Sustainable Drainage Review

Application Name/Title:	A material change of use for stationing of caravans for residential use with hardstanding and dayrooms ancillary to that use
Reference Number:	23/3816/FUL
Date Initial Comments Provided:	19/10/2023
Initial Review By:	Robert Knowles
Checked/Approved By:	Jamie Eden
LLFA Review By:	N/A

Revisions / Amendments

Rev No.	Date	Description	Author/ Prepared By:	Approved For Issue By:	LLFA Review By:
2	08/01/2025	Review following new information	DP	JG	N/A

Summary of Review

Recommendations

At present we **object** to the grant of planning permission for the following reason:

1. No evidence of an Ordinary Watercourse Consent has been provided. As such it is not possible to confirm that consent has been granted for the proposed connection to the Dollis Brook.

We would be agreeable to the above objection being managed as a part of a condition such as the one below:

No laying of services, creation of hard surfaces or erection of a building shall commence until a detailed design of the surface water drainage of the site has been submitted to and approved in writing by the Local Planning Authority. Those elements of the surface water drainage system not adopted by a statutory undertaker shall thereafter be maintained and managed in accordance with the approved management and maintenance plan.
The scheme shall be based upon the principles within the agreed [Title of report] prepared by [SPECIFY] (ref: [SPECIFY]) dated [SPECIFY] and shall also include:

a) Full calculations detailing the existing surface water runoff rates for the QBAR, 3.3% Annual Exceedance Probability (AEP) (1 in 30) and 1% AEP (1 in 100) storm events;
b) Full results of the proposed drainage system modelling in the above-referenced storm events (as well as 1% AEP plus climate change), inclusive of all collection, conveyance, storage, flow control and disposal elements and including an allowance for urban creep, together with an assessment of system performance;
c) Detailed drawings of the entire proposed surface water drainage system, attenuation and flow control measures, including levels, gradients, dimensions and pipe reference

numbers, designed to accord with the CIRIA C753 SuDS Manual (or any equivalent guidance that may supersede or replace it);

d) Full detail on SuDS proposals (including location, type, size, depths, side slopes and cross sections);
e) Evidence of third party consent for proposed connections;
f) Site Investigation and test results to confirm infiltration rates;
g) Temporary storage facilities if the development is to be phased;
h) A timetable for implementation if the development is to be phased;
i) Details of overland flood flow routes in the event of system exceedance, with demonstration that such flows can be appropriately managed on site without increasing flood risk to occupants;
j) Demonstration that the surface water drainage of the site is in accordance with DEFRA non-statutory technical standards for sustainable drainage systems;
k) Full details of the maintenance/adoption of the surface water drainage system;
l) Measures taken to prevent pollution of the receiving groundwater and/or surface water

The drainage scheme must adhere to the hierarchy of drainage options as outlined in the NPPF PPG.

Documents Reviewed

1. Existing Site and Block Plan, Green Planning Studio, Ref. 23_1285, 002, August 2023
2. Proposed Site Plan, Green Planning Studio, Ref. 23_1285, August 2023
3. Planning Statement, Green Planning Studio, PP-12406683, August 2023
4. SuDSmart Plus Sustainable Drainage Assessment produced by Geosmart Information on 19/12/2024, reference 81841.01R3

Typical requirements of Surface Water Drainage Strategy

Typically, we would expect the Drainage Strategy to include the following but not limited to;

- A fully labelled SuDS network diagram showing, pipes and manholes, suds features with reference numbers etc.
- SuDS design input data and results to support the design.
- Infiltration site investigation results showing that infiltration systems are feasible method of discharge for this site, if SuDS infiltration method is proposed;
- Appropriate design rainfall i.e. Flood Estimation Handbook (FEH) design rainfall 2013.
- Assessment of the proposed drainage system during the 30-year design rainfall according to Design and Construction Guidance, March 2020;
- Assessment of the attenuation storage volumes to cope with the 100-year rainfall event plus climate change.
- Evidence of Thames Water (Water Company) agreement for discharge to their system (in principle/ consent to discharge) if the proposal includes connecting to a sewer system.
- Details of overland flood flow routes in the event of system exceedance or failure, with demonstration that such flows can be appropriately managed on site without increasing the flood risk to occupants or neighbouring properties;
- SuDS operation and maintenance plan;
- SuDS detailed design drawings;
- SuDS construction phasing.

Reason

To ensure that surface water runoff is managed effectively to mitigate flood risk and to ensure that SuDS are designed appropriately using industry best practice to be cost-effective to operate and maintain over the design life of the development in accordance with Policy CS13 of the Barnet Local Plan (2012), Policies 5.13 and 5.14 of the London Plan (2016), and changes to SuDS planning policy in force as of 6 April 2015 (including the Written Ministerial Statement of 18 December 2014, Planning Practice Guidance and the Non-Statutory Technical Standards for Sustainable Drainage Systems) and best practice design guidance (such as the SuDS Manual, C753).

Please refer the West London SFRA which has more guidance and checklists available for the developers for application submission.

Requirements for a Flood Risk Assessment

The National Planning Policy Framework, paragraph 163 footnote 50 indicates:
A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding where its development would a more vulnerable use.