

Gate Burton Energy Park EN010131

Order Limits Change Supporting Environmental Information
Document Reference: EN010131/APP/8.25 (**Change Request**)
October 2023

Planning Inspectorate Advice Note Sixteen (Version 3), March 2023
Planning Act 2008

Prepared for:

Gate Burton Energy Park Limited

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1. Introduction

Background

- 1.1.1 This Supporting Environmental Information Report is provided in relation to Order limits changes for the Gate Burton Energy Park (hereafter referred to as the ‘Scheme’) DCO application. Notification of the Applicant’s intention to submit a change request was submitted to the Planning Inspectorate on 20 September 2023.
- 1.1.2 The Scheme comprises the construction, operation, maintenance and decommissioning of a solar photovoltaic (PV) electricity generating facility and energy storage facility with a total capacity exceeding 50 megawatts (MW) and export connection to the National Grid.
- 1.1.3 The likely environmental impacts and effects resulting from the Scheme during construction, operation and decommissioning are reported in the Environmental Statement (ES) **[APP-010-026/3.1]** submitted as part of the DCO application for the Scheme.
- 1.1.4 The application for the Scheme was submitted by the Applicant to the Planning Inspectorate on 27 January 2023. The application was accepted for Examination on 22 February and Examination commenced on 04 July 2023.

Purpose of Report

- 1.1.5 This Supporting Environmental Information Report has been produced to assess the design changes and document any alterations to the content of the ES **[APP-010-026/3.1, 3.2 and 3.3]** and associated documents as submitted to the Planning Inspectorate on 27 January 2023 or as since amended.
- 1.1.6 The Order limits changes are shown in **Appendix A** and described in Section 2 of this Report.

2. Description of changes

2.1.1 This Supporting Environmental Information Report considers four changes to be made to the submitted Order limits. These changes comprise:

- Order limits change 1: an extension to the Order limits immediately to the south of Torksey Ferry Road for works to construct and operate the 400kV cable.
- Order limits change 2: an extension to the Order limits to the east and west along Torksey Ferry Road to accommodate access during construction and (for some parts of the road) during operation and extension to the Order limits immediately to the north of the eastern extension along Torksey Ferry Road (into EDF land) to accommodate access during construction;
- Order limits change 3: a reduction to the Order limits to the north of where Willingham Road meets Marton Road at the request of the land owner; and
- Order limits change 4: a reduction to the Order limits due to the removal of the Marton Road operational access from the Scheme following consultation with Lincolnshire County Council.

2.1.2 For the purposes of this Report Order limits changes 1 and 2 are considered as one change because they are part of the same contiguous area although the reasons for including the two sections are different.

2.1.3 The locations of the Order limits changes are shown in Appendix A. Further details are provided below.

Order limits changes 1 and 2

2.1.4 This change involves an extension to the Order limits to the south of Torksey Ferry Road which is required for works to construct and operate the 400kV cable.

2.1.5 The need for this change has arisen from discussions between the Applicant and stakeholders for the existing Cottam Substation; specifically, EDF Energy (Thermal Generation) Limited, Uniper UK Limited and National Grid Electricity Transmission Plc.

2.1.6 During discussions on voluntary land agreements and protective provisions for works and proposals at the Cottam Substation, EDF has indicated preferences for the location of cable routes within the substation area and for the routes with the other solar schemes to be coordinated. EDF has also indicated preferences on proposed accesses that would minimise impacts on existing and proposed future works at the former power station, to the extent currently known. Uniper has also provided comments on the routing of the cables and on the topic of access to the Cottam Substation for the Scheme which has also driven the Applicant's proposed change request.

2.1.7 There are constraints on the western side of Cottam substation including above and below ground utilities. Collaboration between the Applicant and

the developers of the Cottam Solar Project and Tillbridge Solar Project and liaison with landowners including EDF has identified that a single connection corridor for all three cables is likely to be preferred following detailed design, rather than multiple corridors. The Order limits extension south of Torksey Ferry Road is being submitted because it provides space for a single corridor that can accommodate all three connection cables (Change 1). This will allow the three cables for Tillbridge, Gate Burton and Cottam solar projects to follow the same route into Cottam substation should all projects come forward and during detailed design, to provide an opportunity to minimise cumulative effects.

- 2.1.8 There is a watercourse (Seymour Drain) to the south of Torksey Ferry Road. For the purposes of assessment, in the worst case scenario, it is assumed that the western crossing (see **Appendix A**) will be an open cut crossing. The crossing further to the east will be via a horizontal directional drilling method (HDD) (see **Appendix A**). In order to provide access for installation of the cable to the land to the south for construction vehicles, an existing access onto Shortleys Road will be upgraded which will require the widening of an existing structure crossing Shortleys Road.
- 2.1.9 The extension along Torksey Ferry Road and to the north of Torksey Ferry Road is included to enable construction access to the Substation using Torksey Ferry Road (Change 2). Torksey Ferry Road is designated as a Byway Open to All Traffic (BOAT13) that runs to the south of Cottam substation. The BOAT is currently used by pedestrians, horse-riders, light goods vehicles and 4x4s. The road upgrade will comprise compacted aggregate placed on top of the existing road. BOAT13 will remain open throughout the construction phase, except during a portion of the road upgrade works where the duration of any closure would be up to a maximum of 4 weeks.

Project Alone Scenario

Construction phase

- 2.1.10 The description of the cable installation works remains as set out in **Appendix 2-B** of the Environmental Statement [**APP-114/3.3**] with the cable being installed within a maximum 25m width construction spread which will be located on the south side of Torksey Ferry Road. A running track or 'haul road' will be included. The trench is anticipated to be max 1.42m wide and max 2.5m deep in accordance with the Outline Design Principles [**REP2-008**].

Operational Phase

- 2.1.11 The land will be reinstated and available for future agricultural use. Hedgerows will be reinstated.

Cumulative Scenario

Cumulative Construction Phase

- 2.1.12 In the cumulative scenario, three cables will be installed. For assessment, the assumption is that the whole area which varies from approx. 60m to 120m width, will be disturbed. The wider area is to allow the cables to turn north towards Cottam substation whilst avoiding existing constraints at the Cottam Substation, including a bund.

Cumulative Operational Phase

- 2.1.13 The land will be reinstated and will be available for agricultural use.

Order limits change 3

- 2.1.14 This change involves a reduction of 0.18 ha from the Order limits north of where Willingham Road meets Marton Road (**see Appendix A**), following a land owner request.

Order limits change 4

- 2.1.15 Following feedback from Lincolnshire County Council during Examination, an access review was undertaken to reconsider the access designs, locations and visibility splays to minimise the need for vegetation/hedgerow removal as detailed within **Access Updates and Cumulative Impact Assessment [REP2-045]**.
- 2.1.16 The reason for the removal of this access is to enable existing hedgerows to be retained as well as to ensure that the proposed early planting activities can take place in this location which is required for screening purposes. Access to this section of the Energy and Storage Park will be provided via the private means of access track adjacent to the junction of Marton Road and B1241 High Street (Access E) as shown on Figure 5.1 within the **Planning Design and Access Statement Part 2 [REP2-006]**.

3. Methodology

- 3.1.1 The design changes have been assessed in line with the methodologies set out in the ES [APP-010-026/3.1]. Chapter 5: EIA Methodology [APP-014/3.1] of the ES outlines the overarching process for the assessment of environmental impacts whilst the topic specific methodologies are set out in Chapters 6 to 15 of the ES.
- 3.1.2 As Order limits changes 3 and 4 involve a reduction of a small area of land from the Order limits (0.83 ha) these changes are considered in this section of the Report.
- 3.1.3 **Section 4** presents the results of the assessment of Order limits changes 1 and 2.

Order limits change 3: reduction where Willingham Road meets Marton Road

- 3.1.4 Order limits change 3 has been reviewed. Within the Environmental Statement as submitted, the land is identified within **Figure 2-4 [APP-033]** for ecological mitigation in the form of a Lapwing Field. The small reduction in the Order limits (0.18 ha) in this location will not alter the suitability of the overall area for any species that may use it, and therefore does not impact the effectiveness of the ecological mitigation.
- 3.1.5 No hedgerow planting was proposed in this area, and therefore there will be no increased landscape and visual or glint and glare impacts due to a reduction in screening.
- 3.1.6 The Order limits change does not change the Biodiversity Net Gain (BNG) calculations as the reduction in area proposed for Species Rich Grassland is small, and no hedgerow planting is proposed in this area.
- 3.1.7 As this change would involve a small reduction in area from the Order limits, which is 25m from the adjacent property, there are no changes to the conclusions presented in the ES.

Order limits change 4: removal of Marton Road operational access

- 3.1.8 As stated within **Access Updates and Cumulative Impact Assessment [REP2-045]**, this location has been reviewed to determine if the access location could be removed thus allowing the existing hedgerow to remain in place.
- 3.1.9 From a heritage perspective, the hedgerow has been classified as important in order to preserve the historic nature of this landscape.
- 3.1.10 From an LVIA perspective, the hedgerow has been identified as an area of advanced planting to reinforce the existing hedgerow and grow its height to avoid any glint and glare effects along Marton Road.

- 3.1.11 For the above reasons, the review concluded that the construction of Marton Road operational access would have resulted in environmental impacts that could be avoided through the use of alternative proposed access locations to the site. Therefore, the removal of this access point allows the Applicant the opportunity to provide advance planting across the existing access to further mitigate any landscape and visual and glint and glare effects.
- 3.1.12 As stated within the Transport Assessment **[APP-166/3.3]** during the operational phase, the Scheme will be operated by a nominal amount of people across the Site (up to 14 permanent staff per day), predominantly undertaking maintenance tasks. In addition, there are expected to be approximately 3-4 visitors per week (equating to one visitor per day) for deliveries, and periodic replacement of components. Staff vehicles (and those used for maintenance) will primarily be four wheeled drive vehicles and vans, with HGVs rarely accessing the Site once it is operational. Therefore, due to the low number of vehicles (with up to a maximum of 15 arrivals and 15 departures expected daily for all operational accesses across the Scheme) that would be redistributed to the private means of access track adjacent to the junction of Marton Road and B1241 High Street (Access E) it is considered that there are no changes to the traffic and access conclusions (or any other conclusion) presented in the ES as a result of this change.
- 3.1.13 It should be noted that the changes were made to remove the access from documents at Deadline 2 (8 August 2023) so the change here relates only to the reduction in the Order limits to reflect the removal of the access, not the removal of the access itself.

4. Assessment Findings for Order limits changes 1 and 2: extension to the Order limits along Torksey Ferry Road and to the north and south

4.1.1 This section provides an assessment of Order limit change 1. The following topics (as included in the ES) are considered:

- Climate Change;
- Cultural Heritage;
- Ecology and Nature Conservation;
- Water Environment;
- Landscape and Visual Amenity;
- Noise and Vibration;
- Socio-economics and Land Use;
- Transport and Access;
- Human Health;
- Air Quality;
- Glint and Glare;
- Major Accidents and Disasters;
- Telecommunications, Television Reception and Utilities; and
- Waste and Recycling.

4.1.2 Each topic section presents baseline information, compares the effect of the change to the conclusions of the ES during the construction, operation and decommissioning phase, as well as identifies if the change results in any changes to the cumulative assessment presented in the ES.

Climate Change

Baseline

4.1.3 There is no change to the baseline for climate change as the global climate is the receptor for the lifecycle GHG impact assessment detailed in **Chapter 6: Climate Change [APP-015/3.1]**.

Construction

4.1.4 The additional cable laying and road upgrade work has been reviewed. There is no change to the conclusions of the assessment of construction impacts on the lifecycle GHG assessment, climate change resilience assessment and in-combination climate change assessment as a result of the design changes. The results remain as outlined in **Chapter 6: Climate Change [APP-015/3.1]** of the ES.

Operation

- 4.1.5 There is no change to the assessment of construction impacts on lifecycle GHG assessment, climate change resilience assessment and in-combination climate change assessment as a result of the design changes. The results remain as outlined in **Chapter 6: Climate Change [APP-015/3.1]** of the ES.

Decommissioning

- 4.1.6 There is no change to the assessment of construction impacts on the lifecycle GHG assessment, climate change resilience assessment and in-combination climate change assessment as a result of the design changes. The results remain as outlined in **Chapter 6: Climate Change [APP-015/3.1]** of the ES.

Cumulative

- 4.1.7 In **Chapter 6: Climate Change [APP-015/3.1]** it is stated that it is not possible to define a study area for the assessment of cumulative effects of GHG emissions nor to undertake a cumulative effects assessment, as the identified receptor is the global climate and effects are therefore not geographically constrained.
- 4.1.8 Consequently, there is no change to the assessment of cumulative effects on climate change as a result of the design changes. The results remain as outlined in **Chapter 6: Climate Change [APP-015/3.1]** of the ES.

Cultural Heritage

Baseline

- 4.1.9 The cultural heritage baseline for Order limits change 1 falls within the study area described in **Chapter 7: Cultural Heritage [APP-016/3.1]** of the ES. Assets previously located within the study area are now located within the extended Order limits.
- 4.1.10 There is one non-designated heritage asset recorded on the Heritage Environment Record (HER) that is located within the extended Order limits, comprising a field boundary at Rampton (MNT6166) located south of Torksey Ferry Road.
- 4.1.11 Geophysical survey within the extended Order limits confirmed the location of the field boundary (MNT6166) recorded on the HER and has also identified two linear features as shown on Figure 47 in Geophysical Survey Fieldwork Reports Part 3 **[APP-122/3.3]**.
- 4.1.12 The Scheduled Monument Fleet Plantation Moated Site (NHLE 1008594) is located directly adjacent to the south-eastern extent of the extended Order limits boundary.
- 4.1.13 With regards to the setting of heritage assets, there are five listed buildings located in Rampton situated outside of the study area assessed in Chapter 7: Cultural Heritage **[APP-016/3.1]** within the ES whose settings have the potential to be impacted by the extended Order limits. These comprise two Grade I listed buildings, namely, the Church of All Saints (NHLE 1233879) and

its gateway and boundary walls (NHLE 1276407); and three Grade II listed buildings, namely, Gateway 19m west of Church of All Saints (NHLE 1233880), Manor Farmhouse (NHLE 1233878) and Rose Cottage (NHLE 1276406).

- 4.1.14 There is the potential for previously unrecorded archaeological remains to survive within the extended Order limits.
- 4.1.15 Consultation has been undertaken with Historic England who have advised that a phase of trial trenching is carried out in order to further inform the baseline and identify the presence / absence of archaeological remains that may be associated with the Scheduled Monument.
- 4.1.16 Consultation has also been undertaken with Bassetlaw District Council (BDC) (on behalf of Nottinghamshire County Council (NCC)) and Lincolnshire County Council's (LCC) Archaeological Advisor who have also advised that a phase of trial trenching is carried out in order to further inform the baseline and identify the presence / absence of archaeological remains in the extended Order limits.

Construction

- 4.1.17 The construction phase of the Scheme within the extended Order limits has the potential to impact previously unrecorded archaeological remains.
- 4.1.18 The construction phase of the Scheme within the extended Order limits also has the potential to impact the setting of the Scheduled Monument Fleet Plantation Moated Site (1008594), and any previously unrecorded archaeological remains that may be associated with the Scheduled Monument.
- 4.1.19 As recommended by consultees, a programme of trial trenching is proposed in order to confirm the presence / absence of archaeological remains within the extended Order limits and their significance. The number and layout of the trial trenches will be agreed with Historic England and NCC's and LCC's Archaeological Advisor.
- 4.1.20 Appropriate mitigation measures will be identified in an updated Archaeological Mitigation Strategy Part 2 **[document 7.6 as submitted at Deadline 4]** including archaeological excavation and/or preservation in-situ and will be agreed with Historic England and the Archaeological Advisors to the relevant Local Planning Authority. It is anticipated that the updated Archaeological Mitigation Strategy Part 2 will be submitted at Deadline 5.
- 4.1.21 With regards to physical impacts to archaeological remains, following the implementation of the mitigation measures, the construction phase of the Scheme within the extended Order limits is not considered to result in any new or different significant residual effects.
- 4.1.22 With regard to the setting of heritage assets, the extended Order limits brings the extent of construction works slightly closer to designated listed buildings in Rampton. However, as the proposed works would be limited to the existing Torksey Ferry Road carriageway and verges and comprises improvements to the surfacing of the existing road, it is not considered that this will result in any impacts to the setting of the listed buildings in Rampton. The ES reported no

significant effects on the setting of heritage assets during construction. The construction phase of the Scheme within the extended Order limits is not considered to result in any new impacts to the setting of heritage assets.

- 4.1.23 With regards to impacts to the setting of heritage assets, there is no change to the assessment of construction impacts as a result of the design changes and there are no new or different likely significant effects. The results remain as outlined in **Chapter 7: Cultural Heritage [APP-016/3.1]** of the ES.

Operation

- 4.1.24 It was reported in the ES that it is not expected that the operation of the Scheme will result in any further intrusive activities, and as such, no impact to archaeological remains is anticipated during this phase. The operational phase of the Scheme within the extended Order limits is not considered to result in any new impacts to archaeological remains.
- 4.1.25 With regards to the setting of heritage assets, the ES reported no significant effects during the operational phase of the Scheme. The operational phase of the Scheme within the extended Order limits is not considered to result in any new impacts to the setting of heritage assets.
- 4.1.26 Overall, there is no change to the assessment of operational impacts on cultural heritage as a result of the design changes and there are no new or different likely significant effects. The results remain as outlined in **Chapter 7: Cultural Heritage [APP-016/3.1]** of the ES.

Decommissioning

- 4.1.27 The ES reported that a well-designed decommissioning scheme would not have any impact beyond the already disturbed footprint of the Scheme and will take into account areas of archaeological activity that have been preserved in-situ; therefore, it is not anticipated that decommissioning activities would have a direct physical impact upon archaeological remains. The decommissioning phase of the Scheme within the extended Order limits is not considered to result in any new impacts to archaeological remains.
- 4.1.28 With regards to the setting of heritage assets, the ES reported that during the decommissioning phase, there would be temporary impacts to the setting of designated heritage assets. However, the impacts would be no greater than those reported during construction. The ES reported no significant effects on the setting of heritage assets during decommissioning. The decommissioning phase of the Scheme within the extended Order limits is not considered to result in any new impacts to the setting of heritage assets.
- 4.1.29 Overall, there is no change to the assessment of decommissioning impacts on cultural heritage as a result of the design changes and there are no new or different likely significant effects. The results remain as outlined in **Chapter 7: Cultural Heritage [APP-016/3.1]** of the ES.

Cumulative

- 4.1.30 The Grid Connection Corridor has the potential to be shared with three other projects, West Burton (Ref. EN101032), Cottam (Ref. EN010133) and

Tillbridge Solar Projects. The ES reported a worse case assumption that the cable could be laid anywhere within the Grid Connection Corridor (except within avoidance areas where HDD is used) and therefore the cumulative effect with the Cottam, West Burton and Tillbridge Solar Projects will be the same as that assessed for the Scheme alone, assuming the cable is within the Order limits and has the same level of mitigation secured.

- 4.1.31 The same assumptions have been applied for the Scheme within the extended Order limits, noting that the cable corridor is not shared with West Burton here as that project connects into a different substation, and no new cumulative effects have been identified.
- 4.1.32 Overall, there is no change to the assessment of cumulative effects on cultural heritage as a result of the design changes and there are no new or different likely significant effects. The results remain as outlined in **Chapter 7: Cultural Heritage [APP-016/3.1]** of the ES.

Ecology and Nature Conservation

Baseline

- 4.1.33 The assessment to inform the ecological baseline of the extended Order limits lies within the Study Area (up to 2km either side of the Order limits and now including the extended Order limits) that is described in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** and accompanying appendices **8-B to 8-L [APP-126-136/3.3]**.
- 4.1.34 The baseline was further defined by a walkover survey that was undertaken on 20 July 2023, to identify ecological receptors. The Applicant has also worked with the Cottam Solar Project (Ref. EN010133) and West Burton Solar Projects (Ref. EN101032) to collate ecological information and, where relevant, these data were obtained and reviewed as part of the desk study which has informed the assessment of the ecological baseline presented here.
- 4.1.35 The extended Order Limits includes a section of Torksey Ferry Road which is lined with trees and hedgerows, as well as a small area of agricultural land to the south of the road, adjacent to Seymour Drain. There are no new important ecological features within the extended Order limits, although previously identified important ecological features (as described in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]**), including Cottam Wetlands Local Wildlife Site (LWS) and Torksey Ferry Road LWS are now closer to the extended Order limits at Torksey Ferry Road (but remain outside of the extended Order limits). The presence of protected habitats and species within the Order limits, as identified in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** and potentially applicable to the extended Order limits are considered in the following sections of this report, along with consideration for any required avoidance and mitigation. The walkover survey within the extended Order limits (from publicly accessible land) did not identify the presence of any additional important ecological features which would change the overall assessment of importance presented in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]**.

Construction

- 4.1.36 The extended Order limits brings the construction works closer to two non-statutory designated sites (Torksey Ferry Road LWS and Cottam Ponds LWS). However, as any construction works would be limited to within and immediately to the south of the existing Torksey Ferry Road carriageway and verges (whereby any vegetation clearance in the latter would be minimised as much as is practicable and outside of these designated sites), it is not considered that this will result in any direct impacts to these LWS's. Mitigation will be implemented to avoid indirect impacts such as pollution or changes in air quality. These measures are described in the **Framework CEMP [APP-224/7.3]**. No significant effect on any designated site was reported in the ES **[APP-017/3.1]** during construction and the construction phase of the Scheme within the extended Order limits will not result in any new impacts to these sites.
- 4.1.37 There are no new important ecological features (e.g. protected or notable habitats or species not previously identified and assessed within the Order limits) associated with the extended Order limits, although the extended Order limits does contain habitats and features that could support protected species (such as trees with the potential to support roosting bats and watercourses with the potential to support Water Vole *Arvicola amphibius* and Otter *Lutra lutra*). However, mitigation to avoid impacts on important ecological features (which includes pre-construction surveys to ensure that any mitigation proposed is based on the latest information on the presence, or otherwise and distribution of protected species) is already described in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** and the **Framework CEMP [APP-224/7.3]** and remains applicable and appropriate within the extended Order limits.
- 4.1.38 Therefore, there is no change to the assessment of construction impacts on important ecological features as a result of the design changes and there are no new or different likely significant effects. The results remain as outlined in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** of the ES, adopting mitigation as presented in the **Framework CEMP [APP-224/7.3]**.

Operation

- 4.1.39 No impacts to important ecological features are anticipated within the extended Order limits during operation of the Scheme and the assessment of significant effects remains the same as presented in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** of the ES.
- 4.1.40 Overall, there is no change to the assessment of operational impacts on ecology and nature conservation as a result of the design changes. The results remain as outlined in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** of the ES.

Decommissioning

- 4.1.41 Any impacts arising upon important ecological features from decommissioning would require mitigating in line with legislation and policy at the time of decommissioning. However, **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** did not predict that the decommissioning of the Scheme will

have any impacts on important ecological features and this remains valid for the extended Order limits.

- 4.1.42 Therefore, there is no change to the assessment of decommissioning impacts on ecology and nature conservation as a result of the design changes. The results remain as outlined in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** of the ES.

Cumulative

- 4.1.43 Overall, there is no change to the assessment of cumulative impacts on ecology and nature conservation as a result of the design changes. The results remain as outlined in **Chapter 8: Ecology and Nature Conservation [APP-017/3.1]** of the ES.

Water Environment

Baseline

- 4.1.44 The water environment baseline falls within the study area described in **Chapter 9: Water Environment [APP-018/3.1]**, and in terms of Water Framework Directive (WFD) waterbodies within **Appendix 9-A: Water Framework Directive Assessment [APP-137/3.3]**.
- 4.1.45 The baseline is unchanged from that presented in these documents given that it is located within the existing study area for the Order limits. The baseline was based on a site walkover (completed in 2022) and desk study of publicly available information (e.g. Environment Agency websites relating to the Water Environment).
- 4.1.46 Of principal importance to the Order limits extension is the location of the WFD designated Seymour Drain alongside Torksey Ferry Road. This watercourse initially flows north at the western extent of the extended Order limits to Torksey Ferry Road (approximately 485m east of Rampton), from where it then flows east immediately adjacent to the road on its southern side. It is then culverted north beneath the road (to the south of the Cottam Power Station cooling towers) and continues north into the power station site.
- 4.1.47 The Seymour Drain Catchment (trib of Trent) waterbody (GB104028058340) is heavily modified and is at Moderate Ecological Potential (WFD Cycle 3, 2022) and fails to achieve Good Potential as a result of physical modification, point source sewage discharges, and diffuse pollution from poor soil management. Environment Agency monitoring data suggests that water quality is impacted by surrounding agricultural land uses (see **Chapter 9: Water Environment [APP-018/3.1]**). Site surveys have shown that the watercourse consists of a straightened, artificial channel of around 1.5 m width, has steep incised banks and a bed dominated by fine sediments. In terms of its importance for impact assessment, Seymour Drain is considered a high importance receptor for water quality and low importance receptor in terms of morphology.
- 4.1.48 There are also low importance (for water quality and morphology) ephemeral drains located alongside the northern side of Torksey Ferry Road, and

perpendicular to the road, south of Cottam Power Station. These are heavily modified, artificial watercourses and are tributaries of Seymour Drain.

- 4.1.49 The extension of the Order limits is wholly underlain by Mercia Mudstone Group bedrock. In terms of superficial deposits, alluvium is present at the eastern extent of the extension with Holme Pierrepont Sand and Gravel Member under the western extent. The area is Secondary B aquifer. These are mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers. The WFD groundwater body beneath the site is the Lower Trent Erewash – Secondary Combined groundwater body (GB40402G990300), which is at Good Overall Status.
- 4.1.50 There is a groundwater abstraction south of Cottam Power Station approximately 220m south of Torksey Ferry Road that is from the river gravel deposits for the purposes of mineral washing (NGR SK 82207 78587). Overall, groundwater is considered a medium importance receptor here as a Secondary aquifer. Groundwater supports some industrial abstraction and is also WFD designated and at Good Status.
- 4.1.51 Flood risk to the route along Torksey Ferry Road is considered at high risk from fluvial, artificial and groundwater sources based on a review of **Appendix 9-D: Flood Risk Assessment [APP-142/3.3]**.
- 4.1.52 For full baseline details refer to **Chapter 9: Water Environment [APP-018/3.1]**.

Construction

- 4.1.53 Upgrades to Torksey Ferry Road and the cable installation have the potential to cause water quality deterioration in Seymour Drain and other surrounding drains during construction given its close proximity to the works. This might include pollution relating to deposition or spillage of soils, sediment, oils, fuels, or other construction chemicals, or through uncontrolled site run-off, or break out of drilling fluids when crossing watercourses using non-intrusive techniques. However, this can be managed following best practice measures for management of runoff, sediments and spillages as outlined in the **Framework CEMP [APP-224/7.3]**.
- 4.1.54 Direct works to watercourses for cable crossings or culverting also has the potential to cause adverse morphological impacts. It is currently assumed that the western cable crossings of Seymour Drain would use an open-cut approach due to local constraints that limit the potential for HDD. The eastern crossing of Seymour Drain would use HDD and be trenchless.
- 4.1.55 Launch and receiving pits would be required for HDD and would be no closer than 10m from the water's/channel edge. Nonetheless, there would be a risk of sediment mobilisation in runoff and for chemical spillages to occur that could enter the channel if not managed accordingly. There is also a chance of 'frac-out' events (i.e. hydraulic fluid break out) from drilling to the watercourse if not appropriately mitigated for site specific conditions. A site-specific hydraulic fracture risk assessment will be produced prior to commencing works to define the mitigation required based on ground conditions. Water quality monitoring will also be undertaken prior to, during, and following on from the construction

activity to ensure any spillages or other pollution is identified. These mitigation requirements will be outlined in a Water Management Plan (WMP) which is already a commitment post-consent as stated within the Framework CEMP [APP-224/7.3] and secured by Requirement 12 of the draft DCO [REP3-006]

- 4.1.56 For the open-cut cable crossings, there would be a risk of sediment disturbance when trenching through the channel, plus potential for construction runoff and spillages entering the watercourse given the direct nature of the work. However, mitigation measures will be in place, including over-pumping or fluming of the flow, reinstatement of the channel as found (based on a pre-works hydromorphological survey), and implementation of good industry practice measures which are outlined in the Framework CEMP. Refer to **Chapter 9: Water Environment [APP-018/3.1]** of the ES for further details.
- 4.1.57 Given this embedded and good industry practice mitigation, and that all watercourses alongside Torksey Ferry Road are low importance receptors for morphology, adverse significant effects are not considered likely.
- 4.1.58 Cable routes beneath watercourses may transgress below the water table over part of their routes. The profile of the cable ducting is considered to be small compared to the spatial and vertical extent of the secondary groundwater aquifers beneath the Order limits extension, and therefore is considered to have a negligible impact on groundwater flow. As such, no impediments to baseflow in the River Trent or small watercourses on the Order limits are anticipated.
- 4.1.59 Flood risk to the alternative route along Torksey Ferry Road remains the same as the existing proposed access based on a review of the **Appendix 9-D: Flood Risk Assessment [APP-142/3.3]**.
- 4.1.60 Given the mitigation is secured, there is not considered to be any change to the assessment of construction impacts on the water environment as a result of the design changes. The results remain as outlined in **Chapter 9: Water Environment [APP-018/3.1]** of the ES. There will be no new or different likely significant effects.

Operation

- 4.1.61 It is assumed that current drainage arrangements from Torksey Ferry Road are that runoff is directed into Seymour Drain or other nearby drains. Upgrades to the road, especially those that increase the impermeable area, have the potential to increase runoff of pollutants from the road and thereby adversely affect water quality in Seymour Drain. Any upgrades to the road will incorporate suitable drainage arrangements in line with good industry practice and include attenuation for road derived pollutants, to ensure no adverse effects on Seymour Drain or other surrounding drains. Following implementation of an appropriate drainage design following good industry practice, no adverse effects are anticipated.
- 4.1.62 It is unknown at this stage whether any upgrades or widening would be required to the existing culvert of Seymour Drain beneath Torksey Ferry Road or whether structures maybe required on or over the drainage ditches in the vicinity. In the case of Seymour Drain, it is assumed as a worst case that a

culvert extension of up to 2m is required. Any upgrade to the structure would follow environmentally sensitive design principles. The structure would be designed appropriately to maintain connectivity along the watercourses for aquatic species and riparian mammals, where these are shown to be present. The culvert should be set 150 mm below bed level to allow sedimentation and a naturalised bed to form, which will maintain longitudinal connectivity for aquatic fauna. Length-for-length watercourse enhancements would be required for the extension and for any new structures that may be needed on adjacent ditches to mitigate the impacts, and to ensure compliance against WFD objectives (see Water Framework Directive Assessment [APP-137/3.3]). The requirements will be outlined in a WFD Mitigation and Enhancement Strategy which is already a commitment post-consent as stated within the **Framework OEMP [REP2-035]** and secured by Requirement 13 of the **draft DCO [REP3-006]**.

- 4.1.63 Overall, given the proposed mitigation, there is no change to the assessment of operational impacts on the water environment as a result of the design changes. The results remain as outlined in **Chapter 9: Water Environment [APP-018/3.1]** of the ES. There will be no new or different likely significant effects.

Decommissioning

- 4.1.64 A detailed Decommissioning Environmental Management Plan (DEMP) (secured through the DCO) will be prepared prior to decommissioning to identify required measures to prevent pollution and flooding during this phase of the development. A Framework DEMP accompanied the DCO Application [APP-226/7.5].
- 4.1.65 Overall, there is no change to the assessment of decommissioning impacts on the water environment as a result of the design changes. The results remain as outlined in **Chapter 9: Water Environment [APP-018/3.1]** of the ES. There will be no new or different likely significant effects.

Cumulative

- 4.1.66 Overall, there is no change to the assessment of cumulative impacts on the water environment as a result of the design changes. The results remain as outlined in **Chapter 9: Water Environment [APP-018/3.1]** of the ES. There will be no new or different likely significant cumulative effects.

Landscape and Visual Amenity

Baseline

- 4.1.67 The landscape and visual baseline within the existing Grid Connection Corridor and a 2km study area radius to either side, which includes the area of the design changes, has been described in **Chapter 10: Landscape and Visual Amenity [APP-019/3.1]** as well as in **Appendices 10-C and 10-E [APP-146,148/3.3]**. Site surveys were conducted in 2022 and 2023.

Construction

- 4.1.68 The change will result in an increase in construction activity in the area south of Torksey Ferry Road, the construction upgrades to Torksey Ferry Road, and the removal of existing vegetation and localised changes to the landform to facilitate the cable installation works.
- 4.1.69 Embedded Mitigation measures are stated within the **Outline Landscape and Ecological Management Plan (OLEMP) [APP-225/3.3]**. The objective is to minimise vegetation removal and the retention of habitats where possible. The restoration of habitats and the replanting of removed vegetation, where feasible, shall be carried out at the completion of construction works. Other key issues include the visibility of construction works, associated traffic, and likely localised and temporary changes to the visual amenity for local receptor groups namely recreational users.
- 4.1.70 Temporary, moderate and significant landscape effects during construction works impacting on Local Landscape Character Area (LLCA) 10: Cottam Plain will remain as described in the ES. Additional effects on LLCA 11: Rampton Fringe & Hawk Hills due to the widening of the area of construction are not considered significant, as described in the ES, due to the small scale of the proposed works.
- 4.1.71 Significant and temporary visual effects during construction as described in the ES are likely to increase slightly from Moderate to Moderate-Major due to the extended area within which construction work will take place. This effect therefore remains significant, as identified and described in the ES. These additional visual effects will affect mainly recreational users of PRow including: PRow NT|Rampton|BOAT13 and to a lesser extent road users given the currently poor condition of the road. It will also adversely affect recreational users of PRow's NT|Rampton|FP06, NT|Rampton|BOAT12, NT|Rampton|FP10 and NT|Rampton|FP20 at their junctions with PRow NT|Rampton|BOAT13. In addition, it will also adversely affect recreational users in middle distance views from NT|Rampton|FP9 and close distance views from sections of NT|Rampton|FP7 in the vicinity of Torksey Ferry Road.
- 4.1.72 There are no new significant effects caused by Order limits change 1.

Operation

- 4.1.73 The implementation of mitigation measures including the reinstatement of the ground profile to match existing conditions as well as the replanting of hedgerow vegetation will result in minor to negligible adverse and therefore

not significant residual landscape effects during operation. Visual effects are considered negligible and not significant.

- 4.1.74 Overall, there is no change to the assessment of operational impacts on the landscape and visual amenity as a result of the design changes. The results remain as outlined in **Chapter 10: Landscape and Visual Amenity [APP-019/3.1]** of the ES.

Decommissioning

- 4.1.75 Overall, there is no change to the assessment of decommissioning impacts on landscape and visual amenity as a result of the design changes. The results remain as outlined in **Chapter 10: Landscape and Visual Amenity [APP-019/3.1]** of the ES.

Cumulative

- 4.1.76 Temporary, moderate and significant landscape effects during construction works impacting on Local Landscape Character Area (LLCA) 10: Cottam Plain will remain as described in the ES. Additional effects on LLCA 11: Rampton Fringe & Hawk Hills, as described in the ES, due to the widening of the area of construction are not considered significant due to the scale of the proposed works.
- 4.1.77 Overall, there is no change to the conclusion of the cumulative assessment on landscape and visual amenity as a result of the design changes. The results remain as outlined in **Chapter 10: Landscape and Visual Amenity [APP-019/3.1]** of the ES.

Noise and Vibration

Baseline

- 4.1.78 The study area includes noise and vibration sensitive receptors within 300m of the extended Order Limits. The only sensitive receptors within 300m of the extended Order Limits are properties in Rampton. These properties are in close proximity to the proposed Torksey Ferry Road upgrade works but are further than 300m from the extended Order Limits where cable laying and cable crossing activities would take place.

Construction

- 4.1.79 Potential noise and vibration effects may occur due to construction activities associated with the Torksey Ferry Road upgrade. As properties in Rampton are located further than 300m from cable laying and cable crossing activities, no significant effects are anticipated from these activities. Construction traffic would access the site from the east and so would not affect properties in Rampton.
- 4.1.80 Typical plant for road upgrade works and associated sound data are presented in Table 4-1. Assuming that works would cover a stretch of road of approximately 50m length, over the course of a typical day, the resultant noise level at properties in Rampton which are located at the western end of Torksey Ferry Road upgrade works, would be 74 dB $L_{Aeq,T}$. This is below the Lowest

Observed Adverse Effect Level (as defined in Table 11-6 of **Chapter 11 [APP-020/3.1]**) and not significant.

Table 4-1: Road Upgrade Works Plant

Plant	Sound Pressure Level dB at 10m	Percentage 'on' time
Dozer	75	50
Excavator	78	40
Vibratory Roller	80	50
Dump Truck	81	40

- 4.1.81 Use of a vibratory roller to compact the road surface has the potential to cause disturbance. For calculating potential levels of vibration, reference has been made to Table E.1 of BS 5228-2. Table E.1 contains a method for calculating the percentage chance of a Peak Particle Velocity (PPV) occurring at distance due to a vibratory roller based on the diameter of the drum and the amplitude of vibration. Vibration calculations have been undertaken assuming a typical vibratory roller that may be used is the Tandem Vibratory Roller, which has a drum of 0.72 m and amplitude of vibration of 0.56 mm.
- 4.1.82 A typical level of vibration at a distance of 25m would be below the Significant Observed Adverse Effect Level (SOAEL) (as defined in Table 11-7 of Chapter 11); however, the SOAEL may be exceeded if a vibratory roller is used within 25m of properties in Rampton. BS 5228-2 states that the likely levels of vibration that would be experienced can be tolerated if prior warning and explanation is provided. A commitment to a communication strategy is made in the **Framework Construction Environmental Management Plan (CEMP) [APP-224/7.3]**. As such, increased levels of vibration for short periods are considered acceptable and no significant vibration effects are identified.
- 4.1.83 To reduce noise and vibration emissions due to construction activities, measures to control noise as defined in Annex B of BS 5228-2 and measures to control vibration as defined in Section 8 of BS 5228-2 would be adopted where reasonably practicable. These embedded measures represent Best Practicable Means and would be secured within the Framework CEMP **[APP-224/7.3]**.
- 4.1.84 Overall, there is no change to the assessment of construction impacts on noise and vibration as a result of the design changes. The results remain as outlined in **Chapter 11: Noise and Vibration [APP-020/3.1]** of the ES. There will be no new or different likely significant effects.

Operation

- 4.1.85 During the operational period, use of Torksey Ferry Road to the substation by the Applicant will be infrequent and generally likely to be in a 4x4 or small van. NGET will access the substation more frequently but would do so through their existing arrangements with EDF. Traffic that will use Torksey Ferry Road would therefore be minimal and would not result in a material change in noise levels. Consequently, there is no change to the assessment of operational impacts on noise and vibration as a result of the design changes. The results

remain as outlined in **Chapter 11: Noise and Vibration [APP-020/3.1]** of the ES. There will be no new or different likely significant effects.

Decommissioning

- 4.1.86 Overall, there is no change to the assessment of decommissioning impacts on noise and vibration as a result of the design changes. The results remain as outlined in **Chapter 11: Noise and Vibration [APP-020/3.1]** of the ES.

Cumulative

- 4.1.87 Overall, there is no change to the assessment of cumulative impacts on noise and vibration as a result of the design changes. The results remain as outlined in **Chapter 11: Noise and Vibration [APP-020/3.1]** of the ES. There will be no new or different likely significant effects.

Socio-Economics and Land-Use

Baseline

- 4.1.88 The socio-economics and land use baseline for the extended Order Limits falls within the study area described in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES. Torksey Ferry Road has an existing public right of way, Rampton BOAT13, which is used by local residents to access a number of other public rights of way in the area and local amenities.
- 4.1.89 There is one local receptor, Rampton Fishing Club, that uses Torksey Ferry Road to access part of the River Trent for angling activities by car. It is understood that Rampton Fishing Club have exclusive rights to a 1.5 mile stretch of the River Trent for angling in this location.

Construction

Employment

- 4.1.90 There is no change to the assessment of construction impacts on employment, leakage, displacement, multiplier effect, net construction employment, Gross Value Added (GVA) as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Public Rights of Way

- 4.1.91 As a result of design changes, Rampton BOAT13 will remain open, except during pavement upgrading works when vehicular access would not be possible (see Local Amenities and Land Use section below where this is considered further). There is no change to the assessment of construction impacts on public rights of way as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Agricultural Land

- 4.1.92 The Order limits extension will involve a small area of agricultural land to the south of Torksey Ferry Road where the cable will be installed. The **Outline Soil Management Plan (Outline SMP)** will be adhered to during the

construction works. The Order limit change version has been submitted at Deadline 4. There is no change to the assessment of construction impacts on agricultural land as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Local Amenities and Land Use

- 4.1.93 Rampton BOAT13 will remain open, except during road upgrading works when vehicular and pedestrian access would not be possible. Rampton Fishing Club has been identified as a user of the BOAT and therefore could experience restricted access to a section of the River Trent due to closure of this BOAT.
- 4.1.94 It is understood that Rampton Fishing club have exclusive rights to a 1.5 mile stretch of the River Trent for angling in this location, forming part of a longer stretch of the river which provide opportunities for angling which they would share with other anglers wherever there are no exclusivity rights. The sensitivity of the fishing club is assessed to be medium.
- 4.1.95 The magnitude of impact is assessed to be low on the basis that whilst anglers' access to parts of the river could be prevented during the Torksey Ferry Road upgrade works, this will be for a temporary period of up to a maximum of 4 weeks during which time, access on foot will still be possible for the entire fishing area via existing PRoW alongside the river. Therefore, the impact on the Rampton Fishing Club accessing the River Trent is considered to be minor adverse, which is not considered to be a new significant effect.

Operation

Employment

- 4.1.96 There is no change to the assessment of operational impacts on employment as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Existing Employment

- 4.1.97 There is no change to the assessment of operational impacts on existing employment as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Total Net Operational Employment

- 4.1.98 There is no change to the assessment of operational impacts on total net operational employment as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Public Rights of Way

- 4.1.99 There is no change to the assessment of operational impacts on public rights of way as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Agricultural Land

- 4.1.100 The Order limits extension within agricultural land to the south of Torksey Ferry Road will be returned to agriculture after construction. There is no change to

the assessment of operational impacts on agricultural land as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Local Amenities and Land Use

4.1.101 There is no change to the assessment of operational impacts on local amenities and land use as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Decommissioning

Employment

4.1.102 There is no change to the assessment of decommissioning impacts on employment, net decommissioning employment, employment loss following decommissioning, Public Rights of Way, agricultural land, and local amenities and land use as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Cumulative

4.1.103 There is no change to the assessment of cumulative impacts as a result of the design changes. The results remain as outlined in **Chapter 12: Socio-Economics and Land-Use [APP-021/3.1]** of the ES.

Transport and Access

Baseline

4.1.104 Torksey Ferry Road is a single carriageway road which runs to the south of Cottam Power Station and is not a through route for local traffic. For the area of Torksey Ferry Road being assessed, this carriageway is not an adopted road maintained by Nottinghamshire County Council and the carriageway is in poor condition. The carriageway features a byway open to all traffic, BOAT13, which serves to connect to other provisions in the area, notably FP6, FP20 and BOAT12 which are presented in Figure 13-5 of the Environmental Statement **[APP-104/3.2]**.

Construction

4.1.105 The design changes would result in construction vehicles travelling east on Torksey Ferry Road to access Cottam Power Station via an existing gated access. As per the ES, there is expected to be a daily peak of 25 construction workers, 16 LGVs and 12 HGVs associated with the Grid Connection Corridor which is not expected to result in a material impact on the surrounding highway network, including Torksey Ferry Road.

4.1.106 To ensure that Torksey Ferry Road can be used during construction, the following works would be required:

- Existing field access points 17/02 and 17/05, as shown on the Streets, Rights of Way and Access Plans **[REP2-025/5.3]** will be upgraded to facilitate access to Torksey Ferry Road and the land parcels to the south.

These access designs will be sized to accommodate a max-legal articulated vehicle of length 16.5m.

- The existing carriageway would be surveyed, defects identified and any defects in the existing carriageway repaired.
- Passing places would be provided at regular intervals along Torksey Ferry Road.
- Where existing culverts or structure crossings of the Seymour Drain are present, these crossings will be assessed to determine their structural capacity and where required widened or strengthened to accommodate the anticipated vehicle movements.

4.1.107 During construction, vehicles would join Torksey Ferry Road via an upgraded access point at location 17/02, as shown on the **Streets, Rights of Way and Access Plans [REP2-025/5.3]**, using the haul route along the shared Grid Connection Corridor from Cottam Road to avoid vehicles travelling through Rampton. Construction vehicles would access the land to the south via Shortleys Road at location 17/05.

4.1.108 Due to the presence of construction traffic and the works in the land parcels to the south to install the grid connection corridor, it will be essential to manage BOAT13, FP20 and BOAT12 where there is interface. It is proposed that these existing public rights of way will be maintained on their current alignment as much as practicable.

4.1.109 For Torksey Ferry Road, works will require the closure of part of a circa. 1.7km section of PRoW NT|Rampton|BOAT13 for a maximum period of four weeks. Prior to construction, the duration of the closure will be reviewed depending on existing road condition, construction sequencing, final design and weather conditions during the works, to reduce this as far as possible.

4.1.110 In terms of potential effects, subject to carriageway improvement works, the provision of passing places and the management of existing public rights of way, the proposal for construction vehicles to utilise the existing Cottam Power Station southern gate access is not expected to result in any significant effects.

4.1.111 Overall, there is no change to the assessment of construction impacts on traffic and transport as a result of the design changes. The results remain as outlined in **Chapter 13: Traffic and Transport [APP-022/3.1]** of the ES.

Operation

4.1.112 Given the very infrequent need for access and the nature of the vehicles using the access during operation (no HGV's), vehicles will travel through Rampton to join Torksey Ferry Road. The type of vehicle required during operation will adhere to the maximum weight restriction of 18 tonnes that is currently in place within the village of Rampton.

4.1.113 In terms of PRoW these will be reinstated following completion of the works.

4.1.114 Overall, there is no change to the assessment of operational impacts on traffic and transport as a result of the design changes. The results remain as outlined in **Chapter 13: Traffic and Transport [APP-022/3.1]** of the ES. There will be no new or different likely significant effects.

Decommissioning

4.1.115 Overall, there is no change to the assessment of decommissioning impacts on traffic and transport as a result of the design changes. The results remain as outlined in **Chapter 13: Traffic and Transport [APP-022/3.1]** of the ES. There will be no new or different likely significant effects.

Cumulative

4.1.116 Overall, there is no change to the assessment of cumulative impacts on traffic and transport as a result of the design changes. The results remain as outlined in **Chapter 13: Traffic and Transport [APP-022/3.1]** of the ES. There will be no new or different likely significant effects.

Human Health

Baseline

4.1.117 The Human Health and Wellbeing baseline for the extended Order limits falls within the study area described in **Chapter 14: Human Health and Wellbeing [APP-023/3.1]**. This also considers the baseline review from Noise and Vibration, Socio-economics and Land Use, Transport and Access and Air Quality.

4.1.118 As set out in Traffic and Access, Torksey Ferry Road is not an adopted road by Nottinghamshire County Council and the carriageway is in poor condition. This is a single carriageway road which runs to the south of Cottam Power Station and is not a through route for local traffic. The socio-economics and land use baseline identifies an existing public right of way (Rampton BOAT13) along Torksey Ferry Road. This route is used by local residents to access a wider network of public rights of way and local amenities, namely FP6, FP20 and BOAT12. Properties in Rampton have been identified as additional noise sensitive receptors as they are within 300m of the extended Order Limits, which is in close proximity to the Torksey Ferry Road upgrade works. There is no change to the air quality baseline as a result of design changes.

Construction

4.1.119 There are no changes to the conclusions presented in the ES for: Noise and Vibration, Socio-economics and Land Use, Transport and Access and Air Quality and therefore there is no change to the assessment of construction impacts on human health as a result of the design changes. The results remain as outlined in **Chapter 14: Human Health [APP-023/3.1]** of the ES.

Operation

4.1.120 There are no changes to the conclusions presented in the ES for: Noise and Vibration, Socio-economics and Land Use, Transport and Access and Air Quality and therefore there is no change to the assessment of operational impacts on human health as a result of the design changes. The results remain as outlined in **Chapter 14: Human Health [APP-023/3.1]** of the ES.

Decommissioning

4.1.121 Overall, there is no change to the assessment of decommissioning impacts on human health as a result of the design changes. The results remain as outlined in **Chapter 14: Human Health [APP-023/3.1]** of the ES.

Cumulative

4.1.122 Overall, there is no change to the assessment of cumulative impacts on human health as a result of the design changes. The results remain as outlined in **Chapter 14: Human Health [APP-023/3.1]** of the ES.

Other Environmental Topics

Air Quality

4.1.123 There is no change to the air quality baseline as a result of the design changes. The baseline remains as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

4.1.124 Following the implementation of the measures included within the **Framework CEMP [EN010131/APP/7.3]**, there is no change to the assessment of construction, operation and decommissioning impacts on air quality as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

4.1.125 Overall, there is no change to the assessment of cumulative impacts on air quality as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Glint and Glare

4.1.126 Overall, there is no change to the assessment of construction, operational, decommissioning, and cumulative impacts on glint and glare as a result of the design changes as there is no change the Solar and Energy Storage Park which is the source of any glint and glare impacts. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Ground Conditions

Baseline

4.1.127 The extension of the Order Limits are in a similar context to the adjacent areas already described in **Chapter 15: Other Environmental Topics [APP-024/3.1]** from a geological and hydrogeological point of view. The Order limits extension is predominantly underlain by superficial deposits of the Alluvium (beneath Torksey Ferry Road upgrade area) and the Holme Pierrepont Sand and Gravel Member; these are classified as Secondary A aquifers which are receptors to any potential land contamination. Bedrock comprises Mercia Mudstone Group, which is classified as Secondary B aquifer, also a receptor.

- 4.1.128 The main hydrological receptor in this portion of the Order Limits remains Seymour Drain, which flows north at the western extent of the extended Order limits to Torksey Ferry Road, from where it then flows east immediately adjacent to the road on its southern side. It is then culverted north beneath the road (to the south of the Cottam Power Station cooling towers) and continues north into the power station site. However, the updated Order Limits are in close proximity of River Trent, located approximately 40 m from the Torksey Ferry Road upgrade area south at its closest point.
- 4.1.129 Current land use in the additional areas is generally consistent with land uses already identified in **Chapter 15: Other Environmental Topics [APP-024/3.1]** and in **Appendix 15-F [APP-180/3.3]** with the cable installation construction additional area lying on agricultural land and the Torksey Ferry Road extents within existing roads.
- 4.1.130 A review of historical maps indicates that historical land use comprises roadways, with Torksey Ferry Road visible in the first available map dated 1885, and agricultural land. Cottam power station remains the main potential source of contamination, which is already identified in **Appendix 15-F [APP-180/3.3]**. This is firstly visible on maps dated 1974 and is located immediately north of the additional areas, partially within the Order Limits. It is noted in particular that the eastern extent of Torksey Ferry Road is adjacent to the south of coal or ash storage areas associated with the power station and north of a pumping station.
- 4.1.131 A large number of regulated activities are located within, or in proximity of, the additional areas. These include waste management facilities, mineral sites, discharge consents associated with the Power Station; in particular, a landfill is partially located within Order limits extension in the Torksey Ferry Road upgrade area to the west, and a significant number of landfills and historical landfills are adjacent to the north and south.
- 4.1.132 Other potential sources of contamination include a historical sand pit (potentially infilled) adjacent to the updated Order Limits to the south, the existing Torksey Ferry Road, agricultural land and a potential farm adjacent to the westernmost portion of the Order limit extension.
- 4.1.133 Potential human health receptors remain unchanged, with the exception of possible residential human health receptors located adjacent to the westernmost portion of the Order limit extension.

Construction

- 4.1.134 Risks identified in **Chapter 15: Other Environmental Topics [APP-024/3.1]** and in **Appendix 15-F [APP-180/3.3]** of low, to low to moderate, remain unchanged as a result of the Order limits extension. It is assessed that the risk may be locally low to moderate for human health and controlled waters from the extension of the Order limits towards the west and with the presence of landfills here, however, this also factors in the limited extent of the additional areas and nature of the proposed limited excavation works planned to upgrade the road.
- 4.1.135 Upgrade works to the Torksey Ferry Road and the use of open cut techniques for the cable installation have the potential to disturb contaminated land, with

particular reference to the historical and current landfills associated with the power station. Disturbance of contaminated soils could increase the risk to receptors.

- 4.1.136 The works in proximity of the landfill will likely comprise very limited excavation and are likely to be undertaken within existing road material in the vast majority of the upgrade area. Measures contained within the **Outline Soil Management Plan** will limit the potential for soil derived dusts and contaminant (if present) migration to occur during construction. The Order limit change version will be submitted at Deadline 4.
- 4.1.137 With regards to the cable installation and river crossing, risks could increase if the installation is undertaken with open-cut techniques. There is the potential to disturb historically contaminated soil associated with the power station, Made Ground or agricultural land. However, measures contained within the **Outline Soil Management Plan** will limit the potential for soil derived dusts and contaminant (if present) migration to occur during construction. The Order limit change version will be submitted at Deadline 4.
- 4.1.138 Given the presence of the Cottam Power Station and associated landfills within, and in proximity of, the extended Order Limits, a watching brief will be carried out during works. A strategy has been developed detailing how soils will be managed if found to be or suspected to be contaminated. This is included within the **Outline Soil Management Plan**. The Order limit change version will be submitted at Deadline 4.

Operation

- 4.1.139 Overall, there is no significant change to risks during operations identified on ground conditions as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Decommissioning

- 4.1.140 Potential decommissioning effects will be similar to those set out for the construction phase, and therefore are unchanged from the effects outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Cumulative

- 4.1.141 Overall, there is no change to the assessment of cumulative impacts on ground conditions as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Major Accidents and Disasters

- 4.1.142 Overall, there is no change to the assessment of construction, operational, decommissioning, and cumulative impacts on major accidents and disasters as a result of the design changes. The extension does not introduce any new risk of accidents or disasters. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

Telecommunications, Television Reception and Utilities

- 4.1.143 Overall, there is no change to the assessment of construction, operational, decommissioning, and cumulative impacts on telecommunications, television reception and utilities as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.
- 4.1.144 During construction the contractor will need to put in place appropriate control measures to minimise the risk of cable strikes with both below or above ground statutory undertake assets.

Waste and Recycling

- 4.1.145 Overall, there is no change to the assessment of construction, operational or decommissioning impacts on waste and recycling as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.
- 4.1.146 Overall, there is no change to the assessment of cumulative impacts on waste and recycling as a result of the design changes. The results remain as outlined in **Chapter 15: Other Environmental Topics [APP-024/3.1]** of the ES.

5. Alterations to other environmental application documents

- 5.1.1 The following documents have been updated to reflect the Order limits changes and will be submitted at Deadline 4. A full list of documents updated for the change is provided in the Change Request and Consultation Report [document 8.24] submitted at Deadline 4.

2.3 Outline Design Principles

- 5.1.2 The Parameter Plan within the Outline Design Principles has been updated to reflect the Order limit changes.

3.2 Figure 10-21: Vegetation Removal for Solar and Energy Storage Park

- 5.1.3 This plan has been updated to show retention of hedgerows at Marton Road and removal of two 6m to 8m hedgerow lengths at Torksey Ferry Road to facilitate establishment of the haul road. These areas of hedgerow will be reinstated following installation of the 400kV cable.

3.2 Figure 13.5 PRow network and Figure 13.7 PRows to be Managed

- 5.1.4 These figures have been updated to reflect changes to interactions with PRow in the additional area.

3.3 Appendix 13E: Framework Construction Traffic Management Plan (CTMP)

- 5.1.5 Appendix B of the Framework CTMP has been updated to incorporate the new access locations required on Torksey Ferry Road.

3.8 TPO and Important Hedgerows Plan

- 5.1.6 Updated to show the additional Order limits area.

7.6 Archaeological Mitigation Strategy

- 5.1.7 The figures within the AMS have been updated to reflect the Order limit changes.

7.8 Public Rights of Way Management Plan

- 5.1.8 The Outline PRowMP has been updated to reflect Order limits change 1 and 2.

7.10 Outline Landscape and Ecological Management Plan (OLEMP)

- 5.1.9 Figure 10.23 within the OLEMP has been updated to include the Order limits changes.

7.12 Outline Soil Management Plan

- 5.1.10 The Outline SMP has been updated to include a commitment to undertake a soils monitoring watching brief during the Torksey Ferry Road upgrade works, and production of a Method Statement which details how soils will be managed if found to be or suspected to be contaminated.

6. Conclusion

- 6.1.1 As stated above, the four Order limits changes have been assessed by the same environmental specialists that delivered the ES. The extent to which the changes are likely to lead to new or different significant environmental effects in line with the methodologies set out in the ES have been considered **[APP-010-026/3.1]**.
- 6.1.2 This Supporting Environment Information Report concludes that the changes would result in minor alternations to the detail in the assessments, however these changes are too minor to result in a change to the reported predicted significant effects. In summary, as stated within Table 6-1 below, the changes do not result in any changes to the conclusions presented in the ES.

Table 6-1 Summary of changes to significant effects

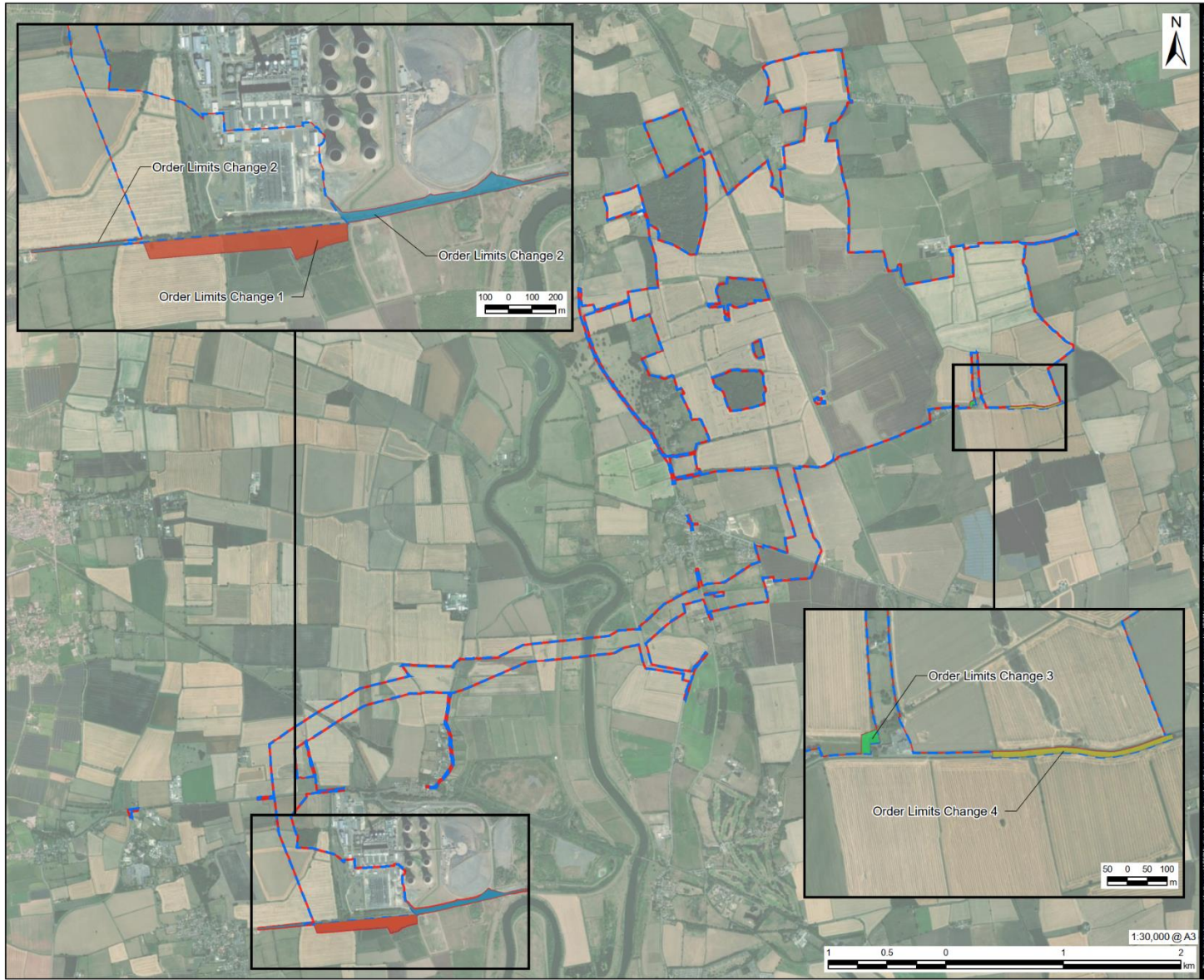
Topic	Summary
Chapter 6: Climate Change	No new or different significant environmental effects
Chapter 7: Cultural Heritage	No new or different significant environmental effects
Chapter 8: Ecology and Nature Conservation	No new or different significant environmental effects
Chapter 9: Water Environment	No new or different significant environmental effects
Chapter 10: Landscape and Visual Amenity	No new or different significant environmental effects
Chapter 11: Noise and Vibration	No new or different significant environmental effects
Chapter 12: Socio-economics and Land Use	No new or different significant environmental effects
Chapter 13: Transport and Access	No new or different significant environmental effects
Chapter 14: Human Health	No new or different significant environmental effects
Chapter 15: Air Quality	No new or different significant environmental effects
Chapter 15: Glint and Glare	No new or different significant environmental effects
Chapter 15: Major Accidents and Disasters	No new or different significant environmental effects
Chapter 15: Telecommunications, Television Reception and Utilities	No new or different significant environmental effects
Chapter 15: Waste and Recycling	No new or different significant environmental effects

6.1.3 As outlined in Section 5, environmental documents have been updated to reflect the changes and ensure mitigation measures also cover the new areas.

Appendices

Appendix A Order Limits Change September 2023

Revision: 01 Drawn: VC Checked: RH Approved: WB Date: 2023-10-02
 File name: \\na.aecom.com\env\GEM\A\Projects\UK\GB\PP\01\UK\GB\PP\01_V11E\logbook\env\02\Project\Gate_Burton_Energy_Park\02_Main\Further_Environmental_Information\Figures_Figures\Figures\01_ChangeRequest.mxd



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LEGEND
 Order Limits January 2023
 Order Limits September 2023

Order Limits Changes
 Change 1
 Change 2
 Change 3
 Change 4

NOTES
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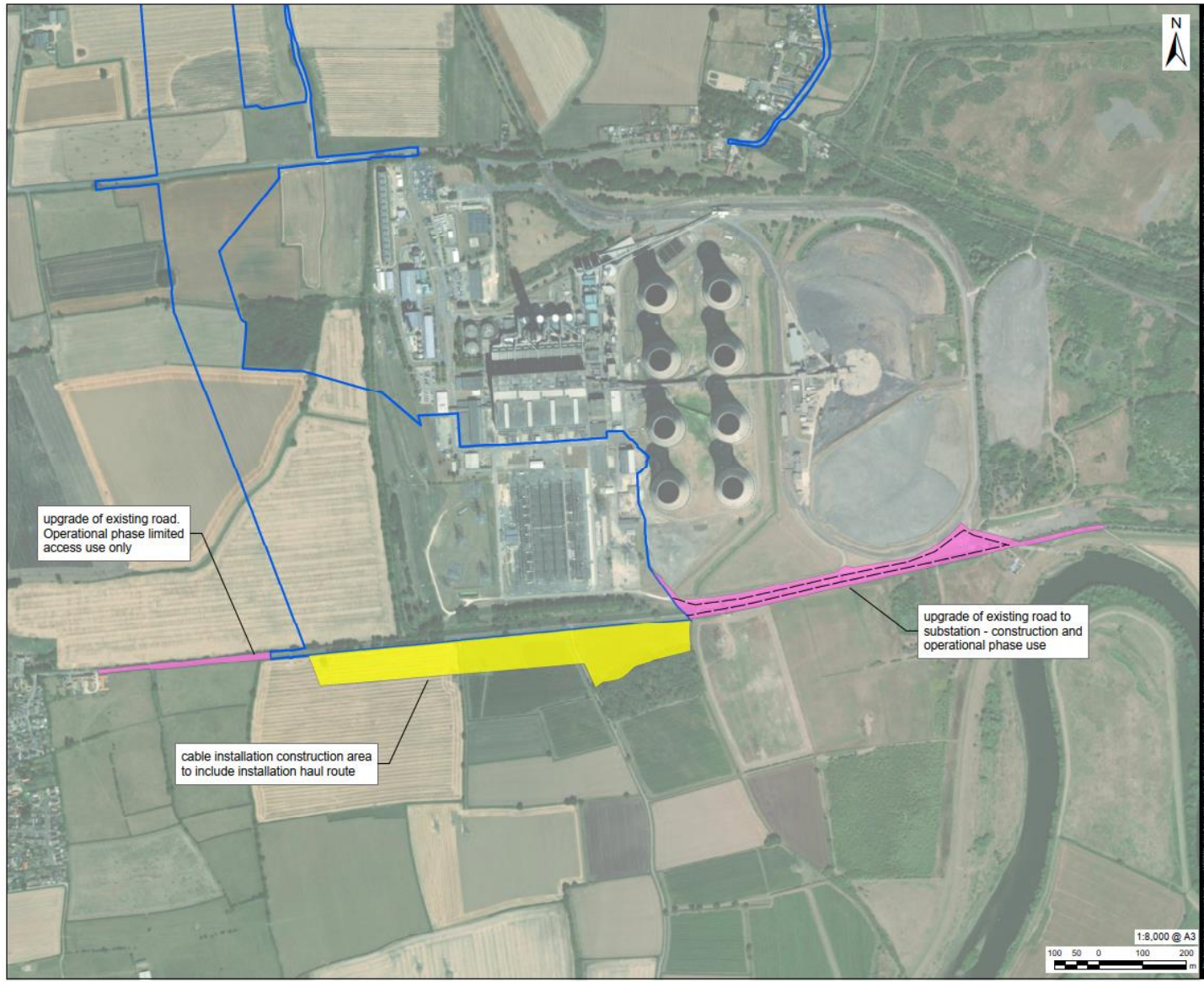
ISSUE PURPOSE
 Applicant's Change Request

PROJECT NUMBER
 60664324

FIGURE TITLE
 Order Limits Change September 2023

FIGURE NUMBER
 Figure 1

Revision: 01 Drawn: VC Checked: TH Approved: WB Date: 2023-09-26
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PROJECT
 Gate Burton Energy Park

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LEGEND

- Order Limits January 2023

Order Limits Changes

- Upgrade of Existing Road
- Installation of one 400kV Cable in the Project only
- Scenario and three 400kV Cables in the Cumulative Scenario
- Existing Track

NOTES

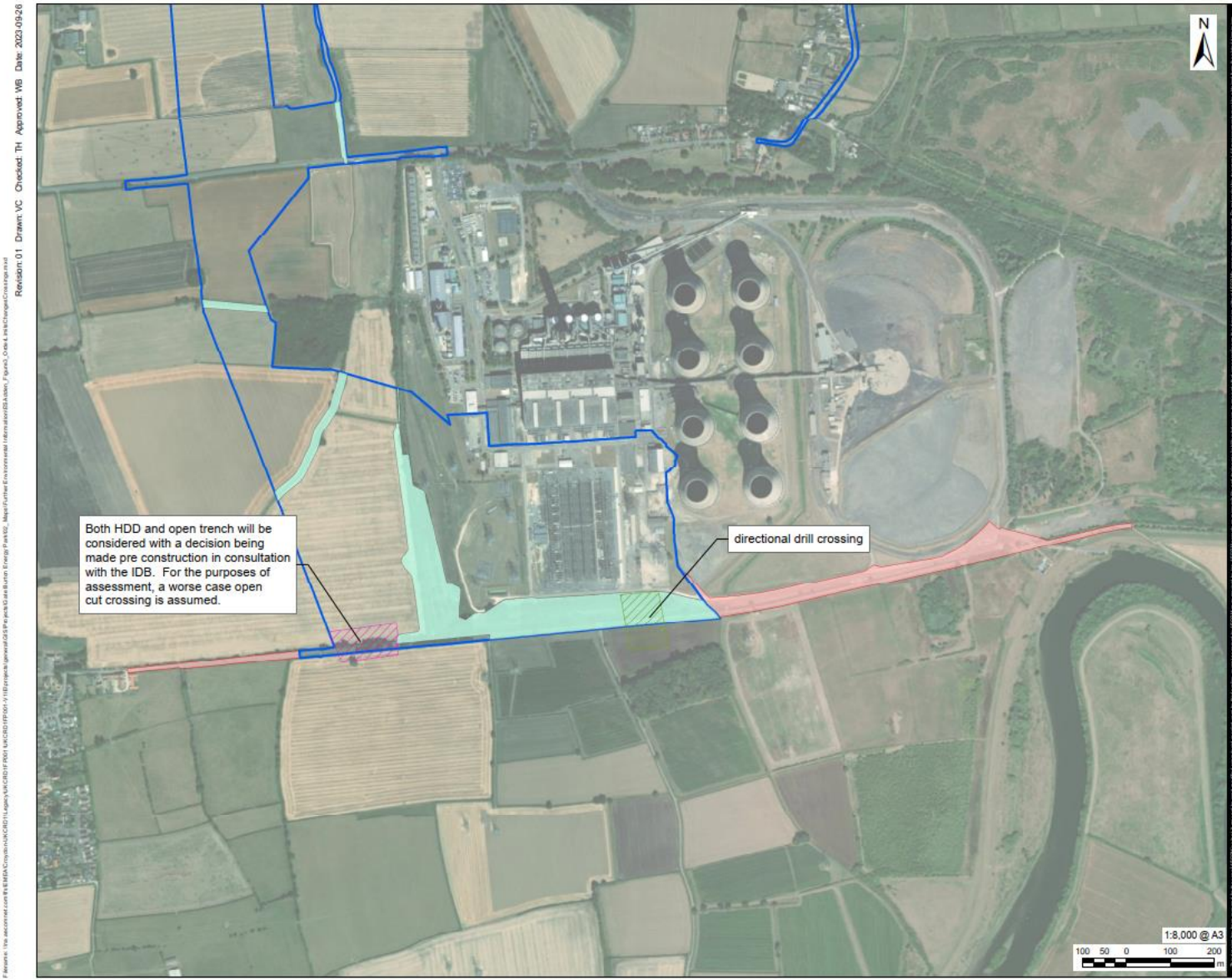
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community's Crown copyright and database rights 2022. Ordnance Survey 0100031673.

ISSUE PURPOSE
 Supporting Environmental Information

PROJECT NUMBER
 00664324

FIGURE TITLE
 Order limits change 1: An extension to the Order limits to the south of Torkesey Ferry Road

FIGURE NUMBER
 Figure 2



Revision: 01 Drawn: VC Checked: TH Approved: WB Date: 2023/09/26



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 Gate Burton Energy Park

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- LEGEND
- Order Limits January 2023
 - Additional Areas within Order Limits
 - Avoidance Area
 - Crossing - East
 - Crossing - West

NOTES
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ISSUE PURPOSE
 Supporting Environmental Information

PROJECT NUMBER
 60864324

FIGURE TITLE
 Order limits change 1: Crossings

FIGURE NUMBER
 Figure 3

