hafrenwater
environmental water management

North Yorkshire Council
Lead Local Flood Authority

Our Ref: 3729/LET1

<u>FAO Emily Andre</u>

10th July 2025

Dear Emily

<u>Application number FL/NY/2025/0030/ENV: Land east of the Mill Yard, Burniston Mill, Coastal Road, Burniston, Scarborough, YO13 0DB</u>

We are writing in response to your letter dated 1st July 2025, which included comments on the updated Flood Risk Assessment (FRA) prepared by Hafren Water (ref 3729/FRA F4, June 2025).

This letter provides additional clarification on the Surface Water Drainage Strategy (SWDS) and is accompanied by an updated version of the FRA (ref 3729/FRA F5, July 2025).

For completeness, this response addresses each of your points in turn, even if no additional information has been requested.

1. Flood risk

No additional information requested

2. Run-off destinations

No additional information requested

3. Peak flow control

Further information has been requested on the 'back-up plan' if the pump fails. A pump failure scenario is discussed within Section 6.3 'Exceedance' of the FRA. It has been demonstrated that the total run-off volume during the 1 in 100-year + climate change storm event can be accommodated within the site boundary, and no vulnerable receptors will be affected.

However, for contingency, a back-up pump will be available on-site to facilitate maintenance and to provide a standby in case of failure.

4. Volume control

The LLFA response states that the volume of attenuation needs to be increased. However, the comments do not accurately reflect calculated run-off volumes or attenuation features presented within the FRA.

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Surface water run-off volumes and the provision of attenuation storage is discussed in Sections 6.2.2 'Surface water run-off calculations' and 6.3 'Exceedance', with supporting calculations in *Appendices 3729/FRA/A2, A3 and A4* of the FRA. However, a summary is provided below for clarity:

3729/LET1/T1: Surface water run-off volumes and attenuation provision			
Return Period	**Calculated run-off volume (m^3)**	**Attenuation feature**	**Total attenuation provision (m^3)**
1 in 2-year, 24-hour duration	537	Perforated pipe, stone surround and stone sub-base	567
1 in 30-year, 6-hour duration	703.5	Perforated pipe, stone surround and stone sub-base Containment within the site boundary by impermeable membrane, topsoil bund, berm and concrete access ramp	1,322
1 in 100-year + climate change, 6-hour duration	1,097.8	Perforated pipe, stone surround and stone sub-base Containment within the site boundary by impermeable membrane, topsoil bund, berm and concrete access ramp	1,322

The FRA and *Table 3729/LET1/T1* demonstrates that there is sufficient capacity within the site boundary to accommodate run-off generated during storm events up to and including the 1 in 100-year + climate change storm event.

The storage capacity of the surface water containment tanks in the south of the site has been excluded from the SWDS, therefore a worst-case scenario is presented.

A surface water drainage strategy drawing now accompanies the updated (revision F5) version of the FRA as *Drawing 3729/FRA/04*. This identifies all proposed attenuation features, and the volume of storage provided within them.

The whole site area has been taken as impermeable for the purposes of the drainage strategy. This is shown on *Drawing 3729/FRA/05.*

5. Designing for exceedance

An exceedance flow plan has been requested.

An exceedance flow plan is now provided within the FRA as *Drawing 3729/FRA/06.* This, along with the content of Section 6.3 of the FRA, demonstrates that exceedance flows will be retained on-site and will not cause flooding of vulnerable receptors on or off-site.

6. Climate change

It has been requested that the climate change allowance incorporated into the SWDS be increased from 25% to 40%.

As set out within Section 4.3 of the FRA, an allowance of 25% is appropriate for 'Less vulnerable' development within the 2050's epoch for the Derwent Humber Management Catchment.

Furthermore, the LLFA's response dated 19th May 2025, under '6. *Climate Change'* states that '*An allowance of 25% has been appropriately chosen*'.

Therefore, we do not consider that increasing the climate change allowance to 40% is justified.

7. Maintenance Plan

It has been requested that maintenance of the proposed float switch and pump is incorporated into the FRA. Section 7 'Adoption and Maintenance' has been updated accordingly.

Recommendations to the Local Planning Authority

The final recommendation specified reads '*A construction phase surface water management plan for ensuring that the SuDS features will function post development has not been provided.'*

As stated within Section 6.2.1 of the FRA 'Principles of the Surface Water Drainage Strategy', under the sub-heading 'Post-restoration', there is no requirement for surface water management post-development. Therefore, there is no requirement to demonstrate the functionality of SuDS post-development.

<u>Summary</u>

It is considered that this letter, along with the updated FRA, provides sufficient information and clarity to enable the LLFA to remove their objection. Should further queries arise, we would welcome the opportunity to discuss these with you via a Teams call.

Yours sincerely

Charlotte Hale

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Enc: Flood Risk Assessment (3729/FRA F5, July 2025)