

Gravesham Borough Council
Development Control
Civic Centre Windmill Street
Gravesend
Kent
DA12 1AU

Our ref: KT/2022/130224/01-L01
Your ref: 20221064
Date: 07 December 2022

Dear Planning Team,

Outline Planning Application With All Matters Reserved, Except For The Primary Means Of Access And Road Layout, For A Phased Mixed-Use Redevelopment Involving The Demolition Of Existing Buildings And Structures Including Site Preparation / Remediation Works, And The Development Of Residential Units (Use Class C3), Class E Uses Including Floorspace For Retail Class E(A)), Food/Beverage And Drinking Establishments (Use Class E(B)), Local Services (Use Class E(C)), Indoor Sport/Recreation/Fitness (Use Class E(D)), Healthcare Space (Use Class E(E)), Creche/Nursery Uses (Use Class E(F)), Office Floorspace (Use Class E(G)(I)), A New Multi-Use Stadium With Associated Business And Leisure Facilities (Sui Generis), Hotel (Use Class C1), Community Uses Floorspace (Use Class F2). The Phased Redevelopment Will Include Other Sui Generis Uses, Delivery Of Open Space And Significant Realignment Of The Road Network Including The A226 Galley Hill Road / Stonebridge Road / Lower Road With Hard / Soft Landscaping, Car And Cycle Parking Provisions, Infrastructure Works, Ancillary And Associated Works.

Land Surrounding Ebbsfleet United Football Club, Bounded By Lower Road, Railway Line, Grove Road And The River Thames, Northfleet, Gravesend

Thank you for consulting us on the above application. **We object to the proposal for the reasons set out below.**

Flood Risk

We object to the proposed development due to the proposal not meeting the requirements of the National Planning Policy Framework (NPPF), supporting guidance and local policy on flood risk.

The NPPF requires that, where development is necessary in areas of highest flood risk (now or in the future), then the development should be made safe for its lifetime without increasing flood risk elsewhere. Part of the site is situated within Flood Zone 3 and features more vulnerable development. Such development must meet the requirements of the Exception test. The development must be safe for its lifetime without increasing flood risk elsewhere, which has not been demonstrated.

The Planning Practice Guidance (PPG) for the NPPF was revised in August 2022. Paragraph 005 requires that, where flood risk management infrastructure forms part of the strategy for addressing flood risk then a site specific flood risk assessment should identify how infrastructure will be operated, funded and maintained. It must be ensured that there is space for future maintenance or new flood risk infrastructure and the consequences of flood risk assets failing should be considered.

The site layout and proposed flood risk management does not meet these requirements. In particular the following must be resolved:

- The proposal does not meet the requirements of the Thames Estuary 2100 (TE2100) plan. In particular, a tidal Thames flood defence to be provided with a design life in-line with the development and raised to the climate change level.
- A minimum offset of 8 metres to be established from development to the Main River Ebbsfleet.
- The Main River Ebbsfleet to be deculverted to provide space for water including a consideration for increased flows resulting from climate change.
- A site specific flood model to be created to better understand fluvial flood risk at this site with a consideration for tidal/fluvial interactions.
- More vulnerable development must be raised above the required site flood level (with allowance for climate change) and with the required freeboard.

Overcoming Our Objection

Please provide information to address the following points.

Tidal Thames Defence Raising

The referenced report does not include any consideration for the condition, residual design life and required raising of the site's tidal Thames flood defences.

As the development has a 100 year design life, the proposal must demonstrate that the site's flood defences will provide the required degree of protection for this design life. The Thames Estuary 2100 Plan (TE2100) sets out the required flood defence crest level to maintain a sufficient standard of protection whilst accounting for the impacts of climate change. For this site, the tidal defences must be raised to a crest level of 8.00m Above Ordnance Datum (AOD) by 2070. Due to the requirement for the development to apply a 100 year design life, a proposal for the raising of the tidal defences to 8.00m AOD must be included as part of the development.

In addition to providing defence raising, it must be shown that the defence has a design life of 100 years. This would require that, either a new flood defence is constructed or that it can be demonstrated that the existing flood defence could be raised to a minimum of 8.00mAOD and provide the required degree of protection for at least the developments design life. Any proposal which included the existing river wall would have to demonstrate sufficient residual design life of the asset through an extensive series of surveys and testing. It is our experience that such defences rarely have sufficient design life and a new asset would likely be required to meet the requirements of the National Planning Policy Framework (NPPF).

Any proposal for defence raising and/or a new defence should consider how the defence line would integrate with the defence line immediately up and downstream of the site. It should be noted that Robins Creek and much of the Northfleet river frontage is currently under development/in the planning process.

If a retreated defence is proposed, the proposal should seek opportunities to provide additional outcomes such as by creating inter-tidal habitat. If a realigned defence relies on the existing river wall (for example, to form part of the defence's toe) then the river wall must be considered part of the overall flood defence line and should be demonstrated to have at least 100 years residual design life following the development.

Proximity to Main River and Tidal Flood Defence Assets

The site plans indicate that development would not only encroach within the required easement distances, but would also include building over the culverted Main River Ebbsfleet. This would create an unacceptable degree of risk to the culvert during construction in addition to likely reducing the residual design life of the main river asset. Peak fluvial flows will increase due to the impacts of climate change and the culverted watercourse will likely require major changes to account for this. Developing over the culvert would significantly limit climate change resilience of this site.

We would object to any proposal which featured encroachment to within 8 metres of a main river or 16 metres of a tidal river and associated assets. It should be noted that flood defence assets (such as flood walls and culverts) often feature buried elements. These should be surveyed to determine the most landward extent of the asset and the easement values measured from these points.

The current condition of the River Ebbsfleet culvert is not accurately known. It would be the riparian owner's responsibility to provide repairs and maintenance. Due to the 100 year design life of the proposed development, it is very unlikely that the culvert would provide the required standard of protection for this period. Deculverting of the River Ebbsfleet must be considered as part of this proposal. Where, existing structures prevent daylighting of the culvert, we would likely support redirecting of the channel. Where parts of the culvert must remain in place, a 100 year residual design life for such assets, would again be required.

The downstream side of the river wall features a flood gate. We would require confirmation regarding the proposal's use of this feature. Flood gates form a weakness within a flood defence. Therefore, we would look for this to be fully decommissioned; replacing the flood gate with a section of flood defence which should feature a crest level of no less than 8.00mAOD.

Flood Modelling

We carried out catchment level modelling of the Main River Ebbsfleet in 2015. The existing model indicates a very low level of flood risk to the site. However, this is likely to be inaccurate and the model should not be used as the only assessment of

fluvial flood risk at this site. A site specific flood risk model must be submitted with any planning application to demonstrate that the site can be considered sufficiently safe from flood risk whilst not displacing flood risk to the surrounding area. This should consider fluvial and tidal flood risk in addition to surface water.

A key uncertainty in the Ebbsfleet flood modelling is insufficient data regarding groundwater flows which have a significant impact on the River Ebbsfleet. Any Environmental Impact Assessment should include an assessment of groundwater interactions with the River Ebbsfleet.

A site specific flood model should consider options for deculverting of the River Ebbsfleet and the resulting change in flood risk to the site.

Insufficient Freeboard to the Modelled Climate Change Level

Section 83 of the 'Environmental Statement Non-Technical Summary' states that the 'Parkland Neighbourhood Character Area' would feature ground floor more vulnerable usage. Section 98 states that more vulnerable usage will be raised 600mm above the tidal breach level for each building. It should be noted an allowance for climate change must be included when determining design flood levels.

Finished flood levels (FFL) of more vulnerable units should be set no lower than 600mm above the design flood level for the site. Where flood levels vary across the site, the supporting FRA should indicate why a given value was chosen. The design flood level for this proposal would be either: the Downstream Tidal Thames Breach level for the year 2100 or the fluvial 1% Annual Exceedance Probability (AEP) flood level with allowance for climate change, whichever is highest. In the case of fluvial flood risk, a freeboard of 300mm would be consistent. As previously noted, site specific flood modelling would likely be required for this site to better represent fluvial flood risk.

We recommend that the ground floors of the proposed development are used for less vulnerable usage; limiting more vulnerable usage to the first floor and above. We further recommend that the FFL for all ground floors is raised to 600mm above the design flood event to reduce the impact of flooding from all sources. It is recommended to raise land levels across much of the site to provide the mentioned FFL levels. This would provide a high level of protection. To enable such raising, tunnel spoil may be possible to source from projects such as HS2.

Raised land levels could form part a retreated part of the required, raised tidal flood defence in line with the TE2100 Plan.

Adjacent Development

Much of the Northfleet area is undergoing development. We recommend that the applicant seeks opportunities to communicate with neighbouring developments and planning authorities, notably, Ebbsfleet Development Corporation (EDC). This may provide efficiencies for the development especially with regards to flood defence raising, deculverting and flood modelling.

We would require confirmation of the relationship of the applicant's site and the Robins Creek. As part of this, please confirm the offset between the red line boundary and the creek defence and the nearest element of the creek's wall.

Flood Risk Activity Permit Informative

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission.

For further guidance please visit <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our National Customer Contact Centre on 03702 422 549. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Without further meeting the requirements detailed above, it is unlikely that a Flood Risk Activity Permit could be issued.

Fisheries, Biodiversity and Geomorphology

We object to this proposal on the basis of inadequate ecological consideration and lack of proposals for enhancement.

River Ebbsfleet- biodiversity net gain

The plans have currently not taken into consideration the River Ebbsfleet that bisects the development area through a culverted section in the north east. Furthermore, chapter 8 of the Environmental Statement acknowledges the mudflat and shingle habitat adjacent to the Thames.

As set out in the Defra 3.1 metric and biodiversity enhancement supported through the National Planning Policy Framework Paragraphs 179-180, net biodiversity gain should be achieved in each habitat type. Therefore, we will need to see significant net gain within the aquatic as well as terrestrial environment. At present, there has been no mention of enhancement plans or opportunities to enhance the culverted Ebbsfleet or the frontage to the River Thames.

Culverted watercourses are low in biodiversity value and pose a greater potential to block and cause a flood risk upstream. The river Thames has historically seen a degradation in ecological value over centuries. Therefore, it is essential to use every opportunity to improve marginal habitat, water quality and flood risk potential.

Overcoming Our Objection

Please provide information on deculverting/daylighting and re-meandering sections of the culverted River Ebbsfleet.

Please provide a biodiversity net gain assessment and proposals to include but not limited to a set-back flood defence and intertidal terrace to provide an improvement to forage and refuge opportunities for fish and bird species; improvements in water quality (outfalls could be sited to exit through terraces to filter discharge). As well as an augmentation in flood storage capacity.

Please see the www.estuaryedges.co.uk guidance for further information.

Please note that we have further comments to make should the above objections be overcome.

Advice to LPA If you are minded to approve the application contrary to this advice, we request that you contact us to allow further discussion and/or representations from us in line with the Town and Country Planning (Consultation) (England) Direction 2009. In particular, we would impose planning conditions for the protection of groundwater and to deal with land affected by contamination.

Please do not hesitate to contact us should you require any further information.

Yours faithfully

Ms Laura Edwards

Planning Advisor

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