PUBLIC

Flood Risk Management
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Development Management
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Ask for Grace Johns
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Our ref AVBC/2022/58
Your ref AVA/2022/0672
Date 08 November 2022

Dear Rae

Proposal: **Retention of building to enclose existing precast concrete manufacturing area (B2 General Industrial)**

Location: **Richard Lees Ltd Bullhurst Lane Weston Underwood Ashbourne Derbyshire DE6 4P**

Application reference **AVA/2022/0672**

No objections in principle		Conditions Recommended	
No Comment	X	Objection Recommended	

Derbyshire County Council as the Lead Local Flood Authority (LLFA) has reviewed the information submitted for this application, which was received on 29 July 2022. As this is a minor application the Lead Local Flood Authority (LLFA) has no formal comment to make and would refer the applicant to our informative notes below.

Peak Flow Control

For greenfield developments, the peak run-off rate from the development to any highway drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event, should never exceed the peak greenfield run-off rate for the same event.

For developments which were previously developed, the peak run-off rate from the development to any drain, sewer or surface water body for the 100% probability annual rainfall event and the 1% probability annual rainfall event must be as close as reasonably practicable to the greenfield run-off rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development, prior to redevelopment for that event.

Volume Control

For greenfield developments, the runoff volume from the development to any highway drain, sewer or surface water body in the 6 hour 1% probability annual rainfall event must not exceed the greenfield runoff volume for the same event.

For developments which have been previously developed, the runoff volume from the development to any highway drain, sewer or surface water body in the 6 hour 1% probability annual rainfall event must be constrained to a value as close as is reasonably practicable to the greenfield runoff volume for the same event, but must not exceed the runoff volume for the development site prior to redevelopment for that event.

Note:- If the greenfield run-off for a site is calculated at less than 2 l/s, then a minimum of 2 l/s could be used (subject to approval from the LLFA).

Details of how the on-site surface water drainage systems shall be maintained and managed after completion and for the lifetime of the development to ensure the features remain functional.

Where cellular storage is proposed and is within areas where it may be susceptible to damage by excavation by other utility contractors, warning signage should be provided to inform of its presence. Cellular storage and infiltration systems should not be positioned within the highway.

Guidance on flood pathways can be found in BS EN 752.

The Greenfield runoff rate which is to be used for assessing the requirements for limiting discharge flow rates and attenuation storage for a site should be calculated for the whole development area (paved and pervious surfaces - houses, gardens, roads, and other open space) that is within the area served by the drainage network, whatever the size of the site and type of drainage system. Significant green areas such as recreation parks, general public open space, etc., which are not served by the drainage system and do not play a part in the runoff management for the site, and which can be assumed to have a runoff response which is similar to that prior to the development taking place, may be excluded from the greenfield analysis.

A. If infiltration systems are to be used for surface water disposal, the following information must be provided:

Ground percolation tests to BRE 365.

Ground water levels records. Minimum 1m clearance from maximum seasonal groundwater level to base of infiltration compound. This should include assessment of relevant groundwater borehole records, maps and on-site monitoring in wells.

Soil / rock descriptions in accordance with BS EN ISO 14688-1:2002 or BS EN ISO 14689-1:2003.

Volume design calculations to 1% probability annual rainfall event + 30% climate change standard. An appropriate factor of safety should be applied to the design in accordance with CIRIA C753 – Table 25.2.

- Location plans indicating position (soakaways serving more than one property must be located in an accessible position for maintenance). Soakaways should not be used within 5m of buildings or the highway or any other structure.
- Drawing details including sizes and material.
- Details of a sedimentation chamber (silt trap) upstream of the inlet should be included.

Soakaway detailed design guidance is given in CIRIA Report 753, CIRIA Report 156 and BRE Digest 365.

B. All Micro Drainage calculations and results must be submitted in .MDX format, to the LPA. (Other methods of drainage calculations are acceptable.)

C. The applicant should submit a comprehensive management plan detailing how surface water shall be managed on site during the construction phase of the development ensuring there is no increase in flood risk off site or to occupied buildings within the development.

Yours sincerely

[redacted]

Grace Johns
Civil Engineering Technician Apprentice