Michael Jessop
Ebbsfleet Development Corporation
The Observatory
Castle Hill Drive
Cstle Hill
Ebbsfleet
Kent
DA10 1EE

Flood and Water Management
Invicta House
Maidstone
Kent
ME14 1XX
Website: www.kent.gov.uk/flooding
Email: suds@kent.gov.uk
Tel: 03000 41 41 41
Our Ref: EBBS/2022/092256
Date: 31 October 2022

Application No: EDC/22/0168

Location: Ebbsfleet Central East Land Adjacent To Ebbsfleet International Railway Station Thames Way Kent

Proposal: Outline planning application (with all matters reserved) for mixed-use development comprising demolition of the existing car parking, structures and station forecourt and provision of residential dwellings (Use Class C3); flexible commercial, business and service uses (Use Class E) to allow provision of retail, offices, restaurants/cafes, nurseries, and healthcare facilities; flexible learning and non-residential institutions (Use Class F1); flexible local community uses (Use Class F2); hotel use (Use Class C1); residential institutions (Use Class C2); and Sui Generis uses to allow provision of co-living and student accommodation, public houses/drinking establishments, and theatres/cinemas. Associated works include hard and soft landscaping, a River Park, car parking and multi-storey car parks, pedestrian, cycle and internal vehicular network, and other ancillary infrastructure; and associated crossings, highway accesses, and junction improvements.

Thank you for your consultation on the above referenced planning application.

Kent County Council as Lead Local Flood Authority have reviewed the Drainage Strategy prepared by Pell Frischmann (21/09/22) and have the following comments:

It is understood that the outline proposal is split into three development areas; EC1, EC2 and EC6. EC6 is designated for open space with no additional impermeable surfaces proposed. No drainage strategy has been submitted for this development area.

EC1 is split into into EC1 east and EC1 west, either side of the River Ebbsfleet. EC1 east conveys water to several geocellular storage units, with a combined capacity of 2626 m3, which discharge at three new proposed headwalls to the River Ebbsfleett at a combined rate of 6.6 l/s (greenfield). EC1 west conveys water to a basin/wetland with attenuation volume of 190 m3. Geocellular storage tanks also attenuate a further 2418 m3 to create a total of 2608 m3 of available storage. These will discharge from two existing headwalls at greenfield rate (6.5l/s).

EC2 will utilise geocellular attenuation tanks to provide 7910 m3 of storage. This will then be discharge at an restricted rate of 19.9 l/s (greenfield) to an existing manhole before being discharged to the watercourse at an existing headwall.

Pervious pavements and bioretention systems will also be incorporated around the site, along with proprietary treatment systems if needed to meet pollution mitigation requirements.

We have no objection in principle to these proposals however we do have the following comments:

1. The pollution hazard index should be the total sum of all individual land use indices present, where runoff from these land uses is entering the drainage system. Furthermore, the arrangement of water treatment measures should ensure that pollution is suitably mitigated, taking into account that a factor of 0.5 is used to account for the reduced performance of secondary or tertiary components associated with already reduced inflow concentrations. Table 4.4 suggests that the proposed drainage does not suitable meet the mitigation requirements for TSS and metals when these factors are taken into account.

2. At the detailed design stage, we would expect to see the drainage system modelled using FeH rainfall data in any appropriate modelling or simulation software. Where FeH data is not available, 26.25mm should be manually input for the M5-60 value, as per the requirements of our latest drainage and planning policy statement (November 2019)

3. As existing drainage features are to be utilised a CCTV survey should be conducted to confirm presence and condition of this network, as mentioned in the Drainage Strategy.

4. Moving forward to the reserved matters stage, the LLFA would expect the future site to be delivered as a phased approach. Therefore, we would seek for a phasing plan to be provided to ensure sufficient provision of drainage as each phase is delivered. Furthermore, any temporary works requirement associated with the construction of the surface water drainage will need to be established. Confirmation would also need to be provided as to whether there is to be the incorporation of further attenuation basins and blue/green roofs.

Should the Local Planning Authority be minded to grant planning permission for the proposed development, the LLFA would request for the following conditions to be attached:

Condition:
No development shall take place until the details required by Condition 1 (assumed to be reserved matters condition for layout) shall demonstrate that requirements for surface water drainage for all rainfall durations and intensities up to and including the climate change adjusted critical 100 year storm can be accommodated within the proposed development layout.

Reason:
To ensure the development is served by satisfactory arrangements for the disposal of surface water and that they are incorporated into the proposed layouts.

Condition:
Development shall not begin in any phase until a detailed sustainable surface water drainage scheme for the site has been submitted to (and approved in writing by) the local planning authority. The detailed drainage scheme shall be based upon the Drainage Strategy (21/09/22) and shall demonstrate that the surface water generated by this development (for all rainfall durations and intensities up to and including the climate change adjusted critical 100 year storm) can be accommodated and disposed of without increase to flood risk on or off-site.

The drainage scheme shall also demonstrate (with reference to published guidance):

- That silt and pollutants resulting from the site use can be adequately managed to ensure there is no pollution risk to receiving waters.
- Appropriate operational, maintenance and access requirements for each drainage feature or SuDS component are adequately considered, including any proposed arrangements for future adoption by any public body or statutory undertaker.

The drainage scheme shall be implemented in accordance with the approved details.

Reason:
To ensure the development is served by satisfactory arrangements for the disposal of surface water and to ensure that the development does not exacerbate the risk of on/off site flooding. These details and accompanying calculations are required prior to the commencement of the development as they form an intrinsic part of the proposal, the approval of which cannot be disaggregated from the carrying out of the rest of the development.

Condition:
No building on any phase (or within an agreed implementation schedule) of the development hereby permitted shall be occupied until a Verification Report, pertaining to the surface water drainage system and prepared by a suitably competent person, has been submitted to and approved by the Local Planning Authority. The Report shall demonstrate that the drainage system constructed is consistent with that which was approved. The Report shall contain information and evidence (including photographs) of details and locations of inlets, outlets and control structures; landscape plans; full as built drawings; information pertinent to the installation of those items identified on the critical drainage assets drawing; and, the submission of an operation and maintenance manual for the sustainable drainage scheme as constructed.

Reason:
To ensure that flood risks from development to the future users of the land and neighbouring land are minimised, together with those risks to controlled waters, property and ecological systems, and to ensure that the development as constructed is compliant with and subsequently maintained pursuant to the requirements of paragraph 165 of the National Planning Policy Framework.

This response has been provided using the best knowledge and information submitted as part of the planning application at the time of responding and is reliant on the accuracy of that information.

Yours faithfully,

Gideon Miller
Graduate Flood Risk Officer
Flood and Water Management