

**Consultation Response from KC,
Lead Local Flood Authority**
2020/91896 Pentlands, New Mill Road, Holmfirth, HD9 7LN
Demolition of existing dwelling and erection of 25 dwellings with associated access and external works
**Date Responded: 20 July
2020**
**Responding Officer:
Aleksandra Tomczyk**
Responding Ref: 0
Summary

Kirklees Flood Management and Drainage, as the Lead Local Flood Authority (LLFA), **OBJECT** to this planning application and require **FURTHER INFORMATION** is provided on the following:

- Flow routing;
- Infiltration testing;
- Surface water drainage design.

Kirklees LLFA also offer the below additional information and comments.

Kirklees Records

The site slopes from approximately 185mAOD along the eastern site boundary (along New Mill Road), to approximately 179mAOD in north west of the site.

There are no watercourses on site. The River Holme flows approximately 125m west of the site.

There is a network of public sewers in the area, including surface water and combined sewers along New Mill Road (east of the site) and a combined sewer west of the site (approximately 120m), along the eastern bank of River Holme.

The site is within Flood Zone 1, according to the Environment Agency's *Flood map for planning*. Northern part of the site is subject to low surface water flood risk, according to the Environment Agency's *Long term flood risk map*.

This area is likely to be suitable for infiltration features.

This site is allocated in the *Kirklees Local Plan* – Local Plan ID HS189.

Additional Comments

The applicant proposes to demolish an existing building on site, and erect 25 new dwellings, in the area of Holmfirth.

The applicant submitted the following relevant documents:

- *Design and Access Statement*, prepared by Orange, undated;
- *Flood Risk and Drainage Strategy*, prepared by Avie Consulting, reference number P3052, dated February 2020;
- *Proposed Drainage Strategy* drawing, prepared by Avie Consulting, number P3052-SK01, revision A, 19.03.2020;
- *Proposed Impermeable Areas* drawing, prepared by Avie Consulting, number P3052-SK04, revision A, dated 19.03.2020;
- *Phase 1 Environmental Desk Study*, prepared by Rogers Geotechnical Services, number C406/19/E/611, dated 17/01/2020; and
- Number of plans and sections of the proposed development.

Flood Risk Assessment and Flow Routing

Kirklees LLFA reviewed the flood risk assessment and management sections of the *Flood Risk and Drainage Strategy* document and have **no objection** to the conclusions stated. Kirklees LLFA make no further comment on this aspect.

Section 9.3 of the *Flood Risk and Drainage Strategy* states that flow paths through the site are to be maintained. The applicant should provide an analysis of flow routing on site, including any inflows from

offsite and any flows originating on site, such as drainage exceedance or gully bypass. The designed flow route should avoid property curtilages where reasonably practicable, utilising roads and open spaces. The applicant should consider how the proposed dwellings will impact the routing.

Flow routing from attenuation, or in this case, the soakaways on site, should also be considered, in case of an exceedance event. The applicant should use *Designing for Exceedance* guidance to inform this design and safe management of any exceedance volumes.

Surface Water Drainage Design

Kirklees LLFA reviewed the drainage sections of the *Flood Risk and Drainage Strategy* document, as well as the *Proposed Drainage Strategy* drawing and make the following comments:

- It is stated in section 14.1 that the infiltration rate for the site is 1.736×10^{-5} m/s. This is quite low and may mean that the soakaways are not feasible on site.
- It is also stated in section 14.1 that further testing must be carried out before construction, to ensure that the rate is applicable in all locations where soakaways are proposed. The applicant should have carried out infiltration testing to BRE Digest 365 standard, in location representative of any soakaways proposed. **This should be carried out and results submitted to the LLFA for review, before approvals are given.**
- LLFA is concerned with proposals to place soakaways in close proximity to retaining walls throughout the site. This is likely to cause a risk of re-emergence of water, which can cause flooding to the properties and third-party land.
- The applicant should also consider the potential for contaminated land on site and the site being within the High-Risk Coal Referral Area, as stated in the *Kirklees Local Plan*. The potential for contamination would make soakaways unsuitable due to potential to mobilise contaminants
- Overall, considering the points above, the LLFA do **not support the proposals to discharge surface water via soakaways, unless viability of this proposal can be proven.** The applicant should consider other option for discharge such as the nearby watercourse. The LLFA will not support any proposals involving pumping of surface water when natural flow processes would see surface water discharge to the adjacent watercourse.
- The LLFA have **no objection in principle** to providing permeable paving throughout the site.

Informative

Section 38 road adoption by Kirklees as a Highway Authority cannot take place unless sewerage located under the carriage way is adopted first. Therefore, all structures under an adoptable carriageway would need to meet the standards as set out by the statutory undertaker, including but not limited to *Design & Construction Guidance** and Yorkshire Water local guidance and any subsequent updates.

As part of a Section 106 agreement the Council are required to ensure the site is managed in a safe and suitable way up until adoption by a regulatory body. This requirement should also apply to drainage on the site, during the build out a management and maintenance plan including responsible management company must be secured. This should be enforced until adoption **and continued for the life of the development if adoption fails.** Adoption can fail at any step in the development process from concept design to site inspection post construction.

*Design & Construction Guidance has replaced 'Sewers for Adoption' giving provision for Sewerage Undertakes to adopt SuDS features and facilities.