

The Great Grid Upgrade

Eastern Green Link 5 (EGL 5)

Preliminary Environmental Information Report

Volume 1

Part 1

Chapter 3 Reasonable Alternatives Considered

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3. Reasonable Alternatives Considered

3.1. Introduction

3.1.1. This chapter of the Preliminary Environmental Information Report (PEIR) presents a summary of the site selection process and consideration of the main alternatives undertaken to date for the Project. This chapter provides the following information:

- Section 3.3 describes the Project development process and outlines the approach taken to defining spatial boundaries and emerging options.
- Section 3.4 summarises the strategic options that have been considered for the Project.
- Section 3.5 describes the routing and siting conclusions as presented at non-statutory consultation held in 2025.
- Section 3.6 describes the main alternatives presented at non-statutory consultation which are not taken forward to statutory consultation and provides an indication of the main reasons for the chosen option(s).
- Section 3.7 describes the design changes and developments that have been considered for the Project between the non-statutory and statutory consultation periods based on received feedback and more detailed technical and environmental work.
- Section 3.8 identifies the future steps to be undertaken to refine the Project prior to application submission.

3.1.2. This chapter should be notably read in conjunction and considered alongside the following technical aspect chapters found in **Volume 1**:

- **Part 1, Chapter 1: Introduction;** and
- **Part 1, Chapter 4: Description of the Project.**

3.1.3. This chapter is supported by the following figures in **Volume 3**:

- **Part 1, Figure 3-1: Emerging Preference following marine route options appraisal;**
- **Part 1, Figure 3-2: English Onshore Scheme Anderby Creek Landfall Swathe;**
- **Part 1, Figure 3-3: English Onshore Scheme Graduated Swathe;**
- **Part 1, Figure 3-4: English Onshore Scheme Converter Station Graduated Swathe;** and
- **Part 1, Figure 3-5: English Scoping Boundary.**

3.1.4. This chapter is supported by the following appendix in **Volume 2**:

- **Part 1, Appendix 3.A: Marine Options Appraisal (MOA).**

3.2. Legislative and Policy Context

3.2.1. **Volume 1, Part 1, Chapter 2: Regulatory and Policy Overview** sets out the overarching policy relevant to the Project and alternatives, comprising National Policy Statement (NPS) for Energy (EN-1) (Ref 3.1) and Electricity Network Infrastructure (EN-5) (Ref 3.2), the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017) (EIA Regulations) (Ref 3.3) and the National Grid Electricity Transmission plc (NGET)'s statutory duties as part of the Electricity Act (1989) (Ref 3.4). These have been considered during the appraisal process for the Project alongside the environmental, technical and economic considerations, which have influenced the optioneering and design evolution process.

3.2.2. Schedule 4, paragraph 2 of the EIA Regulations states that an Environmental Statement (ES) should include:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

3.2.3. Whilst there is no statutory requirement to include an assessment of alternatives in the PEIR, the Planning Inspectorate's Advice Note Seven (Ref 3.5) at 9.3 considers that a good ES is one that:

"Explains the reasonable alternatives considered and the reasons for the chosen option taking into account the effects of the Proposed Development on the environment".

3.2.4. While there is no statutory requirement to include an assessment of alternatives in the PEIR, the consideration of alternatives is an integral part of the ongoing development of the Project. This chapter includes a description of the reasonable alternatives, including design and technical alternatives considered at each stage of the development of the Project and provides an indication of the chosen option(s) including a comparison of the environmental effects. Alternatives will continue to be considered in the development of the Project and will be reported in the ES.

3.2.5. In agreeing the scope of the Environmental Impact Assessment (EIA) with the Planning Inspectorate, the Scoping Report for the Project (Ref 3.6) presented the main alternatives considered from the Corridor Preliminary Routeing and Substation Siting Study (CPRSS) (Ref 3.7). More detail can be found in Sections 3.6 to 3.9 in Chapter 3 of the Scoping Report (Ref 3.6). Upon providing their Scoping Opinion (Ref 3.8), the Planning Inspectorate commented at 2.1.4 that:

"The Scoping Report describes the applicant's options' appraisal, including strategic options for the marine route alignment to Scottish waters. The EIA Regulations require an applicant to provide 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'. The Inspectorate acknowledges the applicant's intention to provide a detailed description of siting and routing options appraisal process in the ES as stated in Chapter of the Scoping Report. The Inspectorate would expect the ES to provide details of the reasonable alternatives studied and the reasoning for selection of the chosen option(s),

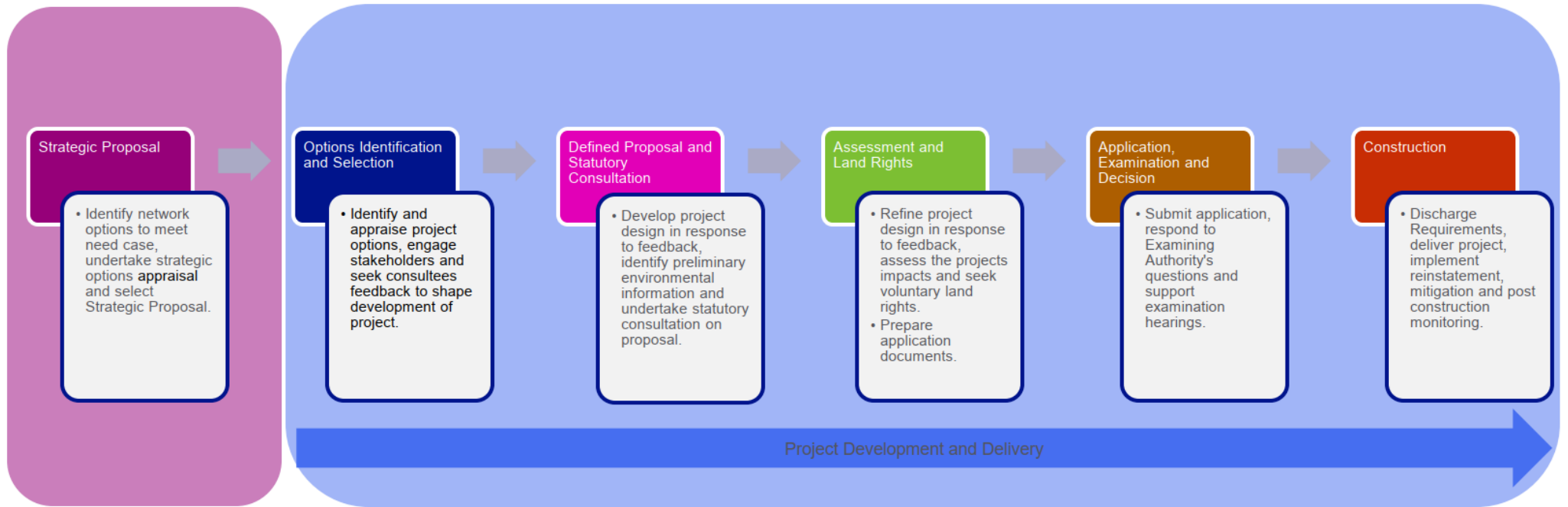
including a comparison of the environmental effects. Technical studies or feasibility work produced to support the appraisal process should be summarised or appended to the ES.”

- 3.2.6. The Environmental Statement (ES) which will be submitted with the Development Consent Order (DCO) application will include details of reasonable alternatives considered, the reasoning for selection of the chosen option, and a comparison of the environmental effects.

3.3. Design Development Process

- 3.3.1. The approach to the design and routeing of new electricity transmission lines, including the consideration of alternatives to the Project, such as alternative routes, sits in the context of National Grid’s Approach to Consenting (Ref 3.9). This outlines the development process for major infrastructure projects, from initial inception to consent and construction. This is a robust and transparent process that is used to compare main alternatives and to assess the positive and potentially adverse effects they may have, across a wide range of criteria, including environmental, socio-economics, technical and cost factors.
- 3.3.2. **Plate 3-1** presents an overview of NGET’s approach to project development and delivery, as set out in National Grid’s Approach to Consenting, and summarises the main objectives of each stage of the consenting process. NGET’s Approach to Consenting comprises the following six stages:
- Stage 1: Strategic Proposal;
 - Stage 2: Options Identification and Selection;
 - Stage 3: Defined Proposal and Statutory Consultation;
 - Stage 4: Assessment and Land Rights;
 - Stage 5: Application, Examination and Decision; and
 - Stage 6: Construction.
- 3.3.3. The following sections provide a summary of the work undertaken to date for the stages completed for the Project. Specifically, the following is described:
- Section 3.4 – describes the process and outcomes associated with Stage 1.
 - Section 3.5 – describes the Stage 2 process for identifying main alternatives and how these were selected.
 - Section 3.9 – identifies the options selected at Stage 2 but not taken through to Stage 3.
 - Section 3.12 – outlines the process and outcomes associated with the evolution of the Project from Stage 2 to Stage 3.

Plate 3-1 NGET's approach to consenting

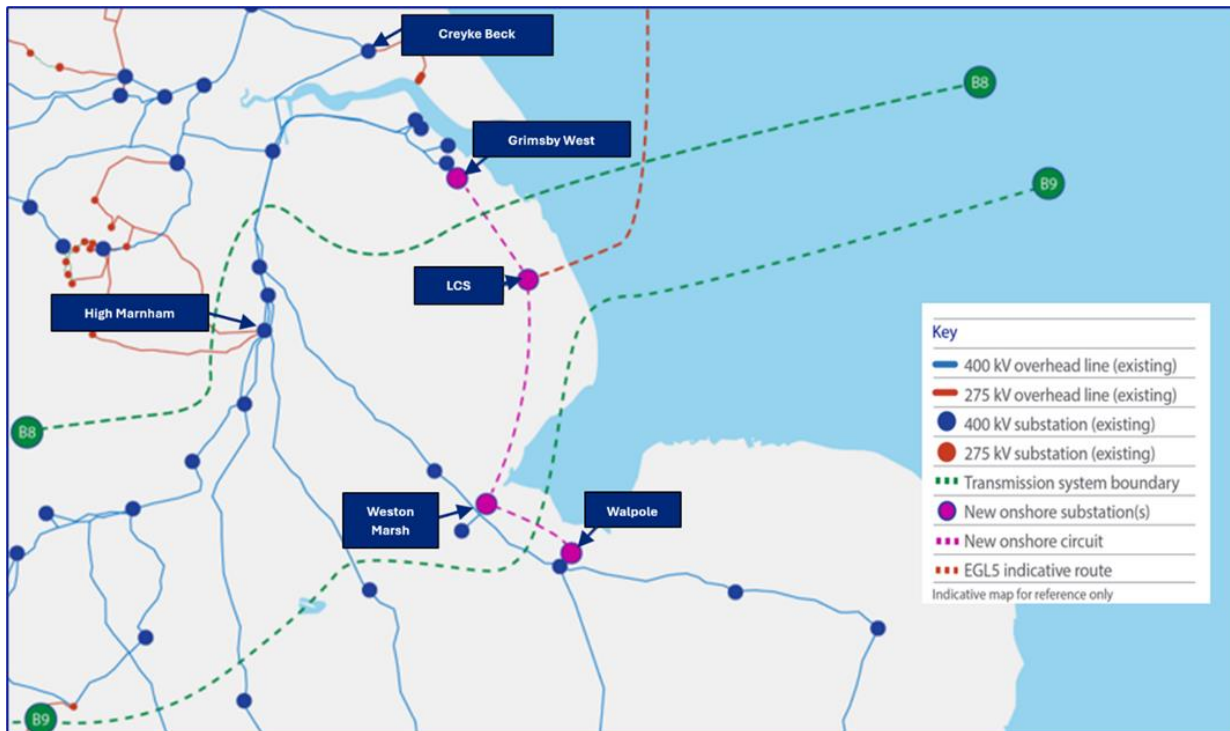


3.4. Stage 1: Strategic Options

Strategic options identification process: The Project

- 3.4.1. Following the National Energy System Operator's (NESO), (formerly known as the Electricity System Operator (ESO)) recommendation for multiple East Coast onshore and offshore reinforcement developments as part of the Pathway to 2030 Holistic Network Design (HND) (Ref 3.10), NGET undertook additional network studies to assess the need for the Project. A strategic optioneering process followed, which is documented in a Strategic Options Report (SOR) (Ref 3.11). This process aimed to evaluate the impact on the existing transmission system in England and Wales, and to confirm, which connection point provided the best value to customers whilst minimising potential environmental and socio-economic impacts. As stated in the needs case for Eastern Green Link (EGL) 5 (as described in the SOR), three distinct issues were identified which need to be considered by system reinforcements that EGL 5 seeks to enhance:
- Provision of capacity and capability from Scotland across the B6 and B7a system boundaries;
 - Consider provision of beneficial capability across B8 and / or B9 system boundaries; and
 - Neutral connection impact upon the East Coast Connections Generation Group (proposed generation contracted to connect in an area south of the Humber Estuary and north of The Wash).
- 3.4.2. A number of potential strategic options were identified which could meet NGET's need case for EGL 5 as well as to enable NGET to meet its statutory duties. Initially a 'long list' of options were identified connecting a number of potential 'start' and 'end' points. These included 'start' points at a landfall in either Lincolnshire or Norfolk and 'end' connection points at, or close to, existing or already planned substations, to minimise the infrastructure required. Further detail on this can be found in the SOR (Ref 3.11). These options were then appraised and filtered to obtain a short list of options, which were subject to a detailed appraisal against a range of technical, socio-economic, environmental, cost and programme issues.
- 3.4.3. The strategic options assessment identified a Strategic Proposal comprising EGL 5 HVDC link south of the B8 transmission boundary to or near to a Main Interconnected Transmission System substation (identified as one of the new Lincolnshire Connection Substation(s) (LCS)). This is referred to as Option 1 (LCS), in the SOR (Ref 3.11), and is shown below in **Plate 3-2**.
- 3.4.4. LCS (A and B), two new substations which are proposed in the Alford area (LCS-A northwest of Alford and LCS-B northeast of Bilsby), are proposed as part of the Grimsby to Walpole Project. The Grimsby to Walpole Project is being developed by NGET to reinforce the electricity transmission system to help deliver the UK Government's Net Zero targets. It forms part of a major programme of reinforcement of the electricity transmission system to accommodate substantial increases in north-south power flows. It would establish a new (wholly or largely overhead line) 400 kV transmission connection, new 400 kV substations at Grimsby West and Walpole, together with new connection substations in Lincolnshire. LCS-B has been identified as the preferred substation for the Project's connection point and it is proposed that EGL 5 will connect directly to the proposed 400 kV LCS-B substation. The new LCS are included as part of the Grimsby to Walpole Project and therefore will be consented through the Grimsby to Walpole DCO.

Plate 3-2 Option 1 (LCS) potential strategic option



3.5. Stage 2: Options Identification and Selection

- 3.5.1. Following confirmation of the Strategic Proposal, the Options Identification and Selection process started for both the English Onshore Scheme and the English Offshore Scheme. Further detail on these stages can be found in the CPRSS (Ref 3.7).
- 3.5.2. NGET have developed over-arching guiding principles for options appraisal. These assist in the decision-making process by helping achieve an appropriate balance between the different competing interests that need to be looked at during an options appraisal. There is no hierarchy in the principles, which echo NGET’s statutory obligations, and are as follows:
- Using or adapting existing infrastructure will generally be given priority over creating new infrastructure.
 - Shorter routes will generally be given priority over longer ones, as smaller-scale infrastructure projects are likely to have lower environmental, safety, sustainability and cost implications (for comparable technology options).
 - Financially less-expensive options, both in terms of capital and lifetime cost, will generally be given priority, as these support NGET’s statutory duty to develop and maintain an ‘efficient, coordinated and economical’ network.
 - Options which avoid or minimise and mitigate impacts on environmental or socioeconomic constraints will generally be given priority over those which have likely significant residual effects, as less environmentally and / or socially damaging routes support NGET’s statutory duty to ‘have regard to the desirability of preserving amenity’ and will more readily achieve consent.
- 3.5.3. Throughout the Options Identification and Selection process, discussions were held by the project team to review findings, challenge judgements, check understandings and assumptions and a develop a relative overview of the overall performance of the end-to-end solution for the Project.

3.6. Options identification process: English Onshore Scheme

- 3.6.1. A CPRSS was undertaken as part of Options Identification and Selection process to further define the location of the proposed English Onshore Scheme infrastructure (see Chapters 5 – 8 of the CPRSS) within a defined study area (Ref 3.7).
- 3.6.2. The focus of the CPRSS was on the routing of new underground cables, and the siting of the new landfall and converter station within the study area.
- 3.6.3. A staged approach was undertaken in line with NGET's Approach to Consenting (Ref 3.9), which comprised of the following:
- Step 1: Defining the study areas – this step sought to identify the broad areas within which transmission infrastructure required for the Project will be located.
 - Step 2: Scope of Environmental Topics and Data Gathering – data was obtained to understand the presence, and distribution of environmental, socio-economic, and technical constraints and opportunities within the study areas. Buffers were also included for some features representing constraints, where it was considered that potentially significant indirect impacts could occur from beyond the asset itself.
 - Step 3: Ascribe a weight to confirm and 'Heat Map' Features - features identified in Step 2 were assigned a classification or "sensitivity weighting" based on their sensitivity to the technology likely to be required for the Project. Sensitivity weightings associated with these features were reviewed and were then combined to produce separate composite 'heat maps'.
 - Steps 4 – 6: Identifying and Defining Corridors, Siting Zones or Siting Areas and Landfall Appraisal – starting with the heat maps produced in Step 3; corridors, siting zones or siting areas were then identified, defined, refined, and confirmed, informed by a combination of GIS analysis, professional judgement, knowledge of routing and siting considerations, and site visits undertaken by both environmental and engineering specialists.
 - Steps 7 – 8: Options Appraisal and Selection of Preferred Options - All options were appraised taking into account potential effects on the environment, the local community, relevant planning policy, including the NPS for EN-1 and EN-5, other existing and proposed development as well as technical and engineering design information to agree a preferred Landfall study area, corridor and siting zones.

3.7. Options identification process: English Offshore Scheme

- 3.7.1. When considering the development of options for marine route alignments (proposed offshore HVDC cable corridors), NGET took the decision to parallel the EGL 3 Project within English waters as far as possible to minimise seabed utilisation, as well as consider coordination with the EGL 3 and EGL 4 Projects on the approach to the Lincolnshire coastline to minimise impacts to adjacent constraints and landfall sterilisation. This decision is in line with National Policy Statement EN-5 (Ref 3.2), including paragraph 2.12.3 and 2.13.12 and 2.13.17, which state that applicants for offshore transmission projects must show that they are coordinating with others to reduce impacts, and should plan their routes and infrastructure with future electricity demand in mind. They also explain that new electricity infrastructure should be built close to or aligned with the coastline, especially along the east of England, where offshore wind power comes onshore.

3.7.2. With this objective in mind, a staged approach was taken that sought to make use of assessments and learnings from the EGL 3 and EGL 4 Projects. In line with NGET's Approach to Consenting (Ref 3.9), the steps consisted of:

- Step 1: Confirm the study area – this step identified the area between the English coastline and the marine boundary between English and Scottish adjacent waters within which transmission infrastructure required for the English Offshore Scheme would be located.
- Step 2: Scope of Environmental Topics and Data Gathering – data on physical, biological, and socio-economic constraints obtained for EGL 3 and EGL 4 within the study area was audited to ensure no new information was available prior to the identification of marine route alignments. Buffers were included around some 'physical' constraints such as wrecks, oil and gas platforms and wells, existing cables and pipelines in accordance with industry guidance.
- Step 3: Ascribe a weight to constraints - features identified in Step 2 were assigned a classification or "weighting" based on its nature, value or sensitivity and how it could be affected by the English Offshore Scheme or conversely whether it could affect the English Offshore Scheme i.e., presents a technical challenge meaning that the cable could not be installed.
- Step 4: Define Marine Route Alignments – starting with the marine route alignments developed for EGL 3 and EGL 4, and using the updated constraints map, marine route alignments were developed through a combination of GIS analysis, professional judgement and knowledge of technical and environmental routeing considerations.
- Step 5: Options Appraisal and Selection of Preferred Marine Route - All options were appraised considering four topic areas; environment, socio-economic, technical and cost. Within these topic areas there were a list of sub-topics which align with best practice informed by the requirements of the EIA Regulations, developed to apply more specifically to the marine environment. This is reported in **Volume 2, Part 1, Appendix 3.A: Marine Options Appraisal.**

3.8. Study Areas

Landfall Options Selection

3.8.1. As mentioned in Section 3.4, consideration was initially given to options which made landfall on either the Lincolnshire or North Norfolk coastlines. Through the Strategic Options appraisal, landfall on the North Norfolk coastline was discounted through selection of the preferred Option 1 (See Section 3.4 of this Chapter). Options which included landfall via the Norfolk Coastline presented more constraints, such as potential impacts to additional designated sites including the Wash and North Norfolk Coast Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar, Cromer Shoal Chalk Beds Marine Conservation Zone (MCZ) and the Norfolk Coast National Landscape. Further detail on why North Norfolk coastline landfalls were discounted can be found in the SOR (Ref 3.11).

- 3.8.2. Chapter 4 of the CPRSS (Ref 3.7) details that the identification of the potential preferred Landfall option involved a Preliminary Landfall Siting Study. Prior to this study being undertaken for EGL 5, an appraisal had been carried out for the EGL 3 and EGL 4 Projects in 2024 for potential Landfalls on the Lincolnshire and North Norfolk coastlines. This information was used as a starting point for EGL 5 Landfall identification and appraisal, and was reviewed, updated accordingly for the EGL 5 Need Case and assumed parameters, and updated with any new data. This appraisal was presented within the SOR (Ref 3.11) for Stage 1, in which two preferred Landfall Study Areas for Lincolnshire were identified (Theddlethorpe and Anderby Creek). More detail on these can be viewed within the CPRSS (Ref 3.7) and MOA:
- Theddlethorpe: This landfall study area is located approximately 4.5 km north of the town of Mablethorpe on the Lincolnshire coastline. The potential landfall location could be accessed via Crook Bank Road, directly off the A1031. The landfall study area has a rural setting, with the former Theddlethorpe Gas Terminal immediately to the south and west and agricultural land to the west. The most prominent coastline features are the tidal flood defence sand dunes running north to south along the coastline and the Saltfleetby to Theddlethorpe Dunes & Gibraltar Point SAC and Saltfleetby – Theddlethorpe Dunes SSSI.
 - Anderby Creek: Anderby Creek is a small holiday village in Lincolnshire, to the north of Skegness. The potential landfall location could be situated to the north or south of Anderby Creek and accessed via Roman Bank Road. This landfall study area has a mainly rural setting with the most prominent coastline feature being a beach with tidal flood defence / sand dunes running north to south and with agricultural land to the west.
- 3.8.3. The landfall study areas defined the area within which the offshore (subsea) cables come ashore. This is the interface between the onshore (terrestrial) and offshore (marine) components of the Project. The landfall study area is considered to extend from Mean Low Water Springs (MLWS) (where it overlaps with the offshore components of EGL 5) across the intertidal zone to terminate at a Transition Joint Bay (TJB).
- 3.8.4. The two landfall study areas were then subjected to an options appraisal considering the landfall parameters and the environmental, socio-economic and technical topics for each landfall study area. The options appraisal was informed by relevant data and feedback received on the EGL 3 and EGL 4 Projects' CPRSS (Ref 3.12), Marine Non-Statutory Environmental Appraisal Scoping Reports (for the EGL 3 and EGL 4 Projects' English Offshore Scheme and Scottish Offshore Schemes) and Scoping Report (for the EGL 3 and EGL 4 Projects' DCO) (Ref 3.13).

Onshore and intertidal area appraisal

- 3.8.5. Feedback provided on these documents received from the Marine Management Organisation (MMO) and Natural England both shared views around the need to avoid as far as practical the Saltfleetby to Theddlethorpe Dunes & Gibraltar Point SAC and Saltfleetby – Theddlethorpe Dunes SSSI. These designated sites could not have been avoided should a landfall at Theddlethorpe have been chosen, and adverse effects on integrity could not be ruled out in relation to the Saltfleetby to Theddlethorpe Dunes & Gibraltar Point SAC.

- 3.8.6. A review of trenchless crossings at the landfalls identified an absence of existing information regarding feasibility of trenchless crossings at the Theddlethorpe landfall and the need for a longer Horizontal Directional Drilling (HDD) crossing when compared to the Anderby Creek landfall. An exit point on the beach would also be required at the Theddlethorpe landfall outside of the Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC but within the Humber Estuary SPA and Ramsar site, within the Greater Wash SPA, and within the Saltfleetby - Theddlethorpe Dunes SSSI and the Lincolnshire Coronation Coast National Nature Reserve (NNR), adding to the consenting risk if this option was taken forward.
- 3.8.7. As part of the trenchless crossing at the landfall, it would be necessary to carry out ground investigation works before confirming whether an HDD trenchless solution is feasible at either landfall. For the Theddlethorpe landfall it was identified that adverse effects on integrity arising from ground investigation surveys could not be ruled out. Alongside other factors, these would require demonstration that there were no alternative solutions to the delivery of the surveys, that would have a lesser or no effect on Habitats Sites. If information is not sufficient to confirm that an adverse effect on the integrity of the designated site cannot be ruled out, an investigation of alternative solutions is undertaken. To proceed with Theddlethorpe it would have been required, pursuant to The Habitats Regulations, to demonstrate that there were no feasible alternatives, which would not have been satisfied when Anderby Creek offered a feasible alternative solution.

Offshore appraisal

- 3.8.8. An options appraisal was undertaken to consider the landfalls in isolation to the marine route options. As the approach to a landfall is an integral part of the appraisal, two short sections of marine route options were considered as part of the landfall options appraisal. The nearshore section of ENG Route C to Theddlethorpe and a short section common to ENG Route A and ENG Route B to Anderby Creek were used, as shown in Figure 4-2 of **Volume 2, Part 1, Appendix 3.A: Marine Options Appraisal**.
- 3.8.9. Whilst Theddlethorpe and Anderby Creek share many of the same marine ecological constraints, the marine route alignment to Anderby Creek was marginally more ecologically constrained under the categories 'water' and 'coastal processes'. The higher 'water' risk was associated with the higher density of bathing waters compared to Theddlethorpe, whilst the coastal processes risk was due to the beach at Anderby Creek being subject to annual beach nourishment / replenishment as part of the Saltfleet to Gibraltar Point Beach Management Strategy (Ref 3.14).
- 3.8.10. The preference from a marine perspective is driven by the technical complexity of a trenchless landfall technique such as HDD. At Theddlethorpe a longer drill would be required (1700 m) to navigate beneath terrestrial protected features. However, initial designs indicated that the HDD would still only exit in shallow water, or within the intertidal zone. This would make the marine construction challenging with the need for different installation tools and vessels. At Anderby Creek, a shorter, less complex trenchless landfall technique could be undertaken, with the exit point being in relatively deeper water, simplifying the construction methodology. Several other projects including Triton Knoll Offshore Wind Farm (OWF) and Viking Link interconnector have successfully completed HDD in the Anderby Creek area, demonstrating the feasibility of the technique. Anderby Creek also offers to potential for coordination with other projects such as EGL 3 and EGL 4.

3.8.11. Following the reasoning explained in the paragraphs above, Theddlethorpe was identified as least preferred option and as such, onward onshore underground cable routeing from Theddlethorpe was not considered within the CPRSS. Anderby Creek was therefore taken forward as the emerging preference for landfall.

Onshore

3.8.12. The connection points of the selected strategic option (the Anderby Creek Landfall, the EGL 5 converter station and the proposed 400 kV LCS-B in East Lindsey) were taken as a start point for the definition of the study areas for the onshore components for EGL 5, i.e., the English Onshore Scheme. Given the geographical extent of the English Onshore Scheme, three distinct but interrelated study areas were defined within the CPRSS. These study areas covered the Landfall, the new underground cable onshore connections and the new EGL 5 converter station (in the vicinity of LCS-B). The approach to developing the separate study areas is detailed within the CPRSS; however, at a high-level, the approach was based on balancing:

- NGET's statutory duty to develop an efficient, co-ordinated and economical system of transmission (Section 9 of the Electricity Act 1989 (Ref 3.4));
- NGET's statutory duty to preserve amenity under Section 38 and Schedule 9 of the Electricity Act 1989;
- Holford Rule 1 (Ref 3.15) (which is to "avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is somewhat increased in consequence"); and
- Horlock Rule 2 (Ref 3.16) (which is to "as far as reasonably practicable seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections").

3.8.13. The separate study areas overlapped, and as such, the combined areas were referred to as 'the Study Area', located within the district of East Lindsey.

Offshore

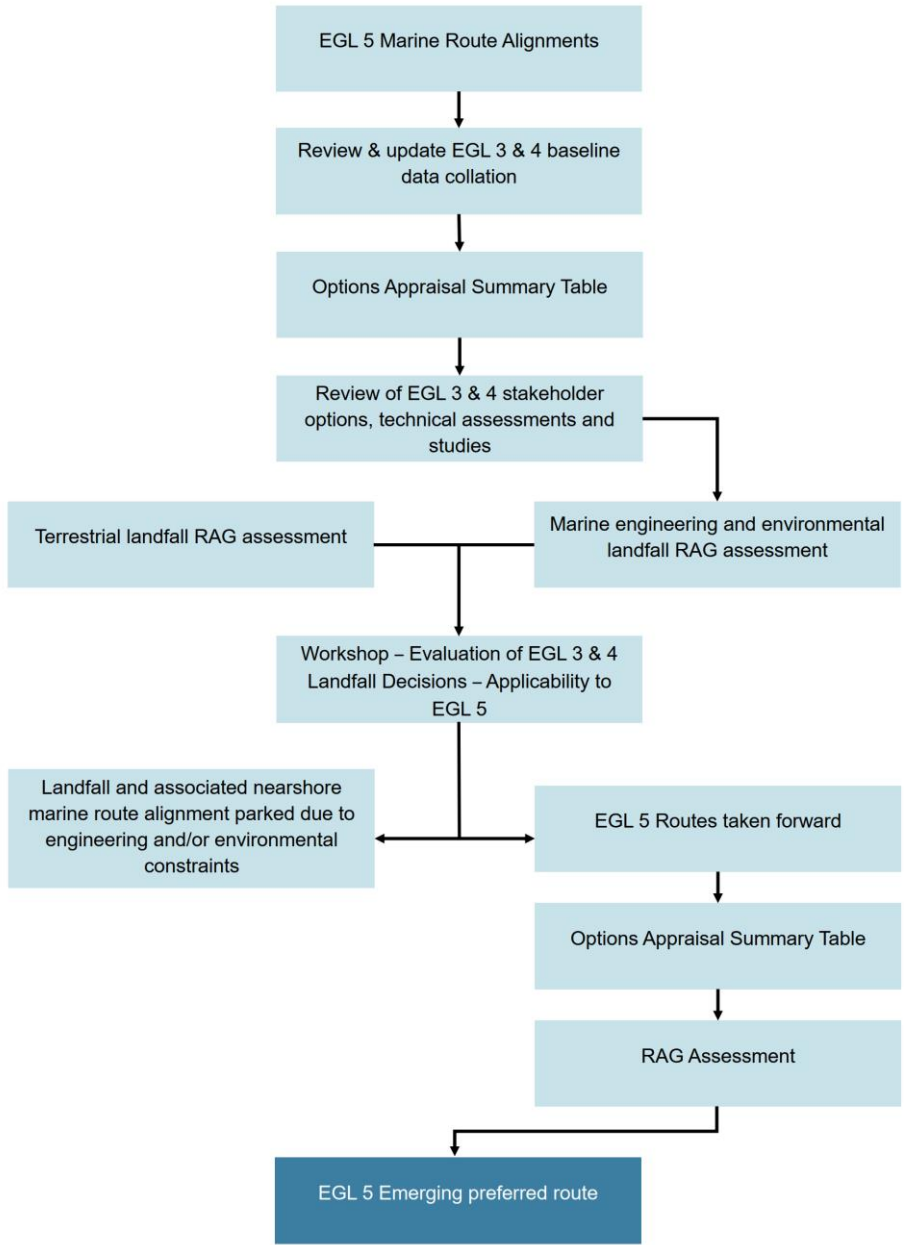
3.8.14. The English connection point in Lincolnshire and the transition points on the marine boundary of the England / Scotland adjacent waters were taken as the start points to define the offshore routeing and siting study area. In Scotland, NGET's project partner, Scottish and Southern Electricity Networks – Transmission (SEN – T) have identified a connection point on the Aberdeenshire coastline. Immediately next to the marine boundary of the England / Scotland adjacent waters, in Scottish waters, Morven (fixed foundation) OWF is in the pre-application stages of consent and Ossian floating OWF has submitted its application for a marine licence to the Scottish Government. The locations of these OWF sites constrain the approach into Scottish waters from England and therefore define the transition points at the marine boundary between England / Scotland adjacent waters.

Marine Routeing Identification

3.8.15. Following the identification of potential landfall sites, it was possible to identify potential marine routes (Step 4 of the NGET's Approach to Consenting). The aim of the marine routeing phase is to ensure that a marine cable route can connect to landfall sites while avoiding key constraints. When considering marine route options, the following criteria were considered:

- Avoid environmentally sensitive areas, where possible;
 - Avoid areas which would restrict vessel movement e.g., anchorages, marine aggregate extraction areas and aquaculture sites;
 - Avoid areas of archaeological importance and wrecks;
 - Avoid existing offshore infrastructure e.g., OWF;
 - Minimise crossings of in-service cables and pipelines and where not possible seek to optimise crossing angles to ensure navigational safety or water depth is not adversely affected;
 - Avoid hazardous seabed e.g., mobile sediments or bedrock outcrops and sub crops, where possible; and
 - Minimise any impact on third parties such as seasonal fishing activities or local tourism.
- 3.8.16. Marine route options that were technically and environmentally suitable and took into consideration stakeholder feedback received for EGL 3 and EGL 4 were developed to the landfall options and the marine boundary between England / Scotland adjacent waters. The decision was taken to parallel the EGL 3 Project as far as possible to minimise seabed utilisation, as well as consider coordination with the EGL 3 and EGL 4 Projects on the approach to the Lincolnshire coastline to minimise impacts to adjacent constraints and landfall sterilisation.
- 3.8.17. Marine routes were identified considering the above and were developed in three distinct areas: English landfall, offshore section and approach to marine boundary between England / Scotland adjacent waters.
- 3.8.18. For the English landfall, six marine route alignments (ENG Route A to ENG Route F) were identified. For the approach to the marine boundary between England / Scotland adjacent waters, three route alignments (SCOT Route A to SCOT Route C) were identified to provide optionality on the offshore connection point around the proposed Morven and Ossian OWF's which lie in Scottish waters immediately next to the marine boundary between England / Scotland adjacent waters. These marine route options are presented in **Volume 2, Part 1, Appendix 3.A: Marine Options Appraisal**.
- 3.8.19. Constraints in the offshore area were extensively investigated for the EGL 3 and EGL 4 Projects, and the offshore area was identified as having little environmental or technical constraints. One offshore route was therefore developed that routes to the east of EGL 3, to avoid an infrastructure crossing of the proposed cables, avoid potential areas of *Sabellaria spinulosa* reef identified on United Kingdom Hydrographic Office high resolution bathymetric data and optimise the route length. Additional options would add route length to the Project without bringing any technical or environmental benefit.
- 3.8.20. An iterative, phased process was used to appraise the landfall and marine route options (Step 5 of NGETs Approach to Consenting). The aim of the options appraisal approach is to identify, in an auditable, robust, transparent and consistent manner, emerging preferences for siting and routing infrastructure. The process consisted of workshops with the Project team and consultation with key marine statutory stakeholders and industry (i.e., other marine users) before a decision workshop on which options should be taken forward. This process is summarised in **Plate 3-3**.

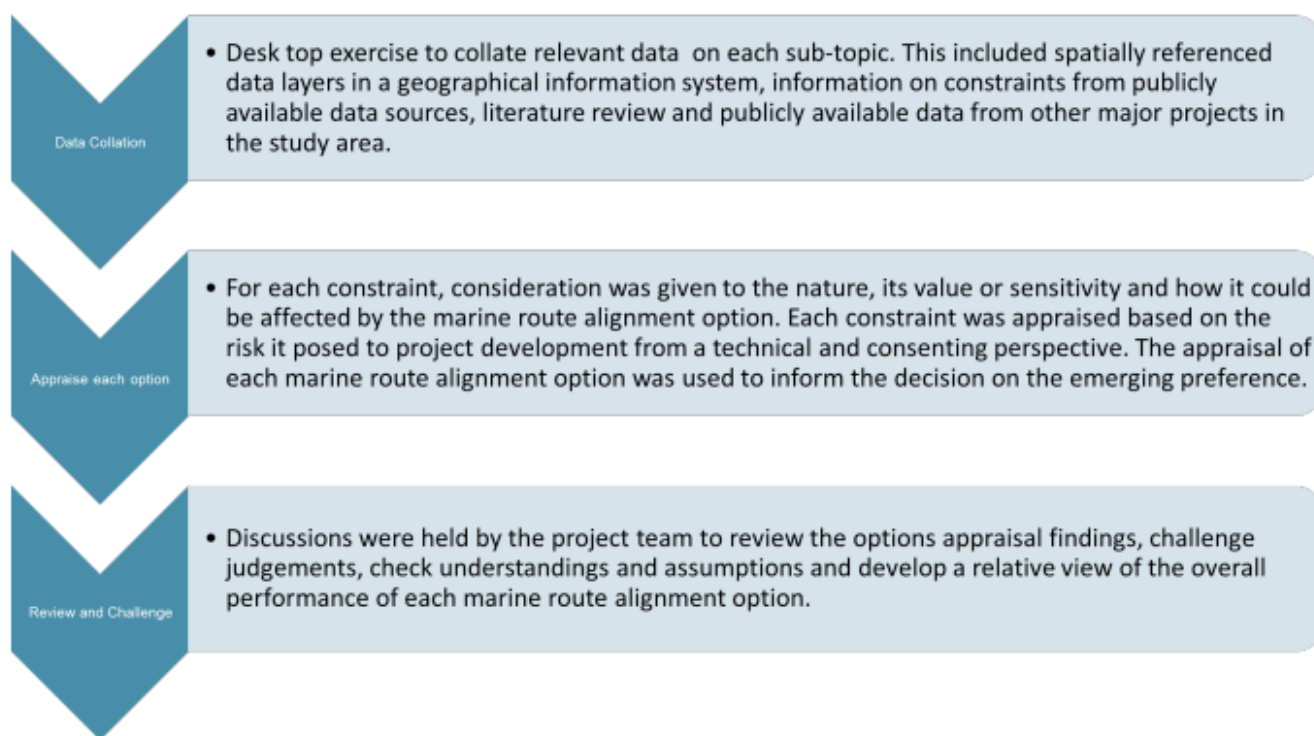
Plate 3-3 Overview approach to landfall and marine route options appraisal



3.8.21. The MOA (**Volume 2, Part 1, Appendix 3.A: Marine Options Appraisal**) included consideration of four topic areas: biological environment, socio-economic, technical and cost. Within these topic areas, sub-topics were considered which align with best practice informed by the requirements of the EIA Regulations. A comparative appraisal of landfall locations and marine route alignments was carried out. Landfall and marine route alignments presenting the lowest consenting risk led to emerging preferences.

3.8.22. The appraisal process was completed following the stages presented in **Plate 3-4**.

Plate 3-4 Approach to Marine Options Appraisal



3.8.23. The process considers the Planning Inspectorate’s Advice Note Seven (Ref 3.5) on the consideration of alternatives and the effects of the development on the receiving environment.

3.8.24. Further information can be found in **Volume 2, Part 1, Appendix 3.A: Marine Options Appraisal**.

Options Selection: English Onshore Scheme

Onshore Route Corridor

3.8.25. Within the new underground cables onshore connections study area, a corridor identification exercise was undertaken to identify a network of potential corridors within which the underground onshore HVDC cables would route. To allow for clear, comparative analysis, these were structured and named. Following identification of the Anderby Creek landfall study area as the emerging preferred landfall and a connection to the proposed 400 kV LCS-B as preferred, the Corridors to be progressed to options appraisal were reviewed. These Corridors (1-6), and the selection process, are outlined in more detailed in Section 5 of the CPRSS (Ref 3.7) for EGL 5. Two Corridors between the Anderby Creek landfall study area and the proposed 400 kV LCS-B were identified (see **Volume 3, Figure 3-3**) and are described below:

- Corridor 5: This Corridor begins at the connection with the Anderby Creek Landfall, and routes west, north of Huttoft, extending over the A52 and then A1111, before finishing at the A1104 between Beesby and Alford.
- Corridor 6: This Corridor begins at the connection with the Anderby Creek Landfall, and routes west, south of Huttoft, extending over the A52 and the A1111, before finishing at the A1104 between Beesby and Alford.

- 3.8.26. A comparative review of the preferred Corridors (5 and 6) was undertaken (as summarised within Sections 5 and 6 of the CPRSS) From an environmental and socioeconomic perspective, although there were minor differentiating features, such as the presence of a Grade II Listed Building in Corridor 5, these are avoidable through careful routeing and as such did not give rise to a preference following a comparative review within the CPRSS.
- 3.8.27. From an engineering perspective, Corridor 5 was identified as being marginally preferred, with Corridor 6 a close second. This is due to several factors including additional flexibility due to the larger number of alternative options being available, fewer medium / high risk constraints to cross and shorter cable route lengths for proposed converter station Siting Zones. However, this was subject to further coordination and design development with other projects in the area (with regards to their onshore project elements); including the Grimsby to Walpole Project, EGL 3 and EGL 4 Projects and Ossian OWF.
- 3.8.28. As such, it was considered that, subject to the selection of the preferred EGL 5 converter station Siting Zone, both Corridors 5 and 6 were to be retained as the emerging preferences for the underground cable routes between the Anderby Creek landfall study area and the proposed 400 kV LCS-B, with a marginal preference for Corridor 5.

Siting Zones

- 3.8.29. The EGL 5 converter station siting zones were developed through the definition of a study area (Step 1), mapping and weighting of features (Step 2 and Step 3), and an iterative identification, review and refinement process (Steps 4, 5 and 6). The EGL 5 converter station siting zones were developed to accommodate a converter station up to 9 ha in area. The converter station siting zones (1-16), and the selection process, are outlined in more detailed in Section 5 of the CPRSS (Ref 3.7) for EGL 5. The siting zones (see **Volume 3, Figure 3-4**) progressed for options appraisal, comprised:
- Siting Zone CS05: an area which is up to 3.1 km by 800 m (approximately 235 ha) and is located up to 300 m north of Bilsby and 190 m east of Thoresthorpe. The siting zone overlaps with the Wold Grift Drain and the A1111.
 - Siting Zone CS06: an area which is up to 1.4 km by 500 m (approximately 85 ha) and located west (up to 100 m) of Huttoft. The siting zone is up to 240 m west of the A52.
 - Siting Zone CS07: an area which is up to 675 m by 550 m (approximately 26 ha) and is located up to 550 m northeast of Huttoft. It is up to 260 m east of the A52.
 - Siting Zone CS08: an area which is up to 475 m by 350 m (approximately 15 ha) and is located between Alford (1.45 km east of Alford) and Thurlby (up to 1.42 km west of Thurlby) and approximately 280 m southeast of Bilsby. The B1449 is immediately north of the siting zone.
 - Siting Zone CS16: an area which is approximately 580 m by 450 m (approximately 24 ha) and is located approximately 150 m north of Anderby and 570 m southeast of Huttoft. It is approximately 490 m east of the A52.
- 3.8.30. Following comparative appraisal of the EGL 5 converter station siting zones, siting zones CS07, CS08 and CS16 were identified as least preferred in the CPRSS due to the limited flexibility for siting, and therefore potential increased technical complexity for siting within these zones. The limited flexibility for siting within these zones is likely to present more limited opportunities to avoid or adequately mitigate potential environmental and socio-economic impacts.

- 3.8.31. Siting zones CS07 and CS16 were less preferred as these siting zones resulted in the longest lengths of High Voltage Alternating Current (HVAC) cable due to their distance from the preferred siting area for the proposed 400 kV LCS-B. This additional length of underground cabling would have increased the geographical spread of development on the basis that HVAC cabling requires a much wider construction corridor. Therefore, this would increase the risk of encountering technical constraints and increase the likelihood, and scale, of potential adverse environmental and socio-economic impacts.
- 3.8.32. On balance, siting zones CS05 and CS06 were identified as the preferred options to be taken forward. Environmentally, there were few factors identified to differentiate between the two siting zones. While CS05 and CS06 both had identified constraints, it is considered that the size of the siting zones is such that these constraints could be avoided and / or adequate mitigation could be implemented to reduce the magnitude of potential impact. Potential impacts and required mitigation will be assessed in full within the ES for the Project which will be submitted with the DCO application. Therefore, siting zones CS05 and CS06 were selected as the emerging preferences for the EGL 5 converter station location in the CPRSS.
- 3.8.33. Locating the proposed EGL 5 converter station within CS05 also offered the opportunity to be located near the proposed 400 kV LCS-B. From an environmental perspective, the co-location of infrastructure is considered preferable to reduce the spread of potential impacts across the wider region. From an engineering perspective, this would offer opportunities in terms of shared infrastructure (such as haul roads). CS05 also allows for the shortest deviations of underground HVDC cables between the new landfall at Anderby Creek and the proposed 400 kV LCS-B.
- 3.8.34. Following the identification of the preferred onshore route corridors and preferred siting zones, a 'graduated swathe' was identified within these which took into consideration environmental and socio-economic constraints, the Holford and Horlock Rules and technical considerations. The graduated swathes indicate the broad areas where the proposed new infrastructure is likely to be located. The darker areas of the graduated swathe indicated a greater preference for the location of the required infrastructure. The graduated swathe areas then went on to inform the EIA Scoping Boundary for the English Onshore Scheme and subsequently the draft Order Limits detailed within this PEIR (and shown on **Volume 3, Part 1, Figures 1-1 to 1-3**). The draft Order Limits are the indicative area within which new infrastructure and temporary construction works may be located.

Options Selection: English Offshore Scheme

Marine Route Options Selection

- 3.8.35. The marine route appraisal concluded with an emerging preference, that included optionality associated with the route through the Holderness Offshore MCZ. Two marine route alignments (ENG Route A and ENG Route B) through the Holderness Offshore MCZ, as shown in **Volume 3, Part 1, Figure 3-1**, were taken forward for surveys, as further information on ground conditions was needed to assess the relative impact of cable installation methods and potential external cable protection of both options within the Holderness Offshore MCZ before discounting either one of the options.

3.8.36. Neither route could avoid the Holderness Offshore MCZ completely due to limited space around the southeastern side of the MCZ caused by the presence of existing infrastructure - an existing pipeline and the Hornsea 1 and 2 export cables. This infrastructure results in there being only sufficient physical space for one cable circuit to completely avoid the MCZ. This space will be utilised by the proposed EGL 3 Project. The positioning of the route for EGL 5 has been developed with consideration of where the proposed EGL 3 and EGL 4 Projects originate from in Scotland to minimise cable crossings and minimise technical and engineering constraints. The EGL 4 Project takes the most technically advantageous route across the Silver Pit Glacial Tunnel Valley bathymetric feature i.e., lowest slope angles to maximise burial feasibility. Whilst ENG Route B takes a shorter route across the feature it is more technically challenging due to the steeper slope angles encountered.

3.8.37. Survey data was collected along both marine routes to inform the decision-making process and stakeholder engagement undertaken with the MMO, the Joint Nature Conservation Committee and Natural England to establish their views and understand the risks of each option. A summary of the routes and findings from the surveys have been provided in **Table 3-1**.

Table 3-1 Summary of routes considered through the Holderness Offshore MCZ

ENG Route A	ENG Route B
<ul style="list-style-type: none"> Extends through the Holderness Offshore MCZ for 20.5 km. 	<ul style="list-style-type: none"> Extends through the Holderness Offshore MCZ for 4.8 km.
<ul style="list-style-type: none"> Up to 85 % of the route may require cable protection (17.5 km). 	<ul style="list-style-type: none"> Up to 100 % of the route may require cable protection (4.8 km).
<ul style="list-style-type: none"> Intersects two pipelines requiring crossings. 	<ul style="list-style-type: none"> Intersects one pipeline requiring a crossing.
<ul style="list-style-type: none"> Extends through three broadscale habitats 'Subtidal Coarse Sediment,' 'Subtidal Mixed Sediment' and 'Subtidal Sands,' protected features of the MCZ. 	<ul style="list-style-type: none"> Extends through two broadscale habitats 'Subtidal Mixed Sediment' and 'Subtidal Sands'.
<ul style="list-style-type: none"> Grab samples assigned the biotope 'Faunal communities of Atlantic circalittoral coarse sediment' (MC321) for most sampling stations within the MCZ apart from at one environmental baseline sample station which was assigned 'Faunal communities of Atlantic circalittoral mixed sediment' (MC421). 	<ul style="list-style-type: none"> Grab samples assigned the biotope 'Faunal communities of Atlantic circalittoral coarse sediment' (MC321) for most sampling stations within the MCZ.
<ul style="list-style-type: none"> Possible aggregations of 'Medium' Annex I stony reef identified at one environmental baseline sample station within the MCZ. 	<ul style="list-style-type: none"> Possible aggregations of 'Medium' Annex I stony reef at one environmental baseline sample station within the MCZ.

ENG Route A**ENG Route B**

- A possible Ocean quahog *Artica islandica* siphon was identified at one environmental baseline sample station within the MCZ. Grab or eDNA samples taken within the MCZ contained no Ocean quahog.
 - Grab or eDNA samples taken within the MCZ contained no Ocean quahog.
 - Crosses the North Sea Glacial Tunnel Valleys (Inner Silver pit) feature of the MCZ for approximately 2.8 km.
-

- 3.8.38. Considering the above and in accordance with the mitigation hierarchy, ENG Route B has been selected as the preferred option for the Project as the shortest route through the MCZ which minimises potential impacts to protected features. Potential impacts to protected features will be assessed in full in the ES which will be submitted with the DCO application.
- 3.8.39. Following completion of all offshore surveys, landfall decision and MCZ routeing decision, draft Order Limits were developed for the Project encompassing all activities required to be undertaken for the cable construction.

3.9. English Onshore Scheme Options not taken forward at the Statutory Consultation

- 3.9.1. An overview of the Preferred Corridor, Preferred Converter Station Siting Zones and associated graduated swathe from Anderby Creek Landfall to the proposed 400 kV LCS-B of the Grimsby to Walpole Project was presented at the non-statutory consultation held from 13 May to 23 June 2025 and detailed within the CPRSS. Subsequent to the non-statutory consultation, a Scoping Report (Ref 3.6) was produced and submitted to the Planning Inspectorate, who responded with their Scoping Opinion (Ref 3.8).
- 3.9.2. The feedback received during consultation and within the Scoping Opinion has been carefully reviewed and considered, informing the ongoing technical work on the technical design and the EIA process. A non-statutory consultation feedback report has been produced which will set out the feedback received and how NGET has responded to this. This document forms part of the statutory consultation package and can be found on the EGL 5 website (Ref 3.17).
- 3.9.3. This section provides a summary of the English Onshore Scheme options which are no longer taken forward in the statutory consultation. These changes are made in response to feedback received through the non-statutory consultation and ongoing technical and environmental studies, and include changes brought by the Project team during iterative reviews of the evolving design.

3.10. Converter Station Siting Zone CS06

- 3.10.1. Within the CPRSS, two converter station siting zone options were presented; CS05 (north east of Bilby) and CS06 (north west of Huttoft).
- 3.10.2. Overall, there were a higher number of responses to the non-statutory consultation objecting to or responding negatively to the location of converter station siting zone CS06 (towards the east). Reasons for opposition to converter station siting zone CS06 included being too close to residents and Radcliffe Donkey Sanctuary, and negative impact on the rural environment.
- 3.10.3. Preliminary landscape and visual assessment (using zones of theoretical visibility) concluded that for both converter stations there was very little difference in terms of potential visibility in the study area, and similar numbers of residential receptors would be affected for both and therefore did not prove to be a determining factor for converter station selection. It was also believed that siting nearer to the LCS-B substation would be preferable from a cumulative landscape and visual perspective, an opinion that has been corroborated by feedback received from Natural England.
- 3.10.4. Siting the converter station closer to LCS-B also had technical advantages in that this reduced the length of HVAC cable (which is more costly and which has a bigger construction footprint to install than HVDC cable).
- 3.10.5. Therefore, considering the technical, environmental and socio-economic factors, in conjunction with the feedback to the non-statutory consultation, CS05 was selected as the preferred converter siting zone to be taken forward for the Project.

3.11. HVDC Cable Route South of Huttoft

- 3.11.1. Within the CPRSS, two cable route options were presented; Corridor 5 (north of Huttoft) and Corridor 6 (south of Huttoft).
- 3.11.2. Public consultation feedback relating to the cable routeing was much less in abundance for the non-statutory consultation than for the converter station siting location and did not prove to be a differentiating factor between routes.
- 3.11.3. With the selection of the preferred converter station siting zone as CS05, the route corridor options were appraised and the northern corridor (Corridor 5) was found to be preferred based on a number of factors including:
 - Corridor 5 was preferred due to the reduced likelihood of congestion and constraints associated with other proposed underground cable projects (EGL 3 and EGL 4, and Ossian Offshore Wind Farm onshore connection) (which according to NGET knowledge (privately shared scheme designs from EGL 3, EGL 4 and Ossian) and publicly available information (EGL 3 and EGL 4 Scoping Report (Ref 3.13)) at the time of selection were proposed to route to the south of Huttoft);
 - Corridor 5 offered more flexibility around the crossing of the A52;
 - Corridor 5 was shorter, resulting in less cable being required, which can lead to lower costs and less impact on the environment; and
 - Corridor 5 was sited further away from a higher number of residential properties in Huttoft.

3.12. Design Development and Evolution of the Project from Non-statutory Consultation

English Onshore Scheme

Design review process

- 3.12.1. Following the non-statutory consultation feedback, the Project was further developed to form the development presented at statutory consultation. The feedback received during non-statutory consultation has been carefully reviewed and considered, informing the ongoing technical work on the technical design and the EIA process. This section provides a summary of how the design of the English Onshore Scheme has evolved since non-statutory consultation.
- 3.12.2. As well as the locations of the permanent components of the English Onshore Scheme, the temporary construction areas, including indicative zone for construction compounds¹, proposed temporary access tracks and points (and bellmouths and visibility splays) have been considered as part of the design development process. These were reviewed, appraised and refined as needed to seek to avoid potential environmental, socio-economic and land ownership impacts as well as technical constraints as far as practical.
- 3.12.3. Design development has sought to promote good design to be considered at an early conceptual stage by avoiding environmental impacts at the outset, where practicable. This includes using the mitigation hierarchy (i.e., to avoid, then reduce and then compensate) to avoid impacts in the first instance by locating project features away from sensitive receptors where practicable and considering measures that can be embedded into the design where sensitive features and receptors cannot be avoided.
- 3.12.4. As part of the design development process, the following design selection principles were considered and applied, drawn from NGET's experience and the Project's specialists supporting the process:
- Avoidance of key sensitive features and receptors by applying appropriate offsets between the English Onshore Scheme and the identified features, where practical. This included minimising or re-orientating construction working areas to avoid effects on potential receptors where practical.
 - Consideration of the space technical constraints such as existing third-party utilities, space available, future restrictions etc.,
 - Shortest route preference to reduce impacts by minimising the amount of infrastructure and overall construction areas. Subsequently, this approach would also reduce the costs of the Project which ultimately reduces the cost to the consumer.
 - Ensuring safe access opportunities and inclusion of permanent and temporary access routes.

¹ Indicative development zones accommodated for within the draft Order Limits. Refer to **Volume 1, Part 1, Chapter 4: Description of the Project** for definitions of development zones.

Assessment of the identified design changes

- 3.12.5. As identified in Section 3.4, the non-statutory consultation materials presented the Preferred Corridor options and the Preferred Converter Station Siting Zone options as well as the broad areas where the proposed new infrastructure associated with the English Onshore Scheme is likely to be located. This was illustrated via within the Preferred Siting Zones and a graduated swathe for the Preferred Corridor options and Anderby Creek Landfall area, showing a greater preference for the location of the required infrastructure as darker areas of the graduated swathe.
- 3.12.6. The below sections outline any changes made since the non-statutory consultation, focussing on any design changes made outside or within the Preferred Corridor and Preferred Converter Station Siting Zone as well as their associated graduated swathes, in addition to the selections outlined in Section 3.6.

Refinement of Converter Station Siting Zone CS05

- 3.12.7. As stated in Section 3.4, Converter Station Siting Zone CS05 was selected as the preferred converter station siting zone. Following on from this, further work has been undertaken to refine the converter station siting zone and produce an Indicative Zone for the converter station platform and buildings. This has largely been driven by consideration of the following factors:
- Location of the LCS-B, proposed as part of the Grimsby to Walpole Project;
 - Connection to the LCS-B substation, and consideration of other future connections. The Project has looked to locate the proposed converter station in such a position as to not provide a constraint to other projects which may wish to connect to LCS-B in the future;
 - Existing utilities constraints;
 - Local topography and existing ground and water conditions;
 - Existing land parcel boundaries and environmental features such as vegetation and water courses; and
 - Opportunities for places to site temporary and permanent access, drainage features and environmental mitigation.
- 3.12.8. As a result of consideration of the above features, the indicative location shown on **Volume 3, Part 1, Figure 4-1** for the EGL 5 converter station, is sited towards the south eastern end of the CS05 Converter Station Siting Zone, within the area marked as darkest on the graduated swathe for the siting zone.

Changes Outside of the Graduated Swathe

- 3.12.9. In refining the design for the components of the English Onshore Scheme (shown in Volume 3, Part 1, Figure 4-1), a number of design features have resulted in the need for areas of the draft Order Limits which fall outside of the Graduated Swathes originally presented at non-statutory consultation. These are detailed as follows:
- Overhead Line (OHL) interactions have been identified in the following locations, for which proposed diversions have been identified. These will require further investigation and assessment, and the appropriate diversions or alternative design measures will be confirmed within the ES. From east to west:

- Existing overhead lines are to be diverted in the vicinity of the A52 and Nothings Lane to accommodate installation of the proposed underground cables. The area allocated allows for raising of the existing overhead lines (should this be required) to safely accommodate construction traffic. Alternatively, the design allows for underground diversion of the affected overhead line sections. Note that additional spans of existing overhead lines are included within the draft Order Limits to allow for effective electrical isolation during any diversion works that may be required for the Project.
- Existing overhead lines are to be diverted in the vicinity of the B1449 Thurlby Road and the A1111 Sutton Road to accommodate works in the vicinity of LCS-B Substation.
- Existing overhead lines south of Mill Lane, Thoresthorpe, Alford and Ailby are to be diverted as a result of vehicle movements along the Shared Grimsby to Walpole haul route.
- Existing overhead lines intersecting / in the vicinity of both the A1111 Bilsby / Alford Road and the A1104 East Street (north east of Alford), and also north of Tothby Lane, to accommodate the Alford Construction Route.
- Land drainage:
 - A number of areas have been extended to include the entirety of field boundaries to enable land drainage mitigation to be included if necessary. Further investigation and assessment is needed to refine the design of land drainage, and will be undertaken for the ES.
- Temporary land access for land owners and occupiers, and for access to the English Onshore Scheme during construction, from east to west:
 - Along Green Lane;
 - Along Northing Lane;
 - East of the A52 Sutton Road;
 - Along Mill Lane, west of the A52 Sutton Road;
 - Along an existing lane perpendicular to the Alford Road, traversing north;
 - Along an existing lane traversing west and north west from Huttoft Road;
 - Two existing lanes, south of Asserby;
 - A number of access options in the vicinity of Asserby Turn, accessed via the A1111 Sutton Road;
 - Access to enable works for overhead line diversion, north of the B1449 Thurlby Road; and
 - Along an existing lane south of Mill Lane.
- Road widening and permanent modifications to public highway for delivery of components:
 - 13 identified locations along the A1104, A157, and B1373 northwest of the English Onshore Scheme.

- Haul Route / Construction Traffic Routes to Site:
 - Part of the Shared Grimsby to Walpole haul route and most of the Alford Construction Route lie outside of the graduated swathes presented at non-statutory consultation. Access routes to site were not considered in detail for Strategic Optioneering and the CPRSS appraisal process and were not presented within these documents. Therefore these have been added to the design since identification of the potential converter station and corridor locations. Further detail on these is provided in **Volume 1, Part 1, Chapter 4: Description of the Project**.
 - Prior to completion of the PEIR and statutory consultation, two changes were made to the Alford Construction Route as follows, in response to environmental design input and feedback:
 - Relocation of the indicative location for the western compound adjacent to the Alford Construction Route, and the haul route's junction with the public highway on the A1104 Station Road, to be further away (southwest) from the Alford Crematorium. Initially the junction and compound were due to be located in the adjacent field, but have been moved into the next field over to provide distance with the facility. Relocation further to the west to provide further separation would require two overhead line crossings, resulting in numerous additional land parcels being affected, and therefore this was discounted.
 - Adjustment of the Alford Construction Route to avoid pasture land associated with a residential property north of Alford Road, used for keeping horses.

3.13. English Offshore Scheme

Offshore Alternatives and Alternative Landfall

- 3.13.1. During the non-statutory consultation, various respondents stated a preference for an entirely offshore or predominantly offshore connection alternative. A response to providing the connection offshore was provided as part of the Project's Need Case in the SOR. No changes to the conclusions drawn as part of this report have been identified, specifically, when considering the need case for the Project, legislative and policy changes as well as further environmental and technical studies. Therefore, the Preferred Strategic Options, as presented in the non-statutory consultation, remain valid and form an appropriate basis on which to take the Project forward. Landfall requirements are described in Sections 3.4 and 3.5, with Anderby Creek Landfall taken forward as the Preferred Landfall for statutory consultation.

Outer Dowsing Offshore Wind Farm Artificial Nesting Structure

- 3.13.2. A minor modification to ENG Route B was made post non-statutory consultation to route around the Outer Dowsing OWF Artificial Nesting Structure (ANS). This is because the search location for the ANS was published after the surveys undertaken on ENG Route B.

3.14. Statutory Consultation and Next Steps

- 3.14.1. This chapter provides a staged overview of how reasonable alternatives have been considered as part of the evolution of the Project, specifically:
- Sections 3.4 and 3.5 identify the selected preferred options as presented at the non-statutory consultation.
 - Section 3.6 identifies which of the preferred options presented at non-statutory consultation have not been taken forward to statutory consultation.
 - Section 3.7 describes how the selected options presented at the non-statutory consultation and taken through to statutory consultation have evolved to result in the draft Order Limits, the Indicative Zone for underground cable assets and the Indicative Zone of the converter station, as described and presented in **Volume 1, Part 1, Chapter 4: Description of the Project**.
- 3.14.2. Consultation on the information provided in this PEIR and the feedback received will be used to review and refine the design of the Project, where appropriate. The Indicative Cable Route and the Indicative Zone of the converter station will continue to be refined subject to further assessment of potential environmental effects and the results of ongoing field surveys. Consultation feedback received during subsequent statutory consultation will also be considered and fed into the site selection process.
- 3.14.3. This chapter will be updated to include information on the further refinement of the Project both onshore and offshore and will highlight any changes or revisions between the proposals as they are currently set out and assessed within the PEIR and those which are included in the final DCO submission. This will then form the basis of the DCO application documents. The current Project design which is being consulted on is described in further detail in **Volume 1, Part 1, Chapter 4: Description of the Project**.

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