Riverside Energy Park

Environmental Statement Supplementary Report

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CORY
RIVERSIDE ENERGY

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1 Introduction

1.1 Overview

1.1.1 This Environmental Statement Supplementary Report (ESSR) has been prepared on behalf of Cory Environmental Holdings Limited (trading as Cory Riverside Energy (Cory or "the Applicant")) for Riverside Energy Park (REP). This document has been prepared and submitted at Deadline 2 and supplements the **Environmental Statement (6.1-6.4, APP-038-APP-100)** submitted for the REP **draft Development Consent Order (dDCO)** application.

1.2 The submitted ES, as corrected and clarified

1.2.1 Since the submission of the DCO application in 16 November 2018, the Applicant has prepared a Corrections and Clarification Report (Submitted at Deadline 2), which provides clarifications and corrections relating to the Environmental Statement. This ESSR should therefore be read alongside the Environmental Statement, as corrected and clarified by the **Corrections and Clarifications Report** (together referred to as 'the submitted ES').

1.3 Purpose of this document

1.3.1 As a result of ongoing design development work and stakeholder engagement, two minor amendments to the Proposed Development have been identified, as follows:

1. Amendment 1: amendment to the location of the Main Temporary Construction Compound, described in Chapters 2 and 3; and

2. Amendment 2: installation of cable troughs for the Electrical Connection route over two watercourses, described in Chapter 4.

1.3.2 This document describes the amendments to the Proposed Development and reports any potential material changes to the assessment of likely significant environmental effects arising from the proposed amendments compared to those reported in the submitted ES.

1.4 Amendments to other submitted documents

1.4.1 The following application documents have been amended as a result of the amendments and will be submitted at Deadline 2 are as follows:

- Land Plans (2.1, Rev 1);
- Works Plan (2.2, Rev 1);
- Access and Public Rights of Way Plans (2.3, Rev 1);
- Draft Development Consent Order (3.1, Rev 1);

- Statement of Reasons (4.1, Rev 1); and
- Book of Reference (BoR) (4.3, Rev 1).

1.5 Structure of this document

- Chapter 1 – Introduction
- Chapter 2 –Amendment 1 (Scenario 1): Amendment to the Main Temporary Construction Compound to include the use of the Data Centre site – description of proposed amendment and assessment of potential likely significant environmental effects;
- Chapter 3 –Amendment 1 (Scenario 2): Amendment to the Main Temporary Construction Compound to include the use of part of the Data Centre site – description of proposed amendment and assessment of potential likely significant environmental effects;
- Chapter 4 - Amendment 2: Installation of cable troughs over watercourses for the Electrical Connection route – description of proposed amendment and assessment of potential likely significant environmental effects;
- Chapter 5 – summary of assessment findings

2 Amendment 1: Amendment to Main Temporary Construction Compound (Scenario 1)

2.1 Overview

2.1.1 The Applicant has removed Plots 02/53 and 02/55 from the Main Temporary Construction Compound. The scenario addressed in this chapter is as follows:

- Scenario 1 – the Applicant has removed Plots 02/53 and 02/55 from the Main Temporary Construction Compound and replaced them with Plots 02/43, 02/44, 02/48 and 02/49 (known as the "Data Centre site") for use as part of the Main Temporary Construction Compound. The Data Centre site was already in the environmental assessment in the submitted ES.

2.1.2 In this scenario Plots 02/53 and 02/55 will no longer be subject to compulsory acquisition and temporary use powers and the existing joinery business on Plot 02/53 would remain. It should be noted that the submitted ES also considered the Applicant taking temporary possession of Plot 03/07. However, the Applicant removed this plot from the temporary possession powers prior to submission.

2.1.3 As a consequence, the existing joinery business and its car parking/yard on plots 02/53 and 03/07 will now remain in operation during the construction of the Proposed Development.

2.2 Site description

2.2.1 As stated at **Paragraph 3.2.8**, **Chapter 3 Project and Site Description** of the **submitted ES (6.1, Rev 1)**, the proposed Main Temporary Construction Compound would be located in an area of previously developed land (a former National Grid substation site) adjacent to the west side of Norman Road, immediately north of its junction with A2016 Picardy Manor Way. The northern extent of this area recently received planning permission (Local Planning Authority reference: 13/00918/FULM) for the erection of three industrial units for mixed use within Class B1 (business), Class B2 (general industrial) and B8 (storage/distribution), with associated ancillary works. Part of the southern portion comprises the Munster Joinery premises (Plot 03/07).

2.2.2 The Data Centre site is located along the west side of Norman Road, immediately adjacent to the proposed Main Temporary Construction Compound. The Data Centre site (also known as Cory/Borax fields) has outline planning permission for the development of Data Centres but is currently vacant with a mixture of hardstanding and rough vegetation/grasses. As noted in the **Table 11.2 Chapter 11 Terrestrial Biodiversity** of the **ES (6.1, Rev 1),** the Data Centre site is identified as of at least regional importance for invertebrates as well as nesting by red-listed birds.

2.3 Plots 02/43, 02/44, 02/48 and 02/49 (Data Centre site) – extant planning consent

2.3.1 Plots 02/43, 02/44, 02/48 and 02/49 (the Data Centre site) are located adjacent to Norman Road. The site is owned by the Riverside Resource Recovery Limited (a Cory group company) and the principle of construction works and development on the site is accepted as it has the benefit of outline planning consent (Local Planning Authority reference: 15/02926/OUTM) for a Data Centre (Use Class B8), sub-stations, formation of new access, car parking and landscaping, which includes two four storey buildings (the Data Centre Permission). The draft Development Consent Order includes the power to install an underground connection along Norman Road and into the Data Centre site to provide power to any future Data Centres on the Data Centre site.

2.3.2 The Data Centre Permission, granted on 11 July 2016, is subject to planning conditions which are appended to this report (Appendix A). The planning conditions consist of, but are not limited to, provisions for a Landscape Management Plan and a Biodiversity Management Plan as well as a Demolition and Construction Timetable which will need to demonstrate the following:

- no work to take place during a bird nesting season, unless an ecologist has provided confirmation that birds are not breeding on site at that time. This timetable will take into account the findings of all ecological survey work undertaken, both before and after approval of the outline permission;
- demolition and construction methods and techniques (including the avoidance of burning on site and vehicle movements);
- days/hours of work and deliveries of construction materials;
- means of minimising noise and vibration (including any piling), and compliance with BS 5228;
- means of minimising dust and similar emissions, in accordance with Air Quality: Best Practice Guidance - The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance (published by the Greater London Authority, July 2014);
- means for the identification, removal and safe disposal of asbestos;
- construction site lighting;
- details of the location of any construction compound, and arrangements for the parking of operators and sub-contractors' vehicles;
- details of proposed hours of site working and operations; and
- contact arrangements for the public, including 'out of hours' telephone numbers for named contacts).

2.3.3 As part of the **draft Development Consent Order (dDCO) (3.1, Rev 1)** a **Pre-commencement biodiversity and landscape mitigation strategy,** an **Biodiversity and Landscape Mitigation Strategy (OBLMS) (7.6, APP-107)** and **Code of Construction Practice (CoCP)** is secured through **Requirements, 4, 5** and **11**, respectively. It is considered that, in the event that works under the Data Centre Permission are not completed, that these Requirements would provide the appropriate controls to replicate the above conditions and ensure no adverse significant effects arise – for example through the necessary restoration of the Data Centre site. Further environmental controls to ensure no adverse significant effects are set out in Schedule 2 of the **dDCO (3.1, Rev 1),** and are not repeated here. In the event that the works under the Data Centre Permission are carried out once the Data Centre site is no longer required for part of the Main Temporary Construction Compound, then as set out above, the Data Centre Permission already provides for the necessary mitigation.

2.4 Proposed Works

2.4.1 The **dDCO (3.1, Rev 1)** describes the proposed works to construct a temporary construction compound (Work No. 8) as follows:

"Work No. 8 — Works to construct temporary construction compound including—

(a) hard standing;

(b) vehicle parking;

(c) accommodation block(s);

(d) new or alteration to accesses; and

(e) construction fabrication areas".

2.4.2 It should be noted that the Data Centre site is identified in the **Works Plans (2.2, Rev 1)** for Work No. 7, which includes:

2.4.3 "Work No. 7 — Works to construct and install from Work No. 6 pipes and cables".

2.4.4 The entire Data Centre site has been allocated for these works (Work No. 7), therefore, construction work relating to Work No. 7 has been assessed and reported in the submitted ES. Although these activities (Work No. 7) differ in relation to the activities and duration to those outlined for the Main Temporary Construction Compound (Work No. 8), they are included in Table 2.1 of this report.

2.5 Assessment of environmental effects

Introduction

2.5.1 This section considers the environmental effects of Amendment 1 (Scenario 1) which includes amendment to the Main Temporary Construction Compound to include the use of the Data Centre site (Plots 02/43, 02/44, 02/48 and 02/49);

Approach and assessment methodology

2.5.2 The approach adopted in this exercise uses the assessment methodology and findings presented in the submitted ES as a starting point, and considers qualitatively the potential effects of the amendment, using professional judgement, comparing the potential effects to those reported in the submitted ES. The principal environmental effects relating to this amendment which have been considered in this assessment are as follows:

1. effects of the proposed works on the joinery business;
2. effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound;
3. effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound; and
4. the potential for any impact interactions likely to arise as a consequence of the amendment.

2.5.3 This approach seeks to determine whether any new or materially different likely significant effects are likely to arise as a result of the amendment and, as a consequence, whether the embedded environmental mitigation measures need to be amended or new measures introduced in order to ensure that the potential effects from the amendment are appropriately mitigated. The assessment has also considered whether the amendment would hinder or prevent the implementation of any proposed embedded environmental mitigation measures.

Scope of assessment

2.5.4 The scope of the assessment includes the construction, operation and de-commissioning phases of the Proposed Development, where appropriate, and the following environmental topics are considered in Table 2.1, as per the submitted ES:

- **Chapter 6 Transport (6.1, Rev 1)**;
- **Chapter 7 Air Quality (6.1, Rev 1)**;
- **Chapter 8 Noise and Vibration (6.1, APP-045)**;
- **Chapter 9 Townscape and Visual Impact (TVIA) (6.1, Rev 1)**;

- **Chapter 10 Historic Environment (6.1, APP-047)**;
- **Chapter 11 Terrestrial Biodiversity (6.1, Rev 1)**;
- **Chapter 12 Hydrology Flood Risk and Water Resources (6.1, Rev 1)**;
- **Chapter 13 Ground Conditions (6.1, Rev 1)**;
- **Chapter 14 Socio-economic (6.1, Rev 1)**; and
- **Chapter 15 Other Considerations (6.1, APP-052)**.

Assessment assumptions: Scenario 1 – construction, operation, de-commissioning and cumulative effects

2.5.5 Amendment 1 (Scenario 1) relates solely to the Main Temporary Construction Compound and not to any activities undertaken during the operation or decommissioning of the Proposed Development. Therefore, only construction effects are considered for Scenario 1.

2.5.6 Following a review of the cumulative effect's assessment presented in each ES topic chapter in the submitted ES, it was considered that, due to the relatively small scale and nature of the amendment, potential cumulative effects with committed developments should be scoped out of the assessment. The assessment presented in Table 2.1 does, however, consider potential impact interactions which might arise as a consequence of the amendment.

2.5.7 Given that, in this scenario, the Data Centre would be constructed following the construction of the Proposed Development, the assessment presented in Table 2.1 does not consider any potential impacts of the construction and operation of the Data Centre.

Assessment tables

2.5.8 Based on the approach and scope set out above, Table 2.1 presents the assessment of the likely significant environment effects arising from amendment 1 (Scenario 1) - changes to the Main Temporary Construction Compound on a topic-by-topic basis. The right hand column sets out the conclusions as to whether or not the amendment has the potential to give rise to new or materially different effects, compared to those presented in the submitted ES.

Table 2.1: Scenario 1 - Main Temporary Construction Compound – Environmental Assessment

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 6 Transport	1. Effects of the proposed works on the joinery business It is likely that the joinery business will be subject to an increase in transport related activity during the construction phase of the Proposed Development along Norman Road. However, the updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **Transport Assessment (TA), Appendix B.1** of the **ES** (**6.3, APP-066**) and is secured through **Requirement 13** of the **dDCO (3.1, Rev 1**), will ensure the safety of road users and minimise transport related impacts along Norman Road (and the surrounding area) during the construction phase. No new or different likely significant effects relating to transport have been identified, therefore, the assessment within the submitted ES, as amended, remains valid. 2. Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound The amendment to the Main Temporary Construction Compound is unlikely to give rise to any new construction activities or change the construction programme. Therefore the volume of construction related vehicles travelling to and from the compound will remain as reported in **Chapter 6 Transport** of the submitted **ES**, as amended **(6.1, Rev 1)**, with the only change being that these vehicles may be required to travel further (approximately 100 m) along Norman Road to the Data Centre site. With regards to the	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	potential for accidents and road safety, the access road that intersects the Data Centre site (access for Crossness Sewage Treatment Works) will be retained. There are likely to be construction-related movements (vehicle and construction workers) between the two retained parcels of land. Therefore, a suitable crossing point along the access road with appropriate traffic controls will be installed during the construction phase. In addition, an additional access may be required off Norman Road for the use of the Data Centre site. Safety measures for the Data Centre site will be controlled through the updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**) and the **Outline CoCP (7.5, Rev 1)**, therefore, no new or different likely significant effects are likely to arise as a result of the amendment. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Whilst there is likely to be more transport related activity along Norman Road in terms of vehicles trips, the potential impact relating to vehicle movements from construction activities is unlikely to be significant as vehicle movements from the joinery business that were originally included as part of the baseline traffic assessment for Norman Road. An updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**) which is secured through **Requirement 13** of the **dDCO (3.1, Rev 1**) ensures principles are set to control vehicle movements from the Proposed Development and that there is no queuing along Norman Road or in the surrounding area.	3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Furthermore, **Paragraph 6.4.14 Chapter 6 Transport** of the submitted ES (**6.1, Rev 1**) that at the assessed peak construction month in the ES (i.e. Month 13), there would be 22 HGV's per working day. The 22 HGV's per working day excludes construction staff vehicle movements, which has been reduced from 552 to 275 since the submission of the DCO as set out in the updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**). Therefore, there is unlikely to be an increase in the volume of HGV movements over the number assessed in the submitted ES. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> As no new likely significant effects have been identified, any new impact interactions are considered unlikely.	

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 7 Air Quality	1. Effects of the proposed works on the joinery business As described in **Paragraph 7.9.1**, **Chapter 7 Air Quality** of the submitted ES (**6.1, Rev 1**) the main potential air quality effects during construction and decommissioning of REP and the Main Temporary Construction Compounds are dust deposition and associated elevation in PM_{10} concentrations. The following activities have the potential to cause emissions of dust: ▪ Site preparation including delivery of construction material, erection of fences and barriers; ▪ Earthworks including digging foundations and landscaping; ▪ Materials handling such as storage of material in stockpiles; ▪ Construction and fabrication of units; ▪ Decommissioning activities (including demolition); and ▪ Removal of materials No foundation or demolition works are required for the use of the Data Centre site and best practice measures to limit dust will be incorporated into the construction of the Proposed Development, as outlined in the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. As an industrial receptor, the joinery business is classified as medium sensitivity. The joinery business would be located within 20m of the Main Temporary Construction Compound. As a single receptor it is below the threshold for consideration of area sensitivity for dust impacts as identified in **Table 7.11 Chapter 7 Air Quality** of the	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	submitted ES (**6.1, Rev 1**). The area would be classified as low sensitivity for human health impacts in accordance with **Table 7.12 Chapter 7 Air Quality** of the submitted ES (**6.1, Rev 1**). There would therefore be no change to the assessment of the risk of construction dust impacts as defined in **Table 7.33 Chapter 7 Air Quality** of the submitted ES (**6.1, Rev 1**). Mitigation measures would therefore remain as those for a low risk site and the measures set out in the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. With the mitigation measures in place, and in accordance with **Table 7.37 Chapter 7 Air Quality** of the submitted ES (**6.1, Rev 1**)., the effects will be not significant. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> Construction related vehicle movements to the Main Temporary Construction Compound will remain as reported in the submitted ES. Construction related vehicles may be required to travel further (approximately 100 m) along Norman Road to the Data Centre site which is located east of Crossness Local Nature Reserve (LNR). The distance to the nearest residential properties (over 500 m to the south of the Application Site) and to the closest nationally designated terrestrial biodiversity site (over 1.6 km north east of the Application Site) remain as reported in the submitted ES. It should be noted that whilst the amendment would result in a larger area to be used for the Main Temporary Construction Compound, the magnitude of dust emissions for earthworks and track out (which relate to the Main Temporary Construction Compound) is already defined as 'Large' in **Table 7.33**, **Chapter 7 Air Quality** of the submitted ES	to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	(**6.1, Rev 1**). Therefore, the risk of additional dust impacts for previously assessed receptors remains low. The principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of the Data Centre site as part of the Main Temporary Construction Compound is unlikely to give rise to new significant effects in relation to air quality. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There is unlikely to be a change in air quality impacts from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. Furthermore, Plot 03/05 south of the Plots 02/53 and 03/07, will still be utilised as part of the Main Temporary Construction Compound, therefore there is unlikely to be any change in potential effects to nearby receptors. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise.	

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 8 Noise and Vibration	1. <u>Effects of the proposed works on the joinery business</u> Precise details of the types of construction methods and plant likely to be used during the construction phase have yet to be confirmed. Therefore, at this stage it is not possible to state precisely where plant would operate and for how long during the working day. However, **Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES** (**6.1, APP-054**) states that "*the Main Temporary Construction Compound, other than their initial preparation for use, are not likely to be utilised for major construction works such as building construction and site levelling and are more likely to be utilised as a laydown area/parking and fabrication of parts.*" Given the industrial nature of the area and the type of business located on Plots 03/07 and 02/53 and the measures set out in the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **DCO (3.1, Rev 1)**, it is likely that the potential temporary construction effects will be negligible. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> Construction related vehicle movement numbers to the Main Temporary Construction Compound will remain as reported in the submitted ES, although construction related vehicles may be required to travel further (approximately 100 m) along Norman Road to the Data Centre site. Therefore, potential subsequent noise and vibration impacts as a result of vehicle movements will not be altered and the impacts identified in the submitted ES remain not significant.	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	3. Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound The removal of Plots 02/53, 02/55 and 03/07 may result in a slight reduction in noise levels to neighbouring receptors located on the opposite side of Norman Road to Plots 02/53, 02/55 and 03/07. However, the commercial premises located along Norman Road are not sensitive to change and it is likely that due to the continued use of the plots surrounding Plots 02/53, 02/55 and 03/07 for use as the Main Temporary Construction Compound, any reduction in noise levels is unlikely to be perceived. Therefore, the removal of Plots 02/53, 02/55 and 03/07 is unlikely to result in a new or different likely significant effect. 4. The potential for any impact interactions likely to arise as a consequence of the amendment As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise.	effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.
Chapter 9 Townscape and Visual	1. Effects of the proposed works on the joinery business The light industrial business located on Plots 02/53, 02/55 and 03/07 is not considered a sensitive receptor to Townscape and Visual change in terms of the amendment to the	1. No new or different likely significant effects are likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Impact Assessment	adjacent Main Temporary Construction Compound. Therefore, Townscape and Visual impacts remain as assessed in the submitted ES. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> The use of the Data Centre site would result in a larger area for the Main Temporary Construction Compound which has the potential to give rise to temporary townscape and visual effects. However, the construction phase would be of a limited duration, approximately three years, and the activities which are listed at **Paragraph 9.9.1**, **Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1)** are unlikely to change. Potential construction activities and plant for the Main Temporary Construction Compound are unlikely to involve tall structures, such as cranes, which have the potential to give rise to townscape and visual effects. The Main Temporary Construction Compound is likely to be used for laydown areas, car parking and fabrication of parts (**Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-054).** The construction activities are not discordant with the character or activities of the existing urban area which can be defined as diverse industrial and urban area, adjacent to existing large-scale industrial buildings. Additionally, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of the Data	to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Centre site as part of the Main Temporary Construction Compound is unlikely to give rise to significant effects in relation to townscape and visual. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There may be a slight beneficial effect to the surrounding area due to the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. However, the joinery business is considered as light industrial and is also likely to use similar plant and machinery. Therefore, the effects identified in **Table 9.5**, **Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1)**, remain valid and there are no new or different likely significant effects when compared to the submitted ES. 4. <u>The potential for any impact interactions likely effects to arise as a consequence of the amendment</u> The impacts identified above are either negligible or no change, therefore, there is unlikely to be any impact interactions.	and 03/07 from the Main Temporary Construction Compound. 4. As new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 10 Historic Environment	1. <u>Effects of the proposed works on the joinery business</u> There is unlikely to be any potential impact to the joinery business in terms of Historic Environment, as this receptor is not considered sensitive to change, nor is it considered to have any archaeological or heritage interest. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> As part of the planning permission for the Data Centre site (Local Planning Authority reference: 15/02926/OUTM) a desk based Archaeological Assessment (June 2017) (document reference: 05-17-04) was undertaken in 2017. The assessment states that ground remediation across all or most of the Data Centre site (with the possible exception of the edges) between 1900 and 2001 will have removed all medieval and post-medieval remains. Whilst there is considerable evidence of resource exploitation in the former marshes along the Thames estuary in the Roman period, in particular in north Kent, where there was pottery and salt manufacture, there is little evidence of such within the vicinity of the Data Centre site and therefore there is a low potential for Roman remains, based on evidence from archaeological investigations in the wider area. Further to the above, the proposed use of the Data Centre site for part of the Main Temporary Construction Compound would not involve any intrusive works to affect any unknown buried archaeology and there are no above ground heritage assets within or adjacent to the Data Centre site, nor does the Data Centre site lie within a local authority	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	conservation area. The northern half of the Data Centre site lies entirely within the Thamesmead and Erith Marshes Area of High Archaeological Potential (AHAP; more generally known as an Archaeological Priority Area) as defined by the London Borough of Bexley. However, as stated above, no intrusive ground works are likely as a result of the use of the Data Centre site for part of the Main Temporary Construction Compound. Therefore, there are no new or different likely significant effects when compared to the submitted ES. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There are unlikely to be significant effects to unknown buried archaeology or above ground heritage assets due to the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound as there are no above ground heritage assets within the vicinity of the surrounding area and unknown archaeological remains, will remain untouched. Therefore, there are no new or different likely significant effects and the effects in the submitted ES remain valid. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise.	to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 11 Terrestrial Biodiversity	1. Effects of the proposed works on the joinery business There is unlikely to be any potential impact to joinery business, in terms of terrestrial biodiversity, as this receptor is not considered sensitive to change nor is it considered to have any ecological merit. 2. Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound The Data Centre site is located immediately east of Crossness LNR. The study area for terrestrial biodiversity, as set out in **Paragraph 11.5.1**, **Chapter 11 Terrestrial Biodiversity** of the submitted ES (**6.1, Rev 1**), includes the Data Centre site. Field surveys carried out as part of the EIA, were extended to the Data Centre site and taken into consideration in the assessment reported in the submitted ES, as amended. The **Works Plans (2.2, Rev 1)** identify the whole of the Data Centre site for 'Work No. 7 - Works to construct and install from Work No. 6 Pipes and Cables'. Therefore, any works relating to the construction of Work No. 7 were considered for the whole of the site up to the boundary with Crossness LNR. Construction works relating to Work No. 7 are likely to differ in activity and duration to those of construction works as part of the Main Temporary Construction Compound. However, no likely significant adverse effects were identified for the Main Construction Compound in the submitted ES, as amended, with the embedded mitigation of the **OBLMS (7.6, APP-107)** secured through **Requirement 5** of the **dDCO (3.1, Rev 1).** Furthermore, the **Outline CoCP (7.5, Rev 1**), which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** will limit the	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	amount of potential noise, dust and light as a result of the construction phase to the surrounding area. The principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of the Data Centre site as part of the Main Temporary Construction Compound is unlikely to give rise to significant effects in relation to terrestrial biodiversity. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53, 02/55 and 03/07 would no longer be subject to the measure set out in the **OBLMS** (**7.6, APP-107**) or the measure set out in the **Outline CoCP** (**7.5, Rev 1**) as secured through **Requirement 5** and **11** of the **dDCO** (**3.1, Rev 1**), respectively. However, the southern extent of the Main Temporary Construction Compound (Plot 03/05) adjacent to Plots 02/53 and 03/07 on the south side, will remain. Therefore, there is unlikely to be any change to potential temporary construction effects on terrestrial biodiversity, namely Crossness LNR, from that assessed in the submitted ES.	to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	4. <u>The potential for any impact interactions likely effects to arise as a consequence of the amendment</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise.	
Chapter 12 Hydrology Flood Risk and Water Resources	1. <u>Effects of the proposed works on the joinery business</u> There is the potential for an increase in surface water runoff as part of the Main Temporary Construction Compound, which has the ability to increase flood risk in the area potentially affecting the joinery business. However, a management system would be in place to adequately manage works within the floodplain which is controlled through within the **Outline CoCP (7.5, Rev 1),** secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, the potential effects in terms of Hydrology Flood Risk and Water Resources remain as reported in the submitted ES. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> A Preliminary Environmental Risk Assessment (January 2016) (document reference 70015694) was undertaken as part of the consent process for the Data Centre (Local Planning Authority reference: 15/02926/OUTM). The Preliminary Environmental Risk Assessment states that the nearest surface water features indicated by OS mapping is the River Thames, located approximately 400 m north of the Data Centre site which is	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	tidally influenced. Drainage ditches are present within the Data Centre site boundary and a number of ditches and small waterways are recorded present on mapping as part of Erith Marshes and the Crossness LNR. The Data Centre site is located within a flood zone 3 as defined by the Environment Agency as an area benefiting from flood defences. There are three reported licensed surface water abstractions within a 1 km radius of the Data Centre site. Two are operated by Thames Water and are taken from Crossness LNR. The third is operated by Cory Environmental Developments and is taken from the River Thames. The use of the Data Centre site as part of the Main Temporary Construction Compound has the potential to give rise to compaction of the ground caused by construction plant. There is potential for an increase in the impermeable surfaces associated with access roads and compound areas which has the potential to affect the surface water drainage regime and increase surface water run-off into nearby watercourses from the Main Temporary Construction Compound. However, such effects would be localised and temporary and controlled using measures set out within the **Outline CoCP (7.5, Rev 1**). Therefore, there are no new or different likely significant effects when compared to the submitted ES. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53, 02/55 and 03/07 would no longer be subject to the measure set out in **Paragraph 12.8.2** of **Chapter 12 Hydrology Flood Risk and Water Resources** of the	Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	submitted **ES (6.1, Rev 1),** and the measures set out in the **Outline CoCP** (**7.5, Rev 1**) to control flood risk and water resources. Therefore, there is potential for an increase to surface water runoff. However, it is likely that the joinery business will have its own flood risk controls and drainage in place. Furthermore, the Data Centre site will be subject to the measures set out in the **Outline CoCP** (**7.5, Rev 1**) to control flood risk and water resources. Therefore, further impacts in terms of Hydrology Flood Risk and Water Resources remain as reported in the submitted ES, as amended. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise. .	any impact interactions.
Chapter 13 Ground Conditions	1. <u>Effects of the proposed works on the joinery business</u> The measures set out in the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** will control potential risk of contamination during the construction phase to the surrounding area (including the joinery business). Therefore, no new or different likely significant effects have been identified.	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> As part of the planning application for the Data Centre site (Local Planning Authority reference: 15/02926/OUTM), Phase 1, 2 and 3 assessments were undertaken for the Data Centre site. The Phase 3, Detailed Quantitative Risk Assessment (DQRA) (March 2017) (document reference 70031031) has been approved by the Environment Agency (EA). The EA agrees with the conclusions of the DQRA and that the current identified contamination at the Data Centre site represents a low risk to both the River Thames and the underlying aquifers (protected by the London Clay). Therefore, on the basis of the current site conditions, remedial measures are not required. The planning application for the Data Centre site involves intrusive construction in the form of pilling. Whereas, the activities for the use of the Data Centre site for part of the Main Temporary Construction Compound will likely involve laydown areas and car parking. These activities are lower risk activities than that of the construction of the two four storey buildings for the Data Centre. Any potential contamination for the Data Centre site as part of the Main Temporary Construction Compound will be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, there are no new or different likely significant effects when compared to the submitted ES.	effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53, 02/55 and 03/07 will no longer be subject to the measure set out in **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** which sets out the principles to control the risk of contamination to construction workers and the surrounding area. However, the existing operations as part of the joinery business are not considered to be a risk to changes in ground conditions. Furthermore, the Data Centre site will be subject to the measures set out in the **Outline CoCP** (**7.5, Rev 1**). Therefore, no new or different likely significant effects relating ground conditions. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> No change has been identified to ground conditions therefore it is considered that there is unlikely to be any impact interactions.	4. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.
Chapter 14 Socio-economic	1. <u>Effects of the proposed works on the joinery business</u> There is potential for a socio-economic benefit with regards to the retention of the joinery business located on Plots 03/07 and 02/53.	1. There is likely to be a beneficial impact (not significant) to the joinery business.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> It is unlikely that any new socio-economic effects will arise from the use of the Data Centre site as part of the Main Temporary Construction Compound. Potential adverse socio-economic and related environmental effects, such as noise, dust, vibration and working hours will be controlled through the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There is potential for a small socio-economic benefit to the surrounding area due to the retention of the business located on Plots 02/53 and 03/07 and its economic benefits to the area. 4. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions will arise.	2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. There is likely to be a beneficial impact as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
		5. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.
Chapter 15 Other Considerations	**Chapter 15 Other Considerations** of the **Environmental Statement (ES) (6.1, APP-052)** includes an assessment on Human Health, Climate, Lighting, Waste, Aviation and Accidents and Disasters. These topics were considered as part of the EIA Scoping process and the consultee comments on these topics. The subsequent **Scoping Opinion** adopted by the Secretary of State on 5 January 2018 (**Appendix A.1** of the **ES (6.3, APP-062))**, confirmed that these topics do not require a specific topic chapter within the ES, as no likely significant effects relating to them were anticipated. The amendment is unlikely to give rise to a change to the Secretary of State Scoping Opinion (**Appendix A.1** of the **ES (6.3, APP-062))**, nor would the outcomes of **Chapter 15 Other Considerations** of the **ES (6.1, APP-052)** be altered. Given the small-scale nature and magnitude of the amendment, it is unlikely to give rise to new or a change in significant effects reported in this chapter of the ES.	There is unlikely to be a change to the 'Other Consideration' due to the small-scale nature of the amendment.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 1) – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Potential effects relating to Health and Climate are included in the above assessments where appropriate. With regards to Light, Aviation, Accident and Disaster, any potential changes would be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**.	

3 Amendment 1: Amendment to Main Temporary Construction Compound (Scenario 2)

3.1 Overview

3.1.1 The Applicant has removed Plots 02/53 and 02/55 from the Main Temporary Construction Compound. The scenario addressed in this chapter is as follows:

- Scenario 2 – the Applicant has removed Plots 02/53 and 02/55 from the Main Temporary Construction Compound and replaced them with Plots 02/43, 02/44, 02/48 and 02/49 (known as the "Data Centre site") for use as part of the Main Temporary Construction Compound. However, the Applicant only uses part of the Data Centre site, Plots 02/49 and 02/48, and constructs a Data Centre pursuant to the Data Centre Permission on Plots 02/44 and 02/43. The Data Centre site was already in the environmental assessment in the submitted ES.

3.1.2 In this scenario Plots 02/53 and 02/55 will no longer be subject to compulsory acquisition and temporary use powers and the existing joinery business on Plot 02/53 would remain. It should be noted that the submitted ES also considered the Applicant taking temporary possession of Plot 03/07. However, the Applicant removed this plot from the temporary possession powers prior to submission.

3.1.3 As a consequence, the existing joinery business and its car parking/yard on plots 02/53 and 03/07 will now remain in operation during the construction of the Proposed Development.

3.1.4 As a consequence of constructing part of the Data Centre (Plots 02/44 and 02/43) (on the northern extent of the Data Centre site) and utilising the southern plot of the Data Centre (Plots 02/49 and 02/48) for use as part of the Main Temporary Construction Compound, there is likely to be simultaneous construction phases. The construction of the Data Centre is likely to result in an 18-24 month programme, whilst the construction of the Proposed Development and the use of the Main Temporary Construction Compound is likely to be 36 months.

3.1.5 Furthermore, there is likely to be approximately 12 months when the Data Centre has been constructed and the Main Temporary Construction Compound is still in use.

3.2 Site Description

3.2.1 As stated at **Paragraph 3.2.8**, **Chapter 3 Project and Site Description** of the submitted **ES (6.1, Rev 1)**, the proposed Main Temporary Construction Compound would be located in an area of previously developed land (a former National Grid substation site) adjacent to the west side of Norman Road, immediately north of its junction with A2016 Picardy Manor Way. The northern extent of this area (Plot 02/53) recently received planning permission (Local

Planning Authority reference: 13/00918/FULM) for the erection of three industrial units for mixed use within Class B1 (business), Class B2 (general industrial) and B8 (storage/distribution), with associated ancillary works. Part of the southern portion comprises the Munster Joinery premises (Plot 03/07).

3.2.2 The Data Centre site is located along the west side of Norman Road, immediately adjacent to the proposed Main Temporary Construction Compound. The Data Centre site (also known as Cory/Borax fields) has outline planning permission for the development of Data Centres but is currently vacant with a mixture of hardstanding and rough vegetation/grasses. As noted in the **Table 11.2 Chapter 11 Terrestrial Biodiversity** of the submitted **ES (6.1, Rev 1)**, the Data Centre site is identified as of at least regional importance for invertebrates as well as nesting by red-listed birds.

3.3 Plots 02/43, 02/44, 02/48 and 02/49 (Data Centre site) – extant planning consent

3.3.1 Plots 02/43, 02/44, 02/48 and 02/49 (the Data Centre site) are located adjacent to Norman Road. The site is owned by the Riverside Resource Recovery Limited (a Cory group company) and the principle of construction works and development on the site is accepted as it has the benefit of outline planning consent (Local Planning Authority reference: 15/02926/OUTM) for a Data Centre (Use Class B8), sub-stations, formation of new access, car parking and landscaping, which includes two four storey buildings (the Data Centre Permission). The draft Development Consent Order includes the power to install an underground connection along Norman Road and into the Data Centre site to provide power to any future Data Centres on the Data Centre site.

3.3.2 The Data Centre Permission, granted on 11 July 2016, is subject to planning conditions which are appended to this report (Appendix A). The planning conditions consist of, but are not limited to, provisions for a Landscape Management Plan and a Biodiversity Management Plan as well as a Demolition and Construction Timetable which will need to demonstrate the following:

- no work to take place during a bird nesting season, unless an ecologist has provided confirmation that birds are not breeding on site at that time. This timetable will take into account the findings of all ecological survey work undertaken, both before and after approval of the outline permission;
- demolition and construction methods and techniques (including the avoidance of burning on site and vehicle movements); days/hours of work and deliveries of construction materials;
- means of minimising noise and vibration (including any piling), and compliance with BS 5228;
- means of minimising dust and similar emissions, in accordance with Air Quality: Best Practice Guidance - The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance (published by the Greater London Authority, July 2014);

- means for the identification, removal and safe disposal of asbestos;
- construction site lighting;
- details of the location of any construction compound, and arrangements for the parking of operators and sub-contractors' vehicles;
- details of proposed hours of site working and operations;
- contact arrangements for the public, including 'out of hours' telephone numbers for named contacts).

3.3.3 As part of the **draft Development Consent Order (dDCO) (3.1, Rev 1)** a **Pre-commencement biodiversity and landscape mitigation strategy,** an **Biodiversity and Landscape Mitigation Strategy (OBLMS) (7.6, APP-107)** and a **Code of Construction Practice (CoCP)** is secured through **Requirements, 4, 5** and **11**, respectively. It is considered that, in the event that works under the Data Centre Permission are not completed, that these Requirements would provide the appropriate controls to replicate the above conditions and ensure no adverse significant effects arise – for example through the necessary restoration of the Data Centre site. Further environmental controls to ensure no adverse significant effects are set out in Schedule 2 of the **dDCO (3.1, Rev 1),** and are not repeated here. In the event that the works under the Data Centre Permission are carried out once the Data Centre site is no longer required for part of the Main Temporary Construction Compound, then as set out above, the Data Centre Permission already provides for the necessary mitigation.

3.4 Proposed Works

3.4.1 The **dDCO (3.1, Rev 1)** describes the proposed works to construct a temporary construction compound (Work No. 8) as follows:

"Work No. 8 — Works to construct temporary construction compound including—

(a) hard standing;

(b) vehicle parking;

(c) accommodation block(s);

(d) new or alteration to accesses; and

(e) construction fabrication areas".

3.4.2 It should be noted that the Data Centre site is identified in the **Works Plans (2.2, Rev 1)** for Work No. 7, which includes:

"Work No. 7 — Works to construct and install from Work No. 6 pipes and cables".

3.4.3 The entire Data Centre site has been allocated for these works (Work No. 7), therefore, construction work relating to Work No. 7 has been assessed and reported in the submitted ES. Although these activities (Work No. 7) differ in relation to the activities and duration to those outlined for the Main Temporary Construction Compound (Work No. 8), they are included in Table 3.1.

3.5 Assessment of environmental effects

Introduction

3.5.1 This section considers the environmental effects of Amendment 1 (Scenario 2) which includes amendment to the Main Temporary Construction Compound to include the part use of the Data Centre site (Plots 02/48 and 02/49):

Approach and assessment methodology

3.5.2 The approach adopted in this exercise has been to use the assessment methodology and findings presented in the submitted ES, as a starting point, and consider qualitatively the potential effects of the amendment, using professional judgement, comparing them to those reported in the submitted ES. The principal environmental effects (relating to Scenario 2) relating to this amendment which have been considered in this assessment are as follows:

1. effects of the proposed works on the joinery business;
2. effects arising from the use of part of the Data Centre site (Plots 02/49 and 02/48) as part of the Main Temporary Construction Compound;
3. effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound;
4. effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);
5. effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational a Data Centre (Plots 02/44 and 02/43);
6. the potential for any impact interactions likely to arise as a consequence of the amendment.

3.5.3 This approach seeks to determine whether any new or materially different likely significant effects are likely to arise as a result of the amendment and, as a consequence, whether the embedded environmental mitigation measures need to be amended or new measures introduced in order to ensure that the potential effects from the amendment are appropriately mitigated. The assessment has also considered whether the amendment would hinder or prevent the implementation of any proposed embedded environmental mitigation measures.

Scope of assessment

3.5.4 The scope of the assessment has considered the construction, operation and de-commissioning phases of the Proposed Development, where appropriate, and the following environmental topics are considered in Table 3.1, as per the submitted ES:

- **Chapter 6 Transport (6.1, Rev 1)**;
- **Chapter 7 Air Quality (6.1, Rev 1)**;
- **Chapter 8 Noise and Vibration (6.1, APP-045)**;
- **Chapter 9 Townscape and Visual Impact (TVIA) (6.1, Rev 1)**;
- **Chapter 10 Historic Environment (6.1, APP-047)**;
- **Chapter 11 Terrestrial Biodiversity (6.1, Rev 1)**;
- **Chapter 12 Hydrology Flood Risk and Water Resources (6.1, Rev 1)**;
- **Chapter 13 Ground Conditions (6.1, Rev 1)**;
- **Chapter 14 Socio-economic (6.1, Rev 1)**; and
- **Chapter 15 Other Considerations (6.1, APP-052)**.

Assessment assumptions: Scenario 2 - construction, operation, de-commissioning and cumulative effects

3.5.5 Amendment 1 (Scenario 2), relates to the use of Plots 02/49 and 02/48 of the Data Centre site for part of the Main Temporary Construction Compound during the construction phase only. Therefore, only construction effects are considered for Scenario 2.

3.5.6 Following a review of the cumulative effect's assessment presented in each ES topic chapter in the submitted ES, it was considered that, due to the relatively small scale and nature of the amendment, potential cumulative effects with committed developments should be scoped out of the assessment. The assessment presented in Table 3.1 does, however, consider potential impact interactions which might arise as a consequence of the amendment.

3.5.7 Furthermore, the assessment identifies any impact interactions between the use of the Main Temporary Construction Compound together with the construction and operation of the Data Centre.

Assessment tables

3.5.8 Based on the approach and scope set out above, Table 3.1 present the assessment of the likely significant environment effects arising from amendment 1 (Scenario 2) - changes to the Main Temporary Construction Compound on a

topic-by-topic basis. The right hand column sets out the conclusions as to whether or not the amendment has the potential to give rise to new or materially different effects, compared to those presented in the submitted ES. In Table 3.1, reference to "Data Centre site" for the Main Temporary Construction Compound, means that part of the Data Centre site on Plots 02/49 and 02/48.

Table 3.1: Scenario 2 - Main Temporary Construction Compound - Environmental Assessment

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 6 Transport	1. Effects of the proposed works on the joinery business It is likely that the joinery business will be subject to an increase in transport related activity during the construction phase of the Proposed Development along Norman Road. However, an updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**) which is secured through **Requirement 13** of the **dDCO (3.1, Rev 1**), will ensure the safety of road users and minimise transport related impacts along Norman Road (and the surrounding area) during the construction phase. No new or different likely significant effects relating Transport have been identified, therefore, the assessment within the submitted ES remains valid. 2. Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound The proposed amendment to the Main Temporary Construction Compound is unlikely to give rise to any new construction activities or change the construction programme. Therefore, the volume of construction related vehicles travelling to and from the compound will remain as reported in **Chapter 6 Transport** of the submitted **ES (6.1, Rev 1),** with only a slight change, as these vehicles may be required to travel further (approximately 100 m) along Norman Road to the Data Centre site. In addition, an additional access may be	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	required off Norman Road for the use of the Data Centre site. Safety measures for the Data Centre site will be controlled through the updated **Outline CoCP (7.5, Rev 1)** and the **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**), therefore, no new or different likely significant effects are likely to arise as a result of the amendment. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Whilst there is likely to be more transport related activity along Norman Road in terms of vehicles trips as the joinery business is retained as part of the amendment, the potential impact relating to vehicle movements from construction activities is unlikely to be significant as vehicle movements from the joinery business were originally included as part of the baseline traffic assessment for Norman Road. An updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**) which is secured through **Requirement 13** of the **dDCO (3.1, Rev 1**) ensures the principles are set to control vehicle movements from the Proposed Development and that there is no queuing along Norman Road or in the surrounding area. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> As part of the Data Centre planning application (Local Planning Authority reference: 15/02926/OUTM, no information on transport related movements were submitted for the	Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	construction phase. Therefore, an approximate estimation in terms of area size of the site and potential construction material was undertaken to determine the number of HGVs for the construction of a Data Centre on Plots 02/44 and 02/43. Taking into consideration a worst-case scenario of site excavation and preparation of the entire site of Plots 02/44 and 02/43 which is approximately 1 hectares, there is potential for approximately 36 HGVs per working day during the construction period, which is likely to result in approximately 4 HGVs per hour. Furthermore, **Paragraph 6.4.14 Chapter 6 Transport** of the submitted **ES** (**6.1, Rev 1**) that at the assessed peak construction month in the ES (i.e. Month 13), there would be 22 HGV's per working day. The 22 HGV's per working day excludes construction staff vehicle movements, which has been reduced from 552 to 275 since the submission of the DCO as set out in the updated **Outline CTMP (Rev 1),** as submitted at Deadline 2, which supersedes the **Outline CTMP, Appendix L** of the **TA, Appendix B.1** of the **ES** (**6.3, APP-066**). Therefore, with the reduced number of HGVs for the construction of the Proposed Development and estimated four HGVs per hour as part of the construction of a Data Centre on Plots 02/44 and 02/43, there is unlikely to be an increase over the number assessed in the submitted ES. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in	been identified from the interaction between the use of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Schedule 2 of the **dDCO (3.1, Rev 1)** will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operation Data Centre (Plots 02/44 and 02/43);</u> There is unlikely to be an interaction during the operational phase of the Data Centre and use of the Main Temporary Construction Compound, as the Data Centre is unlikely to generate a high number of vehicle movements due to the nature of the development and low staff numbers, therefore no interactions are likely. 6. <u>The potential for any impact interactions likely to arise as a consequence of the amendment.</u> No new or different likely significant effects have been identified, therefore, there is unlikely to be any interaction impacts.	use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 7 Air Quality	1. Effects of the proposed works on the joinery business As described in **Paragraph 7.9.1**, **Chapter 7 Air Quality** of the submitted **ES (6.1, Rev)**, the main potential air quality effects during construction and decommissioning of REP and the Main Temporary Construction Compounds are dust deposition and associated elevation in PM_{10} concentrations. The following activities have the potential to cause emissions of dust: ▪ Site preparation including delivery of construction material, erection of fences and barriers; ▪ Earthworks including digging foundations and landscaping; ▪ Materials handling such as storage of material in stockpiles; ▪ Construction and fabrication of units; ▪ Decommissioning activities (including demolition); and ▪ Removal of materials No foundation or demolition works are required for the use of the Data Centre site as part of the Main Temporary Construction Compound and best practice measures to limit dust will be incorporated into the construction of the Proposed Development**,** as outlined in the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. An industrial receptor is classified as medium sensitivity and the joinery business would be located within 20m of the Main Temporary Construction Compound. As a single receptor, it is below the threshold for consideration of area sensitivity for dust impacts as identified in **Table 7.11 Chapter 7 Air Quality** of the submitted **ES (6.1, Rev)**. The area would be	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	classified as low sensitivity for human health impacts in accordance with **Table 7.12 Chapter 7 Air Quality** of the submitted **ES** (**6.1, Rev 1**). There would therefore be no change to the assessment of the risk of construction dust impacts as defined in **Table 7.33 Chapter 7 Air Quality** of the submitted **ES** (**6.1, Rev 1**). Mitigation measures would therefore remain as those for a low risk site and the measures set out in the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**, would not need to change. With the mitigation measures in place, and in accordance with **Table 7.37 Chapter 7 Air Quality** of the submitted **ES (6.1, Rev 1**), the effects will be not significant. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> Construction related vehicle movements to the Main Temporary Construction Compound will remain as reported in the submitted ES. Construction related vehicles may be required to travel further (approximately 100 m) along Norman Road to the Main Temporary Construction Compound. The distance to the nearest residential properties (over 500 m to the south of the Application Site) and to the closest nationally designated terrestrial biodiversity site (over 1.6 km north east of the Application Site) remain as reported in the submitted ES It should be noted that whilst the amendment would result in a larger area to be used for the Main Temporary Construction Compound, the magnitude of dust emissions for earthworks and track out (which relate to the Main Temporary Construction Compound) is already defined as Large in	3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Table 7.33, **Chapter 7 Air Quality** of the submitted **ES 6.1, Rev 1**). Therefore, the risk of additional dust impacts for previously assessed receptors remains low. The principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of part of the Data Centre site (Plots 02/49 and 02/48) as part of the Main Temporary Construction Compound is unlikely to give rise to significant effects in relation to air quality. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There is unlikely to be a change in air quality impacts from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound, as the amended Main Temporary Construction Compound is likely to still be of similar size and use to that presented in the submitted ES. Furthermore, Plot 03/05 south of the Plots 02/53 and 03/07, will still be utilised as part of the Main Temporary Construction Compound, therefore there is unlikely to be any change to nearby receptors. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> Construction of part of the Data Centre site (Plots 02/44 and 02/43), is likely to require a 18-24 month construction programme. Initial site preparation works are likely to include	interaction between the use of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	activities which could give rise to dust. The construction works will be subject to a 'demolition and construction timetable' as a result of Condition 26 of the Data Centre Permission (Appendix A)**.** As stated in the Transport section above, there is likely to be a minimal increase in HGVs as a result of the construction of the Data Centre. Therefore, the cumulative impact of the Main Temporary Construction Compound, with the construction of the Data Centre (Plots 02/44 and 02/43) is likely to have a negligible impact to air quality. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43);</u> There is unlikely to be an interaction from the use of the Main Temporary Construction Compound and the operational phase of the Data Centre, as the Data Centre is unlikely to generate a high number of vehicle movements due to the nature of the development and low staff numbers, therefore no interactions are likely.	Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	6. <u>The potential for any impact interactions likely to arise as a consequence of the amendment.</u> No new or different likely significant effects have been identified, therefore, there is unlikely to be any interaction impacts.	
Chapter 8 Noise and Vibration	1. <u>Effects of the proposed works on the joinery business</u> Precise details of the types of construction methods and plant likely to be used during the construction phase have yet to be confirmed. Therefore, at this stage it is not possible to state precisely where plant would operate and for how long during the working day. However**, Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045)** states that "*the Main Temporary Construction Compound, other than their initial preparation for use, are not likely to be utilised for major construction works such as building construction and site levelling and are more likely to be utilised as a laydown area/parking and fabrication of parts."* Given the industrial nature of the area, the industrial type of business located on Plots 03/07 and 02/53 and the measures set out in the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**, it is likely that the potential temporary construction effects will be negligible.	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data entre site for the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> Construction related vehicle movement numbers to the Main Temporary Construction Compound will remain as reported in the submitted ES, although construction related vehicles may be required to travel further (approximately 100 m) along Norman Road. Therefore, no change to the impacts identified in the submitted ES, as amended and the impacts remain not significant. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> The removal of Plots 02/53, 02/55 and 03/07 may result in a reduction in noise levels to neighbouring receptors located on the opposite side of Norman Road to Plots 02/53 and 03/07. However, the commercial premises located along Norman Road are not sensitive to change and it is likely that due to the continued use of the plots surrounding Plots 02/53 and 03/07 for use as the Main Temporary Construction Compound, change in noise levels is unlikely to be perceived. Therefore, the removal of Plots 02/53, 02/55 and 03/07 is unlikely to result in a new or different likely significant effect. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> Construction of part of the Data Centre site (Plots 02/44 and 02/43), is likely to require a 18-24 month construction programme. The Data Centre construction will require activities such	3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	as piling which has the potential to cause disturbance to people or structural impacts, however these will be subject to a 'demolition and construction timetable' as a result of Condition 26 of the Data Centre Permission (Appendix A). The use of part of the Data Centre site (Plots 02/49 and 02/48) for part of the Main Temporary Construction Compound is likely to be used for laydown areas, car parking and fabrication of parts (**Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of submitted **ES (6.1, APP-045)**). Furthermore, as stated in the transport section above, there is likely to be a minimal increase in HGVs as a result of the construction of the Data Centre. Therefore, the cumulative impact of the Main Temporary Construction Compound, plus the construction of the Data Centre will have a negligible impact to noise and vibration. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43);</u> There is unlikely to be an interaction between the operational phase of the Data Centre and use of the Main Temporary Construction Compound, as the Data Centre is unlikely to	Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified,

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	generate a high number of vehicle movements due to the nature of the development and low staff numbers, therefore no operational cumulative effects are likely. 6. <u>The potential for any impact interactions likely to arise as a consequence of the amendment</u> No new likely significant effects have been identified, therefore, there is unlikely to be any interaction impacts.	therefore, there is unlikely to be any impact interactions.
Chapter 9 Townscape and Visual Impact Assessment	1. <u>Effects of the proposed works on the joinery business</u> The industrial business located on Plots 02/53 and 03/07 is not considered a sensitive receptor to Townscape and Visual change in terms of the amendment to the adjacent Main Temporary Construction Compound. Therefore, Townscape and Visual impacts remain as assessed in the submitted ES. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> The use of part of part of the Data Centre site (Plots 02/49 and 02/48) would result in a similar size to that of the size proposed in the DCO Application for the Main Temporary Construction Compound. In addition, the construction phase would be of a limited duration, approximately three years, and the activities which are listed at **Paragraph 9.9.1**, **Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES** (**6.1, Rev 1)** are unlikely to change.	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Potential construction activities and plant for the Main Temporary Construction Compound are unlikely to involve tall structures, such as cranes, which have the potential to give rise to townscape and visual effects. The Main Temporary Construction Compound is likely to be used for laydown areas, car parking and fabrication of parts (**Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045).** The construction activities are not discordant with the character or activities of the existing urban area which can be defined as diverse industrial and urban area, adjacent to existing large-scale industrial buildings. Additionally, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of the Data Centre site as part of the Main Temporary Construction Compound is unlikely to give rise to significant effects in relation to townscape and visual 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There may be a slight beneficial effect to the surrounding area due to the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound, as the joinery business means that no construction plant will be located in this area. However, the joinery business is considered as light industrial and is also likely to use similar plant and machinery. Therefore, the effects identified in **Table 9.5**, **Chapter 9 Townscape and Visual**	Temporary Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction between the use

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Impact Assessment of the submitted **ES (6.1, Rev 1)** remain valid and there are no new or different likely significant effects when compared to the submitted ES. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> Construction of part of the Data Centre site (Plots 02/44 and 02/43), is likely to require a 18-24 month construction programme. The Data Centre construction will require activities such as piling and cranes which has the potential to impact views. The construction phase of the Data Centre will be subject to a 'demolition and construction timetable' which will include standard mitigation measures to minimise visual impacts, such appropriate lighting. The use of the Main Temporary Construction Compound is unlikely to involve tall structures such as cranes and will likely be used for laydown areas, car parking and fabrication of parts (**Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045)).** No significant impacts were identified for the use of the Main Temporary Construction Compound during the construction of REP and the principle of construction works on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM), therefore, no cumulative impacts have been identified. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in	of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43); There is potential for impacts to townscape and visual in the surrounding area, namely, views from Crossness LNR eastwards. Sensitive receptors will have an extended Main Temporary Construction Compound along the eastern boundary of Crossness LNR together with a four-storey Data Centre (one building). The Data Centre, when complete will likely include a green wall on the eastern façade of the building, as shown on the indictive building layout ((PL) 07) submitted with the planning application (Local Planning Authority reference: 15/02926/OUTM). This design will ensure the constructed Data Centre building will be in keeping with the surrounding area. Furthermore, the principle of development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM), therefore, no cumulative impacts have been identified. 6. The potential for any impact interactions likely to arise as a consequence of the amendment. No new likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.	significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 10 Historic Environment	1. <u>Effects of the proposed works on the joinery business</u> There is unlikely to be any potential impact to the joinery business in terms of Historic Environment, as this receptor is not considered sensitive to change, nor is it considered to have any archaeological or heritage merit. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> As part of the planning permission for the Data Centre site (Local Planning Authority reference: 15/02926/OUTM) a desk based Archaeological Assessment (June 2017) (document reference: 05-17-04) was undertaken in 2017. The assessment states that ground remediation across all or most of the Data Centre site (with the possible exception of the edges) between 1900 and 2001 will have removed all medieval and post-medieval remains. Whilst there is considerable evidence of resource exploitation in the former marshes along the Thames estuary in the Roman period, in particular in north Kent, where there was pottery and salt manufacture, there is little evidence of such within the vicinity of the Data Centre site and therefore there is a low potential for Roman remains, based on evidence from archaeological investigations in the wider area. Further to the above, the proposed use of part of the Data Centre site (Plots 02/49 and 02/48) for part of the Main Temporary Construction Compound would not involve any intrusive works to affect any unknown buried archaeology and there are no above ground heritage assets within or adjacent to the Data Centre site, nor does the Data Centre site lie	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	within a local authority conservation area. Therefore, there are no new or different likely significant effects when compared to the submitted ES. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There is unlikely to be potential impacts to unknown buried archaeology or above ground heritage assets due to the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound as there are no above ground heritage assets within the vicinity of the surrounding area and unknown archaeological remains, will remain untouched. Therefore, there are no new or different likely significant effects and the impacts in the submitted ES, as amended, remain valid. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> There is low potential of archaeological remains on the Data Centre site. The use of part of the Data Centre site (Plot 24/49) for part of the Main Temporary Construction Compound is likely to be used for laydown areas, car parking and fabrication of parts (**Paragraph 8.9.15**, **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045)).** Therefore, there is unlikely to be any impact interaction between the construction phase of the Data Centre and the use of the Main Temporary Construction Compound in terms of buried archaeology. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to	3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43);</u> There are no above ground heritage assets that the operational Data Centre and the Main Temporary Construction Compound would either impact directly or indirectly in terms of views and setting. Therefore, there is unlikely to be any impact interactions. 6. <u>The potential for any impact interactions likely to arise as a consequence of the amendment.</u> No new or different likely significant effects have been identified, therefore, there are no impact interactions or cumulative effects to arise as a consequence of the proposed amendment.	between the use of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
		Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.
Chapter 11 Terrestrial Biodiversity	1. <u>Effects of the proposed works on the joinery business</u> There is unlikely to be any potential impact to the joinery business, in terms of Terrestrial Biodiversity, as this receptor is not considered sensitive to change, nor is it considered to have any ecological merit.	1. No new or different likely significant effects are likely to arise to the

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound The Data Centre site is located immediately east of Crossness LNR. The study area for terrestrial biodiversity, as set out in **Paragraph 11.5.1**, **Chapter 11 Terrestrial Biodiversity** of the submitted **ES (6.1, Rev 1)**, includes the Data Centre site. Field surveys carried out as part of the EIA, were extended to the Data Centre site and taken into consideration in the assessment. The **Works Plans (2.2, Rev 1)** identify the whole of the Data Centre site for 'Work No. 7 - Works to construct and install from Work No. 6 Pipes and Cables'. Therefore, any works relating to the construction of Work No. 7 were considered for the whole of the site up to the boundary with Crossness LNR. Construction works relating to Work No. 7 are likely to differ in activity and duration to those of construction works as part of the Main Temporary Construction Compound. However, no likely significant adverse impacts were identified for the Main Construction Compound in the submitted ES, as amended, with the embedded mitigation of the **OBLMS (7.6, APP-107)** secured through **Requirement 5** of the **dDCO (3.1, Rev 1).** Furthermore, the **Outline CoCP (7.5, Rev 1**), which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** will limit the amount of potential noise, dust and light as a result of the construction phase to the surrounding area. The principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase and intrusive ground works in the form of piling. Therefore, the use of part of the Data Centre site (Plots 02/49 and 02/48) as	joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	part of the Main Temporary Construction Compound is unlikely to give rise to significant effects in relation to terrestrial biodiversity. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53, 02/55 and 03/07 would no longer be subject to the measure set out in the **OBLMS** (**7.6, APP-107**) or the measure set out in the **Outline CoCP** as secured through **Requirement 5** and **11** of the **dDCO** (**3.1, Rev 1**), respectively. However, the southern extent of the Main Temporary Construction Compound (Plot 03/05) adjacent to Plots 02/53 and 03/07 on the south side, will remain. Therefore, there is unlikely to be any change to potential temporary construction impacts to terrestrial biodiversity, namely Crossness LNR, from that assessed in the submitted ES. 4. <u>The effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> There is potential for the combined construction phases of the Data Centre and the Main Temporary Construction Compound to have an impact interaction with the construction of the Data Centre on terrestrial biodiversity. However, impacts identified in **Chapter 11 Terrestrial Biodiversity** of the submitted **ES (6.1, Rev 1)** are considered, not significant (with embedded mitigation). The **OBLMS (7.6, APP-107)** as secured through **Required 4** of the **dDCO (3.1, Rev 1)** considers potential mitigation from noise, lighting, and spillages or leaks during construction phase of the Proposed Development. Furthermore, the Data Centre will be subject to a 'demolition and construction timetable', which is secured through	the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	condition 26 of the Data Centre Permission (Appendix A) to control potential construction impacts. With both these measures secured, there is unlikely to be a cumulative impact. Furthermore, the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43);</u> There is potential for the combined loss of land as a result of the constructed Data Centre (Plots 02/44 and 02/43) and the use of the Main Temporary Construction Compound (plus Plots 02/49 and 02/48). Condition 27 of the Data Centre Permission requires the installation of bird and bat boxes into the fabric of the Data Centre buildings. Furthermore, any potential impacts are likely to be temporary in nature, as approximately 12 months after construction of the Data Centre, the Main Temporary Construction Compound will cease operation and the land re-instated to its original state pervious to the construction of REP. No new likely significant effects have been identified, therefore, there is unlikely to be any impact interaction.	been identified from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 12 Hydrology Flood Risk and Water Resources	1. Effects of the proposed works on the joinery business There is the potential for an increase in surface water runoff as part of the Main Temporary Construction Compound, which has the ability to increase flood risk in the area potentially impacting the joinery business. However, a management system would be in place to adequately manage works within the floodplain which is controlled through the **Outline CoCP (7.5, Rev 1),** secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, the potential impacts in terms of Hydrology Flood Risk and Water Resources remain as assessed in the submitted ES. 2. Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound A Preliminary Environmental Risk Assessment (January 2016) (document reference 70015694) was undertaken as part of the consent process for the Data Centre (Local Planning Authority reference: 15/02926/OUTM). The Preliminary Environmental Risk Assessment states that the nearest surface water features indicated by OS mapping is the River Thames, located approximately 400 m north of the Data Centre site which is tidally influenced. Drainage ditches are present within the Data Centre site boundary and a number of ditches and small waterways are recorded present on mapping as part of Erith Marshes and the Crossness LNR. The Data Centre site is located within a flood zone 3 as defined by the Environment Agency as an area benefiting from flood defences. There are three reported licensed surface water abstractions within a 1 km radius of the Site. Two are operated by Thames Water and are	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	taken from Crossness LNR. The third is granted in favour of Cory Environmental Developments but is not exercised and no water is taken from the River Thames to serve RRRF. The use of the Data Centre site (Plots 02/49 and 02/48) as part of the Main Temporary Construction Compound has the potential to cause compaction of the ground caused by construction plant. There is potential for an increase in the impermeable surfaces associated with access roads and compound areas which has the potential to impact upon the surface water drainage regime and increase surface water run-off into nearby watercourses from the Main Temporary Construction Compound. However, such effects would be localised and temporary and controlled using measures set out within the **Outline CoCP (7.5, Rev 1**). Therefore, there are no new or different likely significant effects when compared to the submitted ES. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53 and 03/07 would no longer be subject to the measures set out in **Paragraph 12.8.2** of **Chapter 12 Hydrology Flood Risk and Water Resources** of the submitted **ES (6.1, Rev 1)** nor the measures set out in the **Outline CoCP (7.5, Rev 1)** to control flood risk and water resources. Therefore, there is potential for an increase to surface water runoff. However, it is likely to that the joinery business will have its own flood risk controls and drainage to ensure flood risk is minimised. Furthermore, the Data Centre site will be subject to the measures set out in the **Outline CoCP** (**7.5, Rev 1**) to control flood risk and water	to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the construction of the Data Centre

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	resources. Therefore, further impacts in terms of Hydrology Flood Risk and Water Resources remain as assessed in the submitted ES. 4. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> No significant impacts have been identified for Hydrology Flood Risk and Water Resources for use of part of the Data Centre site (Plots 02/44 and 02/43) as part of the Main Temporary Construction Compound and the principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM). The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. Furthermore, an **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** for REP and a 'demolition and construction timetable', secured through condition 26 for the Data Centre site will control potential construction impacts. Therefore, there are no likely significant impacts. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43)</u> Operational activities as part of the Data Centre are likely to be minimal with ad-hoc maintenance, as required. Therefore, there is unlikely to be any impact interaction with the	5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Main Temporary Construction Compound and the operational data, therefore no significant impacts are likely to arise. 6. <u>The potential for any impact interactions or cumulative effects likely to arise as a consequence of the amendment.</u> No new likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.	
Chapter 13 Ground Conditions	1. <u>Effects of the proposed works on the joinery business</u> The measures set out in the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** will control potential risk of contamination during the construction phase to the surrounding area (including the joinery business). Therefore, no new of different likely significant effects have been identified. 2. <u>Effects arising from the use of the Data Centre site as part of the Main Temporary Construction Compound</u> As part of the planning application for the Data Centre site (Local Planning Authority reference: 15/02926/OUTM), Phase 1, 2 and 3 assessments were undertaken for the Data Centre site. The Phase 3, Detailed Quantitative Risk Assessment (DQRA) (March 2017) (document reference 70031031) has been approved by the Environment Agency (EA). The EA agree	1. No new or different likely significant effects are likely to arise to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	with the conclusions of the DQRA and that the current identified contamination at the Data Centre site represents a low risk to both the River Thames and the underlying aquifers (protected by the London Clay). Therefore, on the basis of the current site conditions, remedial measures are not required. The planning application for the Data Centre site involves intrusive construction in the form of piling. Whereas, the activities for the use of part of the Data Centre site for part of the Main Temporary Construction Compound will likely involve laydown areas and car parking. These activities are lower risk activities than that of the construction of the two four storey buildings for the Data Centre. Any potential contamination for the Data Centre site as part of the Main Temporary Construction Compound will be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, there are no new or different likely significant effects when compared to the original ES. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> Plots 02/53, 02/55 and 03/07 will no longer be subject to the measure set out in **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** which sets out the principles to control the risk of contamination to construction workers and the surrounding area. However, the existing operations as part of the joinery business are not thought to be a risk to changes in ground conditions. Furthermore, the Data Centre site will be subject to the measures set out in the **Outline CoCP** (**7.5, Rev 1**). Therefore, there are no new or different likely significant effects relating to ground conditions.	the use of the Data Centre site for the Main Temporary Construction Compound. 3. No new or different likely significant effects are likely to arise as a result of the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	4. <u>The effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43);</u> There is unlikely to be any impact interaction for use of the Main Temporary Construction Compound and the construction of the Data Centre in relation to ground conditions. The principle of construction works and development on the Data Centre site has been accepted by the LPA (Local Planning Authority reference: 15/02926/OUTM) to build two four storey buildings which would involve a construction phase. The planning conditions attached to the Data Centre Permission together with the Requirements set out in Schedule 2 of the **dDCO (3.1, Rev 1**) will provide the appropriate controls to ensure no adverse significant effects arise. 5. <u>Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43);</u> Operational activities as part of the Data Centre are likely to be minimal with ad-hoc maintenance, as required. Therefore, there is unlikely to be any significant impact. No significant impacts were identified as part of the use of the Main Temporary Construction Compound (plus Plots 02/49 and 02/48) therefore, there is unlikely to be a cumulative effect.	4. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	6. <u>The potential for any impact interactions likely to arise as a consequence of the amendment.</u> No new likely significant effects have been identified, therefore, there is unlikely to be any impact interaction.	been identified from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
		any impact interactions.
Chapter 14 Socio-economic	1. <u>Effects of the proposed works on the joinery business</u> There is potential for a socio-economic benefit with regards to the retention of the joinery business located on Plots 03/07 and 02/53. 2. <u>Effects arising from the use of the Data centre site as part of the Main Temporary Construction Compound</u> There is unlikely to be any new socio-economic effects arising from the use Data Centre site as part of the Main Temporary Construction Compound. Potential environmental and socio-economic effects, such as noise, dust, vibration and working hours will be controlled through the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. 3. <u>Effects arising from the removal of Plots 02/53, 02/55 and 03/07 from the Main Temporary Construction Compound</u> There is potential for a socio-economic benefit to the surrounding area due to the retention of the business located on Plots 02/53 and 03/07 and its economic benefits to the area.	1. There is likely to be a beneficial impact to the joinery business. 2. No new or different likely significant effects are likely to arise as a result of the use of the Data Centre site for the Main Temporary Construction Compound.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	4. Effects arising from the interaction between the use of the Main Temporary Construction Compound and the construction of part of the Data Centre site (Plots 02/44 and 02/43); Potential environmental and socio-economic effects, such as noise, dust, vibration and working hours will be controlled through the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** for REP and the Data Centre site will be subject to a 'demolition and construction timetable' secured through condition 26 of the Data Centre Permission. Therefore, there is unlikely to be any impact interactions for use of the Main Temporary Construction Compound and the construction of the Data Centre. 5. Effects arising from the interaction between the use of the Main Temporary Construction Compound and the operational Data Centre (Plots 02/44 and 02/43); Operational activities as part of the Data Centre are likely to be minimal with ad-hoc maintenance, as required. Therefore, there is unlikely to be impact interaction between the use of the Main Temporary Construction Compound and the operational Data Centre. 6. The potential for any impact interactions likely to arise as a consequence of the amendment. No new likely significant effects have been identified, therefore, there is unlikely to be any impact interaction.	3. There is likely to be a beneficial impact as a result of the removal of Plots 02/53 and 03/07 from the Main Temporary Construction Compound. 4. No new or different likely significant effects have been identified from the interaction between the use of the

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
		Main Temporary Construction Compound and the construction of the Data Centre 5. No new or different likely significant effects have been identified from the interaction between the use of the Main Temporary Construction Compound and the

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
		operational Data Centre 6. As no new or different likely significant effects have been identified, therefore, there is unlikely to be any impact interactions.
Chapter 15 Other Considerations	**Chapter 15 Other Considerations** of the **ES (6.1, APP-052)** included an assessment on, Human Health, Climate, Lighting, Waste, Aviation and Accidents and Disasters. These topics were considered as part of the EIA Scoping process and the consultee comments on these topics in the subsequent **Scoping Opinion** adopted by the Secretary of State on 5 January 2018 (**Appendix A.1** of the submitted **ES (6.3, APP-062)**, confirmed that these topics do not require a specific topic chapter within the ES, as no likely significant effects relating to them were anticipated.	There is unlikely to be a change to the 'Other Considerations' due to the small-scale nature of the amendment.

Environmental topic reported in the submitted ES	Amendment 1 (Scenario 2) Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	The proposed amendment is unlikely to result in a change to the Secretary of State Scoping Opinion (**Appendix A.1** of the **ES (6.3, APP-062))**, nor would the outcome of **Chapter 15 Other Considerations** of the submitted **ES (5.1, APP-052)** be altered. The amendment us unlikely to change potential effects in any of the ES topics given the small-scale nature and the magnitude of the amendment. Potential impacts relating to Health and Climate are included in the above assessments where necessary. With regards to Light, Aviation, Accident and Disaster, any potential changes would be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**.	

4 Amendment 2: Installation of Cable Troughs for the Electrical Connection Route

4.1 Overview

4.1.1 As a result of ongoing design development work and stakeholder engagement, a second amendment to the Proposed Development is proposed which relates to the installation of a cable trough for the Electrical Connection route over two watercourses.

4.1.2 The need and rationale for this amendment is set out in the Electrical Connection Progress Report (submitted at Deadline 2). In essence, the proving exercise undertaken for the Electrical Connection route determined that at two locations it would be necessary to cross, or preserve the ability to cross, two existing watercourses with an above-ground structure. These lengths of above-ground installation are relatively short and occur at the following watercourses, shown in Figures 4.1 and 4.2 below:

1. Norman Road Crossing: southern end of Norman Road, at the junction with Picardy Manorway; and

2. Joyce Green Lane Crossing: land to the north of the A206 Bob Dunn Way crossing over the strategic sewer (west of Joyce Green Lane).

Figure 4.1 - Norman Road crossing

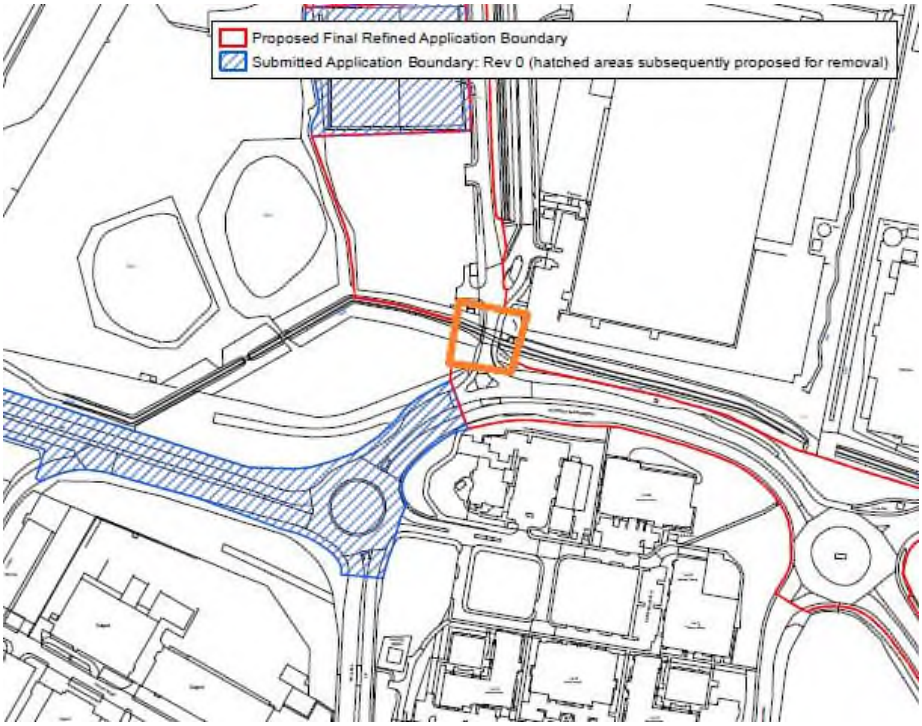
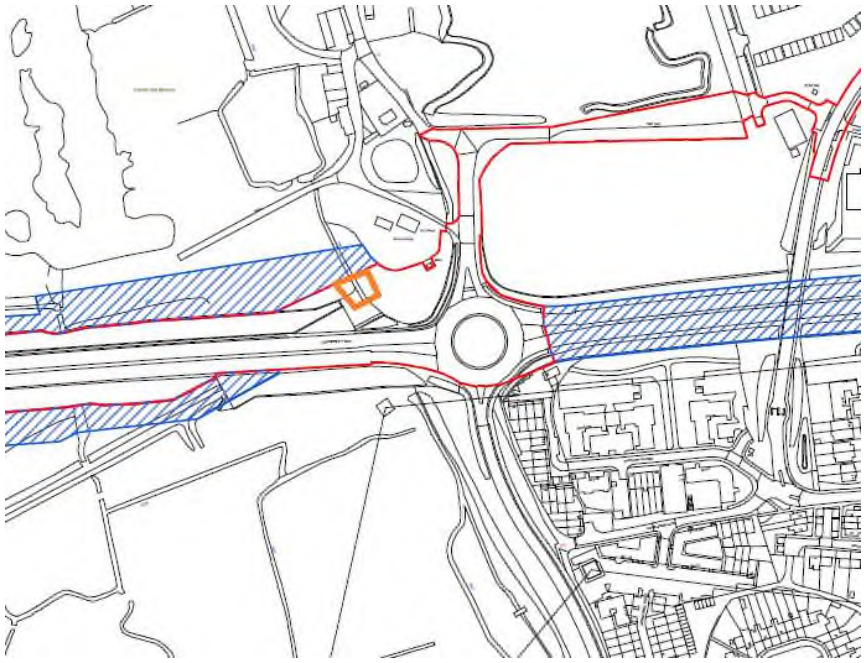


Figure 4.2 Joyce Green Lane crossing



4.2 Site description

Norman Road crossing

4.2.1 At the junction between Norman Road and Picardy Manorway (within the London Borough of Bexley (LBB)) there is a small watercourse that runs parallel to the public highway (A2016). The watercourse is part of the Belvedere Dykes SINC. A bridge at the bottom of Norman Road crosses the watercourse.

Joyce Green Lane crossing

4.2.2 North east of the junction of the A206 Bob Dunn Way and Joyce Green Lane there is a strategic sewer, located to the east of the Joyce Green Lane Quarry in the Borough of Dartford. The small watercourse is part of the Dartford Marshes LWS.

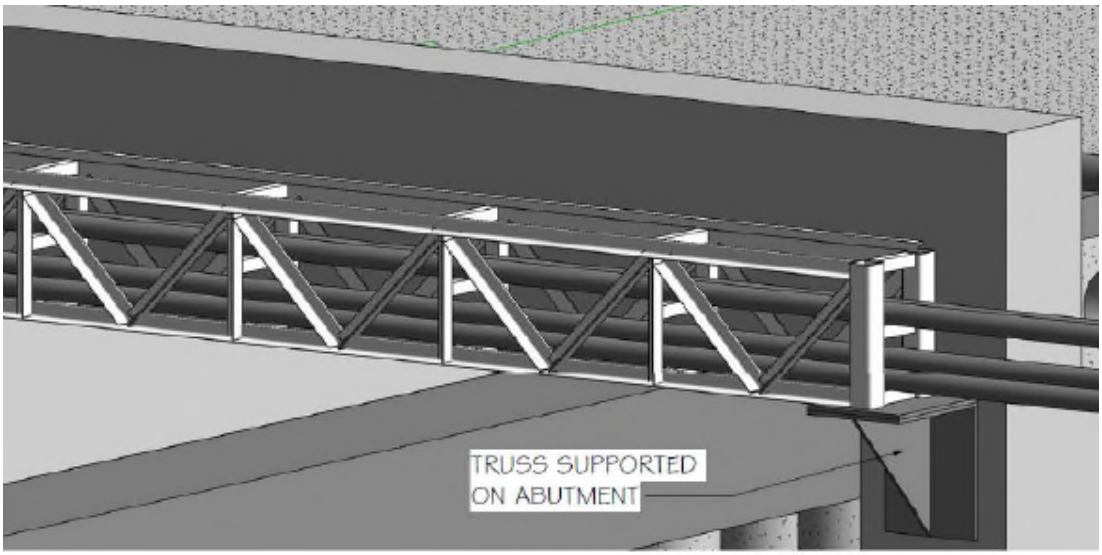
4.3 Description of development

Overview

4.3.1 The above-ground structures (hereinafter referred to as a 'cable trough') would comprise a metal lattice or tubular structure, supported at either end on a foundation or support brackets, which would carry the cables over the obstruction. The lattice structure would likely be covered in panels. An example of the indicative internal structure at Norman Road is provided in Figure 4.3

below. Cladding with metal or plastic panels on its top and sides would give the appearance of a solid structure. Appropriate fencing and/or other security measures may be installed, subject to detailed design risk assessment by UKPN, to prevent unauthorised access:

Figure 4.3 – Indicative image of cable trough



4.3.2 The elevation of the structure would be minimised subject to being sufficient to clear the obstruction, provide safe access and to meet with river/flood flow requirements where necessary.

4.3.3 Subject to detailed design, the crossing could occur at any location within the zones shown on Figures 4.1 and 4.2.

Norman Road crossing

4.3.4 The structure at Norman Road is presented in Figure 4.3 in terms of its indicative scale, which is required to carry 3 power cables and 2 multicore cables associated with the Electrical Connection. The structure will either be supported off the existing structure, as indicated on Figure 4.3, or on its own independent foundations. The structure would allow a clear span of the existing watercourse and would be set at a height similar to that of the existing bridge, but sufficient not to impede or affect existing flows.

4.3.5 The crossing may occur on either the west or east side of the existing highway bridge and is considered by UKPN to present an economic and efficient solution in light of intrusive works proving that there is insufficient space within the existing bridge structure and ducting.

Joyce Green Lane crossing

4.3.6 The structure at Joyce Green Lane would be of a similar scale, design and span to the Norman Road crossing. However, in the absence of an existing adjacent structure, the cable trough would require its own independent foundations, which would be located outside of the existing watercourse banks. This would allow the structure to span the watercourse above ground level. The elevation of the structure would be minimised subject to allowing safe construction and maintenance and meeting requirements in respect of watercourse flow.

4.4 Assessment of environmental effects

Introduction

4.4.1 This section considers the environmental effects of Amendment 2: Installation of cable troughs for the Electrical Connection route for the two river crossings.

Approach and assessment methodology

4.4.2 The approach adopted in this exercise has been to use the assessment methodology and findings presented in the submitted ES as a starting point, and consider qualitatively the potential effects of the amendment, using professional judgement, comparing them to those reported in the submitted ES. The principal environmental effects relating to this amendment which have been considered in this assessment are as follows:

i. construction: effects arising from the construction of the cable trough at each of the watercourse crossings;

ii. operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings;

iii. the potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.

4.4.3 This approach seeks to determine whether any new or materially different likely significant effects are likely to arise as a result of the amendment and, as a consequence, whether the embedded environmental mitigation measures need to be amended or new measures introduced in order to ensure that the potential effects from the proposed amendments are appropriately mitigated. The assessment has also considered whether the amendment would hinder or prevent the implementation of any proposed embedded environmental mitigation measures.

Scope of assessment

4.4.4 The scope of the assessment has considered the construction, operation and de-commissioning phases of the Proposed Development, where appropriate,

and the following environmental topics are considered for each of the river crossings in Tables 4.1 and 4.2, as per the submitted ES:

- **Chapter 6 Transport (6.1, Rev 1)**;
- **Chapter 7 Air Quality (6.1, Rev 1)**;
- **Chapter 8 Noise and Vibration (6.1, APP-045)**;
- **Chapter 9 Townscape and Visual Impact (TVIA) (6.1, Rev 1)**;
- **Chapter 10 Historic Environment (6.1, APP-047)**;
- **Chapter 11 Terrestrial Biodiversity (6.1, Rev 1)**;
- **Chapter 12 Hydrology Flood Risk and Water Resources (6.1, Rev 1)**;
- **Chapter 13 Ground Conditions (6.1, Rev 1)**;
- **Chapter 14 Socio-economic (6.1, Rev 1)**; and
- **Chapter 15 Other Considerations (6.1, APP-052)**.

Assessment assumptions: Amendment 2 - construction, operation and de-commissioning

4.4.5 The construction of the cable trough and its operation at each of the watercourse crossings have been considered and the potential environmental effects are reported in Tables 4.1 and 4.2.

4.4.6 A worst case scenario has been considered for the both proposed crossings, assuming that each structure will be supported on its own independent foundations.

4.4.7 As stated at **Paragraph 12.9.12**, **Chapter 12 Hydrology Flood Risk and Water Resources** of the **Environmental Statement (ES) (6.1, Rev 1)**, at the end of the operational life of the Electrical Connection, it is anticipated that the ducting for the Electrical Connection would be left in situ, such that there would be no decommissioning works and no potential effects in relation to decommissioning. Therefore, the decommissioning phase has not been considered.

4.4.8 Following a review of the cumulative effect's assessment presented in each ES topic chapter in the submitted ES, it was considered that, due to the relatively small scale and nature of the amendment, potential cumulative effects with committed developments should be scoped out of the assessment. However, the assessments presented in Tables 4.1 and 4.2 do consider potential impact interactions which might arise as a consequence of the amendment.

Assessment tables

4.4.9 Based on the approach and scope set out above, Tables 4.1 and 4.2 present the assessment of the likely significant environment effects arising from amendment 2 - Installation of cable troughs for the Electrical Connection route on a topic-by-topic basis at each river crossing. The right-hand column sets out the conclusions as to whether or not the amendment has the potential to give rise to new or materially different effects, compared to those presented in the submitted ES.

Table 4.1: Norman Road Crossing Cable Trough – Environmental Assessment

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 6 Transport	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings; The works to carry out the construction of the cable trough would be small scale and do not represent a major change to the construction of the Electrical Connection route and associated infrastructure, therefore, there is unlikely to be an increase in vehicle trips generated. The construction period is likely to remain as a 15-24 month programme, with approximately 30-60 vehicle visits generated at the temporary construction compounds, as stated in **Appendix B.1 Transport Assessment** of the submitted **ES** (**6.3, APP0-066**). 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings; Once installed, there are no proposed activities in the operational phase other than periodic maintenance. Therefore, no transport effects are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 7 Air Quality	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings As stated above, it is unlikely that there would be an increase in construction related traffic, therefore, no additional traffic related air quality effects are likely, other than those stated in **Chapter 7 Air Quality** of the submitted **ES (6.1, Rev 1)**. The construction of the independent foundations (if required) to support the cable trough across the watercourse has the potential to give rise to dust. Any dust generating activities will be controlled through the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. In addition, the closest residential properties are approximately 100m away at the Norman Road crossing, therefore best practice measures to limit dust will be incorporated into the construction of the Proposed Development. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. Once installed, there are no operational related activities other than periodic maintenance. Therefore, no significant noise or vibration impacts are likely.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	3. <u>The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	
Chapter 8 Noise and Vibration	1. <u>Construction: effects arising from the construction of the cable trough at each of the watercourse crossings.</u> As stated above, there is unlikely to be an increase in construction related traffic, therefore, no additional traffic related noise impacts are likely, other than those stated in **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045)**. The construction of the independent foundations (if required) to support the cable trough across the watercourse has the potential to give rise to noise and vibration. Any such activities will be controlled through the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. At this crossing, the closest residential properties are located approximately 100m away on the opposite side of the A2016. The A2016 is a busy dual-carriage way, therefore the construction work for the cable trough is not discordant with ambient noise levels in the surrounding area.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	In addition, construction work for the cable trough will be undertaken during permitted working hours in accordance with the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. Once installed, there are no operational related activities other than periodic maintenance. Therefore, no noise and vibration impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	
Chapter 9 Townscape and Visual Impact Assessment	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. Construction of the Electrical Connection would give rise to some temporary disturbance in the character of the road corridors, however, any effects would be temporary in nature. Any works carried out would be in accordance with the embedded mitigation described in **Section 9.8 Chapter 9 Townscape and Visual Impact Assessmen**t of the submitted **ES (6.1, Rev 1).** The use of cranes is expected; however, crane activity would be minimal, as cranes are anticipated to only be required for a maximum of one day. Therefore, the townscape/landscape and visual effects identified in **Table 9.7, Chapter 9**	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Townscape and Visual Impact Assessment of the submitted **ES (6.1, Rev 1)**, 'Assessment of effects on townscape and visual receptors from construction of the Electrical Connection', remain as predicted (minor adverse – negligible (not significant). 2. <u>Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings.</u> As stated in **Paragraph 9.9.9**, **Chapter 9 Townscape and Visual Impact Assessment** of the **ES (6.1, Rev 1**) *"The Electrical Connection, except for the Electrical Connection point (where the connection would be made into an existing substation building), will predominantly be located underground (there may be discreet areas that are not located underground due to engineering difficulties) (see details in Chapter 3) therefore removing the potential for significant townscape or visual effects during operation. As agreed within the Scoping Opinion (Appendix A.1) the assessment therefore considers townscape and visual effects arising from the construction of the Electrical Connection but not during operation."* During operation, the cable trough structure would have a clear span over the existing watercourse which would be set at a height above the water that is similar to that of the existing bridge. Although a new piece of infrastructure, the cable trough would be in an area which contains existing infrastructure elements and so would not be out of character. It is therefore considered that the proposed cable trough would not lead to significant townscape or visual effects, and therefore can be scoped out from further assessment in accordance with the agreed Scoping Opinion in relation to the Electrical	operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Connection (**Paragraph 9.9.9, Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1)).** 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	
Chapter 10 Historic Environment	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. For the Electrical Connection route, excavation required would typically be 1.2 m deep. The foundations of the structure to support the cable trough across the watercourse has the potential to disturb unknown buried archaeology. However, the location of the cable trough is not in known Archaeological Priority Area. Furthermore, Requirement 7 *No part of Work Nos. 1, 2, 3, 4, 5 and 9 may commence until a written scheme of archaeological investigation for that part has been submitted to and approved by the relevant planning authority,* secured through the **dDCO (3.1, Rev 1)**, will ensure no significant effects are likely. In addition, there are no above ground heritage assets within the vicinity of the area to be impacted by short term construction related activities. Therefore, no further impacts are likely.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore,

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no statutory designations (Listed Buildings, Conservation Areas, Scheduled Ancient Monuments or World Heritage Sites) are located within the Application Boundary. No locally listed or non-designated built heritage assets are recorded within the Application Boundary. There would be no operational or maintenance activities likely to affect buried archaeological assets as a result of the cable troughs, therefore, no impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	there is unlikely to be a combined cumulative effect.
Chapter 11 Terrestrial Biodiversity	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. 2. Construction of the Electrical Connection route has been assessed within **Section 11.9**, **Chapter 11 Terrestrial Biodiversity** of the submitted **ES (6.1, Rev 1)** with regards to the crossing of the Belvedere Dykes SINC (Norman Road crossing). However, construction related impacts as a result of the installation of the cable trough will result in short-term temporary impacts through habitat loss and disturbance of semi-improved grassland. Habitats	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	adjacent to A2016 are likely to have been subject to historical disturbance and would re-establish following installation and reinstatement. Measures to minimise impacts from installation will be set out within the **Outline Biodiversity and Landscape Mitigation Strategy (OBLMS) (7.6, APP-107)**. Therefore, effects will be Not Significant. 3. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. The cable trough will either be supported off the existing structure, or on its own independent foundations and will be set at a height similar to that of the existing bridge. As the watercourse is already subject to low level shading, therefore, impacts to biodiversity are negligible. 4. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.
Chapter 12 Hydrology Flood Risk and Water Resources	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. **Paragraph 2.9.9, Chapter 12 Hydrology Flood Risk and Water Resources** of the submitted **ES** (**6.1, Rev 1**) states that: *"REP would require a new Electrical Connection to export power to the electricity network. The Electrical Connection will be routed predominantly via the existing road network and will*	1. No new or different likely significant effects are likely to arise from the construction of the cable trough

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	be predominantly underground. The exception would be at the connection point with REP itself, at the connection point to the electricity network and at discreet locations along the Electrical Connection route where it might be attached to existing bridges or supported in new cable bridges over smaller watercourses." Further to this, **Paragraph 12.9.11 Chapter 12 Hydrology Flood Risk and Water Resources** of the submitted **ES (6.1, Rev 1)** states*: "Construction activities associated with installation of the above ground elements would be within the existing Littlebrook substation and in discreet locations at cable bridges over watercourses, and have very minor potential to impact upon the surface water drainage regime and water quality of receiving watercourses and water bodies as a result of small scale and localised earthworks operations. These are noted to be Medium sensitivity receptors. Such effects would be localised and temporary and controlled using measures set out within the Outline CoCP.".* As a result, the magnitude of impact upon the surface water drainage regime and water quality during construction of the above ground Electrical Connection element would be Negligible, which therefore results in the potential effects of the construction phase having a Negligible significance which is Not Significant. 2. <u>Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings.</u>	2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	The cable trough comprises three power cables and two multicore cables associated with the Electrical Connection which would not require water, nor be sensitive to flood risk. The elevation of the structure will be minimised subject to being sufficient to clear the obstruction, provide safe access and to meet with river/flood flow requirements where necessary. Therefore, the operational phase would not give rise to effects upon hydrology, flood risk and water resources. 3. <u>The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.</u> As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	
Chapter 13 Ground Conditions	1. <u>Construction: effects arising from the construction of the cable trough at each of the watercourse crossings.</u> Standard best practice procedures will be undertaken during the construction of the Electrical Connection route and the installation of the cable toughs to minimise risk of exposure to contaminates to construction workers and contamination of surface and ground waters. Furthermore, in accordance with **Requirement 10 Ground Conditions and Ground Stability** which is secured by the **dDCO (3.1, Rev 1)**, impacts are anticipated to result in Negligible/no effects.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. Once installed there are no operational activities associated with the cable trough however, periodic maintenance may be required. This will be carried using best practice procedures to limit any potential risk of contamination. Therefore, no adverse impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
Chapter 14 Socio-economic	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. Potential socio-economic effects and related environmental effects, such as noise, dust, vibration are assessed above and working hours will be controlled through the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1**), therefore, there is unlikely to be any new or different likely significant effects are likely to arise from the construction of the cable trough 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no anticipated activities during the operational phase, other than periodic maintenance. Therefore, no socio-economic effects are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. As no new likely significant effects have been identified it is considered unlikely that any new impact interactions or cumulative effects will arise.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.
Chapter 15 Other Considerations	**Construction and Operation** **Chapter 15 Other Considerations** of the submitted **ES (6.1, APP-052),** as amended, includes an assessment on Human Health, Climate, Lighting, Waste,	There is unlikely to be a change to the 'Other Considerations' due to the small-scale nature

Environmental topic reported in the submitted ES	Amendment 2 – Supplemental Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES)
	Aviation and Accidents and Disasters. These topics were considered as part of the EIA Scoping process and the consultee comments on these topics in the subsequent **Scoping Opinion** adopted by the Secretary of State on 5 January 2018 (**Appendix A.1** of the submitted **ES (6.3, APP-062)**, confirmed that these topics do not require a specific topic chapter within the ES, as no likely significant effects relating to them were anticipated. The amendment is unlikely to result in a change to the Secretary of State **Scoping Opinion** (**Appendix A.1** of the submitted **ES (6.3, APP-062)**, nor would the outcome of **Chapter 15 Other Considerations** of the submitted **ES (6.1, APP-052)**, be altered. Given the small-scale nature and magnitude of the amendment, it is unlikely to give rise to new or a change in significant effects reported in this chapter of the submitted ES. Potential impacts relating to Health and Climate are included in the above assessments where necessary. With regards to Light, Aviation, Accident and Disaster, any potential changes would be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, it is considered that there are no new or different likely significant effects arising from the proposed amendment, when compared to the submitted ES.	of the proposed amendment.

Table 4.2: Joyce Green Lane Crossing Cable Trough – Environmental Assessment

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 6 Transport	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. The works to carry out the construction of the cable troughs would be transient and do not represent a major change to the construction of the Electrical Connection route and associated infrastructure, therefore, there is unlikely to be an increase in vehicle trips generated. The construction period is likely to remain as a 15-24 month programme, with approximately 30-60 vehicle visits generated at the temporary construction compounds, as stated in **Appendix B.1 Transport Assessment** of the submitted **ES (6.3, APP-066)**. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no operational related activities in the operational phase, other than periodic maintenance. Therefore, no transport impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 7 Air Quality	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. As stated above, it is unlikely that there will be an increase in construction related traffic, therefore, no additional traffic related air quality impacts are likely, other than those stated in **Chapter 7 Air Quality** of the submitted **ES (6.1, Rev 1).** The construction of the independent foundations to support the cable trough across the watercourse has the potential to give rise to dust. Any dust generating activities will be controlled through the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. In addition, the closest residential properties are approximately 60m away at the Joyce Green Lane crossing, therefore best practice measures to limit dust will be incorporated into the construction of the Proposed Development. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no operational related activities in the operational phase, other than periodic maintenance. Therefore, no air quality impacts are likely.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES.	
Chapter 8 Noise and Vibration	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. As stated above, it is unlikely that there would be an increase in construction related traffic, therefore, no additional traffic related noise effects are likely, other than those stated in **Chapter 8 Noise and Vibration** of the submitted **ES (6.1, APP-045)**. The construction of the independent foundations to support the cable trough across the watercourse has the potential to give rise to noise and vibration. Any such activities will be controlled through the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. At the Joyce Green Lane crossing the closest residential property is 60m away to the north east. Trees and hedges located between the Joyce Green Lane crossing and the closest residential properties provide a natural barrier in terms of noise attenuation.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	In addition, construction work for the cable troughs will be undertaken during permitted working hours in accordance with the **Outline CoCP (7.5, Rev 1),** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no operational related activities in the operational phase, other than periodic maintenance. Therefore, no noise and vibration impact impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES.	a combined cumulative effect.
Chapter 9 Townscape and Visual Impact Assessment	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. Construction of the Electrical Connection would cause some temporary disturbance in the character of the road corridors, however, these effects would be temporary in nature. Any works carried out would be in accordance with the embedded mitigation outlined in **Section 9.8 Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1)**. At the	1. No new or different likely significant effects are likely to arise from the construction of the cable trough

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	Joyce Green Lane crossing, there is potential for visual effects upon people's views from the long-distance footpath located to the west of the proposed cable trough, arising from the construction of the cable trough. The land is slightly undulating at this point and there is some screening provided by low level shrub vegetation. The use of cranes is expected; however, crane activity would be minimal, as cranes are anticipated to only be required for a maximum of one day. To the east of the cable troughs, along Joyce Green Lane, there is a cycle route and non-designated public route. However, existing vegetation, including trees, would screen construction activity. Therefore, the townscape/landscape and visual effects identified in **Table 9.7, Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES** (**6.1, Rev 1**), 'Assessment of effects on townscape and visual receptors from construction of the Electrical Connection' remain as predicted (minor adverse – negligible (not significant). 2. <u>Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings.</u> As stated in **Paragraph 9.9.9**, **Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1)** *"The Electrical Connection, except for the Electrical Connection point (where the connection would be made into an existing substation building), will predominantly be located underground (there may be discreet areas that are not located underground due to engineering difficulties) (see details in Chapter 3) therefore removing the potential for significant townscape or visual effects during operation. As agreed within the Scoping Opinion (Appendix A.1) the assessment therefore*	2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	considers townscape and visual effects arising from the construction of the Electrical Connection but not during operation." During operation, the cable trough would be a structure that enables a clear span of the existing watercourse set at a minimal elevation as the watercourse is not navigable. Although a new piece of infrastructure, the cable trough would be in an area which contains existing infrastructure elements (Joyce Green Lane Quarry and the busy A206, so would not be out of character. It is therefore considered that the proposed cable trough would not lead to significant townscape or visual effects, and therefore can be scoped out from further assessment in accordance with the agreed Scoping Opinion in relation to the Electrical Connection **(Paragraph 9.9.9, Chapter 9 Townscape and Visual Impact Assessment** of the submitted **ES (6.1, Rev 1))**. 3. <u>The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.</u> No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 10 Historic Environment	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. For the Electrical Connection route, excavation required would typically be 1.2 m deep. The foundations of the structure to support the cable trough across the watercourse has the potential to disturb unknown buried archaeology. However, the location of the cable troughs are not located in known Archaeological Priority Area. Furthermore, Requirement 7 *No part of Work Nos. 1, 2, 3, 4, 5 and 9 may commence until a written scheme of archaeological investigation for that part has been submitted to and approved by the relevant planning authority,* secured through the **dDCO (3.1, Rev 1)**, will ensure no significant impacts are likely. In addition, there are no above ground heritage assets within the vicinity of the area to be impacted by short term construction related activities. Therefore, no further impacts are likely. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no statutory designations (Listed Buildings, Conservation Areas, Scheduled Ancient Monuments or World Heritage Sites) are located within the Application Boundary. No locally listed or non-designated built heritage assets are recorded within the Application Boundary.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	There would be no operational or maintenance activities likely to affect buried archaeological assets as a result of the cable troughs, therefore, no impacts are likely. 3. <u>The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.</u> No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	
Chapter 11 Terrestrial Biodiversity	1. <u>Construction: effects arising from the construction of the cable trough at each of the watercourse crossings.</u> Construction of the Electrical Connection route has been assessed within **Section 11.9**, **Chapter 11 Terrestrial Biodiversity** of the submitted **ES** (**6.1, Rev 1**) with regards to the crossing of the Dartford Marshes LWS watercourse (Joyce Green Lane crossing). However, construction related impacts will give rise to short-term temporary impacts through habitat loss and disturbance of semi-improved grassland. Habitats adjacent to Joyce Green Lane are likely to have been subject to historical disturbance and would re-establish following installation and reinstatement. Measures to minimise impacts from installation will be set out within the **Outline Biodiversity and Landscape Mitigation Strategy (OBLMS) (7.6, APP-107)**. Therefore, effects will be Not Significant.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	Further Great Crested Newt survey work has been carried out, the results show that no GCNs are present in this area. The results are submitted at Deadline 2 2. <u>Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings.</u> The structure at Joyce Green Lane would be of a similar scale, design and span to the Norman Road crossing. However, in the absence of an existing adjacent structure, the cable trough would require its own independent foundations, which would be located outside of the existing watercourse banks minimising potential impact to aquatic biodiversity. The structure is likely to be wide enough to allow for the 3 power cables and 2 multicore cables associated with the Electrical Connection and set an appropriate elevation to limit shading impacts to aquatic biodiversity. Therefore, impacts are likely to be negligible. 3. <u>The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment.</u> No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 12 Hydrology Flood Risk and Water Resources	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. **Paragraph 2.9.9, Chapter 12 Hydrology Flood Risk and Water Resources** of the submitted **ES (6.1, Rev 1)** states that: *"REP would require a new Electrical Connection to export power to the electricity network. The Electrical Connection will be routed predominantly via the existing road network and will be predominantly underground. The exception would be at the connection point with REP itself, at the connection point to the electricity network and at discreet locations along the Electrical Connection route where it might be attached to existing bridges or supported in new cable bridges over smaller watercourses."* Further to this, **Paragraph 12.9.11 Chapter 12 Hydrology Flood Risk and Water Resources** of the submitted **ES (6.1, Rev 1)** states*: "Construction activities associated with installation of the above ground elements would be within the existing Littlebrook substation and in discreet locations at cable bridges over watercourses, and have very minor potential to impact upon the surface water drainage regime and water quality of receiving watercourses and water bodies as a result of small scale and localised earthworks operations. These are noted to be Medium sensitivity receptors. Such effects would be localised and temporary and controlled using measures set out within the Outline CoCP."* As a result, the magnitude of impact upon the surface water drainage regime and water quality during construction of the above ground Electrical	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
	Connection element would be Negligible, which therefore results in the potential effects of the construction phase having a Negligible significance which is Not Significant. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. The cable troughs comprise three power cables and two multicore cables associated with the Electrical Connection which would not require water, nor be sensitive to flood risk. The elevation of the structures will be minimised subject to being sufficient to clear the obstruction, provide safe access and to meet with river/flood flow requirements where necessary. Therefore, the operational phase of the cable troughs would not give rise to impacts upon hydrology, flood risk and water resources. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 13 Ground Conditions	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. Standard best practice procedures will be undertaken during the construction of the Electrical Connection route and the installation of the cable tough to minimise risk of exposure to contaminates to construction workers and contamination of surface and ground waters. Furthermore, in accordance with **Requirement 10 Ground Conditions and Ground Stability** which is secured by the **dDCO (3.1, Rev 1)**, impacts are anticipated to result in Negligible/no effects. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no operational activities associated with the cable trough, however, maintenance of the cable trough may be required from time to time. This will be carried out using best practice procedures to limit any potential risk of contamination. Therefore, no impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 14 Socio-economic	1. Construction: effects arising from the construction of the cable trough at each of the watercourse crossings. Potential environmental and socio-economic effects, such as noise, dust, vibration are assessed above and working hours will be controlled through the **Outline CoCP (7.5, Rev 1)**, which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)** therefore, there is unlikely to be any new or different likely significant effects are likely to arise from the construction of the cable trough. 2. Operation and maintenance: effects arising from the operation and maintenance of the cable trough at each of the watercourse crossings. There are no operational phase activities other than periodic maintenance. Therefore, no socio-economic impacts are likely. 3. The potential for any impact interactions or cumulative effects to arise at each of the watercourse crossings as a consequence of the proposed amendment. No new likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect over that reported in the submitted ES, as amended.	1. No new or different likely significant effects are likely to arise from the construction of the cable trough 2. No new or different likely significant effects are likely to arise from the operation of the cable trough 3. No new or different likely significant effects have been identified, therefore, there is unlikely to be a combined cumulative effect.

Environmental topic reported in the submitted ES, as amended	Environmental Assessment	Environmental Effects (compared to those reported in the submitted ES, as amended)
Chapter 15 Other Considerations	**Construction and Operation** **Chapter 15 Other Considerations** of the **Environmental Statement (ES) (6.1, APP-052)** includes an assessment on Human Health, Climate, Lighting, Waste, Aviation and Accidents and Disasters. These topics were considered as part of the EIA Scoping process and the consultee comments on these topics in the subsequent **Scoping Opinion** adopted by the Secretary of State on 5 January 2018 (**Appendix A.1** of the submitted **ES (6.3, APP-062)**,), confirmed that these topics do not require a specific topic chapter within the ES, as no likely significant effects relating to them were anticipated. The proposed amendment is unlikely to result in a change to the Secretary of State **Scoping Opinion** (**Appendix A.1** of the submitted **ES (6.3, APP-062)**,), nor would the outcome of **Chapter 15 Other Considerations (6.3, APP-052)**, of the submitted ES, be altered. The proposed amendment us unlikely to change potential effects in any of the ES topics given the small-scale nature of the proposed amendment. Potential impacts relating to Health and Climate are included in the above assessments where necessary. With regards to Light, Aviation, Accident and Disaster, any potential changes would be controlled through the **Outline CoCP (7.5, Rev 1)** which is secured through **Requirement 11** of the **dDCO (3.1, Rev 1)**. Therefore, there are no new or different likely significant effects when compared to the submitted ES.	There is unlikely to be a change to the 'Other Considerations' due to the small-scale nature of the proposed amendment.

5 Review of the Assessment Findings

5.1 Amendment 1 – amendment to the Main Temporary Construction Compound

5.1.1 The assessment carried out demonstrates that Amendment 1, in both Scenario 1 and Scenario 2 which involves the use of existing land within the Order Land for the Main Temporary Construction Compound and the removal of certain plots from the Order Land, does not give rise to any new or different likely significant effects, new impact interactions or cumulative effects, when compared to those reported in the submitted ES.

5.2 Amendment 2 – Installation of cable troughs for the Electrical Connection route

5.2.1 As a result of ongoing design development work and stakeholder engagement, a second amendment to the Proposed Development is proposed which relates to the installation of a cable trough for the Electrical Connection route over two watercourses.

5.2.2 The construction and operational effects of the installation of the cable troughs have been assessed and are reported in Tables 4.1 and 4.2. The structures will either be supported by the existing infrastructure (at the Norman Road crossing) or will have independent foundations. In considering a worst case assessment, independent foundations for both crossings have been assumed.

5.2.3 The design of the cable troughs will be discreet and set at an elevation so as to avoid any adverse effects to the surface water drainage regime and water quality of receiving watercourses and water bodies, potentially sensitive views in the surrounding area or effects on local biodiversity in terms of shading. The assessment of the construction and operational phases did not identify any new or different likely significant effects, new impact interactions or cumulative effects, when compared to those reported in the submitted ES.

Appendix A Data Centre Planning Conditions

LONDON BOROUGH OF BEXLEY

Development Control Division
Civic Offices, 2 Watling Street,
Bexleyheath, Kent, DA6 7AT
Telephone 020 8303 7777

Head of Development Control: Mrs S M Clark

To: **Riverside Resource Recovery Ltd**
c/o Mr Roger Miles
Roger Miles Planning Ltd
Three Corner Park
Calstock
Cornwall PL18 9RG

TOWN AND COUNTRY PLANNING ACT 1990
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (ENGLAND) ORDER 2015

GRANT OF OUTLINE PLANNING PERMISSION TO DEVELOP LAND SUBJECT TO CONDITIONS	Reference Code : **15/02926/OUTM**

TAKE NOTICE that Bexley Council, the Local Planning Authority under the Town and Country Planning Acts, **HAS GRANTED OUTLINE PLANNING PERMISSION** for the development of land situated at :

Land Part Of Borax Works
Norman Road
Belvedere
Kent

For Outline application for the construction of a data centre (Use Class B8), sub-stations, formation of new access, car parking and landscaping.

Referred to in the application for Outline Planning Permission for development received on 1st February 2016,

SUBJECT TO THE CONDITIONS as attached

Date of Decision : 11th July 2016

[redacted]

Head of Development Control

LONDON BOROUGH OF BEXLEY

Reference Code :

15/02926/OUTM

CONDITIONS AND REASONS

1 Application for approval of the reserved matters shall be made to the Local Planning Authority before the expiration of three years from the date of this permission.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended by the Planning and Compulsory Purchase Act 2004).

2 The development to which this permission relates must be begun not later than the expiration of two years from the final approval of the details referred to in condition 3 above, or in the case of approval on different dates, the final approval of the last such matter to be approved.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended by the Planning and Compulsory Purchase Act 2004).

3 The development hereby permitted shall not be carried out otherwise than in complete accordance with the approved plans, being Drawing No(s) 15694-GA-01D, PL01,02,03,04,05,06,07 and 08 and any approval granted subsequently pursuant to this permission.

Reason: To prevent any unacceptable deviation from the approved plans.

4 No development approved by this permission shall be commenced prior to a contaminated land assessment and associated remedial strategy together with a timetable of works, being submitted to the Local Planning Authority for approval.

a) The contaminated land assessment shall include a desk study to be submitted to the Local Planning Authority for approval. The desk study shall detail the history of the site's uses and propose a site investigation strategy based on the relevant information discovered by the desk study. The strategy shall be approved by the Local Planning Authority prior to investigations commencing on site (ref 1).

b) The site investigation including relevant soil gas surface and groundwater sampling, shall be carried out by a suitably qualified and accredited consultant/contractor in accordance with Quality Assured sampling and analysis methodology (ref 2).

c) A site investigation report detailing all investigative works and sampling on site, together with the results of analysis, risk assessment to any receptors and a proposed remediation strategy shall be submitted to the Local Planning Authority. The Local Planning Authority shall approve such remedial works as required prior to any remediation commencing on site. The works shall be of such a nature so as to render

harmless the identified contamination given the proposed end-use of the site and surrounding environment including any controlled waters.

d) Approved remediation works shall be carried out in full on site under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance (ref 3). If during any works contamination is encountered which has not previously been identified then the additional contamination should be fully assessed and an appropriate remediation scheme submitted to the Local Planning Authority for approval.

e) Upon completion of the works this condition shall not be discharged until a closure report has been submitted to and approved in writing by the Local Planning Authority. The closure report shall include details of the proposed remediation works and the quality assurance certificates to show that the works have been carried out in full in accordance with the approved methodology. Details of any post remediation sampling and analysis to show the site has reached the required clean-up criteria shall be included in the closure report together with the necessary documentation detailing what waste materials have been removed from the site.

Ref 1: Contaminated Land Research Report nos. 2, 3 and 4 DoE
Ref 2: Contaminated Land Research Report no. 1 DoE
Ref 3: CIRIA Vols 1-12 Contaminated Land Series CIRIA "Building on Derelict Land"

Reason: To prevent harm to human health and pollution of the environment.

5 Before any development is commenced approval of the details (and samples with respect to the building and hard surfacing) of the layout, design, scale, appearance and the hard and soft landscaping of the site including boundary fencing (hereinafter called the reserved matters), shall be obtained in writing from the Local Planning Authority.

Reason: No such details have been submitted for approval.

6 Full details of facilities for parking of cycles within each phase of the development of the site shall be submitted to and approved in writing by the Local Planning Authority and once approved shall be fully implemented before the premises are first occupied.

Reason: To provide adequate cycle facilities in accordance with Policy T14 of the Unitary Development Plan (2004) (saved policies)

7 Details of vehicle parking, including provision of electric vehicle charging points, shall be submitted for approval for each phase of the development and parking shall be provided in accordance with the agreed details before each phase of the development is occupied.

Reason: To ensure that adequate and satisfactory provision is made for the parking of vehicles clear of all highways.

8 Full details of the vehicular access arrangements shall be submitted to and approved by the Local Planning Authority prior to the commencement of the relevant part of the development and such development shall be completed in accordance with such details before the premises are first occupied.

Reason: In the interest of road safety.

9 The use of the land for car parking approved shall not be commenced until the site has been laid out, surfaced and drained to the satisfaction of the Local Planning Authority.

Reason: To ensure a satisfactory standard of development.

10 Detailed plans and drawings with respect to the matters reserved for subsequent approval shall show adequate space to the satisfaction of the Local Planning Authority reserved for the parking, loading and unloading of commercial vehicles and this space shall be used or available for such use at all times.

Reason: To ensure that parking, loading and unloading takes places on the site and off the highway.

11 Prior to the commencement of development in any phase details of the sightlines and pedestrian visibility splays associated with any road junctions, parking spaces, etc, shall be submitted to, and approved in writing by, the Local Planning Authority. The agreed sightlines and visibility splays shall be provided prior to the occupation of any unit with which they are associated and the defined clear areas maintained at all times thereafter.

Reason: In the interests of road safety. These details need to be agreed early to ensure the layout can adequately accommodate them.

12 Each phase of the development hereby approved shall not be brought into use until a detailed Travel Plan has been submitted to, and approved in writing by, the Local Planning Authority. Such a plan is to include strategies for the provision/encouragement of alternative modes of transport to the car for all users of the site, together with details of the phasing of measures, monitoring and review as appropriate. The approved Travel Plan shall be implemented on the commencement/occupation of the development.

Reason: In the interests of minimising the environmental impact of the scheme.

13 Details of staff shower rooms and changing facilities within each of the buildings shall be submitted to and agreed in writing with the Local Planning Authority before occupation of the individual buildings.

Reason: To ensure a satisfactory standard of development.

14 Prior to construction commencing on site, the applicant must submit an energy statement to the Local Planning Authority for approval demonstrating how a 35% reduction in total CO2 emissions from the development has been achieved. This should follow the Mayor's Guidance for Developers in Preparing Energy Assessments. The energy assessment should include: calculation of the energy demand and carbon dioxide emissions that are covered or not covered by Building Regulations at each stage of the energy hierarchy; proposals to reduce carbon dioxide through energy efficient design; proposals to further reduce carbon dioxide emissions through decentralised energy where feasible; proposals to further reduce carbon dioxide emissions through the use of on site renewable energy technologies . The Post Construction review for the BREEAM should confirm that the chosen renewable energy technology has been

installed and that the development achieves 'Very Good'. The renewable energy technology/s installed must remain for as long as the development is in existence.

Reason: To conform with adopted London Plan policy and the Bexley Sustainable Design and Construction Guide. These are needed at an early stage so that works can proceed quickly.

15 Prior to the commencement of the development the applicant shall submit a Pre Construction Assessment and following completion of the development a Post Construction BREEAM Review Certificate showing that at least 'Very Good' has been achieved. Any features that are installed in the development to meet this standard must remain for as long as the development is in existence.

Reason: To conform with the Bexley Sustainable Design and Construction Guide. These are needed at an early stage so that works can proceed quickly

16 Whilst the principles and installation of sustainable drainage schemes are to be encouraged, no infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to Controlled Waters. The development shall be carried out in accordance with the approval details.

Reason: Infiltrating water has the potential to cause remobilisation of contaminants present in shallow soil/made ground which could ultimately cause pollution of groundwater.

17 Prior to commencement of development on site, and in conjunction with the details required by condition 11, the applicant is asked to provide details in to the Local Planning Authority for their approval in writing of the following :-

(i) Details of methods and location for on-site attenuation mentioned are required.
(ii) Details of how the problem of the high water table will be adequately considered within the attenuation methods.
(iii) Details of a maintenance regime which will be put in place to cover all parts of the surface water drainage system.
(iv) Details showing how anything over the 1 in 30 year storm would be stored on site.
The drainage proposals for the proposed planning application shall conform with the following policies and standards: 1. Greenfield run off rates and volumes for the site are required to be met by London Plan Sustainable Design and Construction Supplementary Planning Guidance (3.4.10), London Plan Policy (5.13), Bexley's Strategic Flood Risk Assessment (7.1.2) and Bexley's Sustainable Design and Development Construction Guide SPD (Guidance Note 12) and the Preliminary Rainfall Runoff Management for Developments (2012). 2. If SuDS schemes are not practical then attenuation and long term storage must be provided to ensure greenfield run off rates are met. This is taken from the SuDS Manual (CIRIA 753) and the Preliminary Rainfall Runoff Management for Developments (2012) which requires long term storage to be provided for (M100 6 hours) for the developed site - (M100 6 hours) greenfield. 3. The development must not make the flooding worse either on or off site as per National Planning Policy Framework (NPPF). 4. Exceedance routes for the 100 year design storm plus climate change, to be plotted and protected under planning (NPPF & Designing for exceedance in urban

drainage (Ciria 635)). 5. Surface Water discharge into a Foul Sewer is strictly not allowed.

Reason: This is a highly sensitive area where surface water flooding is concerned, with many flooding incidents occurring in Crabtree Manorway, Lower Road, Maida Road, Station Road and Mitchell Close and so adequate measures are required to prevent or respond adequately to further such incidents. These details need to be agreed early to ensure the layout can adequately accommodate them.

18 Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

Reason: The developer should be aware of the potential risks associated with the use of piling where contamination is an issue. Piling or other penetrative methods of foundation design on contaminated sites can potentially result in unacceptable risks to underlying groundwaters. We recommend that where soil contamination is present, a risk assessment is carried out in accordance with our guidance 'Piling into Contaminated Sites'. We will not permit piling activities on parts of a site where an unacceptable risk is posed to Controlled Waters.

19 No development shall take place until a scheme for the provision, protection and management of a 5 metre wide buffer zone alongside the ditches shall be submitted to and agreed in writing by the Local Planning Authority. Thereafter the development shall be carried out in accordance with the approved scheme and any subsequent amendments shall be agreed in writing with the local planning authority. The buffer zone scheme shall be free from built development including lighting, formal landscaping; and will form a vital part of green infrastructure provision.
The schemes shall include:
1. plans showing the extent and layout of the buffer zone.
2. details of how the site will be protected during development, in particular the nationally scarce plant dittander Lepidium latifolium
3. proposed management plan and access points for maintenance of the ditch and buffer area.

Reason: Development that encroaches on wetland habitats has a potentially severe impact on their ecological value. Land alongside ditches is particularly valuable for wildlife and it is essential this is protected. This protection needs to be implemented before construction starts.

20 A landscape management plan, including long- term design objectives, management responsibilities and maintenance schedules for all landscaped areas, shall be submitted to and approved in writing by the Local Planning Authority. The landscape management plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the Local Planning Authority.
The scheme shall include the following elements:
1. detail of native meadow mixes to be used to create additional habitat areas in all proposed green landscape areas,
2. detail of any swales which must include only native species to enhance biodiversity,

3. details of maintenance regimes to enhance and maintain these features,
4. details of any tree planting to accompany the grassland,
5. details of the green wall design to provide additional biodiversity benefits. This should include details of irrigation and a planting schedule,
6. details of management responsibilities,
7. evidence of Assessment by an ecologist - in the form of a detailed report which demonstrates that there would be no potential impacts on biodiversity.

Reason: This condition is necessary to mitigate for potential impacts on the adjacent local nature reserve, further buffer and protect the ditches, ensure the protection of wildlife and supporting habitat, and secure opportunities for the enhancement of the nature conservation value of the site in line with national planning policy.

21 A Biodiversity Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Biodiversity Management Plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the Local Planning Authority. The Plan shall remain in place for the lifetime of the development. The Plan shall include details of the mitigation measures listed in paragraph 4.24 of the Riverside Data Centre Phase 2 Report dated April 2016 by Applied Ecology Ltd. The Plan should also explore the possibility of Living Roofs for the buildings. The plan shall include details of the green walls to each building, including planting and long tern management. This Plan shall be designed in conjunction with the landscape management plan, to ensure that the provision of each does not contradict each other. The Biodiversity Management Plan shall remain in place for the lifetime of the development and be redrafted every 5 years with each draft undergoing the same process of submission to and approval in writing from the Local Planning Authority before it comes into effect on the completion of a 5 year cycle from implementation of the previous.

Reason: This condition is necessary to mitigate for potential impacts on the adjacent local nature reserve, further buffer and protect the ditches, ensure the protection of wildlife and supporting habitat, and secure opportunities for the enhancement of the nature conservation value of the site in line with national planning policy.

22 No development shall take place until the applicant has submitted to and gained approval from the Local Planning Authority for a Desk Based Archaeological Assessment of the site. If, potentially significant archaeology is identified by the report, further site work should be recommended before any ground works take place. The development shall only take place in accordance with the detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Local Planning Authority.

Reason: The development is likely to damage archaeological remains. The applicant should therefore submit detailed proposals in the form of an archaeological project design. The design should be in accordance with Historic England guidelines. This must be done first as any such investigation is required in advance of construction.

23 The applicant shall undertake further detailed ecological survey work prior to construction on the site. This survey should take the form of an extended phase 1 habitat survey. The findings of this and any recommendations for addressing any matters identified by it that are not already addressed by the Landscape and Biodiversity

Management Plans shall be submitted to and approved in writing by the Local Planning Authority.

Reason: In the interests of biodiversity on the site.

24 A scheme of lighting for the site, indicating the siting, type, timing of operation and intensity of any lighting installations proposed, ensuring that low energy types are used shall be submitted to and approved in writing by the Local Planning Authority. The lighting scheme must be assessed by an ecologist and their findings in the form of an ecological lighting assessment must be submitted with the details for approval in writing from the Local Planning Authority with the details of the lighting scheme.

Reason: In the interests of biodiversity on the site

25 No development shall take place until details of a reptile exclusion fence to protect reptile species during construction have been submitted to and approved in writing by the local planning authority. The approved details shall be carried out as approved and any subsequent variations shall be agreed in writing by the Local Planning Authority. The fencing shall remain in situ for the duration of the construction process on site and shall only be removed with prior approval from the Local Planning Authority.

Reason: In the interests of biodiversity on the site.

26 No development shall take place until details of a demolition and construction timetable for work are submitted to and approved in writing by the Local Planning Authority. This timetable shall have the principal purpose of ensuring that no work takes place during a bird nesting season, unless an ecologist has provided confirmation that birds are not breeding on site at that time. This timetable will take into account the findings of all ecological survey work undertaken, both before and after approval of the outline permission hereby approved under ref:15/02926/OUTM. Once the details are approved, the construction work on site, through all its phases shall be strictly in accordance with its recommendations. The methodology shall demonstrate that it has also taken account of the following : -

i. demolition and construction methods and techniques (including the avoidance of burning on site and vehicle movements); days/hours of work and deliveries of construction materials.
ii. means of minimising noise and vibration (including any piling), and compliance with BS 5228;
iii. means of minimising dust and similar emissions, in accordance with Air Quality: Best Practice Guidance - The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance (published by the Greater London Authority, July 2014);
iv. means for the identification, removal and safe disposal of asbestos;
v. construction site lighting;
vi Details of the location of any construction compound, and arrangements for the parking of operators and sub contractors vehicles;
vii details of proposed hours of site working and operations;
vii. contact arrangements for the public, including 'out of hours' telephone numbers for named contacts).

Reason: In the interests of the amenities of nearby local residents.

27 The applicant shall submit to and gain approval in writing from the Local Planning Authority for details of bird and bat boxes to be incorporated within the fabric of the buildings. Details shall include a plan showing the number, position and type of the proposed bird and bat boxes.

Reason: In the interests of biodiversity on the site.

28 The development hereby permitted shall incorporate security measures to minimise the risk of crime and to meet the specific security needs of the development in accordance with the principles and objectives of Secured by Design. Details of these measures shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development and shall be implemented in accordance with the approved details prior to occupation.

Reason: In the interests of security. These need to be submitted early to enable their incorporation into the development.

29 The arrangements for the storage of refuse and recycling facilities for each of the individual units hereby approved including any means of enclosure shall be submitted to and approved in writing by the Local Planning Authority and completed before any unit is first occupied and shall be permanently maintained thereafter.

Reason: To ensure that satisfactory refuse and recycling facilities are provided for each unit.

30 All Non-Road Mobile Machinery (NRMM) used for major developments of net power between 37kW and 560 kW will be required to meet Stage IIIA of EU Directive 97/68/EC for both NOx and PM. If Stage IIIA equipment is not available the requirement may be met using the following techniques:

(i) Reorganisation of NRMM fleet
(ii) Replacing equipment (with new or second hand equipment which meets the policy)
(iii) Retrofit abatement technologies
(iv) Re-engining

All eligible NRMM should meet the policy above unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit for both PM and NOx is not feasible. In this situation every effort should be made to use the least polluting equipment available including retrofitting technologies to reduce particulate emissions.

Developers will be required to provide a written statement of their commitment and ability to meet the policy within their Construction and Demolition Air Quality Statement and Environment Management plans.

An inventory of all NRMM must be kept on site and all machinery should be regularly serviced and service logs kept on site for inspection. Records should be kept on site which details proof of emission limits for all equipment. This documentation should be made available to local authority officers as required.

The site shall be registered on the NRMM register available at: https://nrmm.london/user-nrmm/register."

Reason: To comply with the GLA's NRMM Low Emission Zone policy (London Plan Policy 7.14) in the interests of maintaining local air quality.

31 The premises shall be used for a data centre and for no other purpose, including any other purpose in Class B8 of the Schedule to the Town and Country Planning (Use Classes) Order 1987 (as amended) or in any provision equivalent to that Class in any statutory instrument revoking that Order.

Reason: To ensure that the proposed development does not prejudice the amenities enjoyed by the occupiers of properties in the vicinity.

INFORMATIVES :-

1 The applicant should be aware that this development is liable for both the Mayoral Community Infrastructure Levy and the London Borough of Bexley's Community Infrastructure Levy (CIL). Before the implementation of this planning permission someone will need to assume Liability for any CIL Charge for the development. Therefore the Council's CIL Administration Officer should be contacted at the earliest opportunity, to discuss what is required and to ensure that the correct process is followed. Contact in the first instance can be made by email to DevelopmentControl@bexley.gov.uk or by telephone to 020 3045 5912.
Please note: - any failure to follow the correct process can lead to surcharges being applied to any CIL Charge due and subsequent legal proceedings can be taken including the issuing of a CIL Stop Notice.

2 The implementation of this planning permission will require the naming of a new road or building, and or the assignment of a postal number(s). The Council, as the Local Street Naming and Numbering Authority, are responsible for approving new road names, assigning postal numbers and entering the information on the National Land & Property Gazetteer, a national database of address information. An application must be submitted to the Council at the earliest opportunity, to ensure that any new name(s) and/or number(s) are assigned before the development is occupied. A fee will be required for this service (see Bexley Council's web site for details or telephone 0203 045 5732). Please note: - the use of an address without the sanction of the Council is unlawful and may be subject to legal proceedings.

3 To assist applicants in a positive manner, the Local Planning Authority has produced policies and written guidance, all of which together with national and London wide policy, is available on the Council's website. The pre-application advice service was used by the applicant in this case. The LPA and the applicant have worked positively and proactively in a collaborative manner through both the pre-application and the application stages to deliver an acceptable development in accordance with the requirements of the NPPF. The LPA delivered the decision in a timely manner in accordance with the requirements of the NPPF. The L.P.A. worked in a proactive manner to conclude the necessary legal agreements which would make the scheme acceptable and compliant with the requirements of the NPPF.