

HDC Drainage request More Information to support this application:

- The applicant should provide evidence of BRE365 Infiltration testing at the location and depth of the proposed SuDS. As shown within the Ground Investigation Report, the site is underlain by areas of Weald Clay Formation Mudstone and areas of Weald Clay Formation Sandstone. The of Weald Clay Formation Mudstone provides a very low-permeability barrier below the site. A falling head test was attempted within the areas of Weald Clay Formation Sandstone, but groundwater was encountered at a level which would prevent the SuDS features from being designed as infiltration features. Due to the presence of the underlying impermeable clays and groundwater, infiltration is not a viable method of surface water disposal, and so the SuDS features are designed to positively drain into the wider network being the water is discharged offsite.
- The applicant must provide evidence of measures to prevent pollution of groundwater. To ensure the development does not pose a risk of contaminating the groundwater, the treatment of surface water has been designed in accordance with the SuDS Manual's simple index approach. The development is defined as having a medium pollution hazard level, with hazard indices of 0.7, 0.6 and 0.7 for TSS, metals and hydrocarbons respectively. Surface water treatment has been provided in the form of permeable paving (indices of 0.7,0.6 and 0.7), two detention basins (indices of 0.5, 0.5, and 0.6), and a swale (indices of 0.5, 0.6, 0.6). The combined treatment of these SuDS features therefore provides mitigation indices in excess of the hazard indices and therefore provides treatment in-line with the SuDS Manual's guidance. In addition to this, the presence of the underlying mudstone provides a low-permeability barrier, reducing the potential vertical migration pathways to groundwater.
- Maintenance and Management Plans must be provided. Please find a drainage maintenance plan attached which provides maintenance actions and their frequency for all below ground drainage components.