

Rebecca Harrison
Gravesham Borough Council
Sent via email

Our ref: KT/2024/131375/02-L01
Your ref: 20231313
Date: 03 September 2024

Dear Rebecca Harrison

Proposed construction of a new cable tunnel beneath the River Thames between Gravesend and Tilbury to provide additional transmission capacity. Above-ground infrastructure in the form of a new Cable Sealing End compound and a new head house building along with associated electricity infrastructure, access, parking, boundary treatment and two overhead gantry structures for future overhead lines. Temporary compound for the duration of the project to provide parking, staff welfare facilities, delivery vehicle parking, and equipment and machinery storage, including boundary treatment and lighting.

Eastcourt Marshes Electricity Distribution Site, Mark Lane, Gravesend, Kent DA12 2HN

Thank you for your consultation. We have reviewed the newly submitted information and have provided comments in regard to Flood Risk, Land Contamination and Ecology.

Environment Agency Position

As a result of our review, we are **maintaining the previous objection** to the proposal on Flood Risk Grounds.

Whilst we acknowledge the submission of a preliminary Risk Assessment, we feel that more information is required as detailed in this response before this proposed future condition can be discharged.

In regard to ecology, we feel that the condition previously requested, is no longer required. However, we would welcome the opportunity to work with the applicant in regards to enhancements of the water environment as detailed in our letter.

Flood Risk

We previously objected to this application on flood risk grounds, detailing our concerns in our response reference KT/2024/131375/01. Having reviewed the revised Flood Risk, we are maintaining our objection until the issues detailed below are addressed. The applicant is aware of our concerns and we have arranged a meeting to discuss these issues in the next week. We will update the Local Planning Authority (LPA) with any progress that is made in regards to our flood risk concerns

following this meeting.

Model/Product 4 data

We would reiterate the matter of the modelled data referred to within the Flood Risk Assessment (FRA).

Our local Customers and Engagement team are able to provide any relevant flooding information that we have available, such as flood maps and modelled flood levels to be used within the FRA. For most sites, applicants should request a Product 4 for this purpose. All flood data requests are free. To request any flood risk data, please email KSLE@environment-agency.gov.uk

The FRA discusses at length different modelled and sea level change scenarios, however it is unclear what modelled data is being used to inform the design level for this application. For example, section 5.8.3 and 5.8.10 states JBA flood mapping fluvial baseline is 2.7m Above Ordnance Datum (AOD). In Table 38, there are levels of 6.90 and 7.09mOD mentioned for future flood risk scenarios. In section 5.8.9, it is stated that the EWL for 0.1% Annual Exceedance Probability (AEP) (2148) is 7.61mAOD at Gravesend Power Station. Table 41 then shows breach modelling levels (2115) of 4.316m AOD and 4.391m AOD.

As stated in our previous response we would advise you to use the Thames Tidal Downriver Breach Inundation Modelling (2018) as the basis for setting proposed design levels. This is the most accurate and suitable data we can supply and we would expect to see design based upon this level. The modelled flood levels obtained from the Thames Downriver Breach Modelling need to be expressed within the FRA for direct comparison with the Finished Floor Levels.

Finished Floor Level/mitigation clarification

We still require further clarity in regards to the proposed Finished Floor Level (FFL) Section 5.88 of the FRA suggests that the project could adopt a shaft design with flood protection raised to 7.9m AOD or 8.61m AOD. Section 5.8.10 then states that the shaft design will need to consider tidal levels of 6.9m AOD. In Section 5.8.11, it is then stated that FFL are proposed at 3.500m AOD, which is significantly below all other proposed FFL's within this FRA.

Section 5.8.11 states that a level of 7.2m AOD should be considered in design if the infrastructure is to remain operable in these conditions. This is then repeated in section 5.9.6 where it is stated the "flood defences or the shaft/compound level would need to be raised to 7.20mOD". However, in section 5.9.6, it is then suggested that the formation level could be raised to a level above the design breach combined flood level of 4.47mOD, with additional measures to be considered (e.g. flood wall) in 2078.

The various levels that are suggested and proposed in the FRA, lead to uncertainty about what levels are proposed and to what design flood scenario. Ultimately we want to ensure that any design FFL is above 1 in 200yr (0.5% AEP) Climate Change design flood level, which can be obtained from the Thames Tidal Downriver Breach Inundation Modelling (2018) and provided by us.

If the infrastructure is to remain operable during flood conditions, it should be made clear that this can be achieved through the demonstration of appropriate FFLs. The levels of 6.9mAOD and 7.2mAOD do seem to be above the Environment Agency's model climate change scenarios but without clarity we are unable to confirm if these are acceptable. To reiterate we would recommend that the finished floor level are set above the 1 in 200yr (0.5% AEP) climate change modelled breach scenario.

We appreciate that the applicant has mentioned that the peak Estuary Wide Level (EWL) is determined to be 6.26mAOD and that the ground level for the compound is raised 0.3m with a floor level of 0.8m above that level. However, without the modelled floor levels mentioned with the FRA and a lack of clarification on the exact FFLs for the development, we are unable to make a direct comparison and establish whether the development will be safe for its intended lifetime.

Mitigation Measures

In addition, we would be grateful for clarification as to the exact mitigation measures proposed. It is stated in section 5.5.4 that flood protection, mitigation and resilience measures would be incorporated into the scheme, however in section 5.8.12 it is stated that "details for flood resistance and resilience plans are not yet available". It is therefore unclear if the FFL can be achieved, or if not, what the mitigation measures will be in order to protect the development from flooding whilst ensuring it remains operable during flood conditions.

Land Contamination

In our previous response we indicated we would seek a condition requiring the submission of a Preliminary Risk Assessment, should planning permission be granted.

The applicant has now submitted this document.

We have reviewed the provided Land Contamination Preliminary Risk Assessment produced by AECOM Limited (dated December 2023) and understand that on-site and off-site sources of contamination have been identified that may pose a potential risk to site. It is unclear as to the levels of contamination identified in previous site investigations. We would require sight of these previous reports or clarification of the extent of contamination identified prior to approval of the discharge of this condition. As such we still feel this condition is still required.

Ecology

Artificial lighting feedback - justification for detailed designs and mitigations

On the whole, we accept the feedback and justification for appropriate lighting design requirements in relation to avoiding impact onto sensitive receptor sites, such as the ditch network. However, we will highlight that this is based around bat ecology, and our position would be for various water dependant species, including water vole, fish and eel. Reference to the Bat Conservation Trust guidance for developers, offers similar assurance for other photo-sensitive species.

Nevertheless, given the explanation for the intended use of artificial lighting within the context of operational need, it is agreeable to remove an expectation of detailed design and mitigation through a condition.

The management of Gravesend ditches precluding enhancement options.

There is a statement that implies that as we chiefly manage the ditches and require access, that enhancements may not be possible. We encourage the applicant to not dismiss the possibility of exploring options with us. Other practical factors to consider include the exact requirements of access, locations, frequency and nature of maintenance activities and ought to be assessed together. We feel that further engagement should be sought for sound justification before dismissing ditch enhancements on the Gravesend site within Biodiversity Net Gain (BNG) plans. Such an approach to the ditch network would significantly benefit the local conservation status of the water vole populations, and this will require landowner collaboration. In our previous response we made a recommendation for a buffer management plan to be produced, and emphasised the potential opportunity to form a working agreement which will ensure water voles are considered in all ditch management practices.

BNG plans for gains in Ditch units.

Further description around increasing Ditch target condition from poor to moderate are not clearly described in the table Appendix G. It is noted that ditches within the baseline are deemed poor condition, where we influence the management of ditches, we would welcome opportunity to discuss whether change in management could deliver improvements. We would not be able to capitalise on BNG credit for this work, but instead want to deliver positive environmental benefits where possible as per our conservation duties; if a collaborative management style can effectively improve the biodiversity optimum and not negatively affect flood risk - then we would like the opportunity to engage to explore options with the applicant.

We trust this information is useful.

Yours faithfully

Mr Pat Abbott

Planning Advisor

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