

**Consultation Response from KC,
Lead Local Flood Authority**
2021/90605 land at, Vanguard Processing Equipment, Spa Fields Industrial Estate, Slaithwaite, Huddersfield, HD7 5BB
Erection of an industrial building (B1(c) use)
Date Responded: 17/02/2022
Responding Officer: Martin Stephenson
Responding Ref: 0
Previous Consultation Response:

- 31/03/2021 by Aleksandra Tomczyk requesting further information on Flood Risk and Surface Water Drainage management

Documents reviewed by the LLFA:

Farrar Bamforth Associates Ltd:

- Document Ref: 20/C21, Flood Risk Appraisal (undated), - uploaded on 26/01/2022
- Drawing Ref: 20C21-FBA-ZZ-XX-DR-A-9001, GA Site Layout Plan, Rev P05 dated 12/02/2021
- Drawing Ref: 20C21-FBA-ZZ-RP-DR-A-2001, GA Roof Plan, Rev P02 dated 12/02/2021

RWO:

- Document Ref: AMF/FRA/Y21172, Supplementary FRA, Version 1 dated 28/09/2021

ICIS Design Ltd:

- Document Ref: 10688.ms, Drainage Strategy & SuDS Management & Maintenance Plan, Revision A dated June 2021

Drainage Summary:

The LLFA has reviewed the submitted documents and drawings listed above and have the following comments:

- The proposed discharge rate to a watercourse of **3.5 l/s** is acceptable (provided the flow control device has an outlet diameter of 75mm or greater) as stated in section 6.0 of the RWO document.
- The proposed attenuation storage volume should be sufficient to retain all rainfall within the site up to the critical 1 in 100 year event (plus 30% climate change) without causing flooding to existing or proposed buildings. Full hydraulic calculations (MicroDrainage or similar) should be submitted to the LPA at the next design stage.
- It is noted from Kirklees Council records, that a 450mm dia Yorkshire Water Surface Water sewer crosses into the site in the south-western corner of the site. This sewer would be the preferred discharge point for the attenuated surface water flows from the site (subject to YW approvals). Discharge to a ditch as indicated on the drawing in the ICIS document would not be acceptable.
- It is noted that the drainage drawing contained in the ICIS document shows foul drainage discharging into Ex MH7 – according to our records, there is no YW Foul Sewer at this location. Please ensure the foul drainage is connected to the 225mm dia YW Combined Sewer in Spa Field (either directly or via an existing connection). Note that approval from YW may be necessary.
- The ICIS drawing also shows the oil separator receiving drainage from the roof of the proposed building – this is in contravention of good practice as these flows could flush out the separated oil. The RWP drainage should pass through the flow control device but not through the oil separator.
- The attenuation tank should be designed in accordance with the details shown in SuDS Guidance CIRIA C753 which shows the national recommended design of cellular storage tanks, Figures 21.4, 21.6 to 21.7).

- The vertical design load on the geocell units should be indicated on the Construction Issue drawings and should be sufficient for the expected maximum wheel load.
- The MH/s upstream of the geocell tank should be of the catch pit type to reduce the risk of siltation within the tank.
- The RWO document indicates flood routing for flooding from outside the site – however the flood routing from exceedance events within the site should also be provided at the next design stage.
- The developer should submit the proposed temporary drainage measures to be taken during the construction phase.

Kirklees Flood Management & Drainage as Lead Local Flood Authority (Statutory Consultee) can SUPPORT this application SUBJECT to appropriate recommended conditions as set out below provided the above comments are satisfactorily addressed in the detailed design.

Suggested Drainage Conditions:

DR01 Drainage Details

Development shall not commence until a detailed design scheme detailing foul, surface water and land drainage, (including agreed discharge rates with the LLFA indirectly or directly to watercourse, attenuation for the critical 1 in 100 + 30% climate change rainfall event, attenuation construction details /design, plans and longitudinal sections, hydraulic calculations, phasing of drainage provision) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include a risk assessment and method statement, in accordance with CDM Regulations 2015, for access to and into the attenuation structure, and an itinerary of maintenance tasks with schedules. No part of the development shall be occupied until such approved drainage scheme has been provided on the site to serve the development or each agreed phasing of the development and retained thereafter.

DR07 Overland Flow Routing

The development shall not commence until an assessment of the effects of 1 in 100 year storm events, with an additional allowance for climate change, blockage scenarios and exceedance events on drainage infrastructure and surface water run-off pre and post development between the development and the surrounding area (both upstream and downstream of the development), has been submitted to and approved in writing by the Local Planning Authority. No part of the development shall be brought into use (dwellings shall not be occupied) until the works comprising the approved scheme have been completed and such approved scheme shall be retained thereafter.

DR10 Construction Phase Surface Water Flood Risk and Pollution prevention plan.

Development shall not commence until a scheme, detailing temporary surface water drainage for the construction phase (after soil and vegetation/site strip) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall detail:

- phasing of the development and phasing of temporary drainage provision.
- include methods of preventing silt, debris and contaminants entering existing drainage systems and watercourses and how flooding of adjacent land is prevented.
- the strategy shall include a plan showing the location of the attenuation storage and supporting calculations, which shall be based on the critical 1 in 2-year storm. It should be assumed that once the site has been stripped that the percentage run-off will be 100 %. The maximum allowable discharge rate is 2.5 litres per second per ha, unless otherwise agreed with the LLFA.

The temporary works shall be implemented in accordance with the approved scheme and phasing. No phase of the development shall be commenced until the temporary works approved for that phase have been completed. The approved temporary drainage scheme shall be retained until the approved permanent surface water drainage system is in place and functioning in accordance with written notification to the Local Planning Authority.

DR20 Interceptor

Development shall not commence until a scheme demonstrating surface water from vehicle parking and hard standing areas passing through an oil/petrol interceptor of adequate capacity prior to discharge. Roof drainage should not be passed through any interceptor.