Consultation Response from KC,
Lead Local Flood Authority

2021/94552 Land at, Barnsley Road, Denby Dale, Huddersfield, HD8 8TS

Erection of 53 dwellings and associated works

Date Responded: 1st March 2022
Responding Officer: Paul Farndale
Responding Ref:

FURTHER INFORMATION is required in order for the Lead Local Flood Authority to support the application.

Surface Water Outfall

We agree that soakaways are not viable on this site with British Geological Data showing the site to be largely class 4 – severe constraints.

A watercourse, Haley Well Beck, to the east of the site is therefore stipulated under the hierarchy of disposal to be the favoured outfall. Kirklees LLFA estimated the discharge restriction to be 9l/s and therefore accepts 9.1l/s as stated in the FRA.

There should be not connection to the public sewer for surface water as a result

Foul Water Outfall

Please contact Yorkshire Water over whether a pumped connection is required as the topography may allow the new development 'to chase' down the levels of the existing system or redesign the existing system by lowering and making it a less steep gradient in order to make this an achievable goal. This should be explored to help reduce the carbon footprint of the development so effective drainage does not rely on power. In addition,
electrical and mechanical faults on pump statins pose a risk of flooding and pollution of adjacent watercourses.

Yorkshire Water need to advise on a suitable stand off but is likely to be 3 metres from the centre line of this watercourse. The planning officer may wish to have this demonstrated up front.

Existing Watercourse and its flood routing.

Downstream of the Site

To allow a 9.1l/s connection to Haley Well Beck for Surface Water, a cctv survey of an enclosed section between the trash screen adjacent to 36 Dearne Side Road and the piped outfall to the river Dearne. The trash screen should be examined to see if it conforms to the latest design and is fit for purpose. Please liaise with Paul Farndale & Martin Stephenson on this aspect. Developments can have an effect on the trash screen. Food incidents have been recorded at this location in the past. Please contact Paul Farndale for more information. These issues should therefore form part of the flood risk assessment.

Adjacent to the Site

Plots are shown very close to the watercourse which is unmodelled. Plot 1 being the closest. A preliminary analysis of levels either side of the site boundary and into land to the east needs to take

place and contours displayed. Modelling may be required so levels must be taken at frequent intervals. This must form part of the flood risk assessment.

Upstream and within the Site.

A total blockage scenario of Haley Well Beck to the south of 204 Barnsley Road needs to be considered. Using the 1 in 1000-year return surface water flood risk maps to simulate this, shows a pathway through the site and not overland where a culverted section of watercourse is. The culvert should have a CCTV survey to fully understand the risk. Assuming a worst-case scenario, it is noted that the FRA states there are no low spots in Barnsley Road. A topographical survey is required along Barnsley Road knowing that the access road may alter flood routing for surcharging systems under the road in addition to the watercourse. This is required to be analysed alongside the flood route mapping. It is possible that the entrance becomes critical, and the road network must act as a safe conduit with kerb levels, gradients of private driveways and finished floor levels designed to achieve this.

Attenuation

Calculated estimates of the design of required attenuation for the 1 in 100-year return period and 30% allowance for climate change must be produced for this step to be conditioned in lieu of a detailed design. The proximity of the attenuation to any pump station, if a gravity system is ruled out completely for foul drainage, must be deemed acceptable for the purposes of adoption by the statutory undertaker.

Section 106, SUDS Maintenance and Management Plan

The LPA is obliged by NPPF to ensure Suds systems are adequately maintained for the life of the site. This will include from the point of installation to the date of adoption by the statutory undertaker. A management company must be set up to protect residents if any agreement to adopt sewerage falls through or the process is not completed. A risk assessment and method statement with CDM Regulations in mind must be devised for the detailed design scheme in order to produce a defined safe method of access to and into attenuation and upstream and downstream infrastructure to perform task listed on an itinerary with an agreed schedule. This will then be couple with the management company undertaking within the section 106 document. Obligations will ceases upon the date of adoption by Yorkshire Water.