction of surface water volume is required to achieve the mandatory unit. As the use of soakaways is not viable due to the nature of the ground (firm clay) the development will be required to include some form of rainwater harvesting. This will be provided to each dwelling (designed by others).

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