



Delegated Report

Section 37 Consultation

Application no: 20240063

Location: Eastcourt Marshes Electricity Substation Mark Lane Gravesend Kent

Description: Electricity Act 1989 - Overhead Lines- Consultation - Works at Gravesend: one existing terminal tower will be removed, and one new tower will be erected to facilitate a realignment. The new span will be 325m long, replacing an existing span of 400m and provide a net loss of approximately 78m of overhead line. To facilitate this replacement tunnel project, new cables in the replacement tunnel must be connected to the existing high voltage 400kV overhead line network and a planning application under the Town and Country Planning Act 1990 has been submitted alongside this application.

Applicant: Kate McGregor

Site Visit Date: N/A

Submitted Documents/Plans

- Cover Letter;
- Form B with Part One completed;
- Drawing no. PDD-100116-OHL-022 Rev. P05 – Route Map 4VGA45A (NEW) to 4VG45B Sheet 01 of 02;
- Drawing no. PDD-100116-OHL-022 Rev. P05 - Route Map 4VGA45A (NEW) to 4VG45B Sheet 02 of 02;
- Historic England consultation response letter dated 31 July 2023;
- KCC Biodiversity consultation response letter dated 14 July 2023;
- KCC Heritage consultation response letter dated 21 July 2023;
- Natural England consultation response letter dated 06 July 2023.
- NE_NG Tunnel meeting minutes.

Relevant Planning History

Reference	Description	Decision	Decision Date
20230668	Request for a screening opinion in accordance with The Town and Country Planning Act (Environmental Impact Assessment) Regulations 2017 in respect of the one new shaft headhouse and one new cable sealing end compound.	Env Impact Assessment is Required	03.08.2023

It is prudent to note there is a current planning application (EIA) which is ref. 20231313 and is for '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.'

Development Plan

Gravesham Local Plan Core Strategy (September 2014):

- CS01 – Sustainable Development
- CS02 – Scale & Distribution of Development
- CS04 – Gravesend Riverside East and North East Gravesend Opportunity Area
- CS10 – Physical and Social Infrastructure
- CS11 – Transport
- CS12 – Green Infrastructure
- CS18 – Climate Change
- CS19 – Development & Design Principles
- CS20 – Heritage and the Historic Environment

Gravesham Local Plan: First Review (1994)

- P3 – Vehicle Parking Standards
- T1, T3, T4 – Impact of Development on Highway Network
- T5 – Access to the Identified Highway Network
- TC7 – Other Archaeological Sites

Paragraph 33 of the NPPF (2023) sets out that policies within adopted local plans should be reviewed to assess whether they need updating at least once every five years, and should then be updated as necessary. Such reviews are also a legal requirement as set out in Regulation 10A of the Town and Country Planning (Local Planning) England Regulations 2012.

The Council undertook such a review in September 2019 and found that the adopted Local Plan Core Strategy is in need of a partial review in terms of Policy CS02, due to the increased need for housing since the Local Plan Core Strategy was adopted and the need to ensure that a sufficient land supply exists to meet this need. Whilst saved policies from the Local Plan 1st Review (1994) generally conform with the NPPF (2023), the Council will also seek to replace these.

National Planning Policy Framework (2023)

- Section 2 – Achieving Sustainable Development
- Section 4 – Decision-making
- Section 8 – Promoting healthy and safe communities
- Section 9 – Promoting sustainable transport
- Section 10 – Supporting high quality communications infrastructure
- Section 12 – Achieving well-designed and beautiful places
- Section 13 – Protecting Green Belt land
- Section 14 – Meeting the challenge of climate change, flooding and coastal change
- Section 15 – Conserving and enhancing the natural environment
- Section 16 – Conserving and enhancing the historic environment

Supplementary Planning Guidance

- Gravesham Landscape Character Assessment (2009)

Consultations

Please note: The consultations carried out for planning application ref. 20231313 have been relied upon to enable assessment of this s37 consultation application.

GBC Environmental Protection

The submitted information has been reviewed and the following comments are made with regards to areas relevant to Environmental Protection:

Noise and vibration

ES IV Chapter 19 covers noise and vibration for the Gravesend area. An appropriate noise assessment has been undertaken including background noise measurement and consideration of noise levels at the nearest sensitive receptors (both residential and non-residential) to the proposed operational headhouse (structure providing access to the tunnel shaft once operational). Of relevance to the Gravesend area, consideration has been given to construction noise/vibration and construction road traffic noise. In terms of vibration, the impact of piling activities has been assessed.

Due to the fact that the majority of the tunnelling work will be carried out underground, it is not envisaged that noise from this will be an issue during the construction.

As recommended by Environmental Protection previously, reference has been made to appropriate guidance and British Standards. Mitigation by way of standard best practicable means as provided in the relevant guidance and standards for noise and vibration will be included within the construction phase. These can be addressed by way of Construction Environmental Management Plan (CEMP) - see comments below on the outline plan submitted. Overall, due to the distance between the Gravesend site and the sensitive receptors, there are not predicted to be any significant noise or vibration impact during the construction or operation phases.

Air Quality

ES IV Chapter 20 deals with air quality for Gravesend and covers the Air Quality Assessment undertaken. It was agreed previously that there will be no air quality impact in the operation phase, as in Gravesend activity will be limited to maintenance only, so only impacts during the construction phase need to be looked at. For Gravesend, 3 Air Quality Management Areas near to the site have been noted and considered. One of these – the Northfleet Industrial Area AQMA (declared for exceedances of PM10) has recently been revoked. In reference to this area, the report confirms that HGV's will not be routed this way.

In terms of construction phase impacts, these have been appropriately assessed with regards to ecological receptors as well as human sensitive receptors. Construction impacts assessed include construction dust, site plant and equipment emissions and onsite construction power emissions. A baseline survey was undertaken at the Gravesend site for 3 months measuring NO2, PM2.5 and PM10 and local air quality monitoring results have also been referenced.

Mitigation measures have been identified where needed and relate to in the main to construction dust emissions and traffic emissions. Mitigation follows IAQM guidance, and the proposals put forward are acceptable. An Outline Traffic Management Plan and Outline Construction Environmental Management Plan has been produced and a Dust Management Plan is proposed.

Mitigation during the construction phase will follow IAQM guidance and the proposals put forward in section 20.8.2 of the Air Quality chapter are acceptable.

Although there is the potential for an impact on air quality during the construction phase (including construction traffic), with the mitigation measures in place, the risk is reduced such that the impact are unlikely to be significant.

Outline Construction Environmental Management Plan (CEMP)

ES VI Appendix 3.1 details the outline CEMP. This has been reviewed and the mitigation measures detailed in Table 8.1 are deemed appropriate for this proposal in terms of the Gravesend site. The Dust Management Plan is referred to in this table, but it would be more appropriate for this to be covered by a separate condition as this will be a detailed document.

Traffic, transport, deliveries etc are dealt with separately in the Outline Construction Traffic Management Plan and matters relating to the routing of these are more for the Highways Officer/KCC to comments on.

Land Contamination

A Land Contamination Preliminary Risk Assessment for Gravesend has been submitted as a separate document to the EIA documents. The methodology and findings of this report are accepted. The report concludes that although overall there is a low risk to human health for current and future site users, there may be the presence of ground gas due to the made/infilled ground at the site. In addition, there is the potential for ground water to have been impacted through leaching of the any made ground contaminants. Piling could exacerbate this. To assess the above the report advises that a quantitative assessment

(intrusive site sampling) is undertaken, and a remediation strategy drawn up as appropriate. This is agreed with and can be dealt with by way of a condition.

To address the above and other matters, the following conditions and informatives are recommended:

Construction Environmental Management Plan

A condition requiring a detailed CEMP using the outline CEMP submitted in the Environmental Statement to be submitted for approval is recommended.

Dust Management Plan – Air Quality

A condition requiring a detailed Dust Management Plan as outlined in the Environmental Statement to be submitted for approval is recommended.

Contaminated Land

No development approved by this permission shall be commenced prior to a contaminated land assessment (in accordance with the CLEA guidelines and CLR 11 methodology) and if necessary, an associated remedial strategy, together with a timetable of works, being submitted to the Local Planning Authority for approval.

- a) A site investigation strategy based on the relevant information discovered by the 'Land Contamination Preliminary Risk Assessment' dated December 2023 by AECOM Limited shall be carried out by a suitably qualified and accredited consultant/contractor in accordance with a Quality Assured sampling and analysis methodology.
- b) A site investigation report detailing all investigative works and sampling on site, together with the results of analysis, risk assessment to any receptors and a proposed remediation strategy shall be submitted to the Local Planning Authority. The Local Planning Authority shall approve such remedial works as required prior to any remediation commencing on site. The works shall be of such a nature so as to render harmless the identified contamination given the proposed end-use of the site and surrounding environment including any controlled waters.
- c) Approved remediation works shall be carried out in full on site under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance). If during any works contamination is encountered which has not previously been identified then the additional contamination shall be fully assessed and an appropriate remediation scheme agreed with the Local Planning Authority.
- d) Upon completion of the works, this condition shall not be discharged until a closure report has been submitted to and approved by the Local Planning Authority. The closure report shall include details of the proposed remediation works and the quality assurance certificates to show that the works have been carried out in full in accordance with the approved methodology. Details of any post remediation sampling and analysis to show the site has reached the required clean-up criteria shall be included in the closure report together with the necessary documentation detailing what waste materials have been removed from the site.
- e) Where applicable, a monitoring and maintenance scheme to include monitoring the long-term effectiveness of the proposed remediation over an agreed period of time, and the provision of reports on the same, must be prepared and approved in writing by the local planning authority.

Following completion of the measures identified in that scheme, and when the remediation objectives have been achieved, reports that demonstrate the effectiveness of the monitoring and maintenance carried out must be produced and submitted to the local planning authority.

Watching brief

The applicant shall undertake a watching brief during construction in case any contamination issue is encountered. If during development any contamination is found, the local planning authority should be informed as soon as practical and the work shall not continue until written agreement is provided by the LPA as to the appropriate measures to be taken to resolve the matter and they are satisfied that those measures have been carried out.

Lighting

Artificial lighting can cause a statutory nuisance under the Environmental Protection Act 1990. It is important that the applicants are not permitted to install external lighting that illuminate anything other than

the ground within the curtilage of the development in order to assist in preventing a nuisance from occurring.

GBC Highways

I have no objections; traffic generation can be considered to be insignificant as most of the construction works will be located in Tilbury. However, the removal of the tunnel boring machine does raise some concern, and this may require some form of control as it would appear to involve 5 abnormal loads which may have difficulty negotiating the Milton Road/Ordnance Road junction. For this reason, it is suggested any abnormal load movements should be restricted to Sundays only and ideally between the hours of 3 and 9 am to minimise traffic conflict for any abnormal vehicle movement using the A226.

The applicant should note that the A226 at Galley Hill Swanscombe, commonly used for abnormal loads, is currently closed due to the chalk spine partially collapsing and no details are available on when it may reopen.

KCC Biodiversity

SUMMARY – ADDITIONAL INFORMATION REQUIRED

We have reviewed the ecological information submitted in support of this application and advise that additional information is sought from the applicant prior to determination of the planning application.

Under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 and paragraphs 180 and 186 of the National Planning Policy Framework (NPPF) 2023, biodiversity should be maintained and enhanced through the planning system.

We can suggest wording for relevant conditions if planning permission is granted, once sufficient information relating to biodiversity net gain, reptiles and water voles has been provided.

We were surprised that Natural England has not provided formal comments on this application as the ES Biodiversity Chapter indicates that during consultation prior to submission of the application, Natural England was concerned regarding potential impacts to a Site of Special Scientific Interest (SSSI) notification project, and on the potential for functionally linked land within the application site for birds designated in nearby SPA habitat. Further, the applicant has carried out an Appropriate Assessment for noise disturbance effects during construction on the Thames Estuary & Marshes SPA/Ramsar site (30m south of the application site). We would urge Gravesham Borough Council to reconsult with Natural England to establish whether it has provided no comment in error. Further dialogue and clarification from Natural England will ensure that Gravesham Borough Council can be confident that the proposed measures to minimise/manage/mitigate/compensate any likely significant negative effects are acceptable.

We would also highlight that Gravesham Borough Council must consider the impact the proposal will have on these designated sites in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) and the NPPF 2023. The responsibility for carrying out a Habitat Regulations Assessment (HRA) Screening and Appropriate Assessment lies with the Competent Authority, Gravesham Borough Council.

Detailed comments are provided below.

Detailed Comments

Reptiles

Reptiles are protected through the Wildlife and Countryside Act 1981 (as amended). All British reptiles are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006) and local planning authorities are required to have regard for the conservation of Section 41 species as part of planning decisions under their biodiversity duty.

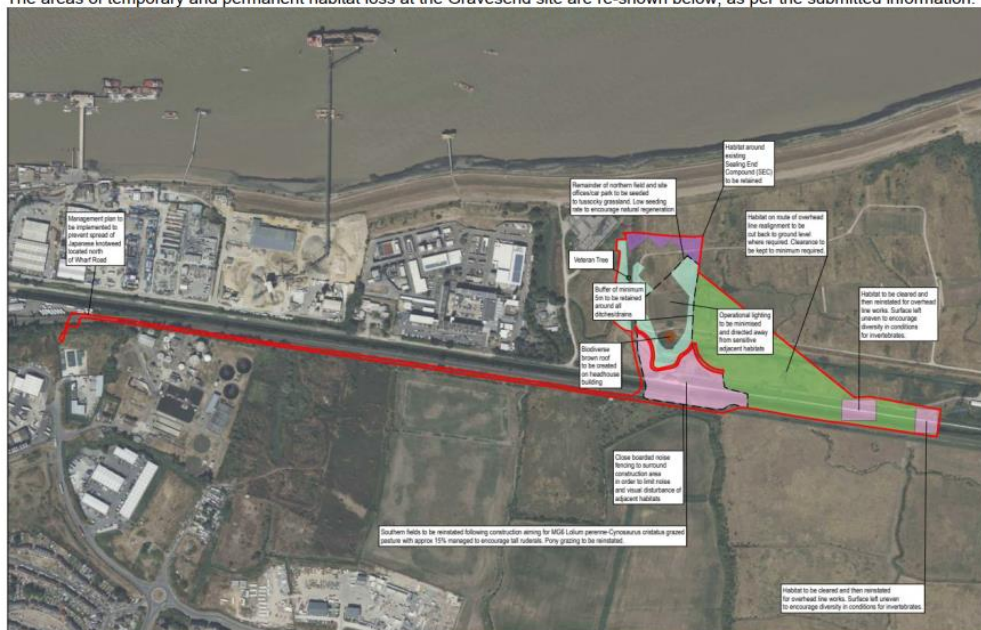
Necessary mitigation/compensation for reptiles needs to be provided prior to determination of any planning application. This is in alignment with paragraph 99 of the ODPM 06/2005, which states *“it is essential that the presence or otherwise of protected species and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision”*.

We note there are severe limitations regarding the results of the reptile surveys undertaken. However, we

Even so, we consider that there will be both a permanent and temporary loss of reptile habitat from the site. A precautionary approach to vegetation clearance has been proposed within the outline Construction Environmental Management Plan (CEMP), but no reptile translocation has been proposed. Whilst it may be possible to avoid immediate killing and injury of reptiles by encouraging them to move into adjacent retained habitat outside the works area, this habitat is unlikely to be suitable to support significant numbers of additional animals. Further, the image shown on page 4 of this advice note indicates that large areas of habitat are to be affected by works across the site. As such, we consider that the mitigation measures proposed for reptiles are insufficient, particularly in the short-term.

For a receptor site, we expect the following criteria to be met (as per government advice¹):

- Impacts**
The areas of temporary and permanent habitat loss at the Gravesend site are re-shown below, as per the submitted information.



Local Wildlife Sites (LWSs) are important for the conservation of wildlife at the county level. These are non-statutory designations which are generally recognised by local authorities and given weight and protection by inclusion in development plan policies in accordance with paragraphs 181 and 185 of the National Planning Policy Framework (NPPF) 2023.

Proposals lie within the Canal and Grazing Marsh, Higham Local Wildlife Site (LWS). This LWS has been

designated for its managed and unmanaged grazing marsh, dykes, sea wall, salt marsh and a long stretch of the Thames and Medway Canal. The site lies adjacent to the South Thames Estuary & Marshes Site of Special Scientific Interest (SSSI) and adds to the overall importance of this stretch of the North-West Kent Marshes.

The NPPF 2023 states under paragraph 180 that: *“Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);...d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.*

Gravesham Borough Council's Local Plan states within Policy CS12: Green Infrastructure:

“5.7.23 Sites designated for their biodiversity value will be protected, with the highest level of protection given to internationally designated Special Protection Areas, Special Areas of Conservation and Ramsar sites, followed by nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and then by other areas of more local importance for biodiversity.

5.7.24 There will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas shown on the Strategic Green Infrastructure Network map and within new development.

5.7.25 Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.”

Based on the current plans for the Site, the proposed development (including Tilbury) is predicted to result in a biodiversity net loss of 10.80%. However, a biodiversity net gain of 4.08% is proposed at an off-site location. The applicant is understood to be exploring further options for biodiversity net gain in line with the applicant's own policies.

We have not reviewed the biodiversity metric calculation tool associated with this application as the pdf format provided is difficult to read. We would require the calculation tool in excel format to be able to review the calculations effectively. We are therefore unable to comment on the validity of the proposed biodiversity net gain and to what extent proposals are capable of compensating for the loss of the Canal and Grazing Marsh, Higham LWS.

It would be helpful to see a copy of the biodiversity metric calculation tool in excel format prior to determination. If the off-site provision has been decided, it would be helpful to see further details regarding the proposed off-site location. This is to better understand/review the biodiversity net gain/loss associated with proposals. The assessment of the suitability of off-site compensation sites will need to include an assessment of any other constraints to achieving the target habitat (e.g., whether other protected or notable species already present will be affected by a change in management/habitats at the off-site compensation site).

If planning permission for proposals is granted, the on-site biodiversity measures (including detailed soft landscaping plans), and off-site net gain site should be secured through planning obligation. However, we note that the applicant's preferred off-site provision is not within Gravesham Borough Council's area, but in Medway Council's. The off-site provision is also proposed to deal with biodiversity losses at the Tilbury site. These factors will need to be considered with regards to any planning obligations.

A detailed Landscape and Ecological Management plan for both the on-site and off-site habitats should also be secured by a suitably worded condition if planning permission is granted in order to ensure that the proposed habitats can be effectively created and managed into the future.

Water Voles

Water voles are assumed present at the Gravesend site as surveys were inconclusive. Submitted information indicates that whilst ditches will be largely protected from impacts through a 5m buffer, it is not clear whether reedbed habitat will be similarly protected during construction. The Biodiversity Net Gain

Assessment indicates that there will be a temporary loss in the coverage of reedbed habitat across the site as a whole (including Tilbury). The figure on page 3 of this advice note also indicates that there may be clearance within areas of reedbed habitat at the Gravesend site. It is not clear how impacts to water vole will be effectively mitigated and compensated for if reedbed habitats are to be impacted. Further, it is not clear from the submitted information how previous limitations regarding obtaining accurate survey data² will be dealt with to inform licensing (where relevant).

We would request clarification prior to determination regarding the above. This is in alignment with paragraph 99 of the ODPM 06/2005, which states *"it is essential that the presence or otherwise of protected species and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision"*.

Invertebrates and Birds

A number of invertebrate (hornet robberfly, shrill carder-bee; brown-banded carder-bee, and small heath butterfly) and bird species found at the Gravesend site,^{3,4} are listed under Section 41 of the Natural Environment and Rural Communities Act (2006) and local planning authorities are required to have regard for the conservation of Section 41 species as part of planning decisions under their biodiversity duty⁵. Paragraph 84 of the ODPM Circular 06/2005 states that *"...The potential effects of a development, on habitats or species listed as priorities... are capable of being a material consideration in the ... making of planning decisions"*.

The applicant should take appropriate measures to avoid, mitigate and, as a last resort, compensate for any negative effects on Section 41 species in the development proposal, in accordance with relevant government standing advice.

Submitted information appears to indicate that there will be a permanent reduction in semi-natural habitats as a result of proposals. Submitted information indicates that in the long-term, taking into consideration mitigation and compensation measures, this is expected to result in a negligible effect on the invertebrate populations of District importance, and bird populations of District and Local importance.

Under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 and paragraphs 180 and 186 of the National Planning Policy Framework (NPPF) 2023, biodiversity should be maintained and enhanced through the planning system. If planning permission is granted for the project, we recommend that a condition is included to ensure invertebrate and bird populations at the site are not only protected in the long-term, but also to ensure that the project is able to deliver net gains to the local invertebrate and bird populations.

Statutory Designated Sites, Bats, Badgers, Protected/Notable Plant Species, Japanese Knotweed, Marine Mammals, Veteran Tree

Following a review of the submitted information, we are satisfied that should planning permission be granted, that a detailed Construction Environmental Management Plan (CEMP) secured by condition, and including noise fencing around the construction site, will be sufficient to avoid and mitigate for impacts upon bats, badgers, protected/notable plant species, Japanese knotweed, marine mammals, veteran trees, the Thames Estuary and Marshes SSSI, SPA and Ramsar and the Medway Estuary and Marshes SPA and Ramsar during construction.

Lighting and Biodiversity

We note that operational lighting has the potential to have adverse impacts upon biodiversity (e.g., bats). Local authorities have a duty to ensure impacts upon legally protected species are avoided and impacts upon bats are a material consideration in any planning permission under the NERC Act 2006 and through the NPPF 2023.

Therefore, to mitigate against potential adverse effects on biodiversity, the Bat Conservation Trust/Institute of Lighting Professional's 'Guidance Note 08/23 Bats and Artificial Lighting at Night'⁶ should be consulted in the lighting design of the development.

We advise that the incorporation of sensitive lighting design for biodiversity is submitted to the local planning authority and secured via an attached condition with any planning permission. Dark buffer zones should be used to separate habitats or features from lighting. Where 'complete darkness' on a feature or buffer is required, we will consider this to be where illuminance is below 0.2 lux on the horizontal plane and below 0.4 lux on the vertical plane.

Kent Highways

This application was supported by a large number of documents, some of which are relevant to the highway impact of the proposal in Gravesham District. These documents are considered to be robust and include the following:

- ES Volume IV Chapter 18 Traffic and Transport – Gravesend
- ES Volume VI Appendix 10.1 Outline Construction Traffic Management Plan
- ES Volume VI Appendix 18.6 Preliminary Highway Impact Assessment (Gravesend) • ES Volume VI Appendix 18.5 Construction Worker Trip Distribution (Gravesend)
- ES Volume VI Appendix 18.4 Baseline Traffic Movements (Gravesend)
- ES Volume VI Appendix 18.2 Transport Scoping Meeting Minutes – Gravesend
- ES Volume VI Appendix 18.1: Transport Statement Note – Gravesend

This proposal was subject to pre-applications discussions with KCC Highways at which a number of issues were discussed and included in the submitted documents.

It should be noted that the Thames and Medway Canal Road is not a public highway maintained by Kent Highways and, whilst there are concerns regarding the use of this narrow road by HGVs, it is not of concern to the Local Highway Authority but would need to be managed by the owners – Network Rail.

The level of traffic generated by the proposal during construction stage is not considered to be significant and during the following operational stage very low and of no concern.

The level of HGV movements to and from the site is managed in a Construction Traffic Management Plan which has been submitted in outline form and a Condition should be applied to any consent granted that a full CTMP should be submitted and approved by the LPA prior to any works commencing. It is essential that a detailed condition survey of the roads to be used to access the site is undertaken before any works commence, and that a Sustainable Travel Plan is included in the CTMP to minimise the number of employees traveling by private car and parking in the nearby roads which are already heavily parked in some places. Other issues that should be included in the CTMP (but not exclusively) are the timings of HGV movements to cause minimum disruption; liaison with the Lower Thames Crossing Team; loading / unloading areas within the site compound; waiting areas to avoid conflicting HGV movements, particularly on the Thames and Medway Canal Road; safe pedestrian access to the site; the impact on highway trees and shrubs of the abnormal loads.

I therefore raise no objection on highway grounds to this proposal provided the following Conditions are applied to any consent granted:

1 The applicant shall submit and obtain approval to a full Construction Traffic Management Plan to the LPA prior to any works commencing. Such a CTMP shall include a pre-condition survey of the local roads to be used, and a Sustainable Travel Plan to reduce the number of employees traveling by private car and parking in nearby public roads.

Informative: It is important to note that planning permission does not convey any approval to carry out works on or affecting the public highway.

Any changes to or affecting the public highway in Kent require the formal agreement of the Highway Authority, Kent County Council (KCC), and it should not be assumed that this will be a given because planning permission has been granted. For this reason, anyone considering works which may affect the public highway, including any highway-owned street furniture, is advised to engage with KCC Highways

and Transportation at an early stage in the design process.

Across the county there are pieces of land next to private homes and gardens that do not look like roads or pavements but are actually part of the public highway. Some of this highway land is owned by Kent County Council whilst some is owned by third party owners. Irrespective of the ownership, this land may have highway rights over the topsoil.

Works on private land may also affect the public highway. These include works to cellars, to retaining walls which support the highway or land above the highway, and to balconies, signs or other structures which project over the highway. Such works also require the approval of the Highway Authority.

Kent County Council has now introduced a formal technical approval process for new or altered highway assets, with the aim of improving future maintainability. This process applies to all development works affecting the public highway other than applications for vehicle crossings, which are covered by a separate approval process.

Should the development be approved by the Planning Authority, it is the responsibility of the applicant to ensure, before the development is commenced, that all necessary highway approvals and consents have been obtained and that the limits of the highway boundary have been clearly established, since failure to do so may result in enforcement action being taken by the Highway Authority. The applicant must also ensure that the details shown on the approved plans agree in every aspect with those approved under the relevant legislation and common law. It is therefore important for the applicant to contact KCC Highways and Transportation to progress this aspect of the works prior to commencement on site.

Guidance for applicants, including information about how to clarify the highway boundary and links to application forms for vehicular crossings and other highway matters, may be found on Kent County Council's website:

<https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance>. Alternatively, KCC Highways and Transportation may be contacted by telephone: 03000 418181

KCC Heritage

The part of the proposed development site south of the Thames, lies within an area of multi-period archaeological potential and is underlain by alluvial, waterlogged deposits with archaeological and palaeo-environmental interest dating from the late glacial to the post-medieval period. It also lies within the western end of the non-designated 19th century Milton Rifle Range. The range consists of a succession of low earthen mound firing points, a target mound and markers' gallery, as well as a weather shelter. The butts were modified in the 1890s and perhaps afterwards and part of the range is still in use today. The range saw continuous use, including for rifle practice during the First and Second World Wars as well as mortar firing practice. Although the formation of the Metropolitan Police Training Facility has involved further modifications to the southern end of the butts and firing points, there are substantial survivals of the original range structures.

The application has been made with an Environmental Statement (ES Volume IV – Chapter 17). This chapter is supported by appendices (ES Volume VI) and figures:

- Appendix 9.1: Historic Environment Desk Based Assessment
- Appendix 9.2: Desk-Based Geoarchaeological Deposit Modelling Report
- Appendix 9.3: Written Scheme of Investigation for Geoarchaeological Deposit Modelling and Borehole Investigation
- Figure 17-1: Designated Heritage Assets
- Figure 17-2: Non-designated Heritage Assets; and
- Figure 17-3: Previous Archaeological Investigations

My comments and recommendations focus on matters related to non-designated archaeology and the paleo-environmental interest of the site. No doubt your Conservation Officer, as well as Historic England, will comment on the application in relation to matters related to the built heritage and designated heritage assets.

The studies undertaken by the applicant in support of the ES are helpful and include the over-arching Historic Environment Desk-Based Assessment and the site-specific Desk-Based Geoarchaeological

Deposit Modelling. The results of these desk-based studies highlight the archaeological and palaeo-environmental interest of the site and the potential for groundworks associated with the proposed development to impact on both surface-level, and below-ground features and deposits of archaeological and palaeo-environmental interest.

To further understand the surface-level archaeological interest (likely to be, but not exclusively, related to the use of the site as a rifle range) detailed earthwork survey, LiDAR survey and archaeological trial trenching is recommended. A detailed, interpretative record of the rifle range, combining the results of fieldwork with documentary research (involving relevant specialists) should be produced to mitigate development impacts. Mitigation of impacts to the rifle range should also include the provision and dissemination of heritage information about the site.

To understand the deeper, below-ground archaeological and palaeo-environmental interest of the site, two geoarchaeological boreholes are proposed, one in each of the two areas of deeper below-ground development impacts. The application is supported by a Written Scheme of Investigation for Geoarchaeological Deposit Modelling and Borehole Investigation, the results of which would provide information about the deeper deposit sequence and its archaeological and palaeo-environmental potential and significance.

I am supportive of the proposed approach to site-specific field evaluation, which acknowledges the limitation to the present basis for our understanding of the archaeological and palaeo-environmental interest of the site. It is recognised that the results of field evaluation will be used to agree detailed mitigation, which could include options for preservation *in situ*, mitigation by design refinements and/or through detailed archaeological excavation and recording, analysis, reporting, dissemination and archiving of the results for public benefit.

It is recognised that the development would impact surface-level and below-ground deposits with archaeological and palaeo-environmental interest, the non-designated Milton Rifle Range and other, presently unidentified archaeological remains and I therefore recommend that if planning permission is granted the following condition is applied to any forthcoming consent:

To evaluate and mitigate the impacts of development on heritage assets with archaeological and palaeo-environmental interest:

A) Prior to any development ground works the applicant (or their agents or successors in title) shall secure and have reported a programme of archaeological field evaluation works, in accordance with a Specification and written timetable which has been submitted to and approved in writing by the local planning authority.

B) Following completion of archaeological field evaluation works, no development groundworks shall take place until the applicant or their agents or successors in title, has secured the implementation of any safeguarding measures to ensure preservation in situ of important archaeological remains and/or archaeological mitigation excavation and recording in accordance with a Specification and timetable which has been submitted to and approved by the local planning authority.

C) The archaeological safeguarding measures, mitigation excavation and recording shall be completed in accordance with the agreed Specification and timetable.

D) Within 6 months of the completion of archaeological works a Post-Excavation Assessment Report shall be submitted to and approved in writing by the local planning authority. The Post-Excavation Assessment Report shall be in accordance with Kent County Council's requirements and include:

- a. a description and assessment of the results of all archaeological investigations that have been undertaken in that part (or parts) of the development;***
- b. an Updated Project Design outlining measures to analyse, report and disseminate the findings of the archaeological investigations, together with an implementation strategy and timetable for the same;***
- c. a scheme detailing the arrangements for providing and maintaining an archaeological site archive and its deposition following completion.***

E) The measures outlined in the Post-Excavation Assessment Report shall be implemented in full and in accordance with the agreed timings.

Reason: To ensure that features of archaeological and palaeo-environmental interest are properly examined and recorded in accordance with relevant Local and the National Planning Policy.

KCC Flood & Water Management

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.

KCC Public Rights of Way

I can confirm that I do not have any objections to the above planning application at Eastcourt Marshes, Marks Lane. Public Right of Way Footpath NG1 lays to the north of the proposed site and Public Right of Way Footpath NG2 lays to the south.

Environment Agency

Thank you for your consultation dated 25 January 2024. We have inspected the application as submitted and we **object** unless the Flood Risk matters highlighted in our response can be adequately addressed.

Should our objection be overcome, we would request that the conditions, detailed in this response, that relate to the Interaction of the Development with Flood Defences Land Contamination, Ecology and Foul Drainage be appended to the future planning permission.

We have also included information in relation to Environmental Permitting and Waste Management. Further information is provided for the applicant via an appendix at the end of the letter.

Flood Risk

Our maps show the site lies within tidal Flood Zone 3a, defined by the 'Planning Practice Guidance: Flood Risk and Coastal Change' as having a high probability of flooding. The proposal is for the construction of a new cable tunnel beneath the River Thames between Tilbury and Gravesend 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, which is classified as an 'essential infrastructure' development, as defined in Annex 3: Flood Vulnerability classification of the Planning Practice Guidance (PPG). Therefore, to comply with national policy the application is required to pass the Sequential and Exception Tests and be supported by a site-specific Flood Risk Assessment (FRA).

The Planning Practice Guidance: Flood Risk and Coastal Change is clear that in Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood. We have reviewed the submitted flood risk assessment (FRA), prepared by BakerHicks, referenced 30003364-BHK-XX-XX-RA-C-02002_FLOOD RISK ASSESSMENT and dated 20 September 2023, and consider it does not comply with the requirements set out in the Planning Practice Guidance, Flood Risk and Coastal Change, Reference IDs: 7-020-20220825 to 7-022-20220825. It does not, therefore, provide a suitable basis for assessment to be made of the flood risks arising from the proposed development. In particular, the submitted FRA should consider the following:

The FRA discusses breach but does not provide any data on the possible flood depths on site following a breach of the defences. Details of possible flood depths and hazards across the site should be provided for the 0.5% and 0.1% flood events inclusive of climate change. Once this risk has been established the FRA should detail how the flood risk shall be mitigated for. As stated above, the PPG is clear that developments such as this should be designed to remain operational during a flood event. It is therefore important that the FRA discusses mitigation measures which will ensure the development can continue to operate during flood events.

The flood risk to the site following overtopping of the defences has not been provided as the FRA discusses that defences may be raised in line with climate change based upon the TE2100 plan. It should be noted that the TE2100 Plan is an aspirational document, rather than a definitive policy, so whether the defences are raised in the future will be dependent on a cost benefit analysis and the required funding becoming available. If the defences can be raised, the proposed development will be protected from flooding during the 1 in 1000 annual probability event in line with climate change. If defences are not raised, then the FRA confirms crest levels of 6.49mAOD, which would be exceeded in the 0.5% and 0.1% annual probability flood events when considering the impact of climate change. The FRA should consider what the flood risk associated with this possibility could be to ensure appropriate measures can be put in place allowing for the long-term operation of the proposed infrastructure.

When determining the safety of the proposed development, you should take this uncertainty over the future flood defences and level of flood protection into account. This may require consideration of whether obtaining the funds necessary to enable the defences to be raised in line with climate change is achievable. For developments such as this, which are required to remain operational during a flood, mitigation measures should be in place to ensure this is the case.

The FRA discusses the possibility of building defences 0.3m above available levels, but as breach and overtopping levels are not provided within the FRA, it is not clear what level this infrastructure protection should be built to. The actual level of proposed additional protection at the site should be confirmed within

the FRA. The FRA proposes these measures could be added in the future, but in the case of an overtopping or breach event, there may not be sufficient warning to ensure defences are put in place and a more permanent, fixed solution, should be considered.

Overcoming our objection

The applicant can overcome our objection by submitting an FRA that covers the deficiencies highlighted above and demonstrates that the development will be safe and not increase risk elsewhere. If this cannot be achieved, we are likely to maintain our objection to the application. Production of an FRA will not in itself result in the removal of an objection.

We ask to be re-consulted with the results of the FRA. We will provide you with bespoke comments within 21 days of receiving formal re-consultation. Our objection will be maintained until an adequate FRA has been submitted.

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.

Other Sources of Flooding

In addition to the above flood risk, the site may be within an area at risk of flooding from surface water, reservoirs, sewer and/or groundwater. We have not considered these risks in any detail, but you should ensure these risks are all considered fully before determining the application.

Environmental Permitting Regulations – Flood Risk Activities

The applicant may need an environmental permit for flood risk activities if they want to do work in, under, over or within 8 metres (m) from a fluvial main river and from any flood defence structure or culvert or 16m from a tidal main river and from any flood defence structure or culvert.

Application forms and further information can be found at: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>. Anyone carrying out these activities without a permit where one is required, is breaking the law.

The FRA states that the Gravesend part of the development site is adjacent to an ordinary water course, but this is incorrect as the river around the site is part of the Medway and is classified as a main river.

Thames Estuary 2100 Plan – Future Thames Flood Barrier

We expect the Thames Barrier to continue to protect London from tidal flooding up until 2070. Over the longer term, the Thames Estuary 2100 Plan (the Plan) sets out several options for managing tidal flood risk, including improving the existing barrier, creating flood storage areas or building a new barrier at either Long Reach or Gravesend Reach. We are committed to working with partners to review and decide on an end of century option by 2040, to ensure that construction is completed by 2070.

The Thames Estuary 2100 Plan was designed to be adaptable to changes in the Thames Estuary and to different rates of climate change and sea level rise, so the 2040 decision date could change. It therefore remains crucial for us to plan early for future flood defence requirements, including the end of the century options within the Plan.

We need to ensure that developers and landowners acknowledge the end of the century options within the Plan, such as a new Thames barrier. Planning applications should make sufficient reference to end of the century options if they could have an impact on the proposal, in this case a new flood barrier within Gravesend Reach, during the proposals life span.

We note that section 5.9.6 of the Flood Risk Assessment (FRA) makes reference to a possible new future Thames barrier in Gravesend Reach but does not include any reference to the other end of the century options within the assessment. Section 7.2 states the project will have no impact on the future work of the TE2100 plan.

However, if the decision is taken to build a new barrier within Gravesend Reach by the year 2070, then this development could impact on this essential piece of flood defence infrastructure.

We recommend the developers regularly check the Gov.uk [website](#) for up to date information on the TE2100 Plan and would welcome future discussions as decisions concerning the future Thames Barrier location are clarified.

Flood Defences

The construction of the tunnel may not result in any settlement to the tidal defences on the North Bank of the Thames Estuary. This is because these defences have already experienced significant settlement and are now at their minimum permissible level. The applicant will be required to monitor the defences for movement and make good any settlement that may result from construction of the tunnel.

During the development of the project adequate space must be provided for the inspection and if needed the maintenance of main river watercourses and flood defences adjacent to the site. This appears to be covered on the plans in the project description document and would also be covered by Environmental Permitting.

Provided our Flood Risk Objection can be overcome, we would request the following condition be applied to any future planning permission in regards to flood defences.

Condition 1

Pre and post development surveys are undertaken in regards to the flood defences on the northern shore of the development site.

Reason for condition 1

To ensure that the structure of the flood defences are not impacted upon by the proposed work and the level of flood defence protection they provide is maintained. Any damage caused by the development should be repaired at the developers cost.

Contaminated Land

Environmental setting

This site is located above Secondary (undifferentiated) and Principal Aquifers (Alluvium and Chalk respectively) and the application overlies Water Framework Directive groundwater body. The site is considered to be of moderate environmental sensitivity. The historic and future use could present potential pollutant linkages to controlled waters. Consideration for the risk posed by piling will need to be undertaken.

The previous use of the proposed development site, on the South bank, as military training ground and rifle range presents a medium risk of contamination that could be mobilised during construction to pollute controlled waters. The construction phase of the development presents a medium/high risk to groundwater through the development of a deep shaft and the use of piling methods during the construction of this shaft. Tunnelling and associated excavation and piling works can result in risks to potable supplies from, for example, pollution/turbidity, risk of mobilising contamination, drilling through different aquifers and creating preferential pathways. Construction of the tunnel through the use of a Tunnel Boring Machine poses a potential risk to groundwater should additives be required and the potential leaking of any components during the tunneling phase.

Prior to the commencement of any works on site we would expect the developer to produce sufficient documentation to suitably outline that the risks posed to groundwater from the proposed development have been identified and can be suitably managed. We would consider the inclusion of mitigation measures associated with potential Land Contamination and the provision of groundwater monitoring to be included within a detailed Construction Environmental Management Plan (CEMP) and associated appendices. Any further documents provided should include suitable risk assessments and mitigation measures to ensure that any potential impact is identified and that suitable measures are in place to prevent further contamination. We would also consider groundwater monitoring to be required pre- during and post-construction to suitably monitor the potential impacts of the development on the underlying groundwater relative to suitable baseline data. Should any drilling additives be required during any phase of the development a list of proposed additives and relevant information should be supplied to the Local Authority and us prior to their use within the development.

From review of the relevant chapters of the Environmental Statement and it is noted that numerous documents are to be provided at the detailed design stage, including, but not limited to; a detailed CEMP, Construction Groundwater Control Strategy, Materials Management Plan, Detailed Drainage Plan, Piling Risk Assessment and Incident Response Plan. This is acceptable in principle, however, these should be submitted and approved by the relevant Local Authority in consultation with the Environment Agency prior to the commencement of any works. We are unable to find any mention of groundwater quality monitoring within the submitted documents.

With regard to the risks posed by land affected by contamination, the application's Environmental Statement outlines that site specific Phase I Desk Studies have been produced for both the Tilbury and Gravesend site, however, these have not yet been made available for review. This document should be submitted to the Local Authority prior to the commencement of any works on site.

It is understood that no mains sewers are available within the vicinity of the site to remove surface or foul water from the proposed site during or post construction. The use of non-mains drainage solutions may pose a risk to groundwater should they not be implemented correctly or with the suitable permissions such as an appropriate permit. The use of either a 9000L cesspool or discharge to the environment via package treatment plants has been noted throughout the Environmental Statement. It is understood that a detailed Drainage Design is to be produced in the future, which should clarify which of these two options the developer is to proceed with. It should be noted that any proposed discharge of treated effluent to the environment will require a permit unless it can meet the exemption criteria outlined within the General Binding Rules (GBR's). This should be considered at an early stage within the development as a permit may not be considered acceptable for this site. Please note that the granting of planning permission does not guarantee an environmental permit for a sewage discharge will be granted. Surface water is understood to be discharged via a petrol interceptor to a surface water channel, this is acceptable from a groundwater quality perspective.

If planning permission is granted we would request that the following conditions related to land contamination are appended to any future planning permission. Without these conditions, the proposed development on this site poses an unacceptable risk to the environment and we would object to the application due to the risk of contamination.

Condition 2

Prior to each phase of development approved by this planning permission no development / No development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Local Planning Authority), shall take place until a scheme that includes the following components to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the local planning authority:

1) A preliminary risk assessment which has identified:

- all previous uses
 - potential contaminants associated with those uses
 - a conceptual model of the site indicating sources, pathways and receptors
- potentially unacceptable risks arising from contamination at the site.

2) A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3) The results of the site investigation and detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the express written consent of the local planning authority. The scheme shall be implemented as approved.

Advice to LPA

This condition has been recommended as we are satisfied that there are generic remedial options available to deal with the risks to controlled waters posed by contamination at this site. However, further details will be required in order to ensure that risks are appropriately addressed prior to development commencing.

The Local Planning Authority must decide whether to obtain such information prior to determining the application or as a condition of the permission. Should the Local Planning Authority decide to obtain the necessary information under condition we would request that this condition is applied.

Condition 3

No occupation of any part of the permitted development / of each phase of development shall take place until a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include any plan (a "long-term monitoring and maintenance plan") for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be implemented as approved.

Condition 4

No development should take place until a long-term monitoring and maintenance plan in respect of contamination including a timetable of monitoring and submission of reports to the Local Planning Authority, shall be submitted to and approved in writing by the Local Planning Authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to and approved in writing by the Local Planning Authority. Any necessary contingency measures shall be carried out in accordance with the details in the approved reports. On completion of the monitoring specified in the plan a final report demonstrating that all long-term remediation works have been carried out and confirming that remedial targets have been achieved shall be submitted to and approved in writing by the Local Planning Authority.

Condition 5

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.

Reasons for Conditions 2, 3, 4 and 5

To protect and prevent the pollution of the water environment (particularly the Secondary (undifferentiated) and Principal aquifers) from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF 2023; paragraphs 180, 189 and 190), EU Water Framework Directive, Anglian River Basin Management Plan and Environment Agency Groundwater Protection Position Statements (2017) A4 – A6, J1 – J7 and N7.

Condition 6

The development hereby permitted may not commence until such time as a Detailed Construction Environmental Management Plan (CEMP) and all associated appendices has been submitted to, and approved in writing by, the Environment Agency and Local Authority.

Reasons for Condition 6

To ensure that the proposed development, including tunnel shafts and the boring of the tunnel, does not harm the water environment in line with National Planning Policy Framework (NPPF 2023; paragraph 180).

Condition 7

Piling and tunnel shaft construction using penetrative methods shall not be permitted other than with the

express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

<http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/scho0501bitt-e-e.pdf>

Reasons for Condition 7

Piling or other penetrative ground improvement methods can increase the risk to the water environment by introducing preferential pathways for the movement of contamination into the underlying aquifer and/or impacting surface water quality.

For development involving piling or other penetrative ground improvement methods on a site potentially affected by contamination, where aquifer units are connected or where groundwater is present at a shallow depth, a suitable Foundation Works Risk Assessment based on the results of the site investigation and any remediation

should be undertaken. This assessment should underpin the choice of founding technique and any mitigation measures employed, to ensure the process does not cause, or create preferential pathways for, the movement of contamination into the underlying aquifer, or impacting surface water quality.

Condition 8

The development hereby permitted shall not commence until a groundwater monitoring and maintenance plan in respect of contamination, including a timetable of monitoring (pre-, during and post-construction) and submission of reports to the local planning authority, has been submitted to, and approved in writing by, the local planning authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to, and approved in writing by, the local planning authority.

Reason for Condition 8

To ensure that the site does not pose any further risk to the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. This is in line with paragraph 180 of the National Planning Policy Framework.

We have provided further information regarding contamination in an appendix at the end of this letter.

Waste Water Management

The drainage management plan identifies that 'Discharge consents will be required for surface water discharges' We recommend that the applicant uses the pre-application service for advice on proposed discharges. Get advice before you apply for an environmental permit - GOV.UK (www.gov.uk) General guidance on applying for water discharge environmental permits can be found at: Discharges to surface water and groundwater: environmental permits - GOV.UK (www.gov.uk)

The applicant indicates a package treatment plant may be used as an alternative to a cess pit. The applicant should refer to guidance above if a package treatment plant is installed. The applicant should confirm if the seepage water which is proposed to be discharged will be saline, if this is the case, impacts relating to effects on the chemistry of the receiving watercourse need to be considered. We would request the condition below, related to wastewater is appended to any future planning permission.

Condition 9

No development shall commence until a strategy to deal with foul water drainage is submitted to, and approved in writing by, the local planning authority.

Reason for Condition 9

To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution in line with paragraph 180 of the National Planning

The CEMP appears to satisfactorily cover the main pollution prevention points we'd expect to see identified. General guidance can be found at Pollution prevention for businesses - GOV.UK (www.gov.uk)

Ecology

Landscape Ecological Management Plan

The construction and operational activities proposed as part of this development could have an unacceptable effect on the ecological value of the wetland habitats and ditch habitats identified at site if these are not managed effectively.

The ditch network potentially supports multiple water vole populations in varying scale; evidence suggests that it is highly relevant to consider the impacts upon both the species and habitats they utilise (both elements are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)).

Therefore, the safeguarding recommendations proposed as outlined in the Ecological Appraisal, ES - Chapter 15: Biodiversity Gravesend and Outline Landscape and Ecological Management Plan documents should be formally adopted. It will also require an adequate buffer zone for all ditch habitats to be retained during the operational phase as part of long-term management of the site.

In light of the above, the proposed development will be acceptable if a planning condition requiring a landscape management scheme for the ditch and wetland scrape features is included on the planning permission.

This approach is supported by paragraphs 180 and 186 of the National Planning Policy Framework (NPPF) which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains for biodiversity.

If significant harm resulting from a development cannot be avoided, adequately mitigated, or as a last resort compensated for, planning permission should be refused.

Without this condition we would object to the proposal because it cannot be guaranteed that the development will not result in significant harm to water voles and associated ditch habitats nor for the newly created wetland features to be successfully established and managed for their conservation optimum.

Condition 10

No development shall take place until a Landscape Ecological Management Plan, including long-term design objectives, management responsibilities and maintenance schedules for all wetland and ditch habitats has been submitted to, and approved in writing by, the local planning authority.

The Landscape Ecological Management Plan (LEMP) shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The LEMP shall include the following:

- details of treatment of site boundaries and/or buffers around water bodies; we request for an adequate buffer zone extent (i.e. to provide good forage and shelter for water voles) to be identified and demarked on a scaled map.
- details demonstrating how the buffer zone will be protected during development.
- Details of how any proposed footpaths, fencing, lighting, and other aspects of the development may interact with the wetland or ditch habitats; The applicant should note that artificial light spill should be directed away from ecological receptors, sensitive lighting design guidance can be accessed via the Bat Conservation Trust.
- no light spill from external artificial lighting into the watercourse or adjacent river corridor habitat. To

achieve this the specifications, location and direction of external artificial lights should be such that the lighting levels within 8/5 metres of the top of bank of the watercourse are maintained at background levels. We considers background levels to be a Lux level of 0-2.

- details of maintenance regimes; including specific treatment of the ditch buffer zone and new wetland habitats.
- details of any new wetland and ditch habitat created on-site, including any proposed planting scheme should be provided. Planting schemes should use native species, suited to the catchment character. Management responsibilities should be provided.

Reason for Condition 10

To ensure the protection of wildlife and the supporting habitat. Also, to secure opportunities for enhancing the site's nature conservation value in line with national planning policy, promoting positive conservation status for water vole in the area and to complement achievement of the proposed BNG ambition.

Opportunities to enhance ditch habitats in collaboration

The presence of water voleS also offers opportunity to further explore enhancements to the ditch habitat, however this will require working in agreement with the relevant Flood Risk Management authority. As previously stated any work within 8m of a fluvial main river may require a Flood Risk Activity Permit; much of the evidence and methods within the LEMP will be relevant to the permit determination.

We note the permit for water discharge will be applied for and Biodiversity Net Gain assessment will be developed.

Environmental Permitting Regulations – Regulated Industries

Chapter 3 Project Description, Plate 3-3 indicates that tunnelling will occur under land covered by permit reference GP3733DZ, operated by Ingrebourne Valley Ltd.

The plan indicates tunnelling will go under landfill Area A1, which contains historically deposited pulverised fuel ash (PFA) from Tilbury Power Station. This area of landfill does not have engineered containment but relies on the natural geology to protect groundwater from the deposited PFA waste.

We would seek to ensure this area of waste is not disturbed by tunnelling to maintain protection of the environment or encourage discussion with our Installations team at the earliest opportunity if it is anticipated the landfill will be impacted by the project.

Waste Management

14.7.13 Assumes that tunnel arisings will be reused in accordance with CL:AIRE. The applicant should note that only clean and uncontaminated material can be used at another site, and that it can only be used at another site without the need for treatment, and the applicant must declare through CL:AIRE and to the local Environment Agency team the site(s) they wish to use that material at, in advance of any excavation.

The applicant must ensure that demolition wastes are suitable for reuse under CL:AIRE, otherwise they will need to be used under a relevant Waste Exemption or the applicant will need to register an appropriate Environmental Permit.

The Environmental Protection (Duty of Care) Regulations 1991 for dealing with waste materials are applicable to any off-site movements of wastes. The code of practice applies to if the applicant produce, carry, keep, dispose of, treat, import or have control of waste in England or Wales. The law requires anyone dealing with waste to keep it safe and make sure it's dealt with responsibly and only given to businesses authorised to take it.

Pollution Prevention Control

The CEMP appears to satisfactorily cover the main pollution prevention points we'd expect to see identified, unless stated previously in this letter. General guidance can be found at Pollution prevention for businesses - GOV.UK (www.gov.uk)

National Highways

Recommend that planning permission not be granted for a specified period

It is recommended that the application should not be approved until **20 May 2024**.

We will be concerned with proposals that have the potential to impact on the safe and efficient operation of the SRN, in this case, particularly within the vicinity of the A2 at Gravesend.

Planning application to Thurrock Council ref: 23/01502/FUL

We are mindful that this strategic proposal impacts on two local planning authority areas: Gravesham Borough Council and Thurrock Council. As such, National Highways needs to ensure its responses to these applications are co-ordinated and consistent.

Our response to the application to Thurrock Council (ref: 23/01502/FUL) dated 15 February 2024 recommends that planning permission not be granted for a period of three months until 15 May 2024. This is to allow time for the applicant to provide additional information on the likely impacts of construction traffic on the SRN, including a Framework Construction Workforce Travel Plan (CWTP).

Until such time that this additional information has been submitted by the applicant to Thurrock Council and assessed by National Highways and the impacts of the proposal on the SRN are clearly understood, we recommend that planning permission not be granted for 20231313.

Please note that this recommendation can be replaced, renewed, or reviewed during the three-month period, or at its end, dependent on progress made with regards to the outstanding matters.

Lower Thames Crossing

We note that the construction programme would overlap with that for Lower Thames Crossing (LTC) and the project teams for LTC and National Grid are already working together to identify and work through project interfaces so that both projects are managed appropriately. We encourage further discussion between the projects to ensure they can be delivered successfully.

Next Steps

We recommend that a call is arranged between the applicant and National Highways as soon as possible to further discuss the application and agree a way forward with the assessment. This could be a joint call to discuss assessment needs for both the north and south of the Thames elements of the project.

Standing advice to the local planning authority

The Climate Change Committee's 2022 Report to Parliament notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 74 and 109 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 108 and 114 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of PAS2080 promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

Historic England

Historic England can confirm we have given advice to the applicant at the pre-application stage with regards to the options appraisal and the design approach

Summary

The project proposes the construction of a new cable tunnel beneath the River Thames between Gravesend and Tilbury to provide additional electricity transmission capacity. Above-ground infrastructure in will include a new Cable Sealing End compound, head house building, and associated electricity infrastructure including overhead gantry structures.

Historic England Advice

Significance and Impact

As set out in the Environment Statement (Vol III, Chapter 9 Historic Environment - Gravesend: dated December 2023) the nearest designated heritage assets to the development are a small number of Grade II listed vernacular dwellings along Lower Higham Road in Chalk.

These are essentially older dwellings, cottages and farmsteads that pre-existed the widespread development in this area in the late C20. For example, Filborough Farmhouse and barns to the east of the study area. These buildings represent and reflect the pre-industrial rural land use. A range of non-designated heritage assets have been recorded from all periods, an include the Milton Rifle range to the east of the development area.

The potential harm here would be to the significance of the designated heritage assets through changes to their setting. In this case changes to the existing pylon array, and from new permanent structures at the substation and tunnel head. There will also be construction impacts during the development with the potential to recover archaeological material.

We also note construction impacts in terms of changes to the setting of the designated heritage asserts but accept these will be temporary for the duration of the project.

Policy

In policy terms we note the application is being considered under both National Planning Statement (EN_1) and the NPPF

Broadly speaking the avoidance of conflicts between the conservation of a heritage asset's and the impact of an application are at the heart of the policies of the NPS and are mirrored in the policies of both EN_1 (e.g. 5.9.22) and NPPF (Para 201). This includes the contribution made to the significance of a heritage asset from its setting.

In all cases where there is harm, whether or not this this is substantial or less than substantial, the policy is still clear that 'any' harm requires a clear and convincing justification (EN_1 5.9.26 and NPPF 206) and that harm will need to be weigh appropriately by the decision maker against the public benefits of the proposal (EN_1 5.9.30 and NPPF 208). This is mindful that 'great weight' needs to be given to a designated heritage asset's conservation, and that the more important the asset the greater the weight should be EN_1 5.9.25 and NPPF 205).

In relation to non-designate heritage assets planning policy (EN_1 Para 5.9.7 and NPPF 209) direct the decision maker to consider the impacts on non-designated heritage assets and where an application will directly affect non-designated heritage assets, a balanced judgement will be required with regards to harm and any loss significance. (see EN_1 5.9.31 and NPPF 209)

Historic England's Position

Historic England have been in pre-application discussion with the applicant and confirm we have been fully consulted prior to this application for planning permission. We have no in principle objection to the scheme and we have supported the tunnel option.

We acknowledge the study area was limited in scope, but we are aware a substation which includes sealing end compounds and pylons already exist at this location.

As set out above we are however aware the development would bring several changes to the existing substation and would add new permanent structures at the tunnel head. There will also be construction impacts during the development.

We can also confirm that heritage issues have also been considered at all stages of the scheme, and this is documented in the ES provided with the application. We support the provision of an Environmental Statement (ES) to support the planning application and can confirm that the ES has not identified any significant effects for either designated or non-designated heritage assets from the permeant changes. We broadly agree with the conclusions and do not have any additional comments.

We agree with the applicant that the development has the potential to have an adverse effect during the development phase, however the final operations phase of the development will only have a relatively modest overall change to the setting of those designated heritage assets. Given the affected assets are all Grade II listed buildings we would therefore defer to your conservation advisors.

We note and confirm the construction effects will be temporary for the duration of the project and we have not considered these issues further.

The proposal does however have the potential for unknown archaeology or non-designated heritage assets to be present from the footprint of the tunnel head and compound. We note the ES outlines an approach for dealing with both non-designated heritage and archaeological matters and we would defer to your archaeological advisors in that regard.

The deep excavation for the tunnel will also likely interact with important Thames side palaeoenvironmental deposits (ref: ES Volume VI Appendix 9.2: Desk-Based Geo-archaeological Deposit Modelling Report). These deposits have relative significance in term of the valuable information they contain, and, in this context, we would consider them to be of equivalence to a non-designated heritage asset.

The application has made provision for managing and investigation the deeper Thames side deposits. This includes the provision of a deposit model, and an outline WSI for the geo-archaeological works. We reviewed the Geo-archaeological WSI at the pre-application stage and confirm our comments have been taken on board and incorporated in the document.

We therefore confirm our view that this would be suitable to underpin mitigation against likely impacts and we support this approach.

We recommend the local planning authority take advice from their archaeological advisors with regards to non-designated and archaeological matters. We also recommend a suitable condition or other mechanism is applied to the permission to secure the programme of archaeological and geoarchaeological works. This would also address policy considerations in both EN-1 and NPPF for non-designated heritage assets.

Recommendation

Historic England has no objection to the application on heritage grounds. There are however some safeguards outlined in our advice that need to be addressed in order for the application to meet planning policy requirements (See paragraphs 5.9.30 and 31 of NPS EN_1, and 208 and 209 of the NPPF), specifically with regards to the mechanism for securing a programme of archaeological and geo-archaeological work.

Your authority should take these representations into account in determining the application. If there are any material changes to the proposals, or you would like further advice, please contact us. Please advise us of the decision in due course.

Buglife

Although Buglife has previously discussed the proposals with National Grid, this submission represents the first time that Buglife has been able to view substantial information regarding the application site that provides greater insights into its wildlife value.

Impacts to invertebrate assemblages within Thames Estuary South Important Invertebrate Area network

The Invertebrate Report written by Mark G Telfer (revised date, 13th November 2023) has assessed the invertebrate populations at the Gravesend site to be of county value. 307 species were recorded in just three survey visits from late July into September, indicating a diverse assemblage. Although the results would likely have been more impressive still with suitable spring and early summer surveys to capture the remaining interest on site the value of the site has been properly recognised and confirm that the site is in good condition for invertebrates.

The site is adjacent to the current mapped area of the Thames Estuary South Important Invertebrate Area (IIA), a network of sites that provide nationally or internationally significant places for the conservation of invertebrates and the habitats upon which they rely.¹ With new invertebrate data available as a result of this application, the Gravesend site will now be incorporated into the Thames Estuary South IIA, recognising the important habitat it provides in the wider landscape, including being functionally linked to the South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI). The site also falls entirely within the Canal and Grazing Marsh, Highnam Local Wildlife Site (LWS) designated for its Coastal Floodplain Grazing Marsh Priority Habitat.

The construction phase will result in the permanent loss of just under 0.96 ha of Coastal Floodplain Grazing Marsh, with approximately 4.5 ha subject to temporary impacts for up to four years. All the site ditches will be retained along with a '*minimum buffer of 5m*'. As this is the only habitat to be retained on site, Buglife would hope to see this buffer increased and ideally a phased approach to loss or modification of habitats rather than the whole area being cleared within a short time frame. It would also like to see a clear commitment to reinstating habitats as soon as possible after their initial disturbance.

Landscape proposals

Overall, the Outline Landscape and Ecological Management Plan (OLEMP) written by AECOM (dated December 2023) details proposals that in the long-term will replace much of the habitat lost, however, every effort must be taken to provide suitable habitats and features for the current invertebrate interest of the site. Buglife provides some additional recommendations below.

Wetland Features

New wetland features are to be created on the site that will link in with the existing ditch network. Buglife is unclear why the ditch network was not surveyed as part of the invertebrate assessment, and it would be recommended for a survey to be undertaken before works commence to help inform new ditch and reedbed creation to maximise their value for invertebrates.

Restoring Habitats

The OLEMP states that "*Where practicable, seed will be obtained from a local source for the purpose of maintaining continuity with local coastal and floodplain grazing marsh*", however, the document also suggests the use of commercial seed mixes. Buglife would like to highlight that sowing commercial seed mixes near a SSSI is not best practice. The document 'Creating habitat for pollinators in Britain & Ireland'² sets out best practice guidance which should be followed to avoid impacts on South Thames Estuary Marshes SSSI.

Brown Roof creation

A brown roof is proposed and when constructed to a high standard, they can provide habitat of high ecological value to invertebrates. Buglife is pleased to see that only locally sourced seed and natural regeneration will be used to establish vegetation. Buglife has created a detailed guidance document '*Creating Green Roofs for Invertebrates*'³ which provides some general principles on how to create biodiverse roofs.

Hornet Robberfly

Hornet Robberfly (*Asilus crabroniformis*) is a Priority Species under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 found on the site. Of this species, the Invertebrate Report states "*preferring sites with high abundance and diversity of dung beetle prey associated with horse dung*". Horse grazing is the desired management for the southern fields. Buglife would like to highlight that the dosing of livestock with broad-spectrum de-wormers is damaging to insect development and alternative treatments should be used wherever possible. Dosing the livestock off-site and keeping them off such land of conservation value for at least 10 days after treatment will reduce the impact of worming treatments on the invertebrate dung fauna.

De-commissioned infrastructure

The OLEMP does not detail proposals for the current infrastructure on the site when it is de-commissioned

at the end of the project. Details should be provided in the full LEMP, with opportunities taken to create habitats that will restore similar grazing marsh conditions to those currently found on site that support its diverse assemblage of invertebrates.

Buglife would urge these recommendations presented here to be taken forward into the more detailed LEMP and Construction Environmental Management Plans to help reduce the impacts from the proposals on invertebrates and provide the best opportunities in the future to maintain the sites invertebrate interest.

Southern Water

Foul and Surface Water Drainage

The Environment Agency should be consulted directly by the applicant regarding the use of a cess pit.

The Council's technical staff and the relevant authority for land drainage should comment on the adequacy of the proposals to discharge surface water to the local watercourse.

It is possible that a sewer now deemed to be public could be crossing the development site. Therefore, should any sewer be found during construction works, an investigation of the sewer will be required to ascertain its ownership before any further works commence on site.

Natural England

Natural England is not able to provide specific advice on this application and therefore has no comment to make on its details. Although we have not been able to assess the potential impacts of this proposal on statutory nature conservation sites or protected landscapes, we offer the further advice and references to Standing Advice.

Natural England advises Local Planning Authorities to use the following tools to assess the impacts of the proposal on the natural environment:

Impact Risk Zones:

Natural England has provided Local Planning Authorities (LPAs) with Impact Risk Zones (IRZs) which can be used to determine whether the proposal impacts statutory nature conservation sites. Natural England recommends that the LPA uses these IRZs to assess potential impacts. If proposals do not trigger an Impact Risk Zone then Natural England will provide an auto-response email.

North Kent Marshes Internal Drainage Board

The Gravesend Headhouse compound is within the Internal Drainage District (IDD) of the North Kent Marshes Internal Drainage Board (NKMIDB) and we note that it is proposed to discharge surface water to a watercourse. This discharge will require land drainage consent in line with the Board's Byelaws (specifically Byelaw 3 available at https://lowermedwayidb.co.uk/wp-content/uploads/2023/02/NKMIDB_Byelaws_DEFRA-approved.pdf). Any consent granted will likely be conditional, and a Surface Water Development Contribution fee is normally required to cover the increased flow and volume in its maintained drainage network. However, this application is proposing to discharge to 'main river' and it is only a short distance before discharging in the tidal Thames as such, it seems unlikely that the Board will require such a payment. For information, the applicant is advised to approach the Environment Agency directly to discuss their proposals for discharging to 'main river' in terms of water quality, water quantity, for works within the Byelaw margin of 'main river' and for the outfall structure.

The plan below identifies the location of 'main river', shown in red.



Once a detailed scheme has been developed and no longer subject to significant change, the applicant is advised to contact the Board to start the land drainage consenting process.

If it is proposed to discharge to a non-main river watercourse within the site boundary, the applicant must re-consult the Board.

This response is based on the information provided with the planning application and is reliant on its accuracy. The Board would be very grateful if its comments were used in their entirety.

HSE

From the information provided it appears that the development is at approximately 4.302 RB from the licensed site i.e. at a greater distance than the 3 RB currently expected for this type of development. Given the nature and the location of this type of development I would not expect there to be a significant impact on the outcomes of the original casualty survey. As the proposed developments fall outside of SD2, but within SD3, of the nearby licensed explosive port. Provided that the proposed developments do not constitute as a 'vulnerable' buildings HSE has no comment to make.

"Vulnerable building" means a building or structure of vulnerable construction, that is to say—

- (a) a building of more than three storeys above ground or 12m in height constructed with continuous non-load bearing curtain walling with individual glazed or frangible panels larger than 1.5m² and extending over more than 50% or 120m² of the surface of any elevation;
- (b) a building of more than three storeys above ground or 12m in height with solid walls and individual glass panes or frangible panels larger than 1.5m² and extending over at least 50% of any elevation;
- (c) a building of more than 400m² plan area with continuous or individual glazing panes larger than 1.5m² extending over at least 50% or 120m² of the plan area; or
- (d) any other structure that, in consequence of an event such as an explosion, may be susceptible to disproportionate damage such as progressive collapse.

Kent Fire & Rescue Services

The proposed block plan, design & access statement don't provide sufficient detail on the access to the site for the fire and rescue service, as required by section 53 of the above legislation.

I make the following observations:

The access road to the proposed development should have a minimum width of 3.7m, and no less than 3.1m in width at any pinch point on route so our appliance can access the site. The access road base (hard standing) must also meet the minimum weight load capacity requirement for our appliances.

Where there are dead-end conditions to and on the proposed site, adequate turning facilities should be made available for the appliance with a minimum radius of 16.8m.

Applicants should be aware that in the event of planning permission being granted the Fire and Rescue Service would require emergency access, as required under the Building Regulations 2010, to be established.

Fire Service access and facility provisions are a requirement under B5 of the Building Regulations 2010 and must be complied with to the satisfaction of the Building Control Authority. A full plans submission should be made to the relevant building control body who have a statutory obligation to consult with the Fire and Rescue Service.

Thurrock Council

Thurrock Council are currently considering their own planning application (under the above quoted reference) for the associated development to the north side of the River Thames, which Gravesham Borough Council have already been consulted on, and response provided on 14 February 2024. The description of our proposal reads as follows:

'Proposed construction a new cable tunnel beneath the River Thames between Tilbury and Gravesend 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.'

It is noted that documents submitted with Thurrock's planning application also include details of works taking place within Gravesham. Thurrock will consider this when assessing the proposed development whilst also considering relevant local and national policies, along with responses received from consultees. However, given the scale of the development, including its distance across the Thames, it is considered that the proposed development within Gravesham including associated infrastructure would not have any adverse impacts upon the administrative area of Thurrock.

Kent Police

Applicants/agents should consult us as Designing out Crime Officers (DOCO's) to address CPTED and incorporate Secured By Design (SBD) as appropriate. We use details of the site, relevant crime levels/type and intelligence information to help design out the opportunity for Crime, Fear of Crime, Anti-Social Behaviour (ASB), Nuisance and Conflict.

There is a carbon cost for crime and new developments give an opportunity to address it. Using CPTED along with attaining an SBD award using SBD guidance, policies and academic research would be evidence of the applicants' efforts to design out the opportunity for crime.

We strongly recommend that if this ATM is given retrospective planning approval, the following security measures are included as part of any planning conditions:

1. We recommend boundary treatments be a minimum of 2m and the installation of lockable gates to the sides of the unit to provide controlled access to the rear. These gates must be flush to the building line to optimize surveillance. If a boundary is made up of hedging, we require the hedges be dense, and where possibly prickly, with a secondary layer for security purposed such as a mess

fence to avoid trespassers

2. We recommend natural surveillance for parking areas. As a secondary layer of security, we would also recommend CCTV be installed to further monitor use. We also strongly recommend gating access roads/ parking areas to prevent nuisance parking and misuse out of hours.
3. Defined pedestrian routes to/ from the building are recommended to improve safety and avoid pedestrian and vehicle conflict.
4. Cycle storage must be well lit and with natural surveillance. We recommend the sold secure or SBD recommended products for additional security.
5. Lighting - Please note, whilst we are not qualified lighting engineers, any lighting plan should be approved by a professional lighting engineer (e.g., a Member of the ILP), particularly where a lighting condition is imposed, to help avoid conflict and light pollution. We recommend that a suitable lighting policy is installed to ensure that the units and staff have safe access to and from the units and to help deflect criminality. External lighting to conform to min standard of BS5489-1:2020.
6. CCTV to be installed, especially in areas with limited natural surveillance such as rear of the development, utility areas/ bin stores and on the access/ exit road. We also recommend cameras in the following areas to keep users safe and monitor their movements; any stairs, emergency access doors, lifts, loading/ unloading areas, car park and reception, main office/ safe. The CCTV must not infringe any lighting plan.
7. We strongly recommend alarms, with an auto-dial function, be installed on all external doors, including emergency exits.
8. All external doorsets (a doorset is the door, fabrication, hinges, frame, installation, and locks) including folding or sliding to meet PAS 24: 2022 UKAS certified standard, STS 201 or LPS 2081 Security Rating B+. Please Note, PAS 24: 2012 tested for ADQ (Building Regs) has been superseded and is not suitable for this development.
9. Windows on the ground floor to meet PAS 24: 2022 UKAS certified standard, STS 204 Issue 6:2016, LPS 1175 Issue 8:2018 Security Rating 1/A1, STS 202 Issue 7:2016 Burglary Rating 1 or LPS 2081 Issue 1.1:2016 Security Rating A. Glazing to be laminated. Toughened glass alone is not suitable for security purposes. Any curtain walling and fixings should be tested and meet BS EN 1627:2011 and/or be certified to LPS 1175: Issue 7, SR1 or STS 202: Issue 3, BR1.
10. Any Shutters should be as close to the building line as possible and must avoid the creation of a recess. Shutters must be certificated to LPS 1175: Issue 7, SR2; STS 202: Issue 3, BR2; Sold Secure Gold or PAS 68:2013
11. Bin Stores must be secure, lit and, if in an area with limited natural surveillance we recommend CCTV cameras be installed. We also strongly advise against placing this store close enough to the building that it can be used as a climbing aid into the building when closed. Please note where there is a mixed-use building, residential and commercial bins must be segregated.
12. If any buildings are to have roof access for maintenance of lift shafts etc., we recommend that ladders/ access doors to these areas are securely locked so that members of the public are unable to access this area. We also require CCTV to cover this area in order to monitor unauthorized access
13. New trees should help protect and enhance security without reducing the opportunity for surveillance or the effectiveness of lighting. Tall slender trees with a crown of above 2m rather than low crowned species are more suitable than "round shaped" trees with a low crown. New trees should not be planted within parking areas or too close to street lighting. Any hedges should be no higher than 1m, so that they do not obscure vulnerable areas.
14. We recommend securing equipment on site over night to prevent criminal damage and theft

Please note, site security is required for the construction phase. There is a duty for the principle contractor "to take reasonable steps to prevent access by unauthorised persons to the construction site" under the Construction (Design and Management) Regulations 2007. The site security should incorporate plant, machinery, supplies, tools and other vehicles and be site specific to geography and site requirements.

We welcome a discussion with the applicant/agent about site specific designing out crime. If the points above are not addressed, they can affect the development and local policing.

This information is provided by Kent Police DOCO's and refers to situational crime prevention. This advice focuses on CPTED and Community Safety with regard to this specific planning application.

Officer's Analysis

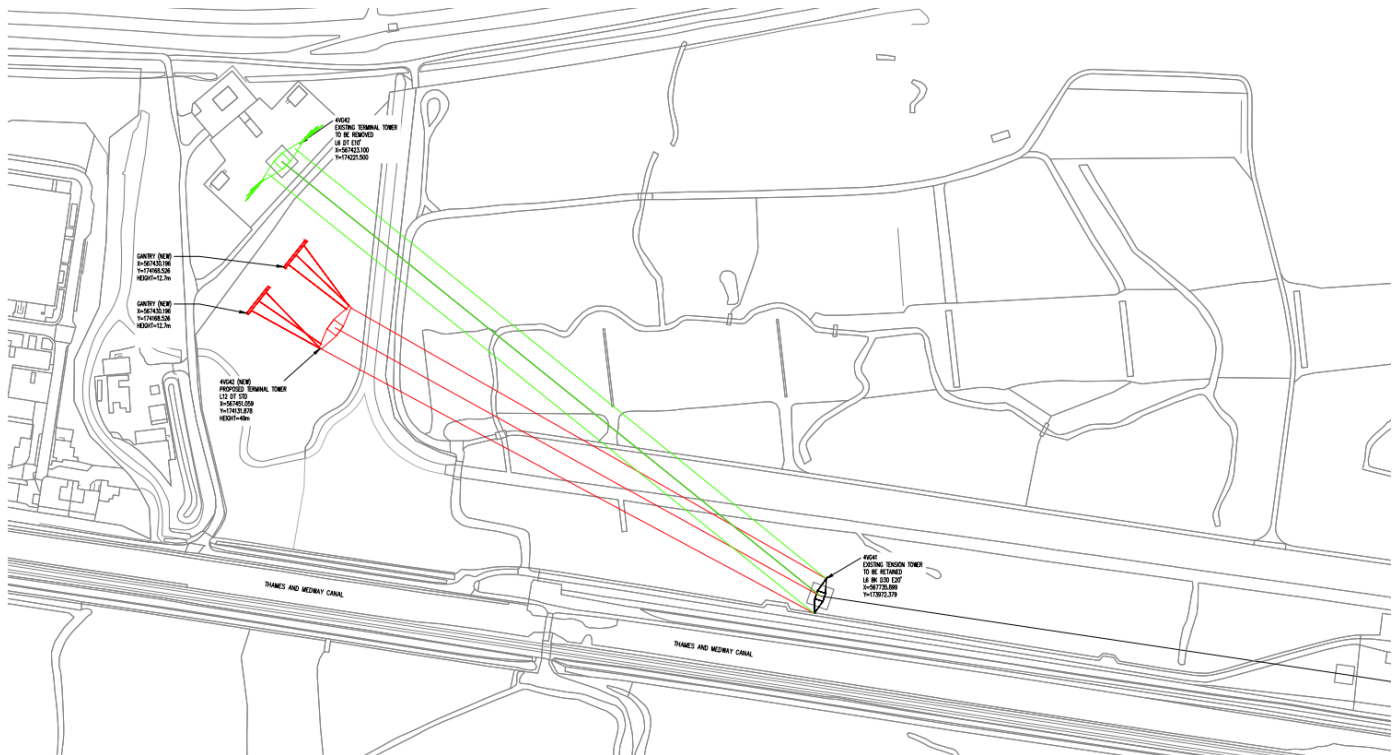
Site Description

The application site is located to the east of the Metropolitan Police Specialist Training Centre in Mark Lane. There is an existing Headhouse and Sealing End Compound with terminal tower (tower is to be removed) and overhead power lines to an existing tension tower which is to be retained.

The site is located within a Local Wildlife Site (Canal and Grazing Marsh, Higham), in close proximity to the Thames Estuary and Marshes Special Protection Area and Ramsar site (at its closest point it is approximately 50m from the existing pylon which is to be retained) and the overhead lines would be in the non-designated heritage asset of Milton Rifle Range. The site is also located in the Green Belt, Shorne And Higham Marshes Landscape Character Area, Flood Zone 3, Area of Archaeological Potential, Historic Landfill Buffer Zones for Gas Works – Canal, Norfolk Road, Denton-Comma Oil and Shamrock Road, Gravesend Riverside East & North East Gravesend Opportunity Area, Biodiversity Opportunity Area, SSSI - Impact Risk Zone, KCC Minerals Safeguarding Areas, Lower Thames Crossing - Safeguarding Zone & Buffer Safeguarding Zone and there is a Public Right of Way – the Gravesend & Northfleet NCP along the Thames and Medway Canal footpath.

Proposal

This application has been received as part of a Statutory Consents Regime for Overhead Powerlines in England and Wales under Section 37 of the Electricity Act 1989 and is a consultation request in relation to the removal of one existing terminal tower and existing overhead power lines and erection of one new 49m terminal tower and new overhead power lines to facilitate realignment with existing tension tower which is to be retained. This is shown in the extract from the drawing submitted with the application:



The existing terminal tower in the existing Sealing End Compound (SEC) will be removed as will the overhead lines shown in green. A new terminal tower and overhead power lines will be constructed to the south of this as shown in red and will be connected to the existing tension tower to the south west.

This consultation is closely related to a current planning application (ref: 20231313) which is under consideration by Gravesham Borough Council, where the works to be carried out under Section 37 would be intricately linked to the completion of the development proposed in planning application ref. 20231313 which is for the following:

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.

All Section 37 applications are made to the Secretary of State for the Department for Energy Security and Net Zero (DESNZ). Views are required to be obtained from the relevant Local Planning Authorities by the applicant prior to submitting an application to the Secretary of State hence the receipt of this application. Thurrock Council have had the same s37 consultation application as works for the development are also proposed in their Borough; their s37 application has been assessed and they have no objections to the proposed overhead line works.

Providing none of the Local Planning Authorities consulted in relation to this development raise any objection, the applicant can then progress to submit an application to the Secretary of State for consideration.

The applicant advises in the submission that the work is subject to a CPO which was to be launched when the s37 application was submitted as the CP cannot begin until then because a condition of the CPO is that consents are being actively progressed.

Analysis

The proposed application is for removal of an existing pylon and overhead power lines shown in green on the submitted plan and erection of a new pylon and replacement overhead power lines to the south shown in red which would be on a realignment to the existing tension tower pylon to the south-west which is to be retained.

The Application summary: Tilbury to Gravesend Tunnel Replacement Project provides information on the project. Due to the detailed nature of the works and the information provided it is considered helpful to provide extracts as follows:

The Application summary advises the following in respect of the works to install the new pylon:

Infrastructure Installation Pylon foundation installation would take place before any circuit outages on the existing OHL. Temporary working areas around the proposed new tower locations would be prepared and taped off to delineate the working area and ensure impacts on sensitive habitats are minimised. An area of c. 6m by 6m would then be excavated for each pylon leg. Piled foundations are required to a depth of between 14-20m and the first 4m depth will be concrete filled. The steelwork required for the new terminal pylons will either be erected by a Mobile Hydraulic Crane, or with a derrick to erect the pylon in small sections. This requires a large laydown and assembly area of c. 50m x 50m before lifting the steelwork sections. A tractor with a light crane or tele-handler may assist in the moving of and erecting steelwork on the ground. The first panel will be lifted by the crane and manoeuvred into position over the foundation stubs and fixed into place with connecting bolts. Once in place, the panel will be stayed to hold its position. Subsequent sections will be assembled using a controlled lift via a crane and staying sequence with each panel or boxed section bolted in turn to the previous erected panel until the pylon is complete and secured.

The Application summary advises the following in respect of the removal of the existing overhead lines and pylon:

Infrastructure Removal The existing OHL conductors would be removed by lowering them on to trestles rollers or wooden batons which are placed in line underneath the conductor and rolled in. Pylon dismantling and removal can be carried out using a variety of methods depending on the pylon type, location and accessibility. Due to the location of these existing pylons, their surrounding land uses and habitats, it is likely the pylons will be dismantled via cranes. Before the pylon structures can be removed, the conductor and fittings are removed. For safety reasons, it may be necessary to 'backstay' the pylons. This would involve c. three 1.2 tonne concrete blocks (2m by 1m), called 'backstays' being placed onto a sledge (via tractor) at strategic locations. The concrete blocks act as a safety device, typically placed c. 35m back from the new pylon and connected by wire rope. Once all backstays are in position, working platforms will be raised to working height at the pylons, and insulators and fittings will be lowered to the ground via tractor and winch. Once this is completed, each conductor is lowered to the ground where it will rest on trestles tables or tarpaulin. Operatives with handheld hydraulic cutters, cut the conductor into manageable pieces

for disposal. The pylons are then dismantled. A large mobile hydraulic crane will be positioned on a crane pad c. 20m x 10m constructed from plastic or metal panelling. It will take c. 1 day to dismantle a pylon using a crane. As they are lowered to the ground, the sections of the pylon will be broken up using mechanical shears fitted to an excavator. Foundations are generally removed to a depth of 1m below ground level, with excavation usually no more than 0.5m by 0.5m. The excavator then breaks the concrete around the steel 'raker' and cuts to a depth of c. 1m. This action would then be repeated for the remaining pylon legs and the land reinstated.

The Application summary advises the following in respect of the replacement overhead lines:

At Gravesend, the replacements are simpler with approximately 403m of single span OHL to be permanently removed and replaced with approximately 325m of new double span OHL. There are two elements to the construction works and methods are the same at both Tilbury and Gravesend. These are: 1) Stringing of the new OHL cables 2) Stringing of the downleads between the terminal towers and landing gantries Dismantling of the existing overhead cables is described in the previous answer. Stringing of the New Overhead Cables Once the pylons are built, the new conductors are hung. This is known as 'stringing'. Stringing is the method of positioning and pulling the new conductors between two pylons. There are two different ways to carry out this operation. The first is none tension pulling. This involves pulling the new conductor from the required point A to B via a tractor winch at ground level. The new conductor can be pulled over trestle tables, rather than the ground, so to protect the new conductor as well as the underlying habitats. Once the conductor is pulled to its required position, it is raised via a winch to its respective landing points on the pylon arms. Once the conductor is secure, a working platform can be raised to the working height point. This ensures operatives work at height safely. The conductor is then 'sagged' (tensioned to ensure mechanical and electrical correctness) via a winch. Once completed, the conductor is then attached to its landing point on the pylon via its fittings, insulators and jumpers. This process is then repeated for each conductor. The second stringing method is called tension stringing. This method keeps the conductor off the ground entirely. Working platforms are raised at each pylon and a running wheel attached to the arms of each pylon. Two hydraulic puller/tension machines are set up at each pylon, one acting to pull the conductor and one acting to tension (pull back) the conductor. This enables the operatives to control the height and tension of conductor, ensuring it is kept off the ground. One puller tension machine is set at the base of the pylon, whilst the other is positioned behind the other pylon (set back by c.50m). Lighter pilot rope is pulled through the puller tension machines and up to the running wheels. These will be pulled through the total span and this enables the conductor to be attached at the tension end, and the conductor to be pulled through the span without coming in to contact with the ground. Once this is complete, the conductor is then sagged to the required tension, and secured with fittings, insulators and jumpers from the working platform. Stringing of the Downleads (between the terminal tower and OHL gantries) The conductor which runs from the new pylon to the gantry within the SECs is called a downlead. This is attached via an insulated connection. Downleads are installed via two tractor winches. These will pull the conductor to its landing point. The downleads are laid out on the ground and cut to their appropriate length. They are then attached to the tractor winches. Once pulled to position, a mobile elevated work platform would be raised to working height on the pylon. The downlead is then attached to its landing point on the pylon via fittings, insulators and jumpers.

The site is an existing National Grid compound with Sealing End Compound, Head House, Terminal Tower, Tension Tower and Overhead Power Lines. The new pylon and Overhead Line works are on land to the south of the existing apparatus and is on land that is not owned by the National Grid.

Whilst the proposal would be for the installation of one new pylon and new overhead lines, as the existing pylon in the Sealing End Compound would be removed and the existing tension tower pylon would be retained there would be no actual additional increase in pylons on the site. In respect of the overhead lines they would be of less length than the existing overhead lines as the existing length of 403m would be removed and the new overhead lines would be 325m which is a reduction in length of 78m. The new pylon would be located 94.6m south-east of the existing pylon and the widest distance between the existing and new overhead lines would be 52.8m. It is therefore considered that there would be a neutral impact in respect of Green Belt and visual/landscape matters.

The site is located in a Local Wildlife Site (Canal and Grazing Marsh, Higham) and in close proximity to the Thames Estuary and Marshes Special Protection Area and Ramsar site. KCC Biodiversity have advised further information is required regarding reptiles, biodiversity net gain and water voles; Buglife also provide detailed comments. The applicant has advised that they will be providing an updated technical note to address KCC Biodiversity's comments and will be providing a letter to explain how they will be addressing the points of other consultees which would include Buglife. At this stage the Local Planning Authority

cannot therefore advise that the proposal is acceptable in respect of biodiversity but the applicant is working on addressing this matter.

The site is in Flood Zone 3 and there are objections to the proposal from the Environment Agency (EA). There is also a holding objection from KCC Flood and Water Management. The applicant has advised that KCC Flood and Water Management have removed their holding objection in an e-mail exchange to them but they are working on matters that KCC Flood & Water Management would require by condition, if permission were to be forthcoming. The EA object to the proposal unless the Flood Risk matters highlighted in their response can be adequately addressed; the applicant advises that they have completed the extra work required and will first consult with the EA if this resolves their comments before submitting to the Local Planning Authority. At this stage the Local Planning Authority cannot therefore advise that the proposal is acceptable in respect of biodiversity and flood risk matters but the applicant is working on addressing these matters.

It appears all other matters including relating to heritage and highways could be dealt with by planning condition, should permission be forthcoming.

It should be noted that the comments made on this application are without prejudice to the subsequent determination of planning application including EIA development (ref. 20231313) which is under consideration by Gravesham Borough Council.

Recommendation: No objection.

See draft Decision

Case Officer:	Ms Rebecca Harrison	Team Leader:	
Signed:	<i>Rebecca Harrison</i>	Signed:	
Dated:	11 June 2024	Dated:	