

**Consultation Response from KC,  
Lead Local Flood Authority**

**2024/92031 Headlands Works, Headlands Road, Liversedge, WF15 7NT**

**Outline application for erection of residential development, adoptable road and public open space**

**Date Responded: 16/08/2024.**

**Responding Officer: Martin Stephenson**

**Responding Ref: 1**

**Documents reviewed by the LLFA:**

HHA:

- E24/8176/001, Preliminary Drainage Feasibility, Rev A dated 30/05/2024.
- Surface Water Drainage Calculations dated 30/05/2024.

**Drainage Summary:**

The site is considered unsuitable for infiltration into the soil due to steep gradients and the risk of re-emergence further down slope.

The development site contains a mixture of existing hardstanding and undeveloped land. Therefore the allowable surface water discharge to sewer from the site should be calculated proportionately for both the rate as a 30% betterment of existing hardstanding and the greenfield run-off rate for the remainder of the site. It is noted that the submitted surface water drainage calculations are missing the calculated greenfield run-off results in the print-out, however Kirklees Council's standard requirements are that greenfield run-off rates are calculated as being 5 l/s per ha. Justification of the proposed allowable discharge rate of 11 l/s will need to be provided at the next stage.

The LLFA confirms acceptance of the discharge point for surface water to the public surface water sewer in Headlands Road.

**Section 106 Unilateral Undertaking**

In order for the LPA to fulfil their obligation to ensure the maintenance and management of surface water drainage systems for the lifetime of the site, a unilateral undertaking to set up a management company to carry out an approved maintenance and management scheme; including access to and into any structure in accordance with CDM regulations 2015; and an itinerary and schedule of maintenance and management tasks. Such an undertaking can cease if and when the infrastructure is formally adopted by the Statutory Undertaker and/or Highways Authority

**Kirklees Flood Management & Drainage as Lead Local Flood Authority SUPPORTS this application SUBJECT to the comments above and the recommended conditions set out below.**

**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 + climate change rainfall event, attenuation construction details /design, plans and longitudinal sections, hydraulic calculations and 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 the scheme shall include a maintenance and management plan for surface water infrastructure. 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 off-site discharge rate shall not exceed 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.