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**Our Ref:** GBC/2024/100887  
**Date:** 1 July 2024

**Application No:** 20240521

**Location:** FM Conway, Imperial Wharf, Clifton Marine Parade, Gravesend Kent

**Proposal:** Application for the approval of conditions 4, 7 and 13 attached to planning permission reference number 20220733 relating to Condition (4) - Surface Water Drainage Strategy, Condition (7) Hard Landscaping Scheme and Condition (13) Biodiversity Enhancement.

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

Kent County Council as Lead Local Flood Authority have the following comments:

#### Road drainage network

The drainage strategy proposes to discharge Catchments 2 and 3 to existing road drainage outside of the red line boundary and in the case of Catchment 3, to land outside of that controlled by the applicant. It is noted that a CCTV survey has been undertaken for some of the network, however the ownership, condition and eventual connectivity of the network is not clear. At detailed design stage we would like to see information confirming the condition and ownership of the network, and in the case that it is maintained by a third party, that consultation has been undertaken to determine that the principle of discharge is acceptable. This will ensure there is a feasible point of discharge for the site before construction commences.

#### River Thames discharge

For Catchment 1, the strategy involves discharge to the River Thames via a new outfall through the Flood Defence. We would also like to see evidence that consultation has been undertaken with the Environment Agency and that they are in agreement with this in principle.

#### Climate Change Allowances

As advised in our original consultation response, as of the 10th of May 2022, the Environment Agency's climate change allowances have been updated. As part of this update, revisions have been made to the 'Peak Rainfall Intensity Allowances' that are used in applying climate change percentages to new drainage schemes.

The LLFA would now seek the 'upper end' allowance is designed for both the 30 (3.3%) and 100 (1%) year storm scenarios. The latest information on the allowances and map can be found at the following link:

<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

This analysis must determine if the impacts of the greater allowance are significant and exacerbate any flood risk. The design may need to be minimally modified but may also need additional mitigation allowances, for example attenuation features or provision of exceedance routes. This will tie into existing designing for exceedance principles.

#### Pumping

Whilst we appreciate that pumping may be ultimately necessary, we would request that pumps are considered only as a last-resort option, and only where infiltration or discharge via gravity can be demonstrated to be unviable. Any pumped system can be prone to failure within the associated development's lifetime, and cannot be considered to be fully sustainable owing to the carbon-cost of the pump's operation. If a pumped system is required, we would like to see details of the pumping system proposed to convey flows at times when the primary outfall is tide locked. We would also like to see the calculations that support the quoted required pumping capacity of 200l/s.

#### Non-return Valve

We would also like to see details of the non-return valve proposed to be installed in the outlet manhole in Catchment 1.

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,

**Elizabeth Kurton**

Flood Risk Officer  
Flood and Water Management