

**Consultation Response from KC,
Lead Local Flood Authority**
2020/92657 King James School, St Helen's Gate, Almondbury, Huddersfield, HD4 6SG
Erection of 10 classroom teaching block and formation of car parking area with associated engineering and landscape works (within a Conservation Area)
**Date Responded:
13 October 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:

- Flood risk assessment;
- Overland flow routing;

Kirklees LLFA also offer the below additional information and comments.

Kirklees Records

The site contours fall from approximately 130mAOD in the north west, to approximately 110mAOD in south east.

There closest watercourse appears to be a culverted watercourse located part within St Helen's Gate (east of the site) and part located within the boundaries of the school. The culvert discharges into Rushfield Dike further south.

There is a surface water sewer along St Helen's Gate (east of the site), discharging into the culvert mentioned above.

The site is located within Flood Zone 1, according to the Environment Agency's *Flood map for planning*. There is a small area of low surface water flood risk, according to the Environment Agency's *Long term flood risk map* – along the west edges of the school building, and along the access road north of the existing car park.

There are records of flooding along Arkenley Lane (south of the site).

Records show this location is likely to be suitable for infiltration features.

Additional Comments

The applicant proposes to develop a classroom block and new car park area, at King James School in Almonbury.

The applicant submitted the following relevant documents:

- *Block Plan* drawing, prepared by Farrell & Clark Architects, number 303_020-DC-01-ZZ-DR-A-0701, revision 2, dated 07/08/20;
- *Flood Risk Assessment and Surface Water Management Report*, prepared by CCS Consulting, reference LE-020, dated 1st May 2020; and
- *Surface Water Management Layout* drawing, prepared by CCS Consulting, number LE-020-CCS-S1-XX-DR-S-0100, revision P2, dated 31.07.20.

Flood Risk Assessment and Flow Routing

Kirklees LLFA reviewed flood risk assessment sections of the *Flood Risk Assessment and Surface Water Management Report* and make the following comments:

- As stated before, there are some areas of surface water flood risk within the site boundaries. This information should be amended in the document. The applicant should also ensure that the flood risk is not displaced or increased due to the proposals.

Kirklees LLFA have no objection in principle to the assessment of the overland flows, as described in section 8.8 and shown in Appendix H. However, this assessment fails to include any drainage or flows from the proposed car park area. This should be provided for review.

Surface Water Drainage Design

Kirklees LLFA reviewed the surface water management sections of the *Flood Risk Assessment and Surface Water Management Report* and *Surface Water Management Layout* drawing, and make the following comments:

- The applicant proposes to discharge surface water into an existing surface water network within the site boundaries. Kirklees LLFA have **no objection in principle** to this proposal, however, the applicant should carry out investigations to determine the sizing and condition of this system, to ensure that it is able to accept the flows.
- The applicant proposes to discharge surface water at 2.6l/s. Kirklees LLFA **object** to this proposal as such low rate could cause issues with maintenance of the system. The LLFA require the minimum discharge rate to be at 3l/s.
- There are discrepancies between the report and the drawing, with regard to the dimensions and sizing of both attenuation options. This should be reviewed, and updated proposals submitted.
- It appears the attenuation is located approximately in the middle of the system (linearly) and therefore, it is very likely that the pipes and manholes downstream of it will often be surcharged. It would be preferred for the attenuation to be a fully online structure and the flow control to be located adjacent to it.
- Management and maintenance plan for the permeable paving, as shown in section 14.3, is considered insufficient to maintain the void ratio required to provide long term attenuation. The applicant should provide high pressure jetting of the pavement at regular intervals, in addition to the steps outlined in the report already.
- The MADD factor used within the MicroDrainage outputs (shown in Appendix F and G of the report) should be 0, not 2.0.
- Neither document present any drainage solutions for the proposed car park area. This should be provided for review to the LLFA.

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 Undertaker to adopt SuDS features and facilities.*