

Delegated Report

Major Planning Application (EIA)

Planning Application No: 20231313

Location: Eastcourt Marshes Electricity Distribution Site Mark Lane Gravesend Kent

Description: 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.

Applicant: Kate McGregor, National Grid

Site Visit Date: 7 March 2024

Submitted Documents/Plans

Cover Letter dated 18 December 2023 (Fees);

Cover Letter dated 2 August 2024;

Application form;

Drawing no. 30003364-BHK-XX-XX-DR-A-01400 Rev. P03 - Gravesend Headhouse - Planning - Site Plan;

Drawing no. 30003364-BHK-XX-XX-DR-A-01402 Rev. P03 - Gravesend Headhouse - Planning - Proposed Site Sections;

Drawing no. 30003364-BHK-XX-XX-DR-A-01403 Rev. P03 - Gravesend Headhouse - Planning - Proposed Ground Floor Plan;

Drawing no. 30003364-BHK-XX-XX-DR-A-01405 Rev. P03 - Gravesend Headhouse - Planning - Proposed Roof Floor Plan;

Drawing no. 30003364-BHK-XX-XX-DR-A-01406 Rev. P03 - Gravesend Headhouse - Planning - Proposed Elevations;

Drawing no. 30003364-BHK-XX-XX-DR-A-01407 Rev. P03 - Gravesend Headhouse - Planning - Proposed Sections;

Drawing no. 30003364-BHK-XX-XX-DR-A-01408 Rev. P01 – Gravesend Headhouse Compound Block Plan – Existing (Planning Drawing);

Drawing no. 30003364-BHK-XX-XX-DR-A-01409 Rev. P01 - Gravesend Headhouse Compound Block Plan – Proposed (Planning Drawing);

Pack with drawing no. TKRE/60677311 – Site Location Plan – Gravesend x4 and three un-numbered drawings;

TKRE Drainage Management Plan Ref. 30003364-BHK-XX-XX-RP-C-02060_TKRE DRAINAGE MANAGEMENT PLAN, dated 11 June 2024, Revision P03;

Design and Access Statement Gravesend, December 2023;

Planning Statement – Gravesend, December 2023;

Flood Risk Assessment, Ref. 30003364-BHK-XX-XX-RA-C-02002_FLOOD RISK ASSESSMENT, dated 23/07/2024, Revision P04;

Flood Warning and Evacuation Plan, December 2023;
 Arboricultural Impact Assessment (AIA) Part 1, December 2023;
 Land Contamination Preliminary Risk Assessment Gravesend, December 2023;
 Construction Traffic Management Plan (includes Construction Worker Travel Plan) dated 18 July 2024, Revision J;
 BNG Metric;
 Biodiversity Net Gain Assessment and Strategy Report (Revision 1), July 2024;
 Report to inform Habitats Regulations Assessment, December 2023;
 Outline Landscape and Ecological Management Plan, December 2023;
 Ecology Technical Note Revision 02 – Response to Ecological Points Raised in KCC Advice to Gravesham BC Dated 27 February 2024;
 Statement of Community Involvement, December 2023;
 Sustainability Statement, December 2023, Revision 1;
 Environmental Statement Volume I Non-Technical Summary, December 2023;
 Environmental Statement Volume II Chapter 1 Introduction, December 2023;
 Environmental Statement Volume II Chapter 2 Alternatives, December 2023;
 Environmental Statement Volume II Chapter 3 Protect Description, December 2023;
 Environmental Statement Volume II Chapter 4: EIA Methodology, December 2023;
 Environmental Statement Volume II Chapter 5 Consultation, December 2023;
 Environmental Statement Volume II Chapter 6 Planning Policy, December 2023;
 Environmental Statement Volume III Chapter 7 Biodiversity – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 8: Landscape and Visual – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 9 Historic Environment – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 10 Traffic and Transport – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 11 Noise and Vibration – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 12 Air Quality – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 13 Water Environment – Tilbury, December 2023;
 Environmental Statement Volume III Chapter 14 Materials and Waste – Tilbury, November 2023;
 Environmental Statement Volume IV Chapter 15 Biodiversity – Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 16: Landscape and Visual – Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 17 Historic Environment - Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 18 Traffic and Transport – Gravesend, Revision 1, July 2024;
 Environmental Statement Volume IV Chapter 19 Noise and Vibration – Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 20 Air Quality – Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 21 – Water Environment – Gravesend, December 2023;
 Environmental Statement Volume IV Chapter 22 Materials and Waste – Gravesend, November 2023;
 Environmental Statement Volume VI Appendix 3.1: Outline Construction Environmental Management Plan, December 2023;
 Environmental Statement Volume VI Appendix 4.1 EIA Screening Opinions, December 2023;
 Environmental Statement Volume VI Appendix 4.2: EIA Screening Opinion Project Responses, December 2023;
 Environmental Statement Volume VI Appendix 4.3: Competent Expert Evidence, December 2023;
 Environmental Statement Volume VI Appendix 7.1 Preliminary Ecological Appraisal, December 2023;
 Environmental Statement Volume VI Appendix 7.2 Ornithological Baseline Report, December 2023;
 Environmental Statement Volume VI Appendix 7.3: Grear Crested Newt eDNA Surveys, December 2023;
 Environmental Statement Volume VI Appendix 7.4: Bat Survey Report, December 2023;
 Environmental Statement Volume VI Appendix 7.5: Otter & Water Vole Survey Report, December 2023;
 Environmental Statement Volume VI Appendix 7.6: Badger Survey Report, December 2023;
 Environmental Statement Volume VI Appendix 7.7: Reptile Survey Report, December 2023;

Environmental Statement Volume VI Appendix 7.8 – Invertebrate Report, December 2023;
 Environmental Statement – Volume VI Appendix 7.9: National Vegetation Classification Survey Report, December 2023;
 Environmental Statement Volume VI Appendix 7.10 Marine Assessment Screening, December 2023;
 Environmental Statement Volume VI Appendix 8.1 Landscape Character Assessment Tables – Tilbury, December 2023;
 Environmental Statement Volume VI Appendix 8.2 Visual Assessment – Tilbury, December 2023;
 Environmental Statement Volume VI Appendix 9.1: Historic Environment Desk Based Assessment, December 2023;
 Environmental Statement Volume VI Appendix 9.2: Desk-based Geoarchaeological Deposit Modelling Report, December 2023;
 Environmental Statement Volume VI Appendix 9.3: Written Scheme of Investigation for Geoarchaeological Deposit Modelling and Borehole Survey, December 2023;
 Environmental Statement Volume VI Appendix 10.1 Outline Construction Traffic Management Plan, December 2023;
 Environmental Statement Volume VI Appendix 10.2: Abnormal Load Assessment Report, December 2023;
 Environmental Statement Volume VI Appendix 10.3 Transport Statement Note (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 10.4: Transport Scoping Meeting Minutes (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 10.5 Receptor Sensitivity Levels (Tilbury), December 2023;
 Environmental Statement Volume IV Appendix 10.6 Baseline Traffic Movements (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 10.7 Preliminary Highway Impact Assessment (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 10.8 Magnitude of Change (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 10.9 Assessment of Construction and Decommissioning Phases (Tilbury), December 2023);
 Environmental Statement Volume VI Appendix 10.10 Cumulative Assessment (Tilbury), December 2023;
 Environmental Statement Volume VI Appendix 11.1 Human Hearing and Acoustic Terminology, December 2023;
 Environmental Statement Volume VI Appendix 11.2 Baseline Noise And Vibration Monitoring Report, December 2023;
 Environmental Statement Volume VI Appendix 11.3 Noise and Vibration Calculations and Modelling, December 2023;
 Environmental Statement Volume VI Appendix 12.1 Detailed Air Quality Assessment Methodology, December 2023;
 Environmental Statement Volume VI Appendix 12.2: Detailed Dispersion Modelling Methodology, December 2023;
 Environmental Statement Volume VI Appendix 13.1 Water Framework Directive Assessment, December 2023;
 Environmental Statement Volume VI Appendix 16.1 Landscape Character Assessment Tables (Gravesend), December 2023;
 Environmental Statement Volume VI Appendix 16.2 Visual Assessment Tables – Gravesend, December 2023;
 Environmental Statement Volume VI Appendix 18.1: Transport Statement Note – Gravesend, December 2023;
 Environmental Statement Volume VI Appendix 18.2 Transport Scoping Meeting Minutes – Gravesend, December 2023;

Environmental Statement Volume VI Appendix 18.3 Receptor Sensitivity Levels – Gravesend, December 2023;
Environmental Statement Volume VI Appendix 18.4 Baseline Traffic Movements (Gravesend), December 2023;
Environmental Statement Volume VI Appendix 18.5 Construction Worker Trip Distribution (Gravesend), December 2023;
Environmental Statement Volume VI Appendix 18.6 Preliminary Highway Impact Assessment (Gravesham), Revision 1, July 2024;
Environmental Statement Volume VI Appendix 18.7 Magnitude of Change (Gravesend), December 2023;
Environmental Statement Volume VI Appendix 18.8 Assessment of Construction and Decommissioning Phases (Gravesend), December 2023;
Environmental Statement Volume VI Appendix 18.9 Cumulative Assessment (Gravesham), Revision 1, July 2024;
Environmental Statement Volume V Chapter 23: Cumulative Effects Assessment, December 2023;
Environmental Statement Volume VI Appendix 23.1 Cumulative Assessment Long and Short List of Other Developments, December 2023;
Environmental Statement Volume V Chapter 24 Summary, December 2023.
Reptile Enhancement Strategy - Approach for Ensuring Local Reptile Population is Maintained During Works;
Photos of Existing Reptile Habitats;
BNG Clarification Letter dated 06 January 2025; and
Letter on National Planning Policy Framework (2024) changes.

Superseded

- ~~Environmental Statement Volume VI Appendix 18.6 Preliminary Highway Impact Assessment (Gravesend), December 2023;~~
- ~~Environmental Statement Volume VI Appendix 18.9 Cumulative Assessment (Gravesend), December 2023;~~
- ~~Flood Risk Assessment Reference: 30003364-BHK-XX-XX-RA-C-02002_FLOOD RISK ASSESSMENT dated 20 September 2023, Revision P02;~~
- ~~Environmental Statement Volume IV Chapter 18 Traffic and Transport – Gravesend, December 2023;~~
- ~~Biodiversity Net Gain Assessment and Strategy Report December 2023;~~
- ~~Biodiversity Net Gain Assessment and Strategy Report Part 2 of 2; and~~
- ~~TKRE Drainage Management Plan Reference 30003364-BHK-XX-XX-RP-C-02060_TKRE DRAINAGE MANAGEMENT PLAN.~~

Relevant Planning History

Reference	Description	Decision	Decision Date
20240063	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	Observations sent	14.06.2024

	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.		
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.	Environmental Impact Assessment Is Required	03.08.2024

Development Plan

Gravesham Local Plan Core Strategy (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 (2024) 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 (2024), the Council will also seek to replace these.

National Planning Policy Framework (2024) (Reflects February 2025 changes)

- 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
- Section 12 – Achieving well-designed 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

- SPG 2 – Residential layout guidelines including Housing Standards Policy Statement October 2015 Adopted 1996 – amended June 2020
- SPG 4 – KCC Parking Standards (2006)
- Design for Gravesham – Design Code (2024)
- Gravesham Landscape Character Assessment (2009)

South-East Inshore Marine Plan (2021)

- Policy SE-CAB-1
- Policy SE-CAB-2
- Policy SE-CAB-3

Consultations, Publicity and Representations

Consultees

*It is prudent to note that at the time the consultee comments were made the NPPF (2023) was in place and so consultees refer to that in their comments. However, it is not considered that the changes to the NPPF made in 2024 affect the comments made and so re-consultation was not considered required.

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.

Environment Agency – 24/09/2024 (Latest comment)

Following the submission of our previous letter, dated 3 September 2024, referenced KT/2024/131375, we have undertaken further meetings with National Grid, as well as a series of internal discussions, concerning the proposed development and our flood risk objection. As a result of these discussions we are now in a position to **remove the previous objection** detailed in that response, on the basis the following **planning conditions** are included in any future planning permission.

The proposed development will only be acceptable if the following conditions are included.

Flood Risk Condition

Prior to commencing operation, the applicant will submit a scheme to show that the development is appropriately resilient to flooding. The scheme should be agreed in writing by the local planning authority, in consultation with the Environment Agency. The submitted scheme shall include:-

- Details and drawings of the proposed headhouses showing all openings through which flood water could flow including threshold levels, dimensions and any closures at such openings.
 - Plans and drawings should be based on the 1:1000-year breach flood event, using the latest data available from the Environment Agency
 - A technical assessment detailing the flood risk reduction measures including the freeboard applied relative to the modelled flood level for each opening. Justification for the inclusion and adequacy of any active flood measures such as flood doors should be provided together with explanation why it is not possible to achieve full passive flood protection.
 - An operation and maintenance plan for any active flood risk reduction features such as flood doors. This should include details of when and how the active measures will be triggered.
- The scheme shall be fully implemented and subsequently maintained, in accordance with the scheme's timing/phasing arrangements, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason

To ensure the power supply infrastructure remains operational and safe for users in times of flood including in the event of a breach failure of the Thames Tidal Flood Defences.

Advice to Local Planning Authority

Whilst we are willing to remove our objection to this application, we would still request that the conditions detailed in our response of 20 February 2024, referenced KT/2024/131375/01-L01 are included on any future planning permission (repeated below for ease of reference).

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.

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; paragraphs 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->

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.

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 Policy Framework.

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).

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 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.

Informative: 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.

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 Development Management Officer

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 – 21/11/2024 (Latest comment)

SUMMARY

We have reviewed the additional ecological information submitted in support of this application (not yet available on the public register) and advise that sufficient ecological information has been provided.

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. Enhancement refers to providing net benefits for biodiversity over and above requirements for avoidance, mitigation and compensation. As such, if planning permission is granted, we advise the conditions below are included.

Construction Ecological Management Plan

We suggest that the below wording is included as a condition for a Construction Ecological Management Plan (CEMP – biodiversity) if planning permission is granted. This will mitigate for impacts to biodiversity and help ensure compliance with relevant legislation.

We advise that the below suggested wording does not cover all aspects usually covered within a Construction Environmental Management Plan (CEMP) (such as pollution control, noise, lighting etc. during

construction). Therefore, this wording should either form part of any larger CEMP / Construction Management Plan (CMP) condition required or should form a separate stand-alone condition for a Biodiversity Method Statement.

Suggested Condition Wording:

No development shall be undertaken (including any site/vegetation clearance) before a construction ecological management plan (CEMP - biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP - biodiversity shall be based on the avoidance, mitigation and compensation measures indicated within the ecological information submitted with the planning application. The CEMP – biodiversity shall include the following:

- *Risk assessment of potentially damaging construction activities;*
- *The identification of biodiversity protection zones and the use of protective fences, exclusion barriers and warning signs. This shall include a suitable buffer zone(s) (as set out by a suitably qualified ecologist) for relevant protected and priority species;*
- *Extent and location of proposed works shown on appropriate scale maps and plans for all relevant species and habitats;*
- *Practical measures (both physical measures and sensitive working practises) to avoid or reduce impacts during construction (may be provided as a set of species or habitat-specific method statements);*
- *The location and timing of sensitive works to avoid harm to biodiversity features;*
- *Timetable for implementation, demonstrating that works are aligned with the proposed phasing of construction;*
- *The times during construction when specialist ecologists need to be present on site to oversee works;*
- *Reference to or inclusion of a minimum 10-year Japanese knotweed management and removals plan;*
- *Details of any necessary protected species licences or reference to other relevant documents as required (e.g., Arboricultural Method Statement/ updated species survey reports/ecological design strategy);*
- *Responsible persons and lines of communication; and*
- *The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.*

The approved CEMP - biodiversity will be adhered to and implemented throughout the construction period (and beyond if required) in accordance with the approved details.

Ecological Design Strategy

No development shall be undertaken (including any site/vegetation clearance) before an Ecological Design Strategy (EDS) has been submitted to and approved in writing by, the local planning authority. The EDS shall ensure that on-site compensatory habitat is provided for relevant protected and priority species (as determined by a suitably qualified ecologist). The EDS shall ensure that both on and off-site compensatory habitat is provided for the projected permanent and temporary loss of reptile habitat (as identified in the AECOM Technical Note: Response to Ecological Points Raised in KCC Advice to Gravesham BC Dated 27th February 2024 (24th July 2024 Rev02). The EDS shall ensure the mitigation and compensation measures with regards to habitat improvements proposed, and the area of land required, are based on available scientific research and government standing advice. If the proposed compensation site already has an existing population of the relevant species and/or is already proposed as compensation for other development, evidence shall be provided to demonstrate that the measures proposed are additional. The EDS shall include the following:

- *Up-to-date survey data carried out in accordance with best practice for the both the development site and the proposed off-site compensation site(s);*

- Purpose and conservation objectives for the proposed works;
- Review of site potential and constraints;
- Description and evaluation of features to be managed;
- Detailed design(s) and/or working method(s) to achieve stated objectives. This shall include a detailed methodology for the movement of reptiles and measures to prevent reptiles returning to the site prior to and during the development. This shall also include details of how any receptor sites will be enhanced and be in a suitable condition to support the likely number of animals which will be moved, prior to any animals being moved, and details of the management of the compensation site(s) in perpetuity.
- Full details of soft landscape works, to include species, size and location of new habitats (e.g., trees, shrubs, hedges and grassed areas to be planted) with the extent and location/area of proposed works shown on appropriate scaled maps and plans;
- Full details of the proposed ecological features. For habitat boxes details shall include numbers, make and model, locations to include height, aspect and mounting location shown on scaled landscaping plans suitable for construction. For log piles and hibernacula details shall include materials, size, shape and construction methodology. Locations shall be shown on scaled landscaping plans suitable for construction;
- Extent and location/area of proposed works on appropriate scale maps and plans;
- Full details of the extent of appropriate buffers (as set out by a suitably qualified ecologist) for protected and priority species;
- Type and source of materials to be used where appropriate, e.g. native species of local provenance;
- Timetable for implementation demonstrating that works are aligned with the proposed phasing of development;
- Details of the body or organisation(s) responsible for implementing the EDS and the mechanisms for securing the mitigation/compensation land and its management for the lifetime of the development;
- Details of initial aftercare and appropriate management prescriptions for relevant protected and priority species and habitats (as identified by a suitably qualified ecologist and in accordance with information submitted as part of the application) for the lifetime of the development within a Landscape and Ecological Management Plan;
- Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period);
- Details for monitoring (to be undertaken by a suitably qualified ecologist(s)) and remedial measures.

The EDS shall be implemented in accordance with the approved details. All features shall be retained as approved thereafter, unless remedial measures are required. Approval for any remedial measures shall be sought from the local planning authority in writing and thereafter implemented as approved.

Wildlife Sensitive Lighting

Prior to operation of the development, a lighting design plan for biodiversity shall be submitted to and approved in writing by the local planning authority. The plan shall include the following:

- The identification of areas/features on-site where disturbance could occur to bat and invertebrate roosting/nesting/sheltering sites and/or foraging/commuting routes;
- The provision of an appropriate plan(s) to show how and where external lighting will be installed;
- The provision of technical specifications for the external lighting;
- The provision of lighting contour plans to show expected lux levels, so that it can be clearly demonstrated that areas to be lit will not disturb bat/invertebrate activity.

All external lighting shall be installed prior to first operation of the development in accordance with the specifications and locations set out in the plan, and these shall be maintained thereafter in accordance with

the plan.

Detailed comments and explanation for the suggested conditions 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.

We note that the project ecologists indicate that 1.1 ha of moderate quality reptile habitat will be retained, protected and enhanced during construction. There will be a permanent loss of 2.6ha of reptile habitat in 2024/2025 (1.2 ha of moderate quality) and a further 3.2 ha of reptile habitat (of which 2.6 ha has been assessed to be of moderate quality by the project ecologists) temporarily lost due to the works to the overhead line in 2028. The temporary habitat clearance is expected to take around 12 weeks to complete, and the project ecologists indicate the habitat will return to its original condition within 6-24 months. Together this habitat loss could have a profound impact on the reptile population on-site in the short to medium term as a minimum.

The applicant has now provided proposals for an on and off-site reptile mitigation strategy. ~0.56 ha of largely unsuitable reptile habitat has been proposed for improvement, and ~0.78ha of suitable reptile habitat enhanced off-site. This totals ~1.34 ha of land. This falls short of the 2.6 ha of reptile habitat to be lost permanently and 3.2 ha to be temporarily lost. We understand that not all of the habitat to be lost permanently or temporarily is optimal for use by reptiles. If the 0.6 ha of less suitable habitat to be temporarily lost is improved in the long-term to benefit reptiles, then 1.94 ha of land will have been created or improved as compensation for the loss of reptile habitat. This is still short of the 2.6 habitat to be permanently lost, although greater than the estimated 1.2 ha of moderate quality habitat to be permanently lost. Based on the rough estimates of habitats to be lost, created and improved, we consider that sufficient information is available to conclude that over the long-term, the local reptile population can be safeguarded. A detailed reptile mitigation strategy should be secured by condition if planning permission is granted. This strategy can be included within a wider ecological design strategy to ensure a holistic approach to protected and priority species mitigation and compensation.

Non-statutory Designated Sites and Biodiversity Net Gain

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”.

Where applicants choose to provide a quantitative assessment of biodiversity net gain, but are not required to under legislation, appeal decisions¹ have clarified that:

- *“Paragraph 174 [now 180] of the Framework [the NPPF encourages applicants to], ... seek a net gain in biodiversity without identifying a specific percentage...”*
- The relevant Core Strategy may *“...seek a net gain in biodiversity without identifying a specific percentage...”*; and
- *“A net gain of just 1% would be policy compliant....”*

Therefore, in line with planning policy, the aim would be to achieve simply a biodiversity net gain, with no specific % target, in line with the NPPF. We acknowledge that the applicant has internal policies for at least a 10% biodiversity net gain.

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), with habitat compensation at two off-site areas in Kent, is predicted to result in a biodiversity net gain of 11.88%.

We note that Policy CS12: Green Infrastructure indicates that ‘there will be no net loss of biodiversity in the Borough’. The applicant has clarified that proposals meet this policy through off-site compensation at the Shorne Reedbeds within Gravesham Borough.

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/condition. We can provide some suggested wording on request.

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/planning obligation if planning permission is granted to ensure that the proposed habitats can be effectively created and managed into the future. This Plan could be secured as part of a condition for an ecological design strategy if planning permission is granted to ensure a holistic approach to protected and priority species mitigation and compensation.

Water Voles

We are satisfied that effects on water vole can be adequately dealt with through conditions for a

construction ecological management plan and ecological design strategy, attached to any granted planning permission.

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,^{2,3} 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 duty⁴. 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. The comments from Buglife suggest that the project ecologists have undervalued the site's importance for invertebrates. Buglife stated in its comments dated 27th February 2024 that survey data available for the site has led to the site being incorporated into the Thames Estuary South Important Invertebrate Area (IIA). This indicates that the site is nationally^{5,6} important for its invertebrate assemblage, and linkages to the wider landscape, including South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI).

We note that Buglife has made the following comments: "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".

Buglife has also indicated that commercial seed mixes should not be used at the site to avoid any potential negative effects on the nearby SSSI.

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 conditions for a construction ecological management plan and ecological design strategy 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 and invertebrates). 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*'⁷ and Buglife's '*Bug-Friendly Lighting*'⁸ advice 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.

We note that the project ecologists have indicated that they consider that no dark buffer zones will be required for this development. We would disagree with this position. Although, the project ecologists have indicated that they do not consider the site of significant importance for bats, the site has been identified to be of national importance for invertebrates which can also be adversely affected by artificial lighting^{9,10}. Based on submitted information, achieving darkness throughout most of the site for most of the time seems very possible.

Health & Safety Executive

Thank you for your email of 30th January 2024 regarding the above planning application. 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.

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 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, and 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 assets 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 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 weighed 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-designated 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.

KCC Flood & Water Management (Latest comment)

Kent County Council as Lead Local Flood Authority have reviewed the TKRE Drainage Management Plan prepared by BakerHicks dated 11.06.2024 and have the following comments:

We appreciate the clarification and information provided and have no objections to the proposals for managing the surface water for the site in principle at this stage. However as part of the detailed design condition we require for the following points to be addressed:

1. The arrangement of water treatment measures should ensure that pollution is suitably mitigated, taking into account that a factor of 0.5 is used to account for the reduced performance of secondary or tertiary components associated with already reduced inflow concentrations. Section 2 of the report suggests that the proposed drainage does not suitably meet the mitigation requirements for TSS when these factors are taken into account.

2. The site is within Flood Zone 2 and 3, with a proposed connection into a main river. Consultation with the Environment Agency early in the planning process is recommended to identify any constraints or specific requirements in this area that may impact the proposed SuDs methods.

3. We note that the area falls within the jurisdiction of the North Kent Marshes internal Drainage Board therefore we would advise that they are consulted with regards to the proposals also.

Should the Local Planning Authority be minded to grant permission, we would recommend for the following conditions are attached to any approval:

Condition:

Development shall not begin in any phase until a detailed sustainable surface water drainage scheme for the site has been submitted to (and approved in writing by) the local planning authority. The detailed drainage scheme shall be based upon the TKRE Drainage Management Plan prepared by BakerHicks dated 11.06.2024 and shall demonstrate that the surface water generated by this development (for all rainfall durations and intensities up to and including the climate change adjusted critical 100 year storm) can be accommodated and disposed of without increase to flood risk on or off-site.

The drainage scheme shall also demonstrate (with reference to published guidance):

- that silt and pollutants resulting from the site use can be adequately managed to ensure there is no pollution risk to receiving waters.
- appropriate operational, maintenance and access requirements for each drainage feature or SuDS component are adequately considered, including any proposed arrangements for future adoption by any public body or statutory undertaker.

The drainage scheme shall be implemented in accordance with the approved details.

Reason: To ensure the development is served by satisfactory arrangements for the disposal of surface water and to ensure that the development does not exacerbate the risk of on/off site flooding. These details and accompanying calculations are required prior to the commencement of the development as they form an intrinsic part of the proposal, the approval of which cannot be disaggregated from the carrying out of the rest of the development.

Condition:

No building on any phase (or within an agreed implementation schedule) of the development hereby permitted shall be occupied until a Verification Report, pertaining to the surface water drainage system and prepared by a suitably competent person, has been submitted to and approved by the Local Planning

Authority. The Report shall demonstrate that the drainage system constructed is consistent with that which was approved. The Report shall contain information and evidence (including photographs) of details and locations of inlets, outlets and control structures; landscape plans; full as built drawings; information pertinent to the installation of those items identified on the critical drainage assets drawing; and, the submission of an operation and maintenance manual for the sustainable drainage scheme as constructed.

Reason: To ensure that flood risks from development to the future users of the land and neighbouring land are minimised, together with those risks to controlled waters, property and ecological systems, and to ensure that the development as constructed is compliant with and subsequently maintained pursuant to the requirements of paragraph 175 of the National Planning Policy Framework.

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 belowground 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 belowground 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 Highways – 28/02/2024 (First Response)

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.

KCC Highways – 30/08/2024 (Second Response)

I note that the applicant has now submitted revised Highway Impact Assessment and Construction Traffic Management Plans since my previous consultation response dated 28th February 2024 in which I raised no objection but recommended a Condition in respect of the CTMP being submitted before any work commences. This is still the case although I would like to note that I still have concerns about the outline CTMP submitted that would need to be addressed in the full document when it is submitted:

- Section 5.2 has changed slightly. Added in some paragraphs including two more bullet points stating “TBM and tunnelling hours: 24-hrs per day / 7-days per week” and “Deliveries: 08:00 – 18:00 Monday to Friday (with exception of TBM)”. It should be clear that deliveries should be undertaken outside of the peak hours. A table has been added showing shift patterns. As well as still stating 40 employees for the Gravesend site, it also states “Tilbury and Gravesend – 30 no. staff [per shaft] for the shaft construction”, so is there 70 in total?
- Section 5.7. The Shaft and tunnel construction movements appear to have reduced quite a lot although it is not clear as to whether this is in Gravesham, or all in Tilbury (4922 two way movements over 8 months to 2468). However, whilst table 5.4 is set out differently to the previous version, it looks like the traffic in Gravesham is slightly reduced overall, but that doesn't include staff. Figure 5.4 'Gravesend – needs clarification
- Section 8 (page 57 of the PDF) is the Framework Construction Worker Travel Plan.
 - 8.3 describes walking, cycling and public transport to the site, but only for Tilbury! What about Gravesend? The Full CTMP needs to include Gravesend.
 - A temporary car park will be provided at both sites and “Construction staff parking at these sites will be monitored, controlled and recorded to ensure that single occupancy car use is minimised”. Doesn't say how or what will be done. No details of temporary car park at Gravesend.
 - It says “The Contractor would be encouraged to provide minibuses /coaches for transporting construction staff between the temporary car park (or local train stations) and the site”. ‘Encouraged’ is not a commitment but should be re-worded to make it such.
 - Section 8.6 ‘Targets’ doesn't actually have a target! There should be a proposed % reduction (usually 10% but could be different for construction workers) from the predicted traffic generation figures. It should at least state the predicted car based flows in the Travel Plan section and say there is a target to reduce them.
 - The Full CTMP needs more detail on how numbers will monitor and what remedial measures will be put into place if targets are breached.
- The full CTMP should include tracking?
- Nothing is said about possibly having to remove the traffic lights at the Ordnance Rd junction.

It is important to note that Local Planning Authority (LPA) 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 LPA planning permission has been granted.

For this reason, anyone considering works which may affect the public highway, including any highway-owned street furniture or landscape assets such as grass, shrubs and trees, 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 and near the highway 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 pre-application advice service in addition to a full formal technical approval process for new or altered highway assets, with the aim of improving future maintainability. Further details are available on our website below:

<https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance>.

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. Further details on this are available on our website below:

<https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/apply-for-a-dropped-kerb/dropped-kerb-contractor-information>

Once planning approval for any development has been granted by the LPA, it is the responsibility of the applicant to ensure that before development commences, 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.

Further 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 Public Rights of Way - 03 September 2024

With regard to pedestrian use we are happy for the diversion via NG1 Saxon Shore Way. I have sent this application onto the KCC Cycle Team so they can comment on the diversion route for NCN1. As such we have nothing to add from our comments from the earlier response.

KCC Public Rights of Way – 08/02/2024

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. I enclose a copy of the Public Rights of Way network map showing the line of the path for your information.

The granting of planning permission confers no other permission or consent on the applicant. It is therefore important to advise the applicant that no works can be undertaken on a Public Right of Way without the express consent of the Highways Authority. In cases of doubt the applicant should be advised to contact this office before commencing any works that may affect the Public Right of Way. Should any temporary closures be required to ensure public safety then this office will deal on the basis that:

- The applicant pays for the administration costs.
- The duration of the closure is kept to a minimum.
- Alternative routes will be provided for the duration of the closure.
- A minimum of six weeks notice is required to process any applications for temporary closures.

This means that the Public Right of Way must not be stopped up, diverted, obstructed (this includes any building materials or waste generated during any of the construction phases) or the surface disturbed. There must be no encroachment on the current width, at any time now or in future and no furniture or fixtures may be erected on or across Public Rights of Way without consent.

Kent Fire & Rescue Services (Latest comment)

Although the Gravesend Headhouse - Planning - Site Plan PDD-100116-LAY-053 Rev P03 does appear to show access roads to and within the site with dimensions at or above the required 3.7m, and that access roads are either stone surfaced, or tarmac surfaced. Please ensure these roads have the minimum carrying capacity for our pump appliances meeting the typical fire and rescues service vehicle access route specification.

The above plans also show turning facilities at the end of the new maintenance road adjacent to the Headhouse. Please confirm the Headhouse can be reached from this area from a suitable route for laying hose.

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 recommend SBD guidance is utilised to address designing out crime to show a clear audit trail for Designing Out Crime, Crime Prevention and Community Safety and to meet our Local Authority statutory duties under Section 17 of the Crime and Disorder Act 1998. The points below identify my recommendations for the layout and design of this scheme.

1. We strongly recommend that the applicant take this opportunity to review their general security arrangements regarding the existing buildings, including perimeter security, alarm

systems, lighting and CCTV.

2. Perimeter security of the site, including gates, should be reviewed to control site permeability and prevent theft of property. A good standard of building security is very important in rural areas, especially for outbuildings that may not be visited for weeks at a time. Each site should be fully enclosed within a minimum 2m security fencing system or higher (we note the Indicative Fencing proposal). It is, however, important that the gap between the base of any fencing and the ground is minimal, so that any equipment, such as the PV panels themselves or copper cable, cannot be easily passed underneath by thieves. Additional defensive planting of natural hedging should be considered around the boundary and along the existing footpath as an added layer of security

3. Consideration should be given regarding property boundary for any potential places where it could be made more secure:

- Densely planted buffers can be used to enhance boundaries. There are plenty of suitable native (non-toxic) prickly species.
- digging deep ditches to control and deter unwanted vehicle access
- if possible, having a single-gated access point to each site. Please refer to the Commercial 2015 Guide, Section 2: Physical Security Specifications for gates on SBD Design Guides

4. We recommend that all photovoltaic (PV) panels are individually security marked and all serial numbers recorded within a site inventory. In addition, the PV panels should be installed using one way security clutch head security bolts/screws or similar, as an added layer of security and in order to make removal more difficult for thieves. Copper cable, transformers, inverters, switch gear and any other equipment of high value should also be security marked. This can be achieved by using unique identifiers, such as serial numbers on the insulation sheathing and with the use of forensic marking solutions. A full equipment inventory should be kept.

5. All string inverters, substations, transformer stations and buildings/ storage containers should be fully alarmed with a monitored system and covered by CCTV. All CCTV should comply with the Information Commissioner's Office guidance. Appropriate security locks and devices should be installed on all equipment cabinets and associated buildings. Locking device screws/bolts should not be easily accessible when closed, to deter by-passing of the locks themselves by a determined offender. One way security clutch head security bolts/screws or similar can also be utilised to prevent easy removal.

6. We note CCTV cameras are proposed for this development "Cabling would also be required for power and data transfer associated with the CCTV system described below. This would generally follow the perimeter fence lines where the CCTV cameras would be located", which is greatly encouraged. We recommend monitored CCTV and alarms systems to be installed and operational to cover vulnerable elevations and site entrances in addition to point 5. Appropriate crime prevention/security signage warning of the use of CCTV and forensic marking solutions should be installed on the exterior face of the security fencing and any gates.

7. Doorsets and windows should meet PAS 24:2022 as a minimum-security standard. All external doors should have a minimum of two locking points with locks that meet the British Standard. All doors and windows that are not part of a designated fire escape route, should be closed and locked. Glazing for windows should be laminated rather than just toughened for security purposes. Please refer to the Commercial 2015 Guide, Section 2: Physical Security Specifications on SBD Design Guides (securedbydesign.com) for doorsets and windows.

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 DOCCO's and refers to situational crime prevention. This advice focuses on CPTED and Community Safety with regard to this specific planning application.

Marine Management Organisation

Please be aware that any works within the Marine area require a licence from the Marine Management Organisation. It is down to the applicant themselves to take the necessary steps to ascertain whether their works will fall below the Mean High Water Springs mark.

Response to your consultation

The Marine Management Organisation (MMO) is a non-departmental public body responsible for the management of England's marine area on behalf of the UK government. The MMO's delivery functions are; marine planning, marine licensing, wildlife licensing and enforcement, marine protected area management, marine emergencies, fisheries management and issuing European grants.

Marine Licensing

Works activities taking place below the mean high water mark may require a marine licence in accordance with the Marine and Coastal Access Act (MCAA) 2009.

Such activities include the construction, alteration or improvement of any works, dredging, or a deposit or removal of a substance or object below the mean high water springs mark or in any tidal river to the extent of the tidal influence.

Applicants should be directed to the MMO's online portal to register for an application for marine licence

<https://www.gov.uk/guidance/make-a-marine-licence-application>

You can also apply to the MMO for consent under the Electricity Act 1989 (as amended) for offshore generating stations between 1 and 100 megawatts in English waters.

The MMO is also the authority responsible for processing and determining Harbour Orders in England, together with granting consent under various local Acts and orders regarding harbours.

A wildlife licence is also required for activities that that would affect a UK or European protected marine species.

The MMO is a signatory to the coastal concordat and operates in accordance with its principles. Should the activities subject to planning permission meet the above criteria then the applicant should be directed to the follow pages: check if you need a marine licence and asked to quote the following information on any resultant marine licence application:

- local planning authority name,
- planning officer name and contact details,
- planning application reference.

Following submission of a marine licence application a case team will be in touch with the relevant planning officer to discuss next steps.

Environmental Impact Assessment

With respect to projects that require a marine licence the EIA Directive (codified in Directive 2011/92/EU) is

transposed into UK law by the Marine Works (Environmental Impact Assessment) Regulations 2007 (the MWR), as amended. Before a marine licence can be granted for projects that require EIA, MMO must ensure that applications for a marine licence are compliant with the MWR.

In cases where a project requires both a marine licence and terrestrial planning permission, both the MWR and The Town and Country Planning (Environmental Impact Assessment) Regulations <http://www.legislation.gov.uk/ukSI/2017/571/contents/made> may be applicable.

If this consultation request relates to a project capable of falling within either set of EIA regulations, then it is advised that the applicant submit a request directly to the MMO to ensure any requirements under the MWR are considered adequately at the following link

<https://www.gov.uk/guidance/make-a-marine-licence-application>

Marine Planning

Under the Marine and Coastal Access Act 2009 ch.4, 58, public authorities must make decisions in accordance with marine policy documents and if it takes a decision that is against these policies it must state its reasons. MMO as such are responsible for implementing the relevant Marine Plans for their area, through existing regulatory and decision-making processes.

Marine plans will inform and guide decision makers on development in marine and coastal areas. Proposals should conform with all relevant policies, taking account of economic, environmental and social considerations. Marine plans are a statutory consideration for public authorities with decision making functions.

At its landward extent, a marine plan will apply up to the mean high water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high water spring tides mark, there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark.

A map showing how England's waters have been split into 6 marine plan areas is available on our website. For further information on how to apply the marine plans please visit our Explore Marine Plans service.

Planning documents for areas with a coastal influence may wish to make reference to the MMO's licensing requirements and any relevant marine plans to ensure that necessary regulations are adhered to. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area must do so in accordance with the Marine and Coastal Access Act and the UK Marine Policy Statement unless relevant considerations indicate otherwise. Local authorities may also wish to refer to our online guidance and the Planning Advisory Service soundness self-assessment checklist. If you wish to contact your local marine planning officer you can find their details on our gov.uk page.

Minerals and waste plans and local aggregate assessments

If you are consulting on a mineral/waste plan or local aggregate assessment, the MMO recommend reference to marine aggregates is included and reference to be made to the documents below;

- The Marine Policy Statement (MPS), section 3.5 which highlights the importance of marine aggregates and its supply to England's (and the UK) construction industry.
- The National Planning Policy Framework (NPPF) which sets out policies for national (England) construction minerals supply.
- The Managed Aggregate Supply System (MASS) which includes specific references to the role of marine aggregates in the wider portfolio of supply.
- The National and regional guidelines for aggregates provision in England 2005-2020 predict likely

aggregate demand over this period including marine supply.

The NPPF informed MASS guidance requires local mineral planning authorities to prepare Local Aggregate Assessments, these assessments have to consider the opportunities and constraints of all mineral supplies into their planning regions - including marine. This means that even land-locked counties, may have to consider the role that marine sourced supplies (delivered by rail or river) play - particularly where land based resources are becoming increasingly constrained.

If you require further guidance on the Marine Licencing process, please follow the link <https://www.gov.uk/topic/planning-development/marine-licences>

National Highways (Latest comment)

Recommend that conditions should be attached to any planning permission that may be granted:
Reasons

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.

We have reviewed the submitted information and have concluded that the proposal would not have a material impact on the SRN.

Lower Thames Crossing

We note that the construction programme would overlap that for the 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 project teams to ensure they can be delivered successfully. The final Construction Traffic Management Plan should be informed by and take account of the construction strategy for the LTC when there is a prospect of the construction phases for both projects overlapping.

Construction Traffic Management Plan

We have noted and reviewed the updated Construction Traffic Management Plan (CTMP) (July 2024) which was uploaded to the planning application webpage on 14 August 2024. The final version of the CTMP, addressing the matter of the construction strategy for the LTC, will need to be prepared, agreed and implemented prior to work commencing.

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. This response is to the planning application made to Gravesham Borough Council (ref: 20231313). We are responding separately to the application made to Thurrock Council.

Having assessed application 20231313, we are content that the proposal, if permitted, would not have an unacceptable impact on the safety, reliability, and/or operational

efficiency of the Strategic Road Network in the vicinity of the site (A2) provided that the following condition is imposed, reflecting DfT Circular 01/2022 and NPPF 2023 paras. 114-117:

1. Construction Traffic Management Plan

Condition: Prior to the commencement of the development hereby permitted a comprehensive

Construction Traffic Management Plan shall be submitted to and approved in writing by the Local Planning Authority (in consultation with the Highway Authority for the A2). The plan shall include as a minimum:

- Construction phasing
- Construction routing plans
- Permitted construction traffic arrival and departure times.

Thereafter all construction activity in respect of the development shall be undertaken in full accordance with such approved details unless otherwise approved in writing by the Local Planning Authority in consultation with the Highway Authority.

Reason: To mitigate any adverse impact from the development on the A2 in accordance with DfT Circular 01/2022.

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.

Natural England

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Further information on when to consult Natural England on planning proposals is here- [Planning and transport authorities: get environmental advice on planning - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/planning-and-transport-authorities-get-environmental-advice-on-planning)

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.

Standing Advice:

Natural England has published Standing Advice. Links to standing advice are in Annex A

If after using these tools, you consider there are significant risks to statutory nature conservation sites or protected landscapes, please set out the specific areas on which you require Natural England's advice.

Further information on LPA duties relating to protected sites and areas is here- [Protected sites and areas: how to review planning applications - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/protected-sites-and-areas-how-to-review-planning-applications)

Further guidance is also set out in Planning Practice Guidance on the natural environment [Natural environment - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/natural-environment) and on Habitats Regulations Assessment [Appropriate assessment - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/appropriate-assessment)

Non detailed advice from Natural England does not imply that there are no impacts on the natural environment. It is for the local planning authority to determine whether or not the proposal is consistent with national and local environmental policies. Other bodies and individuals may provide information and advice on the environmental value of this site and the impacts of the proposal on the natural environment to assist the decision making process.

Network Rail

The developer must ensure that their proposal, both during construction and after completion does not:

- encroach onto Network Rail land
- affect the safety, operation or integrity of the company's railway and its infrastructure
- undermine its support zone
- damage the company's infrastructure
- place additional load on cuttings
- adversely affect any railway land or structure
- over-sail or encroach upon the air-space of any Network Rail land
- cause to obstruct or interfere with any works or proposed works or Network Rail development both now and in the future

Network Rail strongly recommends the developer complies with the following comments and requirements to maintain the safe operation of the railway and protect Network Rail's infrastructure.

Future maintenance

The applicant must ensure that any construction and subsequent maintenance can be carried out to any proposed buildings or structures without adversely affecting the safety of/or encroaching upon Network Rail's adjacent land and air-space. Therefore, any buildings are required to be situated at least **2 metres (3m for overhead lines and third rail)** from Network Rail's boundary.

This requirement will allow for the construction and future maintenance of a building without the need to access the operational railway environment. Any less than **2m (3m for overhead lines and third rail)** and there is a strong possibility that the applicant (and any future resident) will need to utilise Network Rail land and air-space to facilitate works as well as adversely impact upon Network Rail's maintenance teams' ability to maintain our boundary fencing and boundary treatments. Access to Network Rail's land may not always be granted and if granted may be subject to railway site safety requirements and special provisions with all associated railway costs charged to the applicant.

As mentioned above, any works within Network Rail's land would need approval from the Network Rail Asset Protection Engineer. This request should be submitted at least 20 weeks before any works are due to commence on site and the applicant is liable for all associated costs (e.g. a l l possession, site safety, asset protection presence costs). However, Network Rail is not required to grant permission for any third-party access to its land.

Plant & Materials

All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no plant or materials are capable of falling within 3.0m of the boundary with Network Rail.

Drainage

Storm/surface water must not be discharged onto Network Rail's property or into Network Rail's culverts or drains except by agreement with Network Rail. Suitable drainage or other works must be provided and maintained by the Developer to prevent surface water flows or run-off onto Network Rail's property. Proper provision must be made to accept and continue drainage discharging from Network Rail's property; full details to be submitted for approval to the Network Rail Asset Protection Engineer. Suitable foul drainage must be provided separate from Network Rail's existing drainage. Soakaways, as a means of storm/surface water disposal must not be constructed within **20 metres** of Network Rail's boundary or at any point which could adversely affect the stability of Network Rail's property. After the completion and occupation of the development, any new or exacerbated problems attributable to the new development shall be investigated and remedied at the applicants' expense.

Scaffolding

Any scaffold which is to be constructed within 10 metres of the railway boundary fence must be erected in such a manner that at no time will any poles over-sail the railway and protective netting around such scaffold must be installed. The applicant/applicant's contractor must consider if they can undertake the works and associated scaffold/access for working at height within the footprint of their property boundary.

Piling

Where vibro-compaction/displacement piling plant is to be used in development, details of the use of such machinery and a method statement should be submitted for the approval of the Network Rail's Asset Protection Engineer prior to the commencement of works and the works shall only be carried out in accordance with the approved method statement.

Fencing

In view of the nature of the development, it is essential that the developer provide (at their own expense) and thereafter maintain a substantial, trespass proof fence along the development side of the existing boundary fence, to a minimum height of 1.8 metres. The 1.8m fencing should be adjacent to the railway boundary and the developer/applicant should make provision for its future maintenance and renewal without encroachment upon Network Rail land. Network Rail's existing fencing / wall must not be removed or damaged and at no point during or post construction should the foundations of the fencing or wall or any embankment therein, be damaged, undermined or compromised in any way. Any vegetation within Network Rail's land boundary must not be disturbed. Any fencing installed by the applicant must not prevent Network Rail from maintaining its own fencing/boundary treatment.

Lighting

Any lighting associated with the development (including vehicle lights) must not interfere with the sighting of signalling apparatus and/or train drivers' vision on approaching trains. The location and colour of lights must not give rise to the potential for confusion with the signalling arrangements on the railway. The developers should obtain Network Rail's Asset Protection Engineer's approval of their detailed proposals regarding

lighting.

Noise and Vibration

The potential for any noise/vibration impacts caused by the proximity between the proposed development and any existing railway should be made aware to the future occupiers of the site. It must also be assessed in the context of the National Planning Policy Framework which holds relevant national guidance information.

The current level of usage may be subject to change at any time without notification including increased frequency of trains, night-time train running and heavy freight trains. The appropriate building materials should be used to reduce any potential noise disturbance from the railway.

Vehicle Incursion

Where a proposal calls for hard standing area/parking of vehicles area near the boundary with the operational railway, Network Rail would recommend the installation of a highways approved vehicle incursion barrier or high kerbs to prevent vehicles accidentally driving or rolling onto the railway or damaging lineside fencing.

Landscaping

Any trees/shrubs to be planted adjacent to the railway boundary these shrubs should be positioned at a minimum distance greater than their predicted mature height from the boundary. Certain broad leaf deciduous species should not be planted adjacent to the railway boundary as the species will contribute to leaf fall which will have a detrimental effect on the safety and operation of the railway. Network Rail wish to be involved in the approval of any landscaping scheme adjacent to the railway. Any hedge planted adjacent to Network Rail's boundary fencing for screening purposes should be so placed that when fully grown it does not damage the fencing or provide a means of scaling it. No hedge should prevent Network Rail from maintaining its boundary fencing. If required, Network Rail's Asset Protection team are able to provide more details on which trees/shrubs are permitted within close proximity to the railway.

Existing Rights

Whilst not a planning matter, we would like to remind the applicant of the need to identify and comply with all existing rights on the land. Network Rail request all existing rights, covenants and easements are retained unless agreed otherwise with Network Rail.

Property Rights

notwithstanding the above, if any property rights are required from Network Rail in order to deliver the development, Network Rail's Property team will need to be contacted.

North Kent Marshes Internal Drainage Board

The site is within the North Kent Marshes Internal Drainage Board's district; however, this development has been comprehensively reviewed by the Environment Agency and Kent County Council acting as Lead Local Flood Authority (LLFA), and some of the latest submissions are in direct response to these authorities' previous comments. As such, the Board has very little to add other than it would be prudent to condition any permission to ensure no development takes place prior to a detailed drainage scheme being submitted to and approved by the LPA together with details of the scheme's operation and maintenance and it should be verified on-site once completed by a competent engineer and prior to operation.

Furthermore, the LPA may wish to consider a planning condition to ensure a site-specific Flood Risk Assessment addressing construction/temporary works, including emergency response measures for construction activities in flood risk areas is submitted to and approved by the LPA. In addition, a drainage management strategy should be included for the construction phase that addresses the temporary drainage

design including construction water management and protection of watercourses during the works. The submission states that discharge consents will be required for surface water discharges from the Environment Agency, Essex County Council (Tilbury), and Kent County Council (Gravesend), however, the Board would like to take this opportunity to reiterate that, land drainage consent is required from the Board for the discharge of surface water into the Board's district in line with the Board's Byelaws (specifically Byelaw 3 available at https://lowermedwayidb.co.uk/wpcontent/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 then only a short distance before the discharge will reach the tidal Thames as such, it seems unlikely that the Board will require such a payment.

Port of London Authority – 15/02/2024

Within the application documents the depth of the proposed tunnel is proposed to be approximately -34m Above ordnance Datum (AoD) to - 32mAoD, and approximately three to four tunnel widths below the river bed. The diameter of the tunnel is proposed to be 4m in internal diameter (4.5m external diameter) and the depth of the drive tunnel shaft is expected to be approximately 42.5m. To confirm the PLA has no in principle concern with the proposed depth of the proposed tunnel as part of this development although it is requested whether the applicant could provide some further information with regard to the depth of the existing tunnel and a comparison with the depth of the proposed tunnel, and the reason for any significant difference. It is also noted that as part of the development no works are required in the marine environment of the river itself with regard to the tunnel works.

With regard to transport, section 5.5 of the submitted Outline Construction Traffic Management Plan (OCTMP) states that the spoil is planned for removal from both Gravesend and Tilbury sites, by which a number of methods could be utilised including:

- Removal by barge (via River Thames) – Tilbury only; and, - Removal by road – Tilbury and Gravesend.

For Tilbury specifically, two options are described within the application documents with regard to river use.

- the OCTMP and Environmental Statement (ES) state that the use of the Port of Tilbury via berth 5 is being investigated and could be utilised which based on a 1,000m³ tonne barge could result in 86 barges being utilised as part of the development.

- Within the ES there is also an option to utilise the existing and working jetty to the south-east of the proposed Tilbury SEC, delivering the tunnel and Tilbury shaft spoil to the jetty via HGV and transferring to barge. There is an existing road extending to the jetty, however the application states that some upgrading of the existing road will be required. As part of this option there may also be a requirement to carry out enabling works at the jetty itself. If so this will need to be considered as part of a River Works Licence application with the PLA. Within the ES it is also stated that there will be no requirement to use the jetty or berth during weekend or night-time hours, as spoil from the 24 hour tunnelling will be stored in the muck away areas (see Figure 3-5) overnight and during the weekend and therefore the jetty will not require additional lighting during night-time hours. To highlight as part of this option it is likely that a Navigational Risk Assessment (NRA) to consider the use of this jetty.

In principle the use of the Tidal Thames is welcomed, and this must continue to be robustly considered, including for the delivery of materials as well as removal of spoil and be specifically highlighted within a appropriately worded condition for a detailed Construction Traffic Management Plan as part of any forthcoming planning permission. This would be in line with Local Plan policy PMD11 (Freight Movement)

as the application states that the use of the Thames could result in approximately 11,440 HGV movements being taken off the roads and onto the river.

With regard to these works to highlight this will require a River Works Licence with the PLA. This must be added as an informative as part of any forthcoming planning permission and the PLA's Statutory Consents and Compliance Team contacted at lic.app@pla.co.uk. It is welcomed that this requirement is recognised in the submitted Construction Environmental Management Plan (CEMP) in table 7-1 (Required Consents and Licenses).

Furthermore, with regard to the excavation of spoil, it is noted that National Grid are exploring opportunities to transport the spoil to habitat enhancement projects in the local vicinity such as the RSPB site at Cliffe Pools which would provide benefits to aquatic invertebrates and wading birds. This is in principle welcomed particularly with regard to linking river movements. As an alternative the RSPB owned and Land & Water operated site at Rainham Marshes may also be an option for the disposal of spoil. It is therefore considered that this opportunity continues to be investigated and this should also be highlighted within a relevant planning condition as part of any forthcoming planning permission.

Lastly it is noted that the decommissioning of the existing tunnel and associated infrastructure does not form part of this application / project. To confirm the PLA must be consulted on this aspect of the overall development once further details are available.

Port of London Authority – 03/09/2024

Thank you for consulting the Port of London Authority (PLA) on the re-consultation of the above-mentioned planned application, for the proposed Cable Tunnel between Tilbury and Gravesend. I have now had the opportunity to review the updated documents and have the following comments to make, in addition to those raised in the PLA's original response dated 15 February 2024.

As part of the amended documents an Outline Construction Traffic Management Plan (OCTMP) has been provided which on page 36 commits to the removal of tunnelled spoil by barge via the River Thames from the Tilbury side (totalling approximately 85,000m³ of material). Whilst this is in principle welcomed it is noted that for the Gravesend side, the removal of spoil has not been investigated and is considered unlikely to be feasible due to the difficulty of accessing a jetty in this location. Whilst this is noted, including that the proposals comprise most of the work being conducted from the Tilbury side of the river, with the spoil from one shaft and the tunnel being removed via the north portal, it is still considered that the potential use of the river through the supply chain on the Gravesend side must still form a consideration as part of the detailed CTMP, including further consideration of potential landing points in the borough. It is therefore considered that this forms a requirement of a detailed CTMP, via an appropriately worded planning condition as part of any forthcoming planning permission.

As noted previously the proposed development will also require a River Works Licence with the PLA. This must be added as an informative as part of any forthcoming planning permission. For information the applicant is in continuing discussions with the PLA with regard to this requirement.

Shorne Parish Council

A Parish Council representative previously attended a webinar about this project. While understanding and accepting the need for this work, the Parish Council has some concerns about the secondary effects of the proposals:

Increase in traffic on A226:

There will be an increase in traffic due to the works.

The A226 is increasingly busy and this is contributing to adverse safety issues at Shorne Crossroads where pedestrians and vehicles need to cross (and turn across) the stream of traffic.

The additional project traffic will exacerbate this situation.

Abnormal loads:

The project will require the widest and heaviest loads ever seen in the area to use a variety of local roads.

We have concerns about whether these roads are structurally able to support such loadings. In particular, at Gads Hill Higham where the Dickens tunnel runs under the A226 roadway, and at Mark Lane/the Canal towpath (please also see below).

Potential damage to the Canal towpath, and bank/walls:

Mark Lane runs along the first part of the Canal bank heading east from Gravesend. It is in poor condition with many linear cracks, which we understand indicate deficient underlying structure. This is to be expected as it was not constructed as a road normally would be but runs along the former northside canal bank and towpath dating from the early 1800's. It is narrow with soft verges, and it was never envisaged that vast weights would traverse it.

We therefore have significant concerns that damage will result from such use, and request that full repair and remediation must be included as a Condition, in the event of any damage occurring to the Canal walls and bank as well as to the towpath itself.

Thames and Medway Canal Association (TMCA):

The TMCA maintain the Canal and should be consulted on the proposals. They will require maintenance access.

Closure of Footpath NG2 and Sustrans cycle route 1:

The Canal towpath is a footpath and National cycle route, it has an all-weather type surface. We are very concerned about the proposed closure of these for the long duration of the works, so causing severance, and request that the need for full closure should be reviewed - e.g. could it be only closed during peak construction activity or remain open at weekends/bank holidays when recreational use is greatest.

Diversion routes for Footpath NG2 and Sustrans cycle route 1:

The suggested footpath diversion route is to use NG1/Saxon Shore Way to the north, however this becomes extremely muddy and rutted in winter and poor weather, as well as being much longer, so it is not an equivalent or always a viable route.

The suggested cycling diversion is also longer, being to use either Lower Higham Road or the A226. Both of these are extremely busy with traffic of all kinds and pose much greater hazards than the official cycle route. Commercial traffic on the narrow winding lanes, and blind corners and the blind summit on the Lower Higham Road are particularly hazardous. The alternative routes would certainly result in "fear and intimidation" for cyclists. Solving hazard creation for the project will create many others.

We disagree with some of the impact assessments, the impacts being greater than suggested.

Post-project repair and remediation:

Full remediation of all temporary construction areas, and repair of all damage caused by the project must be required by Condition.

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.

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.

UK Power Networks

Please note there are HV underground cables on the site running within close proximity to the proposed development.

Prior to commencement of work accurate records should be obtained from our Plan Provision Department at UK Power Networks, Fore Hamlet, Ipswich, IP3 8AA.

All works should be undertaken with due regard to Health & Safety Guidance notes HS(G)47 (Avoiding Danger from Underground services). This document is available from local HSE office.

Should any diversion works be necessary as a result of the development then enquiries should be made to our Customer Connections department. The address is UK Power Networks, Metropolitan house, Darkes Lane, Potters Bar, Herts, EN6 1AG.

You can also find support and application forms on our website [Moving electricity supplies or equipment | UK Power Networks](#)

Neighbouring properties

First round of consultation

1 neighbour was consulted with an overall expiry date of 27/02/2024 – 2 responses received (both objections), the comments of which can be summarised as follows:

- Any impact on access to their site would be severely detrimental to their business;
- Concerned at the impact on the production and distribution of what they produce in their business;
- Concerned at the proposed works may adversely affect the operation of their business;
- The application fails to give sufficient detail for them to provide detailed comment or to fully understand the potential impact on their businesses.
- They require the following information so they can commission expert evidence to properly understand the impact on their business:- they require information on the extent of the proposed site works, details of how construction traffic will access the development site, including volumes and timing of traffic and any planned road closures, details of how traffic will access the development site after construction (inc. for maintenance) and details of any impact on river traffic or our client's conveyor system;
- Whilst any approval would be likely subject to approval of a Construction Management Plan, at this stage the Council at least needs to understand the reasonable worst case likely impact of the proposed development on the operation of their business in order that it can be satisfied that a Construction Management Plan is in fact capable of adequately mitigating that impact.
- Should the Council grant planning permission subject to a condition requiring a Construction Management Plan, our clients would wish to be consulted on the detail of that Plan before the Council decides whether or not to approve it;
- Proposal involves diverting existing overhead power lines, part of this over their land – concerned that the land's use will be disrupted by the proposed development;
- There are no details on when access will be needed, whether this will conflict with the use of their site, how this will impact their National training requirements, how access will be agreed and the methodology for any works within the site boundary;
- The application should clearly set out these details and then be subject a planning condition to require compliance with the submitted details;
- National Grid have indicated that the overhead lines could be put up either at weekends, or other days when the shooting range is not operational. If this is the case, then this should be stated in the planning application and subject to an appropriate planning condition to ensure compliance;
- They require constant access to their site via Mark Lane, the road is in very poor condition. Questions whether it is in sufficiently good condition to safely accommodate the proposed construction traffic, the planning application should contain provisions for this to be dealt with before construction commences.
- The planning application should also require that the road condition is addressed once again after construction has taken place;
- Access Road - National Grid have indicated verbally that their vehicles would be unobstructed

throughout the construction and would have priority over construction traffic however, no mention of this is made in the planning application and it should commit to this and this should be subject to a planning condition;

- The planning application does not appear to commit as to whether marshals would be used to ensure constant and safe access and egress down Mark Lane, the planning application should commit to this and this should be subject to a planning condition;
- Lower Thames Crossing - Although National Grid believes that the Lower Thames Crossing would not commence until after the National Grid works are complete, the planning application does not appear to consider the impact if both this and the Lower Thames Crossing projects were to proceed simultaneously, this is a particular concern in relation to the access road. The application should either address the impact of both projects happening simultaneously, unless more certainty can be provided that the two projects would not happen simultaneously;
- Electric and Magnetic Radiation (EMR) – Staff are employed who would work under the proposed overhead power lines on a daily basis. The planning application does not confirm what level of EMR would be associated with the proposed overhead power lines or whether it would be safe for staff. They understand that National Grid may have considered impacts on users of the nearby footpath, but they consider this is not the same as staff permanently employed under the lines. They therefore believe that National Grid should supply this information as part of the planning application and if any mitigation is necessary as a result, this should be subject to a planning condition.

Second round of consultation

2 neighbours were consulted with an overall expiry date of 13/09/2024– 1 response received (objection), the comments of which can be summarised as follows:

- The Construction Management Traffic Plan states that removal of spoil from the Gravesend site has not been investigated and unlikely to be feasible due to the difficulty of accessing a jetty in this location however, under application ref. 20240691 the Council issued a decision to state they had no objections to the proposal by the PLA to replace three pontoons at Denton Wharf and highway access to the site at Denton Wharf is adequate for HGV movements.

Officer's Analysis

The proposal is made by the National Grid which owns and operates the national high-voltage electricity system throughout England and Wales and who are obligated to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

National Grid have a proposal to replace a cabled section of the Tilbury to Grain and Tilbury to Kingsnorth (TKRE) 400kV circuits under the River Thames. The existing Grain to Tilbury 400 kV circuits are mostly overhead lines however, a section is cabled within a deep tunnel underneath the River Thames. It is said that the tunnel in its current state would not safely accommodate an upgrade to the new cables. The TKRE Cable Tunnel Replacement Project relates only to the tunnelled section of the circuits and the infrastructure required to transition from overhead line to underground cables.

The TKRE replacement project consists of the following elements.

A new bored tunnel under the River Thames.

Then in order for the overhead lines to transition to a cable under the River Thames the following above-ground components are required at both ends of the new tunnel at Tilbury and Gravesend:

- A new cable sealing end compound consisting of:-
 - a new tunnel headhouse which will cover the shaft into the tunnel;
 - a new overhead line gantry structure which will connect the overhead line downlead conductors and transfer them to six sealing end structures; and
- Modifications to the existing overhead line (OHL) with the new OHL conductors connected to the existing TKRE 400kV OHL conductors via new terminal pylons.

Planning permission is required for the proposed development with applications being submitted to both Thurrock Council for the development north of the River Thames in Tilbury and Gravesham Borough Council for the development south of the River Thames in Gravesend. Thurrock have the larger site area so are the Lead Planning Authority.

The section of the tunnel which falls below Mean Low Water Spring is within the Marine Management Organisation's jurisdiction; National Grid state in their submission that the boring of the tunnel is exempt from marine licensing.

The alterations to the pylons and overhead line are stated in the submission to be consented under the Electricity Act 1989, with the Department for Energy Security and Net Zero being the determining body so those works do not need to be considered in this application.

For reference the below table shows the various elements of the project and the determining Authority:

Project Compound	Primary Consent	Determining Authority
Permanent Work at Tilbury		
New Cable Tunnel, Sealing End Compound and Tunnel Headhouse	Full Planning Permission, Town and Country Planning Act 1990 (TCPA) (as amended) (Ref 1-10)	Thurrock Council
Permanent Work at Gravesend		
New Cable Tunnel, Sealing End Compound and Tunnel Headhouse	Full Planning Permission, Town and Country Planning Act 1990 (TCPA) (as amended) (Ref 1-10)	Gravesham Borough Council
New Bored Tunnel		
New Bored Tunnel	Full Planning Permission, Town and Country Planning Act 1990 (TCPA) (as amended) (Ref 1-10)	Thurrock Council jurisdiction
	Full Planning Permission, Town and Country Planning Act 1990 (TCPA) (as amended) (Ref 1-10)	Gravesham Borough Council
	No consent required (Section 35 of The Marine Licensing (Exempted Activities) Order 2011 (Ref 1-11)).	Marine Management Organisation (MMO)
Overhead Line Works and reconfiguration (at Tilbury and Gravesend)		
Overhead Line Works and reconfiguration	Section 37 Consent under the Electricity Act 1989 (Ref 1-11)	Department of Energy Security and Net Zero (DESNZ)

The red line boundary of the entire development project site is shown below and relates to areas in both Gravesham Borough Council and Thurrock Borough Council with the divide between the two Authorities being in the centre of the River Thames:



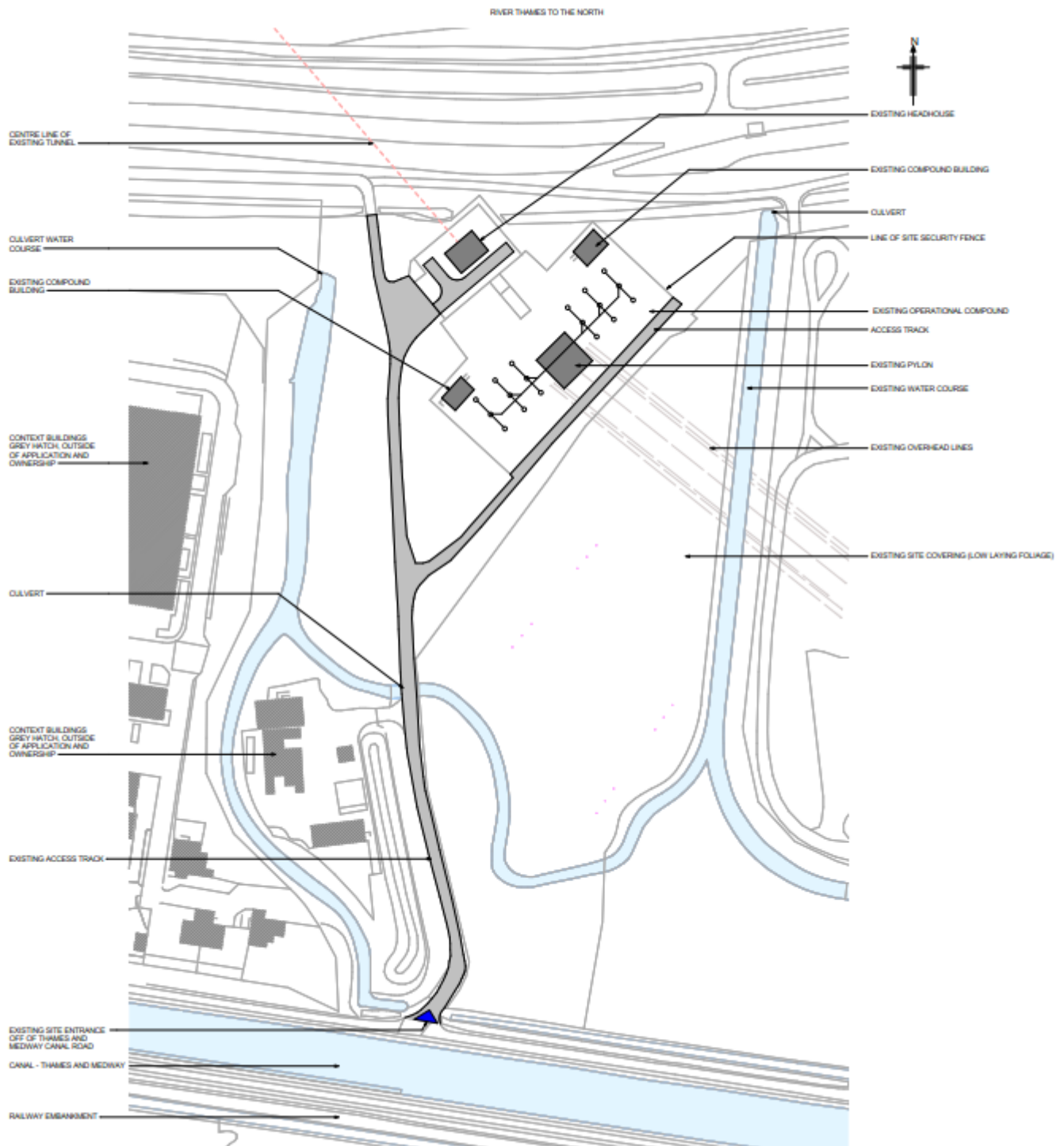
In 2023 the applicant submitted a request screening opinion under application ref. 20230668 in respect of one new shaft headhouse and one new cable sealing end compound. It was determined that the

development was considered EIA development.

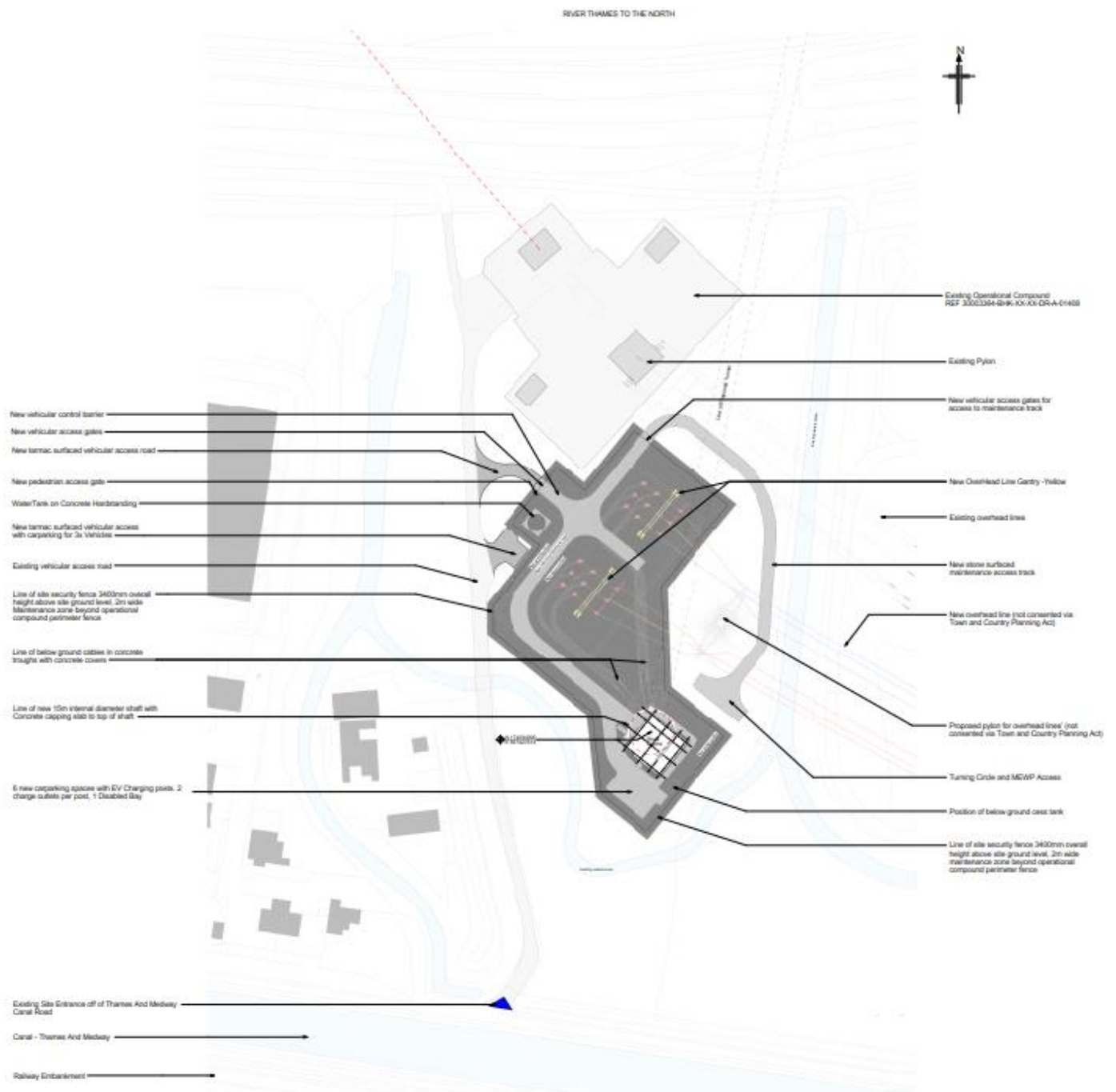
For Gravesham the development consists of the new cable tunnel, the Sealing End Compound and Tunnel Headhouse. It does not include anything to do with the pylons or overhead power lines as the Department for Energy Security & Net Zero (DESNEZ) is the determining authority for those elements.

The application is supported by an Environmental Statement which describes the proposed development, documents the assessment of its likely significant effects on the environment, and details the mitigation measures proposed to prevent, reduce or offset significant adverse effects.

The existing block plan on the Gravesend land-based area of the site is as follows:



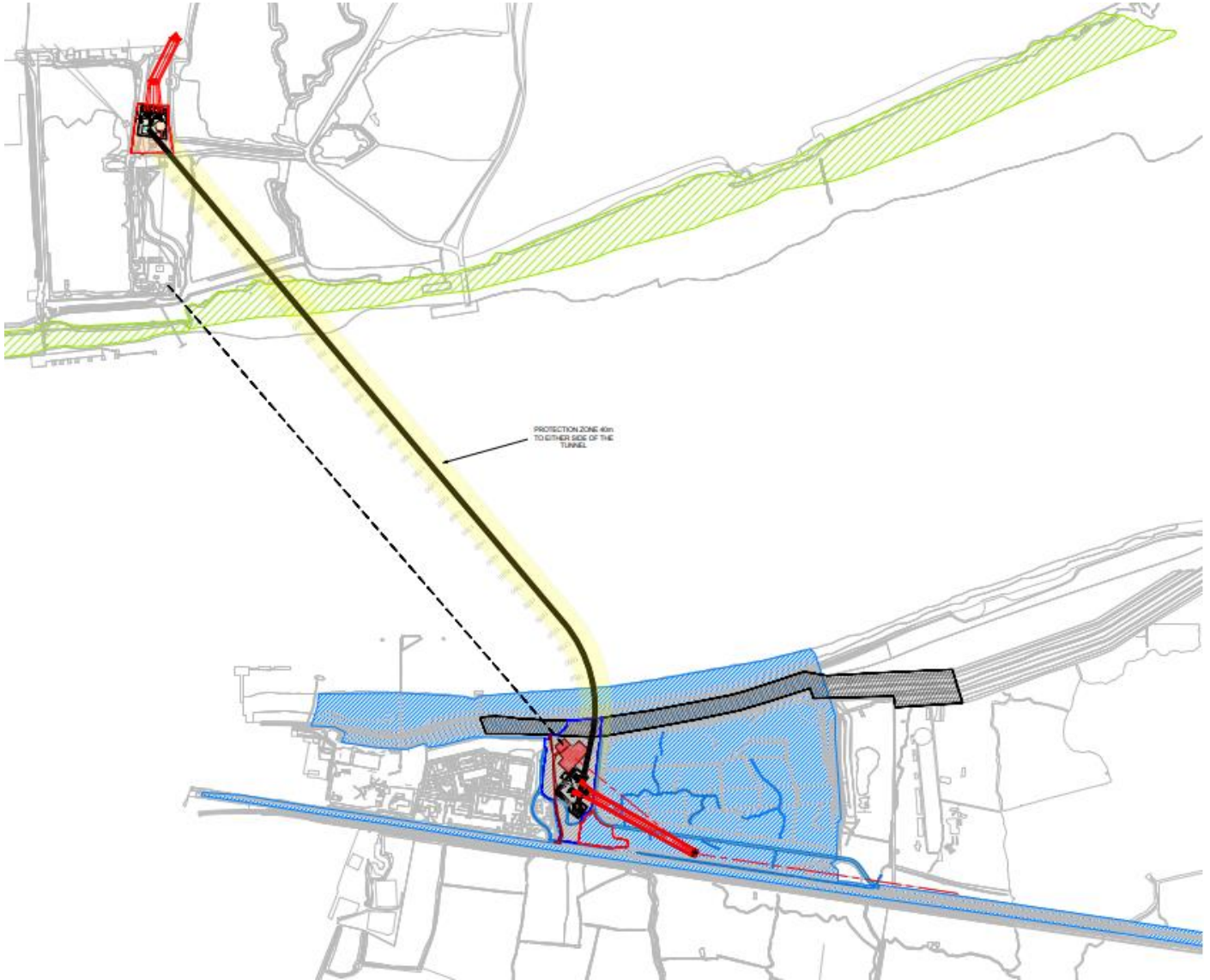
The proposed block plan is as follows:



As can be seen the existing Sealing End Compound with existing headhouse, two existing compound buildings and existing pylon will remain. The proposed new Sealing End Compound will be constructed to the south of the existing compound.

Cable Tunnel

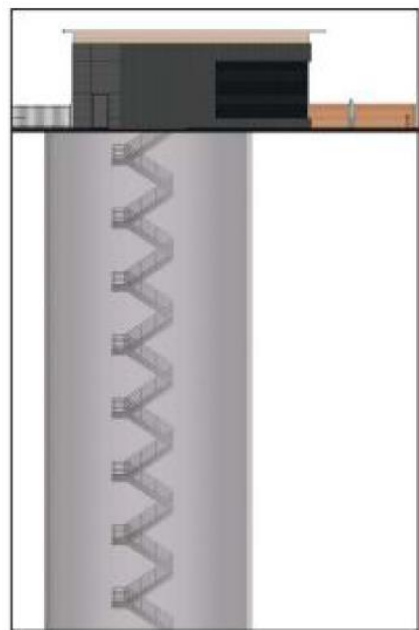
The new cable tunnel will be approximately 2.2km long (from headhouse to headhouse), 4.5m in external diameter, at a depth of approximately 34-32 metres (m) above Ordnance Datum (above mean sea level). The tunnel will follow the alignment as shown below:



Once installed there will be twelve new cross linked polyethylene (XLPE) cables installed in the tunnel which is a modern cable requiring less maintenance and doesn't contain any fluids. Each cable will be well-spaced from the other cables so they do not overheat; an example of how the inside of the tunnel will appear is as follows:



In order to construct the new cable tunnel, vertical shafts will need to be constructed that will be around 15m in diameter and 40m deep, a cross-section of the tunnel shaft with stair access is as follows:



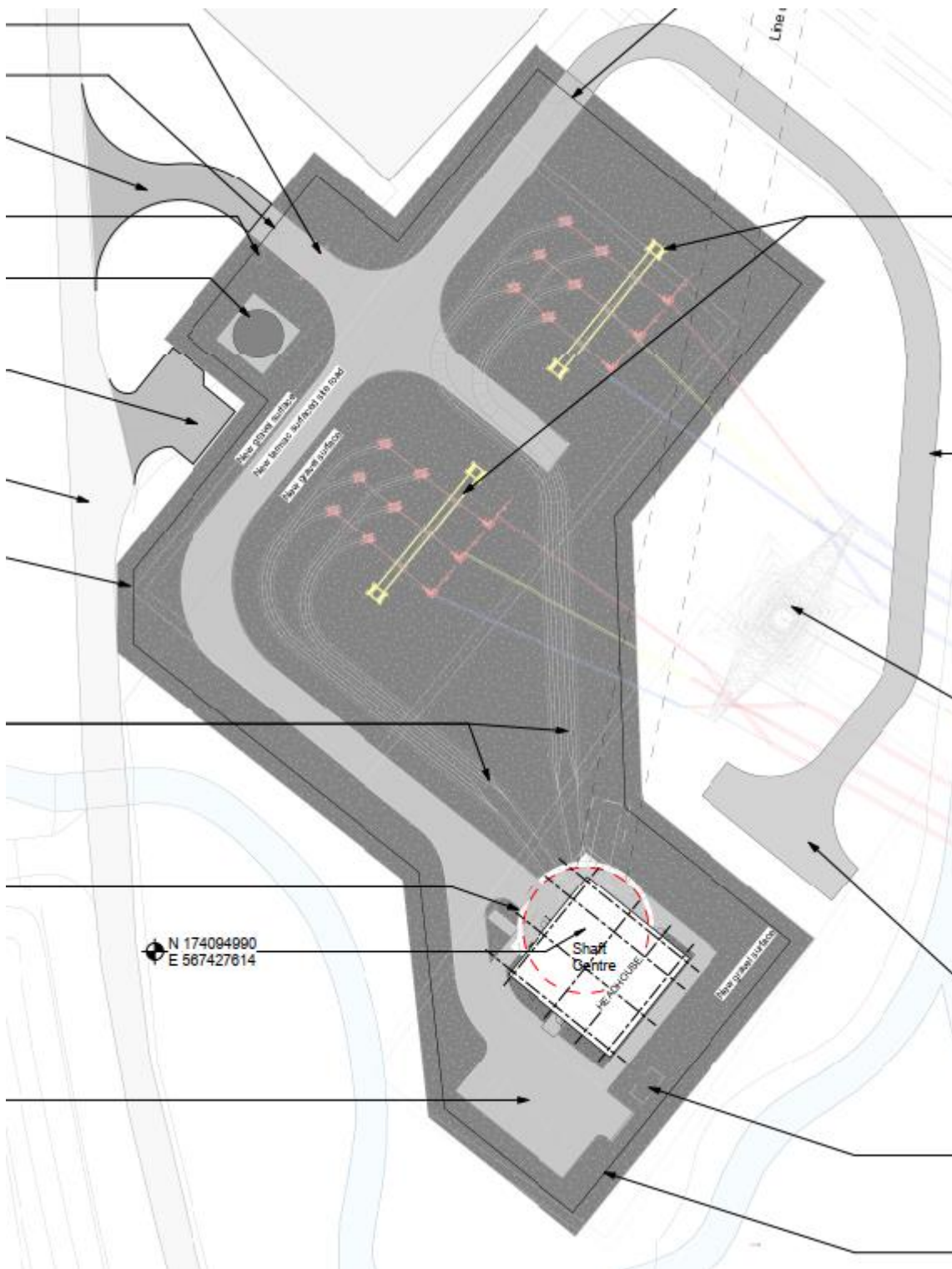
The new tunnel will be created between the two shafts using a tunnel boring machine which will be launched from the Tilbury side and be received at the shaft on the Gravesend side. A tunnel boring machine excavates and inserts a concrete lining using a rotating head with cutting parts running on motors. Tunnelling works are expected to take place for approximately eight months.

The excavated material from the construction of the tunnel will be approximately 72,700m³. The excavated material from the construction of the Tilbury shaft will be approximately 13,000m³. This results in a total of approximately 85,700m³ of spoil which would be removed from the Tilbury site. The composition of the spoil from the tunnel will be chalk. The composition of the shaft spoil will be a mix of chalk, made ground, alluvium and river terrace deposits. The excavated material from the construction of the shaft at Gravesend will be approximately 12,850m³. The composition of the shaft spoil at Gravesend will be a mix of chalk, made ground, alluvium and river terrace deposits same as Tilbury. As there is no suitable jetty on the Gravesend side of the river, the shaft spoil will be removed via HGV. However, National Grid will direct this to a suitable reuse destination as would the spoil from the Tilbury side also. The tunnel and shaft spoil will be removed at the Tilbury end via the River Thames.

Gravesend Sealing End Compound (SEC)

The proposed SEC will contain the equipment required to transition the cables out of the tunnel and up onto the overhead lines supported by pylons. The SEC will be located within a vegetated area to the south of the existing Sealing End Compound which is to remain. It will be 6,328 sq. m in area but during construction a wider area of approximately 37,000 sq. m will be required to accommodate construction equipment and storage areas. The gantry structure for the overhead lines within the SEC will have a maximum height of approximately 13m. The SEC will be surrounded by a 2.4m mesh or palisade security topped with an electric pulse fence to a height of 3.4m. There will be nine new car parking spaces, six to the west of the new headhouse and three to the north just outside of the SEC. The roads within the SEC will be laid with tarmac however, all other surfacing will comprise of gravel or other free draining stone material with a Type 3 sub-base.

The proposed SEC is shown in the below close up extract:

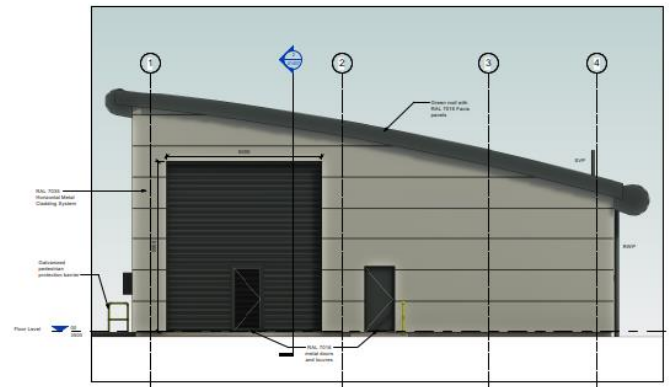
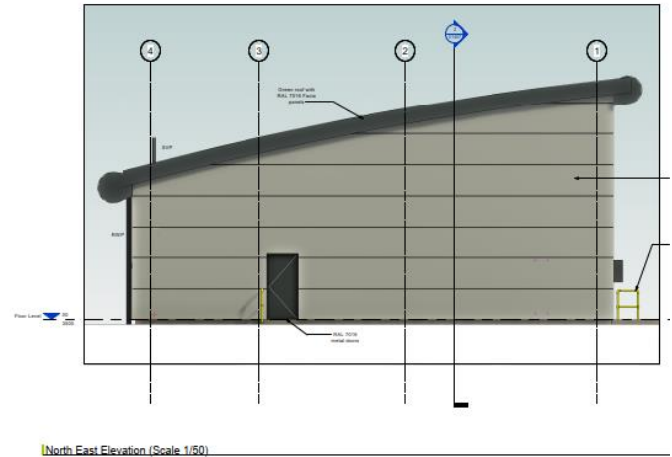


Gravesend Tunnel Headhouse

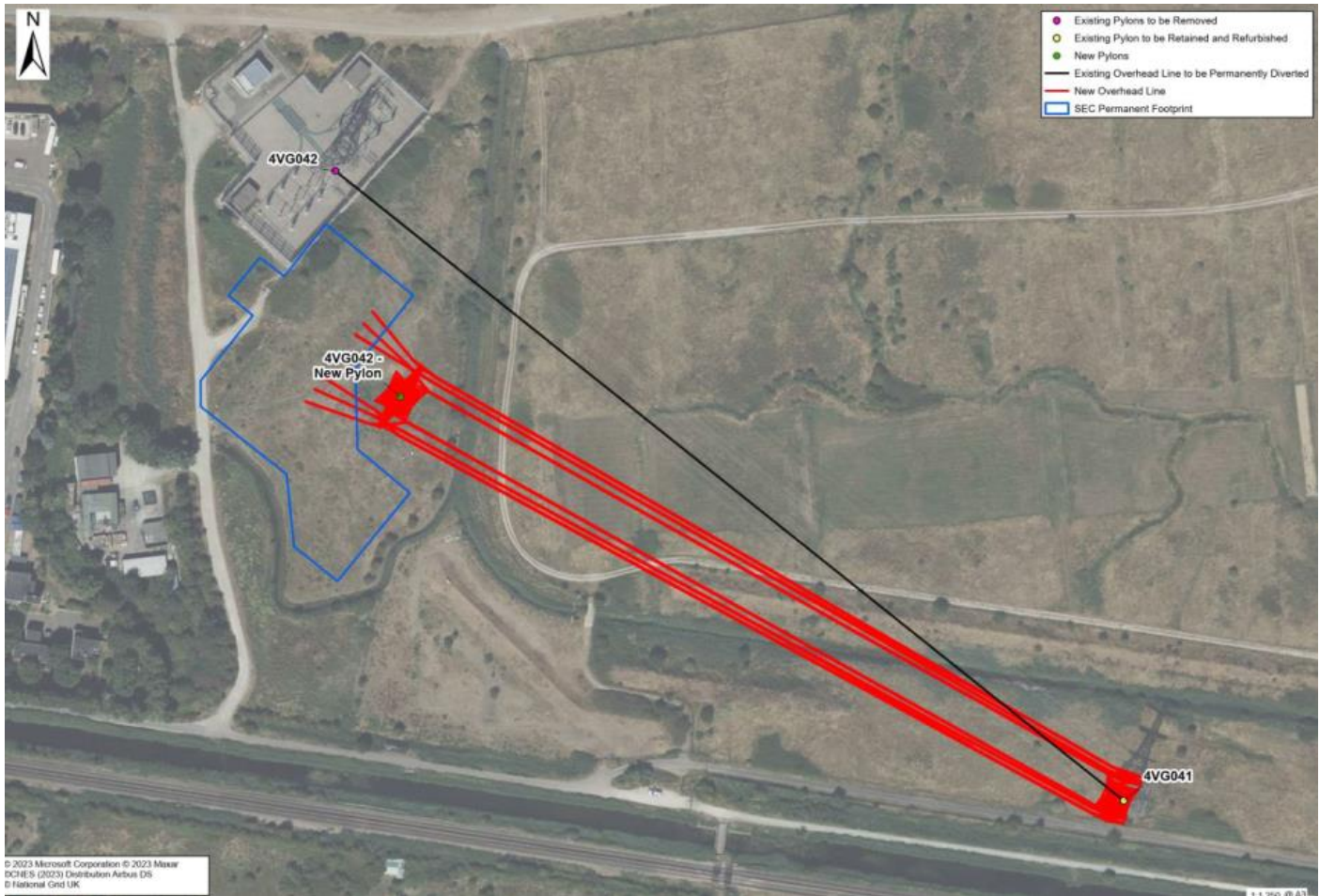
The headhouse will be located within the SEC and will sit above the tunnel shaft. Its purpose is to:

- allow controlled safe and secure access into the tunnel shafts;

- The headhouse will occupy an area of approximately 230 sq. m based on a footprint of 15m x 16m and have a building height of 8m.



Although not being dealt with in this application it is prudent to state that the modification works required to the overhead lines (all pylon and overhead line works will be dealt with by Department of Energy Security and Net Zero (DESNZ)). At Gravesend approximately 400m of single span overhead line will be permanently removed and approximately 330m new double span overhead line will be installed between pylons 4VG041 and new pylon 4VG042. The existing pylon 4VG042 will be removed. Pylon 4VG042 will be replaced by a new terminal pylon which will be erected to the east of the new Sealing End Compound. The existing Pylon 4VG041 to the south east will be refurbished. This is shown below:



Again, it is prudent to note that DESNZ are the determining Authority for any of the works relating to the pylons and overhead lines but they are mentioned here for completeness.

The application site is located in the Green Belt as defined in the LPCS Proposal Map, in the Canal and Grazing Marsh Higham Local Wildlife Site, Area of Archaeological Potential, Biodiversity Opportunity Area, Explosives Storage, Flood Zone 3, Shorne and Higham Marshes Landscape Character Area and the Lower Thames Crossing Safeguarding Zone. The southern margin of the site is approximately 30m from the Thames Estuary and Marshes SSSI and Ramsar Site, a site of international importance.

The principle issues in the consideration of the application are:

- Green Belt
- Grey Belt
- Landscape Character
- Biodiversity & Ecology
- Neighbouring/Public Amenity
- Highway Safety
- Public Right of Way
- Flooding & Drainage
- Heritage
- Design, Character & Appearance

- Other Matters
- Planning Balance & Conclusion

Green Belt

The NPPF (2024) states at Paragraph 142 that Government attaches great importance to Green Belts and that fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open and that the essential characteristics of Green Belts are their openness and their permanence.

At Paragraph 153 of the NPPF (2024) it is stated that, when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt, including harm to its openness.

Paragraph 154 of the NPPF (2024) states that development in the Green Belt is inappropriate unless one of the exceptions given in 154 (a) – (h) applies. Furthermore, paragraph 154 states that the development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all of the criteria listed in 154 (a) – (d) are met.

Whether the proposal is inappropriate development in the Green Belt

Paragraph 154 of the NPPF (2024) states that development in the Green Belt is inappropriate unless one of the following exceptions applies

a) buildings for agriculture and forestry;

b) the provision of appropriate facilities (in connection with the existing use of land or a change of use), including buildings, for outdoor sport, outdoor recreation, cemeteries and burial grounds and allotments; as long as the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it;

c) the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;

d) the replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces;

e) limited infilling in villages;

f) limited affordable housing for local community needs under policies set out in the development plan (including policies for rural exception sites); and

g) limited infilling or the partial or complete redevelopment of previously developed land (including a material change of use to residential or mixed use including residential), whether redundant or in continuing use (excluding temporary buildings), which would not cause substantial harm to the openness of the Green Belt.

h) Other forms of development provided they preserve its openness and do not conflict with the purposes of including land within it. These are:

i. mineral extraction;

- ii. engineering operations;
- iii. local transport infrastructure which can demonstrate a requirement for a Green Belt location;
- iv. the re-use of buildings provided that the buildings are of permanent and substantial construction;
- v. material changes in the use of land (such as changes of use for outdoor sport or recreation, or for cemeteries and burial grounds); and
- vi. development, including buildings, brought forward under a Community Right to Build Order or Neighbourhood Development Order.

Clearly (a), (b), (c), (d), (e), (f) (g) and (h) do not apply in this instance as the proposal is not for agriculture or forestry, is not appropriate facilities for outdoor sport, outdoor recreation, cemeteries, burial grounds or allotments, is not extension or alteration of an existing building, is not a replacement building, is not limited infilling in a village, is not affordable housing, is not limited infilling or the partial or complete redevelopment of previously developed land, is not mineral extraction, is not engineering operations, is not local transport infrastructure, is not the re-use of buildings, is not a material change in the use of the land and is not development, brought forward under a Community Right to Build Order or Neighbourhood Development Order.

It is therefore considered that the proposal does not meet any of the exceptions of paragraph 154 of the NPPF (2024) and therefore the proposal represents 'inappropriate' development in the Green Belt which is by definition harmful.

Grey Belt

Having concluded the development does not meet any of the exceptions of paragraph 154 of the NPPF (2024) consideration of paragraph 155 of the NPPF (2024) now needs to be considered which discusses grey belt land and states:

"The development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all the following apply:

- a. The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan;*
- b. There is a demonstrable unmet need for the type of development proposed;*
- c. The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of this Framework; and*
- d. Where applicable the development proposed meets the 'Golden Rules' requirements set out in paragraphs 156-157 below."*

(A) The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan

The definition of 'grey belt land' is set out in the Glossary of the NPPF (2024) and is defined as:

"Grey belt: For the purposes of plan-making and decision-making, 'grey belt' is defined as land in the Green Belt comprising previously developed land and/or any other land that, in either case, does not strongly contribute to any of purposes (a), (b), or (d) in paragraph 143. 'Grey belt' excludes land where the application of the policies relating to the areas or assets in footnote 7 (other than Green Belt) would provide a strong reason for refusing or restricting development."

The site is not previously developed land.

It therefore needs to be considered whether the site can be defined as constituting grey belt land by assessing whether the site strongly contributes to purposes (a), (b) and (d) of the Green Belt or not.

The application site is not considered to play an important role in ensuring that development in the urban area does not sprawl further east along the River Thames, there would still be a large gap between Gravesend, Shorne and Higham which are the nearest built up areas to the east of the site. It is therefore considered that the application site does not strongly constitute to purpose (a) of the Green Belt (checking the unrestricted sprawl of large built up areas).

The application site on its own is not considered to play an important role in ensuring Gravesend and Strood (which is the nearest neighbouring town to the east) do not merge into one another as there would still be a large gap between the two. It is therefore considered that the application site does not strongly constitute to purpose (b) of the Green Belt (preventing neighbouring towns merging into one another).

Gravesend is an old town in origin and has a number of historic buildings however, the application site itself is not considered to play an important role in preserving the setting and special character of the town. It is therefore considered that the application site does not strongly contribute to purpose (d) of the Green Belt (preserving the setting and special character of historic towns).

As such the site is not considered to strongly contribute to any of purposes (a), (b) or (d) in paragraph 143 of the NPPF (2024). In addition, the proposal would not affect areas or assets in foot note 7 of the NPPF (2024) (other than Green Belt). The development is therefore considered to be on grey belt land.

The proposed development would result in a new building for the head house, a gantry structure, fencing and hardstanding spread across the site and the spatial and visual impacts of the proposed development would result in a small loss of Green Belt openness. However, the development would utilise grey belt land and would not fundamentally undermine the purposes, taken together, of the remaining Green Belt across Gravesham. Therefore, the proposal would comply with criterion (a) of paragraph 155 of the NPPF (2024).

(B) There is a demonstrable unmet need for the type of development proposed

The applicant highlights how the Tilbury to Grain and Tilbury to Kingsnorth (TKRE) replacement project is related to the Government's commitment to tackle climate change and its targets to become net-zero in all greenhouse gases by 2050 for England and Wales; to meet these targets the UK will need to move away from traditional forms of energy generation with a greater need for cleaner, greener energy.

The applicant states how the Future Energy Scenarios (FES) (Ref 2-2) and Electricity Ten Year Statement (ETYS) 2020 (Ref 2-3) forecast a large amount of renewable and low carbon generation, including offshore wind and nuclear, together with three interconnectors from the continent connecting into the transmission system in the east coast of England. Through these forecasts, National Grid Electricity System Operator (ESO) has identified that the Tilbury to Grain and Tilbury to Kingsnorth 400 kilovolt (kV) circuits (which are predominantly overhead line with a cable section installed within the tunnel crossing the River Thames) will be significantly overloaded in their current capacity. The ESO has recommended investment in upgrading these 400kV circuits.

The applicant therefore identifies a national need for the proposed development. This would both ensure energy security and assist the Country in achieving a net zero economy. The proposed development is required to ensure the transmission system in the east Coast of England can meet the future anticipated

demands of renewable and low carbon energy.

Therefore, whilst the proposed electricity infrastructure itself is not a renewable energy or low carbon project *per se* it would provide the infrastructure for enhanced energy security in the National Grid which over time would provide greater support for renewable or low carbon energy production.

A material consideration in the determination of planning proposals for renewable energy and associated facilities are the National Policy Statements (NPS) for the delivery of major energy infrastructure. Both the existing and proposed NPSs state that these can be material considerations in decision making on applications that both exceed or sit under the thresholds for nationally significant projects. The NPSs recognise that large scale energy generating projects will inevitably have impacts, particularly if sited in rural areas.

The NSPs recognise that to meet the Government's objectives and targets for net zero by 2050, significant large and small scale energy infrastructure is required.

The NPS for Electricity Networks Infrastructure (EN-5) states that:

1.1.1 The security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable the new electricity generation, storage, and interconnection infrastructure that our country needs to meet the rapid increase in electricity demand required to transition to net zero, while maintaining energy security.

1.1.2 A significant amount of new network infrastructure is required in the near term to directly support the government's ambition to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030. There is an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net-zero by 2050.

1.1.3 The electricity network infrastructure to support the government's offshore wind ambition is as important as the offshore wind generation infrastructure. Without the development of the necessary networks to carry offshore wind power to where it is needed in the UK, the offshore wind ambition cannot be achieved.

1.1.4 In addition to offshore wind, new networks infrastructure is needed in support of the development of generation by other technologies, including those in EN-3.

1.1.5 As identified in EN-1, government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. This includes: for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. These are viewed by the government as being CNP infrastructure and should be progressed as quickly as possible.

1.1.6 To support the above, the network must be effectively planned to ensure that the appropriate investment and right kind of technology is brought online at the right time, in the right places.

Accordingly, it is considered the case that the proposal would provide the infrastructure which would directly support energy provision which will be increasingly delivered from renewable and low carbon energy sources and would therefore be compliant with the national policy for electricity networks infrastructure as

set out in NPS-5.

The UK Government has declared a climate emergency and set a statutory target of achieving net zero emissions by 2050, and this is also a material consideration. Since the declaration, the Sixth Assessment Report of the Intergovernmental Panel on Climate Change has indicated that there is a greater than 50% chance that global temperature increases will exceed 1.5 degrees Celsius above pre-industrial levels. The report indicates that delay in global action to address climate change will miss a rapidly narrowing window of opportunity to secure a liveable and sustainable future for all.

The UK Energy White Paper, Powering our Net Zero Future (2020), describes the costs of inaction as follows:

“We can expect to see severe impacts under 3°C of warming. Globally, the chances of there being a major heatwave in any given year would increase to about 79%, compared to a 5% chance now. Many regions of the world would see what is now considered a 1-in-100-year drought happening every two to five years.

At 3°C of global warming, the UK is expected to be significantly affected, seeing sea level rise of up to 0.83 m. River flooding would cause twice as much economic damage and affect twice as many people, compared to today, while by 2050, up to 7,000 people could die every year due to heat, compared to approximately 2,000 today. And, without action now, we cannot rule out 4°C of warming by the end of the century, with real risks of higher warming than that. A warming of 4°C would increase the risk of passing thresholds that would result in large scale and irreversible changes to the global climate, including large-scale methane release from thawing permafrost and the collapse of the Atlantic Meridional Overturning Circulation. The loss of ice sheets could result in multi-metre rises in sea level on time scales of a century to millennia.”

Overall it is considered that there is a demonstrable unmet need at a national level for the electricity infrastructure which is proposed. Therefore, the proposal would comply with criterion (b) of paragraph 155 of the NPPF (2024).

(C) The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of the Framework.

The application site is located to the south of the National Grid's existing Sealing End Compound site immediately adjacent to it. It would not be a new National Grid Electricity Distribution Site located some distance from the existing site but would be located right next to the existing one which is to remain. The development would be confined to this one area. As such the site is considered to be in a sustainable location. Therefore, the proposal would comply with criterion (c) of paragraph 155 of the NPPF (2024).

(D) Where applicable the development proposed meets the 'Golden Rules requirements set out Paragraphs 156-157

The proposed development is not major development involving the provision of housing and therefore criterion (d) is not applicable to this proposal.

As the proposal meets the requirements of (a), (b) and (c) of paragraph 155 (and (d) does not apply) it is not inappropriate development.

It is now necessary to assess all of the other principle considerations in the assessment of the proposal.

Landscape Character

The application site is within a field which has grass and vegetation and is used for grazing as are the surrounding fields. The application site is bordered to the north by the existing SEC with hardsurfacing and containing a Headhouse, two compound buildings, overhead line gantry and one electricity pylon.

The site is located in the Shorne and Higham Marshes. This is defined as in good condition with high sensitivity and a guideline to focus on the long term conservation of the area. Its key characteristics are flat grazing marsh with a lack of vegetation, a sense of remoteness with extensive views across the marshes, network of ditches and meandering waterways divide the marshes in an irregular pattern leaving parcels of land of a medium scale, no roads and limited development, features of historic interest including Shornemead Fort and extensive views across the River Thames and to higher ground to the south. The proposal would replace an existing area with grass and vegetation and introduce development of 13m height for the overhead gantry element and 8m for the headhouse to house the tunnel shaft. The site would be located next to an existing SEC so the development would not be out of keeping with the character of this particular locality which is heavily dominated by the existing SEC and pylons and overhead power lines. As such although there would be a degree of harm caused by the proposed increase in the electricity infrastructure in the area given that the proposed development would be located adjacent to the existing SEC it is considered this impact would be less than if the proposed SEC was constructed in a field some distance from the existing SEC. Given the context of the immediate locality it is considered the impact on the landscape would be moderate.

In respect of landscape character the proposal is therefore considered compliant with Policy CS12 (LPCS).

Biodiversity & Ecology

The site is located in the Canal and Grazing Marsh, Higham Local Wildlife Site (LWS) which is a non-statutory site of County importance. In addition, the southern margin of the site is approximately 30m from the Thames Estuary and Marshes SSSI and Ramsar Site, a site of International importance.

The fields to the west of the site consist of pony grazed grassland forming a mosaic with areas of scrub, reed, and tall ruderals. Fields to the south of the Milton Rifle Range and within the range itself are generally unmanaged and less diverse. All of these areas are considered by KCC Biodiversity to meet the definition to be considered Coastal and Floodplain Grazing Marsh, a Habitat of Principal Importance.

Surveys identified that the site supports notable populations of common reptiles (slow worm, common lizard and grass snake) and water vole. In addition, it has been found to support a diverse assemblage of invertebrates of County Importance, including hornet robberfly.

Intertidal bird surveys identified very low levels of use by the species for which the Thames Estuary and Marshes SPA/Ramsar site are designated. In addition, the number of species and number of birds recorded during the breeding and non-breeding bird surveys suggests these areas are of no more than Local importance for these species groups.

Paragraph 187 of the (NPPF, 2024) requires that planning policies and decisions should contribute to and enhance the local environment in a number of ways, including the provision of a net gain for biodiversity. Policy CS12 (LPCS) states that there should be no net loss of biodiversity in the Borough and that opportunities to enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas.

Chapter 15 of the Environmental Statement sets out that a range of embedded mitigation measures have been included in the design to avoid and/or reduce impacts on important ecological features. This includes minimising vegetation clearance, and creation of a range of biodiverse habitats following construction

including reinstatement of the southern fields to grazed pasture. In addition, a range of Construction Environmental Management Plan (CEMP) measures will be employed to reduce/avoid impacts including sensitive timing of works and maintaining buffer zones around all ditches. Close-boarded noise fencing will be erected around the construction site to limit noise disturbance.

Chapter 15 identifies that based on the low numbers of SPA/Ramsar species utilising the Gravesend Site, and the offset of the proposed Gravesend SEC from the intertidal habitats no significant effect on the structure/function of the Thames Estuary & Marshes SPA and Ramsar are expected.

It is stated that the proposal will result in the loss of approximately 2.4ha of existing grazed pasture, but that this impact will be partially offset by the creation of approximately 2ha of new grassland dominated habitats and a biodiverse brown roof (350 sq. m). In parallel, there will be temporary modification of habitat to facilitate overhead line realignment works. It is said this will result in a temporary adverse effect (approx. 4 years) on conservation status at the local level that is not considered significant by the applicant.

Chapter 15 identifies that embedded mitigation measures are expected to reduce impacts on intertidal birds, however low-level impacts are likely to remain due to disturbance and temporary habitat losses. The proposal would result in a temporary adverse effect (approx. 4 years) on the intertidal bird assemblage at the site level which is not considered significant. For both breeding and non-breeding birds there would similarly be a temporary adverse effect (approx. 4 years) at the site level that is not considered significant by the applicant.

A precautionary method of works will be employed as part of the CEMP in order to sensitively clear areas of suitable reptile habitat and displace reptiles into areas of adjacent habitat. With these measures in place a temporary adverse effect (approx. 4 years) at the site level that is not considered significant is expected.

The site is known to support a diverse range of invertebrate species. Habitat loss during construction is expected to result in a significant temporary (approx. 4 years) adverse effect on conservation status at the District level. However, based on the similar areas of suitable habitat within the surrounding marshes, this effect is expected to be reversible and following completion of construction this is expected to reduce to a long term effect that is not considered significant by the applicant.

KCC Biodiversity advise that overall they have no objections to the proposal subject to conditions. These include a Construction Ecological Management Plan (CEMP – biodiversity), an Ecological Design Strategy and Wildlife Sensitive Lighting.

Reptiles

As stated, the applicant's surveys have identified that the site supports notable populations of common reptiles there are a number of reptiles on the site. Reptiles are protected through the Wildlife and Countryside Act 1981 (as amended) and are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).

KCC Biodiversity note that the project ecologists indicate that 1.1 ha of moderate quality reptile habitat will be retained, protected and enhanced during construction but that there will be a permanent loss of 2.6ha of reptile habitat in 2024/2025 (1.2 ha of moderate quality) and a further 3.2 ha of reptile habitat (of which 2.6 ha has been assessed to be of moderate quality by the project ecologists) temporarily lost due to the works to the overhead line in 2028. The temporary habitat clearance is expected to take around 12 weeks to complete, and the project ecologists indicate the habitat will return to its original condition within 6-24 months. Together this habitat loss could have a profound impact on the reptile population on-site in the short to medium term as a minimum.

In response to comments from KCC Biodiversity in the application the applicant has now submitted a reptile strategy which provides proposals for on and off-site reptile mitigation. ~0.56 ha of largely unsuitable reptile habitat has been proposed for improvement, and ~0.78ha of suitable reptile habitat enhanced off-site. This totals ~1.34 ha of land. KCC Biodiversity advise that this falls short of the 2.6 ha of reptile habitat to be lost permanently and 3.2 ha to be temporarily lost but that they understand that not all of the habitat to be lost permanently or temporarily is optimal for use by reptiles. They advise that if the 0.6 ha of less suitable habitat to be temporarily lost is improved in the long-term to benefit reptiles, then 1.94 ha of land will have been created or improved as compensation for the loss of reptile habitat. They advise this is still short of the 2.6 habitat to be permanently lost, although greater than the estimated 1.2 ha of moderate quality habitat to be permanently lost and that based on the rough estimates of habitats to be lost, created and improved, they consider that sufficient information is available to conclude that over the long-term, the local reptile population can be safeguarded. KCC Biodiversity advise that a detailed reptile mitigation strategy should be secured by condition if planning permission is granted and this strategy can be included within a wider ecological design strategy to ensure a holistic approach to protect and prioritise species mitigation and compensation.

Non-statutory Designated Sites and Biodiversity Net Gain

The site lies within the Canal and Grazing Marsh, Higham Local Wildlife Site (LWS). 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 194 and 198 of the NPPF (2024).

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 (2024) states under paragraph 187 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs”*.

In this case as the application was submitted in December 2023 Biodiversity Net Gain (BNG) is not mandatory (which was introduced for major planning applications in February 2024). The proposal therefore stands to be considered against Policy CS12 (LPCS) which states that there shall be no net loss of biodiversity in the Borough.

National Grid proposes both onsite and off-site biodiversity measures. At Gravesend there is a 167m line of trees proposed for creation which would deliver 0.35 hedgerow units. The off-site biodiversity measures would be at Shorne Reedbed in the Gravesham Brough and Cliffe Pools in the Medway Borough.

At Shorne Reedbed there will be areas of moderate condition reedbeds enhanced to good condition which will deliver 48.47 habitat units. There will be 7.31 habitat units delivered from habitat creation. Of the total 122.49 Off-site Post Intervention Habitat Units delivered overall approximately 94 of these units come from Shorne Reedbeds following habitat loss, retention creation and enhancement. The remaining habitat units (approximately 28) would be delivered from Cliffe Pools.

Based on the current plans for the site, the proposed development (including Tilbury) is predicted to result in a biodiversity loss of 13.50% and a biodiversity gain of 25.38%. Overall, this provides a biodiversity net gain of 11.88%.

With both the on and off-site mitigation the proposal would have no net loss of biodiversity in the Borough. KCC Biodiversity have confirmed they are satisfied with this and that the on-site biodiversity measures (including detailed soft landscaping plans) and off-site net gain site should be secured by planning obligation/condition. The off-site biodiversity measures would ordinarily need to be secured by a legal agreement. However, on this occasion the applicant's personal timetable for the project does not allow for the period of time that a legal agreement would take. The applicant discussed with their legal team and they have suggested a way forward being a Grampian condition to secure the off-site biodiversity measures. The Team Leader checked with GBC Legal and suggested condition wording. GBC Legal advised a condition would be acceptable but made some amendments to the condition wording. The condition would have a timeframe of prior to commencement of the development and would request a mechanism be secured for the provision of ecological enhancements on land outside of the red line boundary in accordance with the approved Biodiversity Net Gain Assessment and Strategy Report. The use of a condition would therefore be an acceptable way forward to deal with the off-site biodiversity measures.

KCC Biodiversity also advise that 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/planning obligation if planning permission is granted to ensure that the proposed habitats can be effectively created and managed into the future. They advise that this plan could be secured as part of a condition for an ecological design strategy if planning permission is granted to ensure a holistic approach to protected and priority species mitigation and compensation.

Water Voles

KCC Biodiversity have advised that they are satisfied that effects on water vole can be adequately dealt with through conditions for a construction ecological management plan and ecological design strategy, attached to any granted planning permission.

Invertebrates and Birds

KCC Biodiversity advise that 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 are listed under Section 41 of the Natural Environment and Rural Communities Act (2006).

They advise that the submitted information appears to indicate that there will be a permanent reduction in semi-natural habitats as a result of the proposals and 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.

KCC Biodiversity reference Buglife's comments who state that the project ecologists have undervalued the site's importance for invertebrates. Buglife stated in its comments dated 27th February 2024 that survey data available for the site has led to the site being incorporated into the Thames Estuary South Important Invertebrate Area (IIA) and that this indicates that the site is nationally important for its invertebrate assemblage and linkages to the wider landscape, including South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI).

KCC Biodiversity note that Buglife has made the following comments: “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”.

Buglife has also indicated that commercial seed mixes should not be used at the site to avoid any potential negative effects on the nearby SSSI.

KCC Biodiversity advise that if planning permission is granted for the project, they recommend that conditions for a construction ecological management plan and ecological design strategy are 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

KCC Biodiversity advise that they 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

KCC Biodiversity advise that operational lighting has the potential to have adverse impacts upon biodiversity (e.g., bats and invertebrates) and 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’ and Buglife’s ‘Bug-Friendly Lighting’ advice should be consulted in the lighting design of the development.

They 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.

KCC Biodiversity advise that they disagree with the project ecologists view that no dark buffer zones will be required for this development. They advise that although, the project ecologists have indicated that they do not consider the site of significant importance for bats, the site has been identified to be of national importance for invertebrates which can also be adversely affected by artificial lighting and that based on the submitted information, achieving darkness throughout most of the site for most of the time seems very possible.

As such it is considered that subject to conditions the proposal would be compliant with biodiversity and ecology and in respect of these matters the proposal is compliant with Policy CS12 and section 15 of the NPPF (2024).

Neighbouring/Public Amenity

There are no neighbouring properties close to the site. The nearest neighbouring properties are located in

Dalefield Way to the south some 730m away with properties in Lower Higham Road even further away than this. Due to the significant distance of these properties from the application site it is not considered there would be any impact on any neighbouring amenity from the proposed development.

Noise and Vibration

Chapter 19 of the Environmental Statement covers noise and vibration for the Gravesend area. An appropriate noise assessment has been undertaken, 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. GBC Environmental Protection advise that 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. Mitigation is proposed by way of standard best practicable means and GBC Environmental Protection advise that this can be addressed by way of Construction Environmental Management Plan (CEMP). GBC Environmental Protection consider that there would not be any significant noise or vibration impact during the construction or operation phases.

Air Quality

Chapter 20 of the Environmental Statement deals with air quality for Gravesend and covers the Air Quality Assessment undertaken.

In terms of construction phase impacts, which include construction dust, site plant and equipment emissions and onsite construction power emissions, mitigation measures have been proposed and relate to construction dust emissions and traffic emissions. GBC Environmental Protection consider the proposed mitigation measures acceptable and advise that 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.

Land Contamination

A Land Contamination Preliminary Risk Assessment for Gravesend has been submitted. GBC Environmental Protection advise that they accept its methodology and findings and that 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 and 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. GBC agree and advise this can be dealt with by condition. This is agreed with and can be dealt with by way of a condition.

Electric and Magnetic Fields

Within the submission it is stated that all equipment that generates, distributes or uses electricity produces Electric and Magnetic Fields (EMFs), that the exposure limits for EMFs in the UK are set by the Government on advice from Public Health England and the electricity industry strictly follows these limits. It is stated that the proposed development would be designed to comply with the guidelines for exposure to EMFs.

Therefore, subject to conditions concerning a Construction Environmental Management Plan, Dust Management Plan – Air Quality, contaminated land, watching brief and lighting it is considered the proposal would not impact on neighbouring/public amenity and in regard to this the proposal is compliant with Policy CS19 (LPCS).

Highway Safety

The proposed development would generate some construction traffic. The tunnelling phase will involve the busiest period of construction activity and so will see the most traffic generation during the whole of the proposed development. At Tilbury the shaft and tunnel spoil will be removed via the River Thames meaning approximately 11,440 HGV movements would be removed from the local and strategic highway network. This equates to approximately 42% of total HGV movements for the Proposed Development at Tilbury. At Gravesend the construction works required are less intensive than at Tilbury. This is because the tunnelling will be driven from the Tilbury side. The busiest period of construction activity at Gravesend will be during the sinking of the tunnel shaft. During this period, there would be approximately 2,462 HGV movements spread over 24 weeks.

An Outline Construction Traffic Management Plan has been submitted which identifies a safe and efficient transport route for vehicles to access both the Gravesend and Tilbury sites during the construction period, whilst minimising impacts on the local highway network.

In terms of the operational phase once the construction phase is completed and the new tunnel is commissioned and in operation, it is expected that visits will mirror those of the existing sealing end compounds. The Sealing End Compounds will be unmanned, and infrequent maintenance visits required as detailed below:

- Bi-monthly visits (Tilbury) / monthly visits (Gravesend) with a light van or car for e.g., safety checks on such equipment as fire alarms; inspection or minor maintenance of electrical and ventilation equipment; and
- Maintenance work on electrical/ventilation equipment or buildings involving five to ten light good vehicles visits once every two to five years.

Once completed the facility would therefore require minimal supervision during operation resulting in limited visits from the National Grid. As such, disturbance to local residents and traffic impact during construction and operation of the proposal would be limited. Furthermore, construction issues could be managed through the imposition of a construction management condition to further limit local disturbance. On this basis, the proposal would have a negligible effect on traffic levels in the local area resulting in no impact on highway safety, a conclusion supported by Kent Highways. They have reviewed the revised Highway Impact Assessment and Construction Traffic Management Plan (CTMP) submitted with the application and they recommend that a condition is required to request a full CTMP. Subject to this it is considered the proposal would be acceptable in respect of highway safety matters and this regard the proposal would be compliant with Policy CS11 (LPCS).

Public Right of Way (PROW)

At Gravesend the Thames & Medway Canal Road hosts the National Cycle Network (NCN) Route 1, managed by Sustrans (custodian of the NCN in the UK) and a Public Right of Way (NS317). For health and safety reasons, both of these would need to be diverted during appropriate phases of construction. Pedestrians will be diverted onto nearby Public Right of Way NS318 and NG1 (Sanon Shore Way / England Coast Path). Whereas, cyclists would be diverted onto Chequers Street (at Lower Higham) – Chalk Road – Lower Road – Lower Higham Road – A226 (Rochester Road) – Raphael Road – subway – Prospect Grove – Norfolk Road. KCC PROW raise no objections to the proposal, therefore in respect of the PROW it is considered the proposal is compliant with Policy CS11 (LPCS).

Flooding & Drainage

The site is in the Flood Zone 3. A Flood Risk Assessment has been submitted with the application. The Environment Agency (EA) originally objected to the application as they considered that more information

was required. The EA had queries regarding the modelled data referred to in the FRA and required clarification on the Finished Floor Level (FFL) and the exact mitigation proposed. Following discussions between National Grid and the EA, the EA now advise that they remove their previous objection subject to a number of planning conditions.

Subject to conditions on drainage KCC Flood & Water Management raise no objections to the proposal.

As such subject to conditions it is considered that in respect of flood risk and drainage the proposal would be compliant with Policy CS18 (LPCS).

Heritage

Chapter 9 of the Environmental Statement covers an assessment on the Historic Environment. It does not identify any significant effects for either designated or non-designated heritage assets from the permanent changes and Historic England advise that they broadly agree with the conclusions and do not have any additional comments. The nearest designated heritage assets to the development are a small number of Grade II listed buildings along Lower Higham Road in Chalk. Historic England advise that there would be a modest overall change to the setting of those listed buildings; they state that the construction effects will be temporary for the duration of the project. Overall it is considered that given the distance of the proposal from the designated heritage assets in Lower Higham Road, there would be no impact on the setting of those listed buildings. It is prudent to note that the high level work such as the pylons and overhead lines is not part of the assessment of this application as those elements come under the jurisdiction of DESNZ. In respect of heritage matters the proposal is considered compliant with Policy CS20 (LPCS) and saved Policy TC2 (LPFR).

Archaeology

An Historic Environment Desk-Based Assessment and a Desk-Based Geoarchaeological Deposit Modelling Report have been submitted with the application. These highlight that the proposal would impact surface-level and belowground deposits with archaeological and palaeo-environmental interest, the non-designated Milton Rifle Range and other, presently unidentified archaeological remains. KCC Heritage recommend that subject to conditions the proposal would not harm archaeology. In respect of archaeology the proposal would be compliant with saved Policy TC7 (LPFR).

Design, Character and Appearance

The site is next to the existing SEC at Eastcourt Marshes. The proposal would expand the electricity infrastructure in this local area but given the context of the surroundings this would not be out of keeping. The headhouse is of a modest scale and acceptable design and the appearance of the gantry is bound by its practical purpose. The tunnel under the Thames would not be visible. Overall it is considered the proposal is acceptable in respect of design, character and appearance and in this regard the proposal is compliant with Policy CS19 (LPCS).

Other Matters

Alternative Options

The applicant sets out how three options were considered to address the identified issue of the existing Tilbury to Grain and Tilbury to Kingsnorth 400 kilovolt (kV) circuits not being able to meet the future demand there will be from renewable and low carbon energy. Option 1 was to remove the existing fluid filled cables (FFCs) within the existing tunnel and retrofitting new cross-linked polyethylene (XLPE) cables. However,

option 1 was not considered viable as it carried significant health and safety concerns which could not be eliminated by design or mitigation; this included the work needing to take place in a confined space where the working area would be extremely limited and the work needing to take place adjacent to live equipment as at least one 400kV circuit would need to remain live to maintain electricity supply. Also, during cable replacement, each circuit would need to be switched out for a full outage season. The maximum outage duration that could be facilitated for the refurbishment of the tunnel and shafts would be two, six-month outages, in 2026 and 2028; an uninterrupted 18-month outage per circuit would not be possible for the Kingsnorth-Tilbury and Grain-Tilbury circuits with consecutive outages required per year between 2029 and 2033 for the cable replacement. Given the minimum construction programme to replace a single circuit is 13 months, it was not considered feasible to remove each existing circuit, supporting concrete and install new cables within the outages provided.

Option 2 was to construct a new tunnel under the River Thames parallel to the existing tunnel with (XLPE) cables with associated infrastructure including cable sealing compounds, shaft headhouses and mechanical and electrical services and modifications to the existing overhead lines. This option is the one that was chosen and forms this application. This option posed a higher risk of potentially significant adverse environmental effects but complied with all health and safety and the National Grid's technical requirements and standards and would not impact on the existing circuits for most of the construction phase, with only outages required during the permanent overhead line diversions.

Option 3 was to install a new overhead line across the River Thames to replace the cables in the existing tunnel. This option would have complied with all health and safety, and with all National Grid technical requirements and standards, would have been cheaper and quicker than Option 2 to construct and have fewer traffic movements than option 2. It was not considered a viable option however, as it would have met the criteria of a Nationally Significant Infrastructure Project (NSIP) and require a Development Consent Order (DCO) application meaning a consenting programme which would be considerably more extensive than options 1 and 2. It was also considered it would have been likely to receive substantial stakeholder challenge, particularly in regard to the size of 4VG pylons required (245m) and that there would have likely been long-term significant landscape and visual effects as a result of the required pylon height. Additionally, the fact that the indicative proposed alignment of this option passed through sites of international and national importance for ornithological (birds) features. It is stated that ornithological species susceptible to collision risk are present within this project area and wider zone of influence, including qualifying species of the Thames Estuary and Marshes Special Protection Area / Ramsar. Given the highly migratory nature of many of the species present, significant numbers of species flying at risk heights could not be ruled out. The applicant states the risk is said to be variable according to the species, but in the worst case could be significant, including for species listed as qualifying features for designated sites. There may also have been habitat loss of functionally linked land used by bird species listed as qualifying species of European designated sites.

Any Other Material Planning Considerations

None.

Conclusion

The application site is considered to be a suitable location for the type of development proposed, in view of it being on Green Belt land and would not fundamentally undermine the purposes, taken together, of the remaining Green Belt across Gravesham; that there is an unmet need for the electricity infrastructure nationally in order to support renewable and low carbon energy demand for the future and site is considered to be in a sustainable location.

It has also been found after an assessment of all other matters that the proposal is acceptable in respect of landscape character, biodiversity and ecology, neighbouring/public amenity, highway safety, public right of way, flooding and drainage, heritage, archaeology and design, character and appearance. The applicant has also demonstrated that alternative options have been considered.

It is therefore concluded that subject to the imposition of conditions, the proposal would not conflict with local and national planning policy.

Recommendation

Permission

(For detailed conditions and informatives, see draft Decision)

Case Officer:	Ms Rebecca Harrison	Team Leader:	Richard Hart
Signed:	<i>Rebecca Harrison</i>	Signed:	<i>R Hart</i>
Dated:	3 rd March 2025	Dated:	3 rd March 2025