Richard Hall

From: Hunt, Timothy <

Sent: 06 September 2021 16:07

To: Richard Hall

Subject: S104: Flosh Meadows, Cleator Moor (Surface Water) 4200011332

Richard,

Under the circumstances we will accept a connection of surface water to the combined sewer to the south of the site at a rate not exceeding 5 l/s

This will mean that you will need to increase the storage volume of the storm tank slightly

Thanks Tim



Tim Hunt

Developer Services Engineer (North Area)
Developer Services & Metering
Customer Services

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From: Richard Hall [

Sent: 02 September 2021 15:39

To: Hunt, Timothy

Subject: Flosh Meadows - Surface Water

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Hi Tim,

Further to our conversation yesterday, please refer to the enclosed plans and summary below.

As discussed, there is a 'watercourse' running through the site. We had initially intended to discharge surface water from the development to the watercourse. This would have satisfied the planning hierarchy for disposal of surface water as the ground conditions are unsuitable for the use of infiltration techniques.

During the application for funding arrangements, it was discovered that the developer had no legal right to discharge to the 'watercourse', partly due to the fact that the watercourse is in fact man made and was constructed as a Mill Race, to feed a downstream mill wheel. This has been agreed as correct between legal teams representing the developer, Homes England, United Utilities and the Local Authority.

UU have previously confirmed that surface water can discharge to the existing sewer located within the extents of Howthorne Fields. Coast have reviewed various potential proposed routes for offsite drainage. The only route that appeared feasible is as shown on the enclosed plan. The route presents difficulties with buildability. Due to the

depths and locations of existing sewers and utility apparatus, the proposed sewer becomes very shallow with cover to pipes as shallow as 0.625m. Both UU and the LA highways have agreed that this solution is acceptable, providing that a protection slab is installed in particularly shallow locations. Coasts view is that this will present a maintenance issue for the highway authority as a shallow hard spot will be situated at a depth of 0.325m below finished ground level and it is highly likely that the flexible surfacing will crack above the slab, presenting an opportunity for ingress of surface water and spalling of the road surface in due course.

In addition to the issues above, the depth of the proposed sewers are likely to lead to clashes with existing gas, water and electricity mains. The proposed depth of 0.625m to soffit and 0.850m to underside of the proposed pipe will be situated within the zone of the existing utility services, which are typically 0.60m – 0.90m below finished ground level. Again this will cause significant issues with buildability and may make the proposals unfeasible. The enclosed plans identify the location of existing utilities. We have requested water and electricity plans to further demonstrate the issue.

We have discussed the use of a surface water pumping station with the LLFA and they deem pumping station to be lower in the planning hierarchy than a connection to a combined sewer.

We believe that the only available option to the developer is to form a connection to the existing combined sewer located within the developers land at the southern boundary. We would be grateful if you could review this e mail and information and advise us accordingly.

The LLFA are satisfied that a combined connection is satisfactory given the work completed to date and subject to confirmation from UU of its acceptability.

If you have any queries, please let me know.

Kind regards,

Richard Hall



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