

AVANT HOMES DRAINAGE MAINTENANCE PLAN FOR SITE AT FORMER ST. LUKES HOSPITAL, HUDDERSFIELD

The proposed development consists of 226 new build properties with a mixture of detached, semi-detached and townhouses ranging from 2 bed to 4 bed properties.

Avant Homes will remain the owner of the drainage system and will be responsible for the maintenance of the new development sewerage system until the site is formally adopted by the local sewerage undertaker (Yorkshire Water).

It is anticipated that adoption will follow completion of the site development works and the subsequent maintenance periods specified within the Section 104 Agreement. The Yorkshire Water Reference for this development is H-3-264-313.

The adoptable sewers, both foul and surface water are covered by this agreement and the agreement is bonded by the NHBC. Entering into such an agreement allows for the works to be completed if for any reason Avant Homes are unable to do so.

In line with the above this document looks to set out the proposed maintenance and general upkeep of the sewer system by Avant Homes.

Both foul and surface water outfall to existing Yorkshire Water adopted sewers. The site is split by 3 outfall points.

The first discharge point is to the Yorkshire Water combined sewer located in Blackmoorfoot Road. The surface water discharge at this point is limited to 148.3 litres per second. The discharge is limited by a control manhole that contains a hydro brake. Storage is provided on site in the form of oversized concrete pipes. This provides storage for the 1 in 100 year storm event plus 30% climate change

The second discharge point is the Yorkshire Water combined sewer in Nabcroft Lane. The surface water discharge at this point is limited to 230 litres per second. The discharge is limited by a control manhole that contains a hydro brake. Storage is provided in the form of oversized concrete pipes and an underground concrete storage tank located beneath the public open space. These combine to provide storage for the 1 in 100 year storm event plus 30% climate change

The third discharge point is also in to a Yorkshire Water combined sewer located in Nabcroft Lane. The surface water discharge at this point is limited to 37.6 litres per second. The discharge is limited by a control manhole that contains a hydro brake. Storage is provided in the form of oversized concrete pipes. This provides storage for the 1 in 100 year storm event plus 30% climate change.

For reference please see drawing E18/7232/024F

Proposed Maintenance & Inspections of System

- Localised repair or where necessary replacement of damaged pipes & manholes, covers and frames
- Clearing of sediment build up in storage pipes and storage tank as and when required
- Jetting and vacuum to foul & surface water sewer if any localised blockage is noted or reported in order to ensure free flow is restored
- Undertaking any necessary CCTV survey to diagnose any issue that is not clearly apparent

The onsite adoptable drainage network will be inspected on an annual basis or following any major storm event in order to avoid situations that could impede the effectiveness of the system. This will be undertaken until formal adoption of the system is gained. Road drainage (gullies) will be inspected and debris such as leaves and silt are removed to avoid these items been washed into the main system.

Visual inspections to all 3 surface water control manholes to ensure they remain operational and any debris removed. The storage tank can be man accessed for routine maintenance inspections and build up of silts can be removed through specialist equipment such as Jet Vacs.

Summary of Inspections/Actions

Underground Storage Tank – Visual Inspection undertaken annually. Actions - Jetting and removal of silt and other foreign objects if required

Flow Control Manholes – Visual Inspection undertaken once every 4 months. Actions - Jetting and removal of silt and other foreign objects if required

Manholes/Access Chambers & Pipework - Visual Inspection undertaken once every 6 months. Actions - Jetting and removal of silt and other foreign objects if required. If any blockages are noted then a CCTV survey to be arranged by Avant Homes to locate issue. If required localised repair or replacement to be undertaken.