

Our Ref: 20/010/GM/22/036
Your Ref: KT/2022/129861/01-L01

Environment Agency
Orchard House Endeavour Park
London Road
Addington
West Malling
Kent
ME19 5SH

For the attention of Mr D Sankar

01 November 2022

Dear David,

Planning Application Reference 20220733 – Land at Imperial Wharf, Clifton Marine Parade, Gravesend, Kent, DA11 0DY

Following on from previous correspondence I am writing on behalf of our client FM Conway Limited to address comments received from yourself by letter dated 09 August 2022 in respect of the above.

It is noted that the main concerns raised in respect of the proposed development relate to the condition of the flood defence and additional information is sought to demonstrate *“that works will provide a satisfactory standard of flood risk protection for the design life of the development.”*

It is noted, in particular, that an inspection of the flood defence undertaken by the Environment Agency (EA) in 2019 revealed a number of defects in the defence including minor cracks and impact damage in the capping beam plus missing mastic sealant. In addition, a hole was identified in the concrete wall that sits in front of the flood defence located at the splash zone and it was noted that if water were to get through this to the sheet pile it could cause erosion/corrosion of the sheet pile and erosion of the promenade material. The 2019 inspection concluded that the residual life of the defence was predicted to be 10 years.

Having reviewed the comments received it was subsequently agreed in your email dated 24 August 2022 that a comprehensive assessment would be undertaken of the flood defence and a report would be produced comprising of the following:

- Details of the inspection and how it has been undertaken;
- A general description of the construction of the wall;
- A schedule of identified defects and;
- A list of actions to be undertaken.

I can confirm that an assessment of the flood defence has now been completed by qualified engineers from Frankham Consultancy Group. A copy of the full assessment dated October 2022 is attached.



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Within the assessment the flood defences at the site have been subdivided into walls 1 to 7. Overall, the defences are assessed to be in a 'Fair' condition in accordance with EA Guidance SC060078. Recommendations for the repair of the defences are outlined within section 5 of the assessment and comprise of like for like repair/ replacement of each of the identified defects.

It is noted in your letter dated 09 August 2022 that:

"We would require a comprehensive assessment of the flood defence and walkway to be carried out and appropriate mitigation to be implemented before we could remove our objection to the proposal."

Given the nature of the remedial work required and the likely timescale for undertaking this work it is considered that it would be more appropriate to require the work to be undertaken prior to commencement of the development, rather than prior to planning approval. In this regard we propose the following condition:

"Prior to the commencement of the construction of the development the recommendations for remedial works identified within the report prepared by Frankham Consultancy Group dated October 2022 shall have been undertaken and written confirmation submitted to Gravesham Borough Council."

In respect of the other matters raised within your consultation response you also required confirmation of the offset distances for each of the elements of the development with a consideration for buried elements. In this regard I can confirm that the offset distances will be as follows:

- Emulsion plant: 5.7m
- Emulsion plant tanks: 15m
- Load out gantry: 6.7m
- Bitumen tanks: 45m

It is assessed that the above will not result in any negative impacts upon the construction of the flood defence in terms of loading pressure and the construction of these elements will not result in any disturbance to buried elements.

With regard to future improvements to the flood defences at the site it is recognised that there will be a need to raise the defence in future in line with the Thames Estuary 2100 Plan. It was noted within the Flood Risk Assessment (FRA) produced by BCL Hydro and submitted as part of the planning application that the defence would need to be raised several times over the lifespan of the development. In the first instance it was stated that the defence would need to be raised by 0.3m by around 2040.

Having discussed this with engineers from Frankham Consultancy Group they have advised that it would be possible to achieve this through the installation of a 300mm concrete upstand along the length of the current defence. This could be easily accommodated at the Site without any structural changes to the existing defence. The Applicant's operations would also not impact upon their ability to undertake this improvement work in future.

Lastly, confirmation was sought with regard to the type of barrier which would be installed in order to protect the flood defence the risk of vehicle impact associated with the movement of vehicles around the loading gantry and HGV parking area to the west of The White House. It is proposed that an interlocking concrete barrier will be installed in front of the flood defence. An indicative specification of a barrier supplied by JP Concrete is provided attached to this letter.

I trust that the attached information is sufficient for your needs and will enable you to remove your objection to the proposed development. Should you have any questions, please do not hesitate to contact me.

Yours sincerely,



George Massingham BSc (Hons) AssocRTPI
CONSULTANT