

Hopwood Hall College

Review of EA Objection Letter – Reference SO/2025/125078/05-L01

WDC confirm we have reviewed the objection letter in detail, below are highlighted the key points raised within the letter and the associated response from Roscoe.

It is noted the questions are worded from WDC to Roscoe in the first instance as us challenging Roscoe to respond and address the EA concerns.

1. Does the application now pass the second part of the exception test

To demonstrate the development is safe during a flood event the Roscoe FRA should cover:

- a. Site Layout and Building Location
 - Confirm the building is on the highest part of the site.
 - Show topographical data (levels relative to flood levels).
- b. Flood Risk Assessment (FRA)
 - Include peak flood depths and extent for 1-in-100-year events (plus climate change allowance).
 - Show site-specific flood mapping.
- c. Safe Access and Egress
 - Identify safe evacuation routes above predicted flood levels.
 - Show distance of access routes.
- d. Flood Resilience Measures
 - Raised floor levels above flood level.
 - Use of flood-resistant building materials.
 - Consider wet-proofing or flood-proofing strategies.
 - Electrical, mechanical, and IT systems raised or protected.
- e. Impact on Surrounding Areas
 - Demonstrate that the development does not increase flood risk elsewhere.
 - Include any SUDS measures (permeable paving, attenuation basins) if relevant.
- f. Management and Maintenance
 - Include a flood response plan for staff and pupils.
 - Outline ongoing maintenance of flood defences and drainage systems.
- g. Summary of Safety
 - Clearly conclude that the College will remain safe for occupants during design flood events.

Roscoe confirm they have considered all of these points and have concluded that the site is safe for occupants. Based on this, Roscoe are confident the second part of the Exception Test is satisfied, supporting the case for the site's suitability for this more vulnerable use.

The proposed development includes raising the College building by approximately 1m, while parts of the car park will be lowered by over 1m. On balance, the overall site levels are lower than existing, creating additional flood storage capacity. Because of the nature of the site and these level changes, Roscoe consider that formal flood storage compensation may not be necessary, as the development does not significantly increase ground levels.

Roscoe will provide a net levels comparison drawing to clearly demonstrate the combined effect of the raised and lowered areas and confirm the development does not increase flood risk on-site or to surrounding areas. *(WDC to provide information for review)*

2. Have we amended the plan for it to not fall within Flood Zone 3A

- Roscoe confirm that based on governmental flood mapping the redline boundary indicates the site is within Flood Zone 2. Review point 13 for more detail.

3. Has the exception test passed alongside the sequential test

- Roscoe note refer to point 1

4. Have we demonstrated via a site-specific flood risk assessment that the development will be safe without increasing flood risk elsewhere? If so how?

WDC understand the EA is proposing that the reason the flood mapping data shows the site under a proposed flood level of 120.23 whilst the river has a flood level of 119.35, is due to overland flows from the North-East (St Mary's Gate) and not from the River Roch.

Roscoe have provided an overland flow routes plan and an existing and proposed levels plan within the FRA. Both of these documents demonstrate that within an outcome where flood water is directed from St Mary's Gate, it will not present a danger to the proposed building and would either route away from the development following downstream levels in St Mary's Gate or College Road Westerly or if it was to enter the site, find a passage to the River Roch without impacting the school.

The existing levels also work for the existing scheme, so any raise in the levels for the proposed building from the existing car park would not be taking away flood resource from elsewhere. *(Roscoe will clarify this with separate flood routing plans for proposed / existing – WDC to provide).*

WDC understand the EA are particularly concerned about the risk of flooding being increased elsewhere and WDC will aim to demonstrate that there is no increased risk elsewhere. Whilst Roscoe have provided data within there FRA, this may prove difficult to interpolate, we will therefore provide a specific existing vs proposed example of overland flow that demonstrates flood water from overland flows will find its way to the River Roch in either scenario. *(WDC to provide information for review).*

The proposed development includes raising the school building by approximately 1m, while parts of the car park will be lowered by over 1 m. On balance, the overall site levels are lower than existing, creating additional flood storage capacity. Because of the nature of the

site and these level changes, we consider formal flood storage compensation may not be necessary, as the development does not significantly increase ground levels. A net levels comparison drawing will be produced to clearly demonstrate the combined effect of the raised and lowered areas and confirm that the development does not increase flood risk on-site or to surrounding areas. *(WDC to provide information for review).*

5. How have we demonstrated that the development is safe for its designated lifetime

Roscoe have demonstrated the College development is safe for its designated lifetime through a combination of site selection, design measures, and flood risk management strategies, as follows:

a. Site Selection and Layout

- The College is positioned on the highest part of the site to minimise exposure to floodwaters.
- Surrounding ground levels have been assessed to ensure safe access and egress routes remain above predicted flood levels for the design flood events (including allowance for climate change).

b. Flood-Resilient Design

- The building incorporates flood-resistant materials and raised floor levels to reduce the risk of water damage during flooding.

c. Safe Access and Egress

- Pedestrian and emergency vehicle access routes have been assessed and designed to remain safe and passable during extreme flood events.
- The College has a flood response and evacuation plan in place to ensure the safety of students, staff, and visitors.

d. Site Drainage and Risk Management

- Surface water management measures, including attenuation and sustainable drainage systems (SuDS), are in place to reduce flood risk both on and off-site.

e. Lifetime Safety Assurance

- All measures are designed to remain effective for the College's designated lifetime, considering climate change allowances, ensuring continued safety for occupants and visitors.

Through careful site selection, resilient design, safe access planning, and effective flood risk management, the College has been designed to remain safe for its designated lifetime, satisfying the requirements of the second part of the Exception Test.

6. What consideration have we given to whether flood risk will be increased in the surrounding area

EA Product 4 data does not show any flooding for the development based on River Roch exceedance. Any flooding is proposed to be a result of overland flows across St. Mary's Gate. The existing car park is being left at existing levels, with the proposed building raising above existing levels. The existing building footprint did not provide a flood storage zone previously, as any overland flows would find passage to River Roch, which will remain the situation post development.

7. Have we presented any opportunities for reducing flood risk

The College development has been designed to minimise flood risk on-site and to surrounding areas. The building is located on the highest part of the site, incorporates raised floors and flood-resistant materials, and critical services are protected. Sustainable drainage measures (SuDS), including features, have been included to manage runoff and reduce flood risk. Safe access and egress routes are maintained during flood events, ensuring the safety of students, staff, and visitors.

8. What flood risk mitigation measures have been included within the design? Why do the EA consider they will not make the development resilient to the flood levels?

- Potentially raised electrical sockets, wiring, and services above predicted flood levels.
- Non-return valves on drainage and sewer connections.
- Sealing of entry points for pipes and ducts to reduce water ingress;.
- Provision of safe access/egress routes during flood events.
- Preparation of a flood evacuation plan for site occupants.

The full response is included in page 9 of the "Response to EA objections"- see attached.

9. What flood storage compensation for the 1 in 100 +35% climate change have been included?

The proposed development includes raising the College building by approximately 1m, while parts of the car park will be lowered by over 1m. On balance, the overall site levels are lower than existing, creating additional flood storage capacity. Because of the nature of the site and these level changes, we consider that formal flood storage compensation may not be necessary, as the development does not significantly increase ground levels.

A net levels comparison drawing will be produced to clearly demonstrate the combined effect of the raised and lowered areas and confirm that the development does not increase flood risk on-site or to surrounding areas. *(WDC to provide information for review).*

10. What do we have to raise the building by to accommodate the Flood Zone 3 requirement.

- This is noted in page 8 of the “Response to EA Objections”- see attached.
- In essence it is 121.59m AOD

Note this is further reviewed in follow on correspondence which relates to the Product 4 data and the Node value/level.

11. Response 1.0 How can we compensate for the out of bank 2d level being higher than in channel where it splits into the flood plain (*Noted the EA requires modelling*)

We would have to provide our own external modelling for the EA to review. (WDC to further review).

12. Response 1.02 Even though we have changed the boundary the EA state we are still at risk for the 100 year +35% and this must be compensated for – How do we compensate for this? (*Note the LPA are to ensure the sequential and exception test are valid – what have we based our sequential and exception test on, is it the correct information?*)

- The EA are stating Flood Zone 3 must be scoped back into the FRA as it is still relevant.
- Flood Zone Status and Compensation

The site is located entirely within Flood Zone 2 (medium probability) according to the latest Environment Agency mapping. Although the EA has noted that the site could be at risk during the 100-year +35% climate change event, this does not change the statutory Flood Zone designation.

Given the net effect of the development – raising the College by 1m and lowering parts of the car park by over 1m – the overall site levels are lower, creating additional flood storage. Therefore, formal flood storage compensation is not required for a Flood Zone 2 site, as the development does not increase flood risk elsewhere.

- Sequential and Exception Tests
 - The Sequential Test has been undertaken using up-to-date Flood Zone 2 mapping to confirm that no reasonably available sites exist in Flood Zone 1.
 - The Exception Test is based on:
 - The sustainability benefits of the College at this location.

- Demonstration that the development is safe for its designated lifetime, with flood-resilient design, safe access/egress, and no increase in flood risk.
- All information used for the sequential and exception tests is current and correct, consistent with statutory guidance.

While the EA's comment reflects risk management for extreme events, we note in the Preapp Response the statutory Flood Zone is 2, and the development is designed to remain safe without requiring flood compensation. The sequential and exception tests are valid and based on the correct information.

13. Response 1.03 How have we confirmed the development is outside of Flood Zone 3? Have we considered the Product 4 data thoroughly giving consideration to pages 28-35.

Roscoe have confirmed based on governmental flood mapping the development is in Flood Zone 2. Whilst the EA consider, that even though the boundary has changed to be outside of the government flood mapping, the Product 4 data shows flooding within the site for the 100yr + 35cc & 70cc storm events which places the development in Flood Zone 3

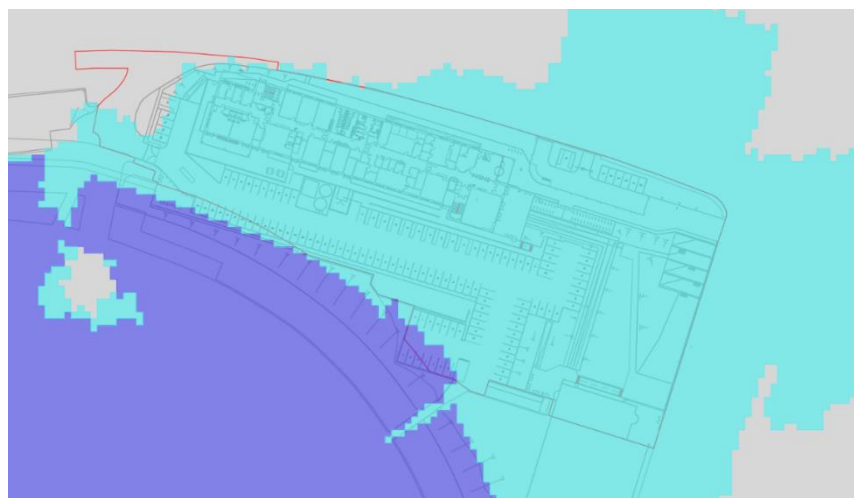
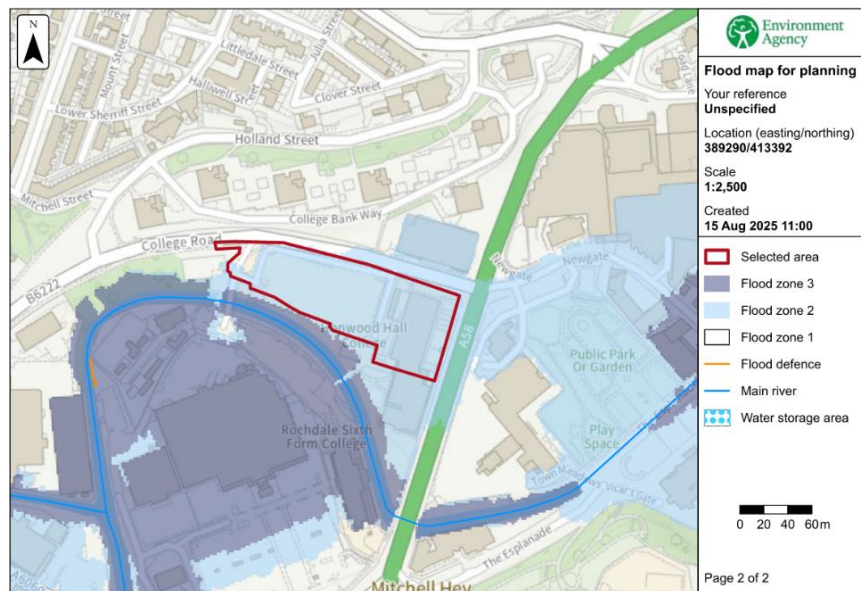
WDC Question – EA Response 1.04 Have we confirmed how we have got to this conclusion and why we consider we are in Flood Zone 2?

- Have we correctly interpolated the Product 4 data we have been provided
- Have we requested the velocities from inforequests.gmmc@environment-agency.gov.uk

The site is was determined to be within Flood Zone 2 based on several points.

- 1) The Governmental Flood Mapping Data that is used on all schemes and is recognised as the primary determinations by the EA, show's the site to be within Flood Zone 2.
- 2) Initial Product 4 data received (Product 4 data provided 23rd July 2025), stated maximum flood level at 119.38. Which is 150mm lower than the existing / proposed car park level and so would not indicate any flooding on site, in line with typical Flood Zone 2 or 1 data.
- 3) There is no historic flooding event to have occurred on our development. As per EA Product 4 information.
- 4) The pre-app letter from the local council confirmed the site was in flood zone 2. Please see correspondence letter attached. Roscoe have highlighted where they have stated the site is positioned in flood zone 2- please see page 8 of the document.

Roscoe confirm they have requested the velocities - see attached



14. WDC Question to Roscoe - Why are the EA insistent we are incorrect in relation to the SUDS?

United Utilities (UU) have reviewed and approved the proposed SUDS tanks for the development. The fact the tanks may be inundated during the 1% +35% and 70% storm events has been considered in their approval, is this acceptable to the Environment Agency?