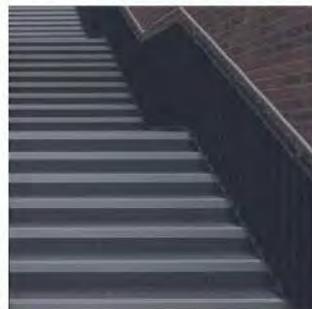
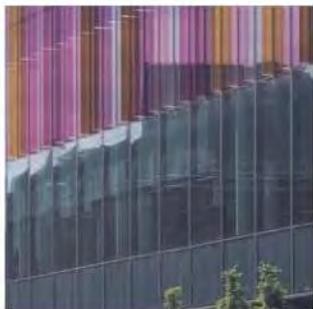
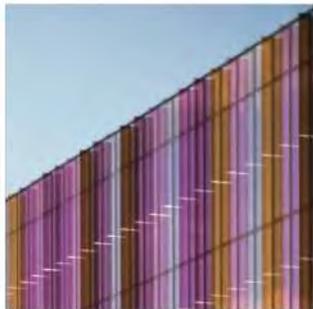


PIXB – Huddersfield Central

Drainage Planning Conditions Discharge Statement

Doc Ref: 15106-BKP-XX-XX-RP-C-0002 Rev. B

Date: 04.12.2025



boothking



1. Planning Conditions

Condition 8.

Prior to commencement of development, 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), shall be submitted to and approved in writing by the Local Planning Authority. No part of the development hereby approved shall be first occupied until the works comprising the approved scheme have been completed, and the approved works shall be retained thereafter.

Response to Condition 8

Please refer to Document Reference No: 15106-BKP-XX-XX-RP-C-0001 Flood Risk Assessment Date: 18.06.2024 - Rev A. for the calculations for both foul and surface water discharge rates and the description of the works. Drawings 15106-BKP-XX-XX-DR-C-0501 - Drainage Area, 15106-BKP-XX-XX-DR-C-0510 - Drainage Key Plan, 15106-BKP-XX-XX-DR-C-0511 - Proposed Drainage GA, 15106-BKP-XX-XX-DR-C-0590 - Drainage Details - Sheet 1, 15106-BKP-XX-XX-DR-C-0591 - Drainage Details - Sheet 2 and **15106-BKP-XX-XX-DR-C-0515 - P01 - Exceedance Flood Routing** also included in the issued report showing the drainage scheme.

Surface Water

In following the standard hierarchy of drainage solutions, consideration should firstly be given to the discharge of surface water runoff by sustainable methods such as infiltration. Review of currently available geological information for the surrounding area and information provided in the Site Investigation Report, it is unknown whereas the groundwater table is located to shallow depths. For the purpose of this report, however, infiltration has been excluded from the calculations.

The carpark will be surfaced in asphalt and drained by an Aco drain.

As per the Kirklees SFRA Level 2: *"the Local Planning Authority may set local requirements for planning permission have the effect of more stringent requirements than these National Standards. More stringent requirements should be considered where current Greenfield sites lie upstream of high risk areas. This could include improvements on Greenfield runoff rates"*.

There are two methods for calculating the greenfield run-off rate: the IH124 method and the ICP method. The IH124 method calculates the peak greenfield run-off flow rates by correlation of the Soil Index Value, the Average Annual Rainfall and the Site Area (SOIL, SAAR and AREA). The IH124 Method should be used for sites in excess of 50 hectares and the resulting discharge is linearly interpolated for the required area. The ICP method uses the IH124 method and automatically interpolates the discharge for sites less than 50 hectares and therefore this is the method that has been used. Extract in figure below:

Q_{BAR} (l/s):	1.61	1.61
I in 1 year (l/s):	1.38	1.38
I in 30 years (l/s):	2.81	2.81
I in 100 year (l/s):	3.34	3.34
I in 200 years (l/s):	3.81	3.81

Greenfield Run Off Calculation

The peak Qbar greenfield discharge rate for the whole site is identified as 1.61 l/s and 3.34l/s for the 1 in 100-year event.

For the proposed development, the extension 700m² and the refiguration of the carpark 280m²:

Flows arising from the proposed development will be restricted to 3.0 l/s 1 in 100-year (+45%CC) storm.

Existing flows have been calculated for the whole site and for the development separately and can be found in Appendix F of the Document Reference No: 15106-BKP-XX-XX-RP-C-0001 Flood Risk Assessment.

1 in 100 year storm event for the whole site was calculated with the 2- pipe method and the result was 45.2l/s.

1 in 100 year storm event for the development only was again calculated with the 2-pipe method and the result was 15.4l/s.

The proposed discharge rate for the development is 3.0 l/s, representing an 80.5% reduction.

The site drainage network will be designed in accordance with current best practice to have sufficient capacity not to flood both during the critical 1 in 30-year storm (plus 40% allowance for climate change) and 1 in 100-year storm event (plus 45% allowance for climate change). In this way the risk of off-site flooding, which could result in damage to other buildings and essential services, will be minimised and the risk of flooding elsewhere should not be increased as a result of the development proposals.

A Hydrobrake flow control device which controls the rate of discharge into the dedicated surface water sewer to the proposed discharge rate.

Causeway Flow output for the Critical Storm for the 1 in 100 year storm event plus 45% climate change is enclosed in Appendix F of the Document Reference No: 15106-BKP-XX-XX-RP-C-0001 Flood Risk Assessment.

2. Planning Conditions 8 - 20/10/2025.

Responding Officer: Martin Stephenson

Responding Ref: 1

Condition 8:

The statement does not address the routing of floodwater due to blockages in the surface water drainage or during rainfall events greater than the design event. The LLFA requires a plan showing the direction/routing of floodwater which would escape from MHs, gullies, etc. during one of these events (this is commonly indicated with “flow arrows” on the drainage plan which follow the slope of the final ground levels). This plan should clearly indicate that the flooding does not affect existing or proposed buildings.

Therefore, Condition 8 **cannot be** discharged until further information is submitted to the LLFA.

Response to Condition 8

The exceedance flood routing is detailed in the attached document titled **15106-BKP-XX-XX-DR-C-0515 – P01**.



TOPOGRAPHICAL NOTES:

The Topographical and buried services shown on this drawing were provided to Booth King by others. Booth King have not verified this information and therefore we can not guarantee its accuracy. The position and alignment of services may differ from that shown and other buried services may be present.

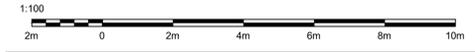
The contractor must verify the location of all buried services before any excavation or piling works begin. Damage to existing services could present a major health and safety risk plus associated commercial penalties.

Levels information shown is based on information available. This office is to be made aware of any discrepancies found on site.

- DRAINAGE NOTES:**
- All adoptable works to be in accordance with 'SSG appendix C' where applicable.
 - All manhole cover levels to be confirmed by Architect.
 - Clay pipes to be flexibly jointed and comply with the requirements of BS EN 295.
 - Concrete pipes to be flexibly jointed and comply with the requirements of BS EN 1916 and BS 5911.
 - Plastic pipes (PVC-U) to be flexibly jointed and comply with the requirements of BS EN 1401-1 1998.
 - All surface water pipes to be 110mm Ø, laid at a gradient no flatter than 1:80 (UNO).
 - All foul water pipes to be 110mm Ø, laid at a gradient no flatter than 1:40 (UNO).
 - For minimum depths requiring pipe protection refer to drainage details drawings.
 - Protection to drains and gully connections may be concrete bed surround between cover depths of 450mm to 200mm.
 - Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special precautions.
 - Pipes and fittings are to be laid in accordance with the manufacturers recommendations.
 - All manholes to be Type B, 1200mm Ø precast concrete manhole rings with minimum 150mm concrete surround (UNO). All manhole covers to be D400 class (UNO). Refer to drainage details drawings for manhole installation details.
 - All foul water pop up & RWP locations are TBC by Architect.
 - Rodding access is to be provided at all pop-ups & RWPs.
 - For setting out of all pop-up positions refer to Architect's details.
 - Civil engineering contractor to arrange for:
 - Own services and temporary supplies.
 - Pathway & partial closure as deemed required by their method statement. Including costs.
 - Temporary adequate over pumping as deemed required by civil engineers method of construction.
 - The contractor should confirm the locations for existing services prior construction.
 - Prior to installation of any proposed site drainage, the invert level of existing outfall/connection is to be confirmed on site.

REFERENCE KEY:

REF.	SECTION SIZE
	Flow Direction
	Flow Direction



- NOTES:**
- Do not scale from this drawing.
 - This drawing is copyright and is sent to you in confidence. It must not be copied, used or disclosed, in whole or in part, to third parties without written permission. It remains the property of Booth King Partnership Ltd. (BKPL) and must be returned on request.
 - This drawing is to be read in conjunction with all relevant contractual documents.
 - Anyone using this drawing must be aware of their legal duties under the CDM Regulations 2015, refer to the HSE website for further information. BKPL are not Principal Designers.
 - All dimensions shown on this drawing are in millimeters unless noted otherwise.
 - If the Contractor consider that they do not have sufficient information to safely complete the works detailed on this drawing, they should contact the Engineer.
 - All works are to be carried out in accordance with the Building Regulations (as amended) and to the approval of Building Standards.
 - This document uses revision codes in accordance with ISO EN 19650: P. Preliminary (non-contractual) - review, comment or approval. C. Contractual - Approved for stage completion.
 - This document uses status codes in accordance with ISO EN 19650: Work in progress: S0 - WIP Shared (non-contractual); S1 - Coordination, S2 - Information, S3 - Review, S4 & S5 - Approval. Published (contractual): A1, An, etc. (where "n" relates to the project stage).
 - This document uses project stages in accordance with the IStructE Structural Plan of Work 2020: 2 - Concept, 3 - Coordination, 4 - Technical Design, 4.5 - Production Design, 5 - Construction, 6 - Handover.
 - Only documents with a revision code Cf (where "f" relates to a revision number) and status code A5 are suitable for construction.
 - Documents with status code A6 indicate final construction ONLY. Any deviations to that which is on site is not the liability of BKPL.

REV.	DATE	REVISION DETAILS	INITIALS
C01	14.11.25	STAGE 3 - ISSUED FOR PLANNING	PA
CURRENT DRAWING REVISION CHECKED BY EZ			
CURRENT DRAWING REVISION APPROVED BY EZ			

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PROJECT: Premier Inn Huddersfield Central

TITLE: Exceedance Flood Routing

DRAWING STATUS:		PROJECT STAGE:		
S3		STAGE 3		
SCALE (A1)	AUTHOR	DATE	REVISION	BKPL No.
1:100	PA	Nov '25	C01	15106
DRAWING REF: 15106-BKP-XX-XX-DR-C-0515				