



Rebecca Harrison
Gravesham Borough Council
Civic Centre
Windmill Street
Gravesend
Kent
DA12 1AU

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: GBC/2024/099071
Date: 19 February 2024

Application No: 20231313

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

Proposal: 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.

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

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

We have reviewed the submitted information for the Gravesend site and understand it is proposed to include a green roof on the Gravesend Headhouse and convey flows from the roads and car park to filter channels using a downstream defender for water quality and to discharge into the existing ditch at the greenfield rate which then discharges to the River Thames.

While we have no objection to the method proposed and understand the betterment provided by reducing flows to greenfield rates, we recommend inclusion of the full hydraulic calculations to review the inputs to the model such as rainfall data, safety factors, time area diagrams and flow rates.

Please note:

Any feature capable of conveying water can be considered to fall under the definition of an 'ordinary watercourse' and we would urge the applicant to contact us prior to undertaking any works that may affect any watercourse/ditch/stream or any other feature which has a drainage or water conveyance function. Any works that have the potential to affect the watercourse or ditch's ability to convey water will require our formal flood defence consent (including culvert removal, access culverts and outfall structures). Please contact flood@kent.gov.uk for further information.

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 design for exceedance principles.

Please also include supporting evidence such as greenfield calculations, infiltration testing or borehole analysis and any further supporting information in the TKRE Drainage Management Plan to clarify the assumptions made for the drainage design.

We would emphasize that additional ground investigation will be required to support the use of infiltration. It is recommended that soakage tests be compliant with BRE 365, notably the requirement to fill the test pit several times. Detailed design should utilise a modified infiltrate rate and demonstrate that any soakaway will have an appropriate half drain time.

It is recommended that until the above comments are addressed, a holding objection is in place.

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,

Lucy Senior

Flood Risk Officer

Flood and Water Management