

**Technical Information****Hydrogeology and Drainage**

The site sits on the edge of a valley slope. A hydrogeologist has been appointed to assess the site specific ground conditions and work with our drainage consultants.

Surface water runoff will follow the topography of the land unless it is intercepted. This site has a number of historic land drains crossing it but they are in poor condition, making them less effective in periods of high rainfall.

A spring emerges in the North West Corner of the site and is currently connected to a Yorkshire Water sewer.

The existing Greenfield Run Off Rate from the site is 42 litres per second. This will be reduced to 15 litres per second through a new drainage design for site as required by Yorkshire Water.

The proposed scheme upgrades existing land drains and captures all run off at the site, groundwater emerging from springs on site will continue to drain to the Yorkshire Water sewer.

The scheme uses storage and SUDS techniques to attenuate existing run off by 35%.

The total storage volume provided on site will be sufficient to accommodate run-off from the developed site including a 1 in 100 year event plus an increased allowance of 40% for climate change.

The tanks will have the effect of holding water back for gradual release at a rate of 15 litres per second using control devices.

Both foul and surface water drainage will connect to the existing public sewer network in Hawksworth Drive (8 litres per second) and St Peter's Way (7 litres per second). The receiving foul and surface water sewers are 'separate', which means that surface water will connect to a sewer designed exclusively for surface water and foul will discharge to a dedicated foul water sewer. This is agreed with Yorkshire Water.

Overland flow from off the site and groundwater emergence within the site will be picked up by new on-site land drainage systems.

Plans showing the existing and proposed drainage arrangements are on display today.

**Ecology**

Brooks Ecological have undertaken a Preliminary Ecological Appraisal of the site. Generally the site only supports species poor agriculturally improved pastures and degraded hedgerows which are of very low ecological value. The planning application will include the relevant ecological surveys requested by Bradford Council

Ecological enhancement measures can be incorporated into the site such as the sowing of wildflower grassland, installation of bat and bird boxes and improving hedgerow boundaries.

**Landscape Proposals**

Three areas of new public open space are included in the proposed layout.

Proposed housing fronts onto each of these open green spaces providing natural surveillance.

Two of the areas are connected by footpaths to create circular walking routes around the new development.

The central area of open space is connected by a footpath into the adjacent Meadow Croft, allowing pedestrian access north into Menston and to the nearby Menston Primary School.

Existing tree and hedgerow planting to the boundaries would be retained where possible and supplemented with new native planting, strengthening boundaries and improving biodiversity.

**Transport**

The site is well located to take advantage of sustainable travel options with good footway and cycle links to Menston and the facilities in the settlement such as schools, shops, surgeries and leisure facilities.

Access for these modes will be from the main access on the south side of the site and via Meadow Croft to the north, the latter will give direct access into the centre of Menston.

There are bus services that pass through Menston, of which the closest stops are to the north of the site on Hawksworth Road but there are additional facilities on Main Street in the settlement centre.

A Transport Assessment is being prepared and will form part of the planning application. This involves collecting base traffic data and modelling flows.

The Local Highways Authority can request local highway improvement if they are necessary as a result of the development.