

**Consultation Response from KC,
 Lead Local Flood Authority**
2021/93621 Land off, Fullwood Drive, Golcar, Huddersfield, HD7 4JH
Erection of 10 dwellings and associated works (Within a Conservation Area)
**Date Responded:
 26/11/2021**
**Responding Officer:
 Martin Stephenson**
**Responding Ref:
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Drainage Comments

With reference to the following documents:

1. LLFA's previous consultation response dated 07 October 2021 from Aleksandra Tomczyk,
2. Brierstone Ltd letter dated 05 November 2021 from Dax Bradley,
3. Acumen Architects email dated 05 November 2021 from Hamish Gledhill
4. and the FRA produced by Build Vision Consulting Engineers dated August 2021.

For the avoidance of doubt, the allowable surface water discharge from the neighbouring Brierstone site into the YW sewer network will be a maximum of 5 l/s for the **combined** Armitage and Brierstone sites.

Therefore, the allowable discharge from the Armitage site into the Brierstone site should be limited to **3.4 l/s** (i.e. the minimum flow rate without risk of blockage to the flow control device) and the outlet diameter of the flow control device is no smaller than 75mm (e.g. HydroBrake model SHE-0075-3400-2050-3400).

It is confirmed that a MADD factor of 2 is acceptable and it is noted that the developer will carry out further investigations of the springs within the site for both the summer and winter seasons.

It is further confirmed that the climate change allowance to be used for the 1 in 100 year storm event is 30%.

Kirklees Flood Management & Drainage does NOT OBJECT to this application provided the above comments are addressed in the detailed design and recommends the following conditions/recommendations.

Suggested Conditions and Recommendations:
DR01 Drainage

Development shall not commence until a detailed design scheme detailing foul, surface water and land drainage, (including agreed discharge rates with the LLFA indirectly or directly to watercourse, attenuation for the critical 1 in 100 + 30% climate change rainfall event, attenuation construction details /design, plans and longitudinal sections, hydraulic calculations, phasing of drainage provision) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include a risk assessment and method statement, in accordance with CDM Regulations 2015, for access to and into the attenuation structure, and an itinerary of maintenance tasks with schedules. No part of the development shall be occupied until such approved drainage scheme has been provided on the site to serve the development or each agreed phasing of the development and retained thereafter.

DR07 Overland Flow Routing

The development shall not commence until an assessment of the effects of 1 in 100 year storm events, with an additional allowance for climate change, blockage scenarios and exceedance events on drainage infrastructure and surface water run-off pre and post development between the development and the surrounding area (both upstream and downstream of the development), has

been submitted to and approved in writing by the Local Planning Authority. No part of the development shall be brought into use (dwellings shall not be occupied) until the works comprising the approved scheme have been completed and such approved scheme shall be retained thereafter.

DR10 Construction Phase Surface Water Flood Risk and Pollution prevention plan.

Development shall not commence until a scheme, detailing temporary surface water drainage for the construction phase (after soil and vegetation/site strip) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall detail:

- phasing of the development and phasing of temporary drainage provision.
- include methods of preventing silt, debris and contaminants entering existing drainage systems and watercourses and how flooding of adjacent land is prevented.
- the strategy shall include a plan showing the location of the attenuation storage and supporting calculations, which shall be based on the critical 1 in 2-year storm. It should be assumed that once the site has been stripped that the percentage run-off will be 100 %. The maximum allowable off-site discharge rate shall not exceed 2.5 litres per second, unless otherwise agreed with the LLFA.

The temporary works shall be implemented in accordance with the approved scheme and phasing. No phase of the development shall be commenced until the temporary works approved for that phase have been completed. The approved temporary drainage scheme shall be retained until the approved permanent surface water drainage system is in place and functioning in accordance with written notification to the Local Planning Authority.

Recommendations

A drainage maintenance agreement (see below) should be put in place to maintain the site drainage system (including any SUDS/storage/flow control installations) following occupation of the housing units until these are adopted by Yorkshire Water to ensure the efficient operation of the system.

Section 106 – Management Company

The LPA is obligated under House of Commons Written Statement 161 to ensure the maintenance and management of sustainable drainage for the lifetime of the site. This includes the period from construction up until a date of adoption by the statutory undertaker (Yorkshire Water). There is no guarantee that systems will be adopted even if an agreement is signed to do so. It is vital therefore that an undertaking is ensured in the planning process to maintain these systems to manage flood risk. A detailed maintenance plan including access and safety is expected to be included so it can be enforced against non-compliance.