# Riverside Energy Park

# Planning Statement

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CORY
RIVERSIDE ENERGY

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# 1 Executive Summary

## 1.1 Overview of the Proposed Development and DCO Application

1.1.1 Cory Environmental Holdings Limited (trading as Cory Riverside Energy) (Cory or the Applicant) is applying to the Secretary of State (SoS) under the Planning Act 2008 (PA 2008) for powers to construct, operate and maintain an integrated Energy Park, to be known as Riverside Energy Park (REP). The principal elements of REP comprise complementary energy generating development (with energy from waste) being the largest component) and an associated Electrical Connection (together referred to as the 'Proposed Development').

1.1.2 REP is proposed on land immediately adjacent to Cory's existing Riverside Resource Recovery Facility (RRRF) located at Belvedere within the London Borough of Bexley (LBB) and would complement the operation of the existing facility as well as making greater use of existing river-based infrastructure in London. It would comprise an integrated range of technologies including: energy from waste (or waste energy recovery), an Anaerobic Digestion facility for food and green waste, solar panels and battery storage. Additionally, REP would include on site infrastructure to provide the potential for heat to be supplied to local housing and businesses.

### Key REP Policy Themes

Key policy themes at the core of REP and the DCO submission are:

| Riverside Energy Park: Key REP Policy Themes | |
|---|---|
| ✓ | Generating reliable low carbon/renewable energy for London and UK |
| ✓ | Bridging the infrastructure gap in London and the South East |
| ✓ | Replacing landfill - not recycling – and moving waste up the Waste Hierarchy |
| ✓ | Dealing with London's residual waste problem - in London – and achieving greater net self-sufficiency for London |
| ✓ | Maximising movement of freight by river in London and minimising traffic congestion |
| ✓ | Tackling air quality and delivering carbon positive outcomes |
| ✓ | Bringing forward private investment – and avoiding the need for public subsidy |

1.1.3 As the generating capacity of REP will be in excess of 50 MWe capacity it is classified as a Nationally Significant Infrastructure Project (NSIP) under section 14 and 15 of the PA 2008 and therefore requires a Development Consent Order (DCO) to authorise its construction and operation.

1.1.4 The DCO application submitted to the Planning Inspectorate (PINS) for the Proposed Development complies with the requirements of Section 37 of the PA 2008, the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations') and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Infrastructure EIA Regulations 2017) which together govern the content of a DCO application. A full list of the DCO application documents submitted to PINS is set out in Table 2.1.

1.1.5 The Proposed Development is considered to fall within Schedule 1[1] to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the Infrastructure EIA Regulations 2017). Accordingly, an EIA has been undertaken pursuant to the Infrastructure EIA Regulations 2017, which set out the requirements for undertaking an EIA and the required information for inclusion within an Environmental Statement (ES).

1.1.6 In accordance with Section 5(2)(a) of the APFP Regulations, an ES (**Document Reference 6.1**) has been submitted with the DCO application and a copy of Scoping Opinion issued by the SoS is contained at **Appendix A.1** of the ES Technical Appendices (**Document Reference 6.3**).

1.1.7 Section 104 of the PA 2008 provides that in making decisions on DCO applications, the SoS must have regard to any relevant National Policy Statement (NPS) and must decide the application in accordance with it unless the proposal would contravene specific legal tests or the adverse impacts would outweigh its benefits.

1.1.8 Section 104(2) of the PA 2008 also requires the SoS to have regard to any local impact report submitted by a relevant local authority; any matters prescribed in relation to the development of the description to which the application relates; and any other matters which the SoS thinks are both important and relevant to the decision.

1.1.9 This Planning Statement (or this Report) (**Document Reference 7.1**) provides an explanation of planning issues associated with the Proposed Development and assesses the Proposed Development against policy requirements outlined primarily in National Policy Statements (NPSs) and other relevant planning policy documents. The relevant NPSs which outline the need for energy infrastructure and the issues to be considered are: NPS EN-1 (Overarching

[1] For EIA purposes the Proposed Development is considered to fall within paragraph 10 of Schedule 1 to the Infrastructure EIA Regulations 2017 (i.e. Waste disposal installations for the incineration or chemical treatment (as defined in Annex I to Directive 2008/98/EC under heading D9) of non-hazardous waste with a capacity exceeding 100 tonnes per day). It should be noted that, for the purposes of the Waste Framework Directive (2008/98/EC), the Proposed Development will be classified as a recovery operation, rather than a disposal operation.

Energy Policy), NPS EN-3 (Renewable Energy Supply from Waste) and NPS EN-5 (Electricity Networks Infrastructure). Other relevant planning documents are identified in Sections 4 and 5. Other relevant planning documents are identified in Sections 4 and 5.

## 1.2 The Need for New Energy and Waste Infrastructure

1.2.1 NPS EN-1 and EN-3 establish an urgent and substantial need for new energy generation infrastructure (including energy from waste) making clear the expectation that the industry will provide this capacity through private led investment such as REP. Alongside the drive for new energy generation is the desire for it to be renewable or low carbon, to meet climate change targets. REP meets these policy objectives, delivering new energy capacity through a renewable/low carbon supply, with no public funding support or subsidy.

1.2.2 The climate change driven priorities of NPS EN-1 and EN-3 include the delivery of: positive carbon outcomes and renewable/low carbon energy; sustainable waste management; and optimised design.

1.2.3 London Plan policy is consistent with the NPSs in seeking to reduce London's carbon emissions, gain decentralised energy supply, and divert waste away from landfill through new treatment capacity that will enable London to be self-sufficient (by 2026). Responding directly to the NPSs and London Plan objectives, REP:

- Is an Energy Recovery Facility (ERF) that achieves a positive carbon outcome, not least through the recovery of renewable/low carbon electricity from both food waste and residual waste and has good potential to also contribute to heat demand;
- Constitutes sustainable waste management capacity, diverting waste away from landfill, moving it up the waste hierarchy and providing for the reuse of metals and ash as construction aggregates (reducing reliance on the quarrying of primary aggregates); and
- Delivers good design, not least through incorporating a range of energy recovery and storage technologies, being CHP Enabled, and incorporating river freight as part of the multi-modal transport network thereby significantly reducing the number of trucks on London streets.

1.2.4 REP is a major energy infrastructure project recovering energy from waste and providing a reliable heat source for a future distribution network. Section 3 of the Project and its Benefits Report (**Document Reference 7.2**) demonstrates how REP will achieve the priorities of NPS EN-1 and EN-3 by:

- Recovering renewable/low carbon energy from residual waste;
- Reducing carbon emissions; and
- Delivering the potential for CHP.

1.2.5 Section 4 of the Project and its Benefits Report (**Document Reference 7.2**) demonstrates how REP, as new waste management infrastructure, meets the three waste management policy priorities of:

- Delivering the waste hierarchy;
- Enabling self-sufficiency; and
- Achieving site optimisation.

1.2.6 At the regional level, the extent of need for new residual waste treatment facilities such as REP is demonstrated in the Applicant's policy based assessment of REP against the London Plan and draft London Plan policies, as presented in the Project and its Benefits Report and the London Waste Strategy Assessment contained at Annex A (**Document Reference 7.2**).

## 1.3 Planning Assessment

1.3.1 Section 104 of the PA 2008 requires that the DCO application should be decided in accordance with NPS EN-1, EN-3 and EN-5 unless the Proposed Development would contravene specific legal tests set out under section 104 (4), (5), (6) and (8) or the adverse impacts would outweigh its benefits (section 104 (7)). The Proposed Development does not contravene any legal tests set out under section 104 of the PA 2008 and is in conformity with NPS EN-1, EN-3 and EN-5.

1.3.2 NPS EN-1 paragraph 4.1.3 explains that the decision-maker will weigh up a proposal's contribution to meeting the need for energy infrastructure and wider benefits, against the potential adverse impacts of the proposal and measures to avoid, reduce or compensate for any adverse impacts.

1.3.3 The likely impacts of the Proposed Development have been minimised wherever practicable through specification, siting and design and, where significant residual impacts remain, further mitigation has been incorporated into the draft DCO (**Document Reference 3.1**).

1.3.4 After further mitigation has been taken into account, the ES (**Document Reference 6.1**) **Chapter 16** finds that the Proposed Development will not have significant adverse residual effects except for townscape and visual impacts.

1.3.5 The benefits of the Proposed Development, notably the contribution to meeting the urgent national need for renewable/low carbon electricity supply and the demonstrated need for new waste infrastructure in South East England, outweigh the limited adverse impacts. The Proposed Development would create other benefits including, but not limited, to:

- Deliver an equivalent of 140 permanent jobs during construction and 75 Full Time Equivalent (FTE) jobs during the operational phase;

- Provide approximately £16.8m GVA and £24.9m GVA per annum during operation to the local and national economy respectively, assuming average levels of GVA; and

- Remove waste lorries from roads through using river transport. The existing Riverside Resource Recovery Facility (RRRF) typically operates with a minimum 75% of waste input delivered by river and the ERF within REP would also normally operate with a high percentage of waste transported by river.

1.3.6 NPS EN-1 paragraph 3.1.3 states that all development consent applications for energy infrastructure should be assessed *"on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part*". Accordingly, the decision-maker "*should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008*" (NPS EN-1 paragraph 3.1.4).

1.3.7 Given the need for energy infrastructure as identified in NPS EN-1 paragraphs 3.1.3 and 3.1.4, it is considered that the Proposed Development would contribute materially towards meeting the urgent national need for renewable/low carbon electricity supply.

# 2 Introduction

## 2.1 Purpose and Scope of the Planning Statement

2.1.1 Cory Environmental Holdings Limited (trading as Cory Riverside Energy) (Cory or the Applicant) is applying to the Secretary of State (SoS) under the Planning Act 2008 (PA 2008) for powers to construct, operate and maintain an integrated Energy Park, to be known as Riverside Energy Park (REP). The principal elements of REP comprise complementary energy generating development (with energy from waste being the largest component) and an associated Electrical Connection (together referred to as the 'Proposed Development'). As the generating capacity of REP will be in excess of 50 MWe capacity it is classified as a NSIP under section 14 and 15 of the PA 2008 and therefore requires a DCO to authorise its construction and operation.

2.1.2 The two principal elements of the Proposed Development are: the Energy Park which would be located adjacent to an existing ERF operated by Cory (referred to as RRRF) situated at Norman Road in Belvedere within the London Borough of Bexley (LBB). The underground Electrical Connection would run from the REP site and terminate at the Littlebrook substation in Dartford. Plans showing the location, Application Boundary and indicative zoning for the Proposed Development are provided in Environmental Statement (ES) Figures 1.1-1.3 (**Document Reference 6.2**) and ES Appendix A.1 (**Document Reference 6.3**). A Project Glossary has been submitted with the application (**Document Reference 1.6**).

2.1.3 The Planning Statement is provided as part of the DCO application; it provides an explanation of planning issues associated with the Proposed Development. It sets out the planning policy context and assesses the Proposed Development against policy requirements outlined primarily in National Policy Statements (NPSs) and other relevant planning policy documents. Where relevant, the Planning Statement cross-refers to other DCO application documents which provide details of design features, mitigation measures, or other commitments that address relevant planning issues.

2.1.4 The Planning Statement is structured as follows:

- **Section 1 –** sets out an executive summary of this Report.
- **Section 2 –** introduces the Applicant and outlines the requirement for Development Consent, the DCO process and the composition of the DCO application;
- **Section 2** – provides a description of the surrounding area, Application Site and Proposed Development and summarises the benefits of the Proposed Development;

- **Section 3** – outlines the legislative and planning policy context of the Proposed Development including national, regional and local policy requirements;

- **Section 4** – assesses the Proposed Development against relevant policies by theme focusing primarily on conformity with the requirements of the relevant NPSs and then other relevant and important policy considerations; and

- **Section 5** – sets out the overall planning balance of benefits and other effects for the Proposed Development and explains how effects will be mitigated.

## 2.2 The Applicant and Study Team

2.2.1 Cory is registered in England (Company Number 05360864) and is the Applicant for the Proposed Development. Cory's registered address is 2 Coldbath Square, London, United Kingdom, EC1R 5HL.

2.2.2 Cory is a leading recycling, energy recovery and resource management company, with an extensive river logistics network in London. Cory secured consent for, constructed and now operates the existing RRRF adjacent to the Proposed Development.

2.2.3 Cory is now progressing these plans for REP to maximise the use of its existing infrastructure and land holding and to further meet the needs for resource recovery and energy generation in UK and in London.

2.2.4 Further information on REP is provided on the dedicated project website at http://www.riversideenergypark.com.

2.2.5 Preparation of the Application has been managed by Cory with support from the following consultancy team:

- Ardent Management Ltd – land referencing;

- Camargue Group Ltd – community engagement services;

- Fichtner Consulting Engineers Limited – engineering services;

- Hitachi Zosen Inova AG – proposed technology provider and engineering, procurement and construction services;

- Marico Marine - marine navigation specialists;

- Peter Brett Associates LLP – environmental and planning services; and

- Pinsent Masons LLP – legal services.

Note: Weedon Architects have provided architectural design services on behalf of Hitachi Zosen Inova AG.

## 2.3 Requirement for Development Consent and EIA

2.3.1 The process for consenting Nationally Significant Infrastructure Projects (NSIPs) is established by the PA 2008, as amended by the Localism Act 2011.

2.3.2 In England and Wales, an onshore electricity generating station is classified as an NSIP under the PA 2008 if it has a capacity of more than 50 MWe. As REP would have a rated electrical output of at least 50 MWe it is classified as an NSIP under section 14(1)(a) and section 15 of the PA 2008.

2.3.3 Under section 31 of the PA 2008, consent is required for development that is or forms part of an NSIP and therefore a DCO application must be made to the SoS for REP.

2.3.4 Development consent for an NSIP may only be granted further to an application made under section 37 of the PA 2008 to the SoS. Development consent can also be granted for associated development. The Electrical Connection is associated development and therefore the DCO application will be for the Proposed Development. The Electrical Connection is included within this application and is assessed through the EIA process and the likely significant environmental effects are reported on in the ES (**Document Reference 6.1**).

2.3.5 Section 37 of the PA 2008 governs the content of a DCO application, including requirements for certain accompanying documents. The APFP Regulation require that a DCO application, where applicable, must be accompanied by an ES and scoping (or screening) opinions.

2.3.6 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'Infrastructure EIA Regulations 2017') require that an EIA be carried out for any development listed in Schedule 1 and development listed in Schedule 2 ('Schedule 2 development') if it is likely to have significant effects on the environment.

2.3.7 The Proposed Development is considered to fall within Schedule 1 to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the Infrastructure EIA Regulations 2017). Accordingly, an EIA has been undertaken pursuant to the Infrastructure EIA Regulations 2017, which set out the requirements for undertaking an EIA and the required information for inclusion within an ES.

2.3.8 Section 5(2)(a) of the APFP Regulations require that any ES required pursuant to the Infrastructure EIA Regulations 2017, together with any scoping or screening opinions or directions, must accompany the DCO application.

2.3.9 In accordance with Section 5(2)(a) of the APFP Regulations, an ES (**Document Reference 6.1**) has been submitted with the DCO application and a copy of the

Scoping Opinion issued by the SoS is contained at **Appendix A.1** of the ES Technical Appendices (**Document Reference 6.3**).

## 2.4 The Development Consent Order Process

2.4.1 The Applicant must submit a DCO application to PINS, the government body responsible for operating the planning process for NSIPs, which will first decide whether to accept the application. If accepted, PINS will appoint an Examining Authority to examine the Application.

2.4.2 Following the examination, the Examining Authority will make a recommendation to the relevant SoS. The SoS must determine the application in accordance with the relevant National Policy Statements (NPSs) for the Proposed Development, which are: NPS EN-1 (Overarching Energy Policy), NPS EN-3 (Renewable Energy Supply from Waste) and NPS EN-5 (Electricity Networks Infrastructure). If the SoS decides to grant development consent, then the Secretary of State will make a DCO which will authorise the construction, commissioning and operation (including maintenance) of the Proposed Development.

## 2.5 Other Application Documents and Plans

2.5.1 The DCO application submitted for the Proposed Development complies with the requirements of Section 37 of the PA 2008, the APFP Regulations and the Infrastructure EIA Regulations 2017 which together govern the content of a DCO application.

2.5.2 In preparing the DCO application, regard has also been taken to relevant PINS guidance, including PINS Advice Note 6 (Preparation and submission of application documents, February 2016) (AN6).

2.5.3 A full list of the DCO application documents submitted to PINS is set out in Table 2.1.

Table 2.1 List of DCO Application Documents

| Application Document Reference | Application Document Name | Statutory / other Requirement for Document |
|---|---|---|
| **Category 1: Application Form** | | |
| 1.1 | Covering Letter | Reg. 5(2)(q) |
| 1.2 | The Applicant's Section 55 Checklist | Section 37(3)(b) and Reg. 5(1) |
| 1.3 | Guide to The Application | Reg. 5(2)(q) and PINS Advice Note 6 |

| Application Document Reference | Application Document Name | Statutory / other Requirement for Document |
|---|---|---|
| 1.4 | Application Form | Reg. 5(1) and section 37(3)(b) |
| 1.5 | Notices for Statutory Publicity | Section 48 |
| 1.6 | Project Glossary | Reg. 5(2)(q) |
| **Category 2: Plans / Drawings** | | |
| 2.1 | Land Plan(S) | Reg. 5(2)(i) |
| 2.2 | Works Plan(S) | Reg. 5(2)(j) |
| 2.3 | Access and Rights of Way Plan(S) | Reg. 5(2)(k) |
| 2.4 | Illustrative Site Layout Plan(S) | Reg. 5(2)(o) |
| 2.5 | Illustrative Elevation Drawings | Reg. 5(2)(o) |
| 2.6 | Illustrative Access/Parking/Landscaping Drawings | Reg. 5(2)(o) |
| **Category 3: Draft Development Consent Order** | | |
| 3.1 | Draft Riverside Energy Park Development Consent Order (draft DCO) | Reg. 5(2)(b) |
| 3.2 | Explanatory Memorandum (including comparison DCO) | Reg. 5(2)(c) |
| **Category 4: Compulsory Acquisition Information** | | |
| 4.1 | Statement of Reasons | Reg. 5(2)(h) |
| 4.2 | Funding Statement | Reg. 5(2)(h) |
| 4.3 | Book of Reference | Reg. 5(2)(d) and Reg. 7 |
| **Category 5: Reports** | | |
| 5.1 | Consultation Report and Appendices | S.37(3)(c) |
| 5.2 | Flood Risk Assessment | Reg. 5(2)(e) |

| Application Document Reference | Application Document Name | Statutory / other Requirement for Document |
|---|---|---|
| 5.3 | Grid Connection Statement | Reg.5(2)(p) and Reg.6(1)(a) |
| 5.4 | Combined Heat and Power (CHP) Assessment | Reg. 5(2)(q) |
| 5.5 | Other Consents and Licences | Reg. 5(2)(q) and PINS Advice Note 7 |
| 5.6 | Statutory Nuisance Statement | Reg. 5(2)(f) |
| **Category 6: Environmental Impact Assessment and Habitats Regulations Information** | | |
| 6.1 | Environmental Statement (ES) | Reg. 5(2)(a) and Infrastructure EIA Regulations 2017 |
| 6.2 | ES Figures | Reg. 5(2)(a) and Infrastructure EIA Regulations 2017 |
| 6.3 | ES Technical Appendices | Reg. 5(2)(a) and Infrastructure EIA Regulations 2017 |
| 6.4 | ES Non-Technical Summary (NTS) | Reg. 5(2)(a) and Infrastructure EIA Regulations 2017 |
| 6.5 | Habitats Regulations Assessment | Reg. 5(2)(g) and Infrastructure EIA Regulations 2017 |
| **Category 7: Any other Documents** | | |
| 7.1 | Planning Statement | Reg. 5(2)(q) |
| 7.2 | The Project and its Benefits | Reg. 5(2)(q) |
| 7.3 | Design and Access Statement | Reg. 5(2)(q) |
| 7.4 | Design Principles | Reg. 5(2)(q) |

| Application Document Reference | Application Document Name | Statutory / other Requirement for Document |
|---|---|---|
| 7.5 | Outline Code of Construction Practice (CoCP) | Reg. 5(2)(q) |
| 7.6 | Outline Biodiversity and Landscape Mitigation Strategy | Reg. 5(2)(q) |

## 2.6 Requirement for other Consents

2.6.1 For the Proposed Development to be constructed and operated additional consents may be required as detailed in Other Consents and Licences (**Document Reference 5.5**). These additional consents and licences are identified below.

### Electricity Generation Licence

2.6.2 The Applicant will apply to the SoS for an exemption Order under s5 of the Electricity Act 1989 as a generating station with a capacity of less than 100 MWe. If made, the Order will exempt REP from the requirement for a generation licence under s6 of the Electricity Act 1989. An exemption Order was previously obtained for RRRF.

### Building Regulation approval

2.6.3 This would be required from LBB/DBC under the Building Regulations 2010. Should the DCO be made then applications would be made during detailed design of the generating station and associated buildings.

### Bilateral Connection Agreement

2.6.4 Required to connect the Project to the Electricity Distribution Network. The Applicant has been working closely with UKPN to progress engineering and feasibility studies for the proposed Electrical Connection. These studies will conclude in the coming months and, in parallel, the Applicant is holding discussions with UKPN to apply for and accept a Bilateral Connection Agreement. Further details are provided in the Grid Connection Statement (**Document Reference 5.3**).

### Environmental Permit

2.6.5 Required by the Environmental Permitting (England and Wales) Regulations 2016, as amended, for the operation of the generating station. The Environmental Permit would regulate emissions to air among other things. An application for an Environmental Permit is being made to the EA in parallel with

the DCO application to the SoS. The Environmental Permit application will be submitted in Q4 2018.

### European Protected Species Licence

2.6.6 An application for a licence under the Conservation of Habitats and Species Regulations 2017 would be made in the event that, prior to commencement of construction, European Protected Species are identified in any part of the Order land and impacts on them, or their habitats, cannot be avoided.

### Water Vole Conservation Licence

2.6.7 An application for a Conservation Licence under the Wildlife and Countryside Act, 1981, as amended would be made in the event that, prior to construction, water voles are confirmed within any part of Order land and impacts on them cannot be avoided.

### Health and safety related consents

2.6.8 Applications to be made under the Health and Safety at Work Act 1974 and subsidiary legislation by the main contractors before construction and before operation commences as appropriate.

### Permit for transport of abnormal loads

2.6.9 Required under the Road Vehicles (Authorisation of Special Types) (General) Order 2003 or with authorisation from the SoS under the Road Traffic Act 1988 for the delivery by road of loads that fall outside standard practice. Any such permit, if required, would be applied for by the supplier or haulier responsible for the movement of the abnormal load, on a case by case basis where relevant.

### Land drainage consent

2.6.10 Applications may be made, under s23 of the Land Drainage Act 1991, if required, by the contractor(s) to the relevant drainage authority.

### Section 61 consent

2.6.11 Required to control noise on construction sites under the Control of Pollution Act 1974. Applications may be made, if required, by the contractor(s) a minimum of 28 days before construction commences.

### River Works licence

2.6.12 Cory group companies already have the benefit of river works licences under the s66 of the Port of London Act 1968 for the existing jetty and moorings used for the operation of RRRF. The Applicant and the Port of London Authority (PLA) are in discussions regarding the re-grant or amendment of the existing river works licences to provide rights for the Applicant to use those facilities for the purposes of REP.

### Environmental Permit

2.6.13 Required by Regulation 12(1) of the Environmental Permitting (England and Wales) Regulations 2016 for any water discharge activities or groundwater activities. An application for a permit will be required if the construction activities require any polluting waste water to be discharged.

# 3 Proposed Development Summary

## 3.1 Introduction

3.1.1 This chapter provides a description of the Application Site, surrounding areas and the Proposed Development and summarises the case for the Proposed Development.

## 3.2 Application Site

3.2.1 The Application Site comprises the following:

- The REP Site, Located To The North Of Belvedere Off Norman Road;
- The Main Temporary Construction Compound Located To The South Of The REP Site And West Of Norman Road;
- The Electrical Connection, Running Underground Between The REP Site And The Electrical Connection Point At The Existing National Grid Littlebrook Substation In Dartford; and
- Cable Route Temporary Construction Compounds required to support the construction of the selected Electrical Connection route. These will be small discrete compounds, required for a period of time whilst works are undertaken along particular lengths of the Electrical Connection route.

3.2.2 The Application Site would be located within the administrative areas of the LBB and Dartford Borough Council (DBC). The Application Site extents are shown on the Site Location Plan (**Figure 1.1**), Application Boundary (**Figure 1.2**) and Location of Project Elements (**Figure 1.3a** and **Figure 1.3b**) in the ES Figures (**Document Reference 6.2**).

## 3.3 The Application Site and Surrounding Areas

### REP site & Main Temporary Construction Compound

3.3.1 The REP site is located in Belvedere, in the LBB, in an area bounded to the north by the River Thames and the adjacent Thames Path long distance trail. It is bounded to the east by a boundary fence onto a public footpath linking Norman Road with the Thames Path, and to the west by a boundary fence onto the adjacent undeveloped Crossness Nature Reserve, between the REP site and Thames Water's Crossness Sewage Treatment Works (STW) site, approximately 200 m away. Within this area a public footpath links the Crossness Local Nature Reserve (LNR) with the Thames Path. A number of ditches and small watercourses surround the REP Site.

3.3.2 The REP site includes the existing jetty extending out into the River Thames but excludes the existing RRRF main building itself. The majority of the REP site is used for private vehicle circulation areas, the jetty access ramp, staff and visitor

parking, open container storage, contractor maintenance, an electrical substation and associated landscape/habitat areas.

3.3.3 The REP site is accessed by river via the existing jetty and by pedestrians and vehicles from Norman Road, a single carriageway road linking to the dual carriageway A2016 Picardy Manor Way.

3.3.4 To the immediate north of the REP site is the River Thames. Further north, on the opposite bank of the river is an area characterised by manufacturing, including the Ford Motor Company works, and associated car and lorry parking. To the east of the REP site and Norman Road is a large strategic industrial area, accessed via a junction at the southern end of Norman Road. This includes two distribution centres and a document storage facility. East of these are further warehouse, distribution and similar commercial developments.

3.3.5 West of the REP site is Crossness Sewage Treatment Works (STW), which is approximately 1 km in width from east to west and approximately 200 m from the REP site boundary. This operational STW includes settlement and sludge tanks, as well as a sludge-powered generator where sludge is thermally treated and used to generate electricity. The Grade I listed Crossness Pumping Station, built by Sir Joseph Bazalgette, is located at the western end. Further to the west of the STW is the Thamesview Golf Centre, beyond which is the Thamesmead residential area.

3.3.6 To the south and west of the REP site and Norman Road is Crossness Nature Reserve, a 25.5 ha LNR which is part of the Erith Marshes Site of Metropolitan Importance for Nature Conservation (SMINC), containing a number of ditches, watercourses and ponds. The site is owned and managed by Thames Water. To the east of the Crossness LNR, adjacent to Norman Road is a site owned by the Applicant, with planning permission for a data centre (Local Planning Authority reference: 15/02926/OUTM). Power for the data centre is expected to be provided via a connection along Norman Road from the RRRF and REP site. South of the data centre site is the area identified as the Main Temporary Construction Compounds.

3.3.7 South of Norman Road is the A2016, formed by the dual carriageway Picardy Manor Way at its junction with Norman Road (North), and by the dual carriageway Eastern Way, south of Crossness LNR. South of Picardy Manor Way is a recent development of The Morgan pub and a Travelodge hotel building, along with five residential blocks. South of this is a residential area centred on North Road and Norman Road (South). Further south is the main area of Belvedere comprising residential dwellings, Belvedere railway station and retail outlets. South of Eastern Way are areas of undeveloped marshland, containing a number of ponds and watercourses, interspersed with commercial storage and distribution and education development, and bounded to the south and southwest by Yarnton Way, a dual carriageway.

3.3.8 The proposed Main Temporary Construction Compounds 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 most recently received planning permission 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 (Local Planning Authority reference: 13/00918/FULM). Part of the southern portion comprises an existing joinery business.

### Electrical Connection

3.3.9 The proposed Electrical Connection route runs southwards from the REP site towards the existing Littlebrook substation, in Dartford. A number of alternative route options were identified through studies undertaken by UK Power Networks (UKPN), the local distribution network operator, and are shown in **Figure 1.2** (ES Figures (**Document Reference 6.2**). A number of alternative routes have been assessed within the ES however, only one overall route would be required to connect from the REP site to the Electrical Connection Point. Whilst UKPN and the Applicant have identified a preferred Electrical Connection route, the Application retains secondary alternatives in case insurmountable engineering difficulties are encountered on the preferred route. The preferred route is Route 1 but following variant 1A along Norman Road and 2B through The Bridge development. Secondary (back up) options are therefore Route 2A and the remainder of Route 1 (through the Crossness Nature Reserve and along the A206 south of The Bridge development. It is anticipated that an ongoing programme of exploratory engineering investigation will conclude during the pre-examination and examination process that will allow the DCO to be refined and ultimately granted on the basis of a single route

3.3.10 The Electrical Connection routes are generally located on the highway (highway, verges and railway/watercourse crossings on highway structures) and are predominantly through urban areas. Some route lengths run outside the highway and include the Crossness LNR, adjacent areas of the River Cray and Dartford Creek valleys and through The Bridge development. In developed areas, the site surroundings for the Electrical Connection are generally residential, but with significant industrial and commercial areas.

3.3.11 The Electrical Connection route would cross the River Darent, a tributary which feeds into the River Thames. The Dartford Marshes Local Wildlife Site (LWS) is a large area of marshland and wetland habitat along the River Darent and on the Darent floodplain and land south of the A206 falls within the River Cray Site of Importance for Nature Conservation (SINC). The Electrical Connection route would cross the River Darent in existing highway or using trenchless installation techniques.

## 3.4 Project Description

3.4.1 The Proposed Development comprises REP and the associated Electrical Connection which are described in turn below, followed by a discussion of the

anticipated REP operations. **Chapter 3** of the ES (**Document Reference 6.1**) provides further details of the Proposed Development.

### REP

3.4.2 REP would be constructed on land immediately adjacent to Cory's existing RRRF, within the London Borough of Bexley and would complement the operation of the existing facility. It would comprise an integrated range of technologies including: waste energy recovery, Anaerobic Digestion, solar panels and battery storage. The main elements of REP would be as follows:

- ERF: to provide thermal treatment of Commercial and Industrial (C&I) residual (non-recyclable) waste with the potential for treatment of (non-recyclable) Municipal Solid Waste (MSW);
- Anaerobic Digestion facility: to process food and green waste. Outputs from the Anaerobic Digestion facility would be transferred off-site for use in the agricultural sector as fertilizer or as an alternative, where appropriate, used as a fuel in the ERF to generate electricity;
- Solar Photovoltaic Installation: to generate electricity. Installed across a wide extent of the roof of the Main REP Building;
- Battery Storage: to store and supply additional power to the local distribution network at times of peak electrical demand. This facility would be integrated into the Main REP building; and
- On Site Combined Heat and Power (CHP) Infrastructure: to provide an opportunity for local district heating for nearby residential developments and businesses. REP would be CHP Enabled with necessary onsite infrastructure included within the REP site.

### Electrical Connection

3.4.3 REP would be connected to the electricity distribution network via a new 132 kilovolt (kV) underground electricity cable connection. The route options for the Electrical Connection are shown in the Works Plans (**Document Reference 2.2**).

3.4.4 In consultation with UK Power Networks ('UKPN'), Cory is considering Electrical Connection route options to connect to the existing National Grid Littlebrook substation located south east of the REP site, in Dartford. The route options are located within the LBB and DBC, and would run from a new substation proposed to be constructed within the REP site.

### REP operations

- Delivery of waste to REP: the majority of waste would be delivered to REP by barge from Waste Transfer Stations (WTS) along the River Thames, utilising the existing jetty which is located immediately to the north of RRRF

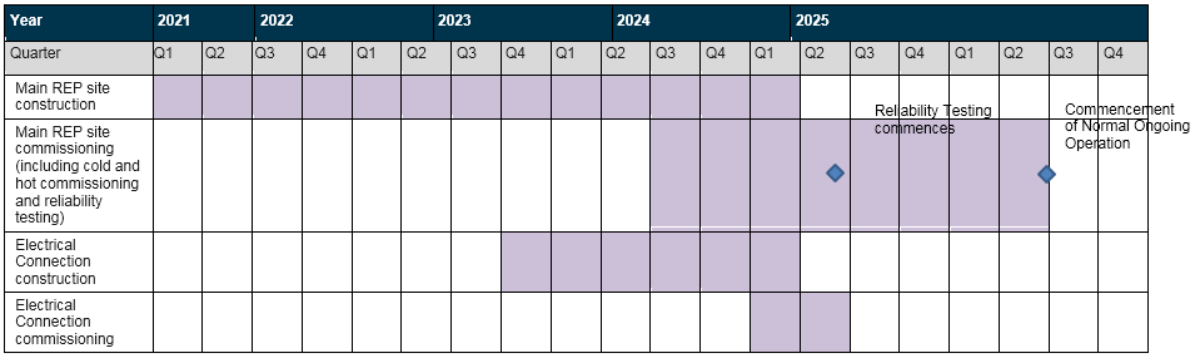
and the REP site. Whilst CRE is a river-based operator, the application includes flexibility to allow deliveries by road where commercially and environmentally appropriate to do so, e.g. for local waste deliveries from the Bexley area or for food/green waste; and

- Removal of by-products from REP: Incinerator Bottom Ash (IBA) would be transported by river to the existing IBA Facility at the Port of Tilbury for treatment/recycling, and then for onward use as secondary aggregate in the construction sector. Air Pollution Control Residues (APCR) would be taken off-site by road in sealed containers to be treated/recycled for use as a construction material.

## 3.5 Proposed Development Stages

3.5.1 **Chapter 3** of the ES (**Document Reference 6.1**) describes the Project Stages in line with NPS EN-1 (paragraph 4.2.3). Figure **3.1** presents the indicative construction and commissioning programme for the Proposed Development. The three stages of development; construction (including commissioning), operation (including maintenance) and decommissioning are summarised below.

Figure 3.1 Indicative construction and commissioning programme




### Construction and Commissioning

3.5.2 Should consent be granted in 2020, it is anticipated that construction and commissioning of REP would commence in 2021 and be fully completed in 2025 with a construction period of approximately 36 months until 2024 including the following steps:

i. Stopping up of a section of adopted highway at the north of Norman Road where vehicles enter the REP site (as shown on the Access and Right of Way Plans - **Document Reference 2.3**); access to RRRF will be maintained and associated rights agreed with the operators of RRRF;

ii. Erection of a temporary site fence and the stripping of any organic topsoil;

iii. Installation of a granular piling carpet constructed by importing new or recycled granular material followed by piling (likely to consist of Continuous Flight Auger (CFA) piling or percussion piling);

iv. Construction of a temporary embedded retaining wall (using a slip form constructed technique) constructed around the perimeter of the deep waste bunker required for the ERF and Anaerobic Digestion facility. A temporary dewatering scheme would be implemented during the construction;

v. Remaining concrete foundations, new underground drainage networks and other critical services (fire mains, potable water, foul water and site electric cables) constructed underground together with the new roads around the perimeter buildings;

vi. Installation of the mechanical equipment comprising the future operational plant utilising tower cranes on the REP site. The mechanical erection phase will take place on the Main Temporary Construction Compound;

vii. Erection of the Main REP Building steelwork and metal cladding using tower cranes;

viii. Installation of the electrical equipment and control system inside the water tight building (most electrical equipment would be delivered to site in prefabricated modular buildings);

ix. Commissioning phase to start upon completion of the electrical installation including two phases for the ERF and Anaerobic Digestion plant (cold and hot commissioning) described below;

    a. Cold commissioning phase - undertaken before energisation of that particular system to ensure that all mechanical and electric items have been correctly installed; and

    b. Hot commissioning phase – the ERF will be fully tested including reliability testing. Waste would be delivered to the ERF and steam produced from the boiler, resulting in electricity via the steam turbine. The ERF will be fully tested to ensure compliance with the Environmental Permit and that maximum efficiency and reliability is achieved during operation.

x. Commissioning of the Anaerobic Digestion plant is divided into three phases (cold commissioning, hot commissioning and performance testing) described below:

    a. Cold commissioning: functional testing and commissioning of equipment without organic materials. To be completed when all components have been checked for proper installation and when the proper function of measurement devices, control devices and moving parts have been checked. All function tests are documented;

b. Hot commissioning: filling and then heating up of the digester with press water / inoculum. Start up with organic material increasing the level of organic substrate input up to the designed throughput level; and

c. Performance test: proof of the guaranteed performance values. Following and during hot commissioning the contract guaranteed performance values are demonstrated through a series of established performance tests.

xi. The solar and battery storage equipment would be switched on to test electrical connections as part of the overall Energy Park commissioning; and

xii. Demobilisation of temporary facilities within the REP site and any permanent landscaping/habitat scheme would be completed upon completion of commissioning and reliability testing.

3.5.3 The construction of the Electrical Connection route is estimated to be up to approximately 18 – 24 months, consisting of a rolling programme along the route. The works at Littlebrook 132 kV substation are estimated to take approximately two weeks to install 132 kV cables and connect the cables to the switchgear.

3.5.4 The construction of the proposed Electrical Connection would comprise the following steps:

i. The required 3 m wide working corridor along footpaths and verges would potentially encroach onto the highway. Where this occurs within the highway carriageway then a lane closure would be required;

ii. Lane closures would typically require a reduction from two lanes to one lane on dual carriageways and traffic signals to control single lane traffic on single carriageways;

iii. Road closures may be required in certain circumstances depending on local constraints. In determining a preferred Electrical Connection route the Applicant and UKPN sought to minimise potential temporary road closures wherever possible. Further information regarding the alternatives considered is included in ES **Chapter 5** (**Document Reference 6.1**);

iv. Some highway footways may require temporary diversion or closure however public rights of way (PRoW) closures are considered unlikely;

v. During trenching works it is expected that a length of up to 200 m would typically be excavated for around 5 days to facilitate duct laying although the working area could be up to c. 300 m to allow for safe clearances. Methods to protect and reinstate soils evacuated through the trenching works will be included within the final Code of Construction Practice (CoCP);

vi. Subsequent detailed design will determine the location of jointing pits. Joint pits may need to be accessed to install and joint cables for approximately 5 days; and

vii. UKPN has identified a limited number of locations along the preferred route which may require trenchless installation techniques such as localised Horizontal Directional Drilling (HDD), boring or the installation of cables under or over an existing structure. UKPN is undertaking intrusive investigations to refine and confirm the trenchless installation areas, however this Application has excluded the potential to undertake trenchless installation within the extent of a former inert landfill immediately to the southwest of the highway crossing of the River Darent; and

viii. Where trenchless installation is required, the works would be supported by a compound, approximately 30 m by 20 m encompassing equipment and materials storage, and support facilities.

3.5.5 The Electrical Connection route construction period is dependent on the number of construction work areas active at the same time although it is expected that there would be no more than two working areas active at the same time.

3.5.6 Two forms of Temporary Construction Compounds would be required as follows:

i. Main Temporary Construction Compounds: required to support the development of REP and located on the western side of Norman Road and to the south of the REP site. Main Temporary Construction Compounds would be used as a laydown area for construction materials and equipment and as a site for satellite welfare facilities. Additional hard standing fill (i.e. a compacted imported fill) may be required on some Main Temporary Construction Compounds to ensure the integrity of the site for laydown purposes. On completion of the construction phase, any compacted fill installed would be removed. They would be established before piling works commence on the main REP site; and

ii. Cable Route Temporary Construction Compounds: required to provide small scale localised storage of materials and mobile welfare facilities whilst the Electrical Connection route is constructed. At this stage it is not possible to identify the specific location of the Cable Route Temporary Construction Compounds, however the Application Boundary has been drawn with the expectation that the compounds can be encompassed within these limits.

### Operation

3.5.7 The initial plant operations would include a period of reliability testing from 2024 onwards, commencing normal ongoing operation in the mid to latter part of 2025, subject to prior grant of the DCO.

3.5.8 The operation of REP would generate a minimum of 75 full time equivalent (FTE) jobs comprising operations, jetty / site operations, engineers, technicians / fitters, stores operatives and financial / admin staff.

3.5.9 Highway access to REP would be via Norman Road from the existing highway network and access from the River Thames would be via the existing jetty which would be shared with RRRF. Indicative onsite traffic management would predominantly utilise a one-way system. Amendments would be required to the northern end of Norman Road to facilitate a revised arrangement on entering the REP site. An Illustrative Site Layout is provided in **Figure 1.3 a, b and c** (ES Figures (**Document Reference 6.2**). Primary pedestrian access to REP would be via Norman Road and the PRoW network.

### Maintenance, Start-up and Shutdown

3.5.10 The ERF would be designed to operate for approximately 8,000 hours per year. Typically, each boiler line would undergo one planned minor outage (approx. 7 days in duration) and one planned major outage (approx. 14 days in duration) per year without taking the entire plant offline. Statutory inspections on common plant (necessitating a full shut down for approx. 3 days) are required at least every two years. The turbine and generator would typically be taken out of service for up to 8 days per year for inspections and maintenance.

3.5.11 The waste bunker would be sized to accommodate c. 7 days' storage capacity when operating at nominal throughput. This is sufficient to allow waste to be stockpiled in a controlled manner for anticipated maintenance periods. In the very rare event of an extended outage, waste volumes would be managed through the logistics network and, if required, diverted to other waste disposal/treatment facilities temporarily.

3.5.12 The Anaerobic Digestion facility would remain in operation for the entirety of its design life once commissioned. All components requiring maintenance would be accessible from outside of the digester. All ancillary systems are designed to be capable of being maintained without disrupting the Anaerobic Digestion process.

3.5.13 Battery storage would remain in operation for the entirety of its design life, operating intermittently but frequently to suit generation output and peak demand. The roof mounted photovoltaic panels would remain in operation for the entirety of their design life and would require occasional cleaning and maintenance.

### Decommissioning

3.5.14 The generating equipment would be removed at the end of the operational life of REP once the plant had ceased operations permanently. Any decommissioning phase is assumed to be, at worst, of a similar duration to construction and therefore environmental effects are considered to be of a similar level. If the Electrical Connection route was decommissioned, then

ducting would be left in-situ. Cabling may be removed, or disconnected (made safe) and left in-situ.

## 3.6 The Case for the Proposed Development

3.6.1 The Project and its Benefits Report (**Document Reference 7.2**) explains how REP will deliver the demonstrated need for major energy generating infrastructure, provide investment in sustainable waste management and a range of societal benefits. In summary, the Proposed Development would deliver the following benefits:

a. Contribute to delivering the urgent and substantial need for new renewable/low carbon electricity supply and storage as established in NPS EN-1 by generating sufficient power from waste and solar to supply the equivalent of c.140,000 homes per annum;

b. Deliver the waste hierarchy at the national level and in London without prejudicing local waste management targets;

c. Provide substantial private investment in sustainable waste management to efficiently recover renewable/low carbon energy by diverting waste from landfill (the greatest source of greenhouse gasses in the waste sector);

d. Contribute to meeting climate change targets and delivering the Mayor's aspirations for London to be a zero-carbon city by generating renewable/low carbon electricity supply and diverting waste from landfill;

e. Deliver flexible, decentralised, renewable/low carbon, secure and reliable electricity supply, which will assist in reducing the percentage of London's electricity demand that is sourced from outside the capital;

f. Deliver realistic connection prospects for heat distribution, including the Thamesmead redevelopment. REP will be CHP enabled to be ready to connect into a future district heating network;

g. Deliver battery storage that will improve the efficiency and resilience of London's and the UK's electrical supply. Battery storage is a new technology and REP actively supports this growth sector. In this respect REP exceeds the expectations set out in the NPSs;

h. Enable London and the South East to efficiently and effectively manage an increased amount of its own waste, whilst benefitting from renewable/low carbon electricity supply;

i. Deliver a diversity of employment opportunities on-site, off-site and throughout the supply chain. The Proposed Development would deliver an equivalent of 140 permanent jobs during construction and 75 Full Time Equivalent (FTE) jobs during the operational phase;

j. Support the local and national economy: REP operation would provide approximately £16.8m GVA and £24.9m GVA per annum to the local and national economy respectively, assuming average levels of GVA; and

k. Remove waste lorries from roads through using river transport. RRRF typically operates with a minimum 75% of waste input delivered by river and the ERF within REP would also normally operate with a high percentage of waste transported by river.

# 4 Legislative and Policy Framework

## 4.1 Introduction

4.1.1 This chapter outlines the legislative and planning policy context for decision making for NSIPs. It also identifies the matters which the SoS must have regard to when examining and determining the REP DCO application.

4.1.2 This chapter provides a detailed summary of relevant National Policy Statements (NPSs) which are the primary consideration for the SoS in deciding a DCO application. An overview of relevant policy at the national, regional and local level is then presented and a detailed summary of relevant planning policies is contained at **Appendix A**.

## 4.2 Legislation and Planning Policy

4.2.1 Section 104 of the PA 2008 states that DCO applications must be determined in accordance with the relevant NPS, where one is in place, unless the application would:

- Lead to the United Kingdom breaching international obligations;
- Be in breach of any statutory duty imposed on the SoS;
- Be unlawful;
- Result in the adverse impacts of the development outweighing its benefits; or
- Be contrary to any condition prescribing how an application should be decided.

4.2.2 The SoS under section 104 of the PA 2008 must also take account of any local impact report submitted by a relevant local authority, relevant matters prescribed in regulations and any other matters which the SoS thinks are both important and relevant to the decision.

4.2.3 NPS EN-1 paragraph 4.1.5 clarifies that development plan documents and other planning guidance documents may be both important and relevant considerations to SoS decision-making. Relevant planning policy documents are summarised at **Appendix A** and an overview is provided in this Section.

4.2.4 Table 4.1 sets out the legislation and policy documents relevant to the consideration of the REP DCO application.

Table 4.1 Legislation and policies relevant to the Proposed Development

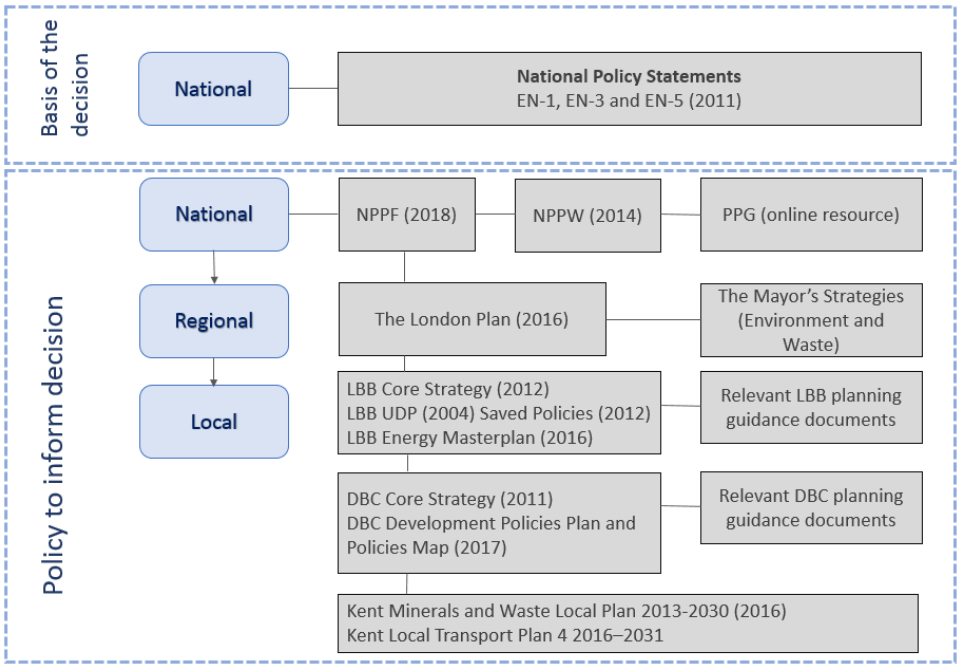
| Type | Policy/Legislation/Guidance |
|---|---|
| **Legislation** | a) European Directives:<br>– EIA Directive (2011/92/EU) (as amended by EIA Directive 2014/52/EU)<br>– Habitats Directive (92/43/EEC)<br>– Landfill Directive (1999/31/EC)<br>– Waste Framework Directive (2008/98/EC)<br>– Waste Incineration Directive (2010/75/EU)<br>– Energy Efficiency Directive (2012/27/EU)<br>– Air Quality Directive (2008/50/EC)<br>– Industrial Emissions Directive (2010/75/EU)<br>– Birds Directive (2009/147/EC)<br>– Medium Combustion Plant Directive (2015/2193/EU)<br>– Environmental Liability Directive (2004/35/EC)<br>b) The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('Infrastructure EIA Regulations 2017')<br>c) The Infrastructure Planning (Applications Prescribed Forms and Procedure) Regulations 2009 ('APFP Regulations') (as amended)<br>d) The Localism Act 2011 (as amended)<br>e) Air Quality (England) Regulations 2000<br>f) Air Quality (Amendment) (England) Regulations 2002<br>g) Control of Pollution Act 1974 (COPA)<br>h) Environmental Protection Act 1990<br>i) Conservation of Habitats and Species Regulations 2017<br>j) Wildlife and Countryside Act 1981 (as amended)<br>k) The Natural Environment and Rural Communities Act 2006 ('NERC') |

| Type | Policy/Legislation/Guidance |
|---|---|
| | l) Flood and Water Management Act 2010<br>m) Water Environment (Water Framework Directive) (England and Wales) Regulations 2017<br>n) The Environmental Permitting (England and Wales) Regulations 2016<br>o) The Water Resources Act 1991<br>p) The Land Drainage Act 1991<br>q) Water Act 2003 |
| **National Planning Policy, & Guidance** | a) Overarching National Policy Statement for Energy (EN-1) (2011) ('NPS EN-1')<br>b) National Policy Statement for Renewable Energy Infrastructure (EN-3) (2011) ('NPS EN-3')<br>c) National Policy Statement for Electricity Networks Infrastructure (EN-5) (2011) ('NPS EN-5')<br>d) National Planning Policy Framework ('NPPF') (2018)<br>e) National Planning Policy for Waste ('NPPW') (2014)<br>f) Planning Practice Guidance ('PPG') (online resource) |
| **London Policy, Guidance & Strategies** | a) The London Plan (2016)<br>b) London Environment Strategy (2018) ('LEnvS')<br>c) Mayor's Transport Strategy (2018) ('MTS')<br>d) London Riverside Opportunity Area Planning Framework (2015) ('London Riverside OAPF')<br>e) London Plan: The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance ('SPG') (2014)<br>f) London Plan: Shaping Neighbourhoods: Character and Context SPG (2014)<br>g) London Plan: Sustainable Design and Construction SPG (2014)<br>h) London Plan: London View Management Framework (LVMF) (2012)<br>i) London's Wasted Resource: The Mayor's Municipal Waste Management Strategy (2011) ('MMWMS')<br>j) Managing risks and increasing resilience: The Mayor's Climate Change Adaptation Strategy (2011)<br>k) Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy (2011) |

| Type | Policy/Legislation/Guidance |
|---|---|
| | l) Making Business Sense of Waste: The Mayor's Business Waste Strategy for London (2011)<br>m) Draft London Plan showing Minor Suggested Changes (2018)<br>n) The Mayor's Draft Economic Development Strategy for London (2017) |
| **Local Policy, Guidance & Strategies** | a) Bexley Core Strategy (2012)<br>b) Bexley Unitary Development Plan ('UDP') (2004) Saved Policies (2012)<br>c) Bexley Energy Masterplan (2016)<br>d) Bexley Growth Strategy (2017)<br>e) Dartford Core Strategy (2011)<br>f) Dartford Development Policies Plan and Policies Map (2017)<br>g) Kent Minerals and Waste Local Plan 2013-2030 (2016)<br>h) Kent Local Transport Plan 4: Delivering Growth without Gridlock 2016–2031<br>i) Thamesmead and Abbey Wood Supplementary Planning Document (SPD) (2009) |

4.2.5 Figure 4.1 sets out a hierarchy of relevant adopted policy documents. It shows that NPSs will form the basis of the decision on the DCO application and other adopted policy, guidance and strategy documents which may constitute important and relevant considerations in accordance with NPS EN-1.

Figure 4.1 Hierarchy of adopted policy documents for decision making




## 4.3 National Planning Policy

### Overarching National Policy Statement for Energy (NPS EN-1) (2011)

4.3.1 NPS EN-1 sets out the Government's policy for delivery of major energy infrastructure in England and Wales and recognises that there is a significant need for new energy infrastructure. Paragraph 3.1.3 states that all applications for development consent should be assessed on the basis that the Government has demonstrated that there is a need for all types of infrastructure covered by NPS-EN1 including energy from waste.

4.3.2 Paragraph 3.3.22 states that the UK will need up to 59 GW of new electricity capacity by 2025 and that 33 GW (60%) of this new capacity will need to come from renewable sources to meet current renewable energy commitments. NPS EN-1 reaffirms the UK Government's current renewable objectives:

- The Government's legally binding target is to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels (paragraph 2.2.1); and
- The UK is committed to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 (paragraph 3.4.1).

4.3.3 NPS EN-1 recognises that the successful transition to a secure, low carbon energy system will require major investment in cleaner power generation. Section 3.4 sets out the role of renewable electricity generation in meeting electricity capacity needs:

- Large scale deployment of renewables will help the UK to tackle climate change, reducing the UK's emissions of carbon dioxide by over 750 million tonnes by 2030;
- Deployment of renewables will also deliver up to half a million jobs by 2020 in the renewables sector; and
- Energy from waste is identified as a major source of large-scale renewable energy generation.

4.3.4 Section 3.7 identifies that there is an urgent need for new electricity transmission and distribution infrastructure in the UK driven by the need to connect to new sources of electricity generation as well as sources of increasing electricity demand (new housing and business premises). It states that the need case for new connections should be considered as being demonstrated by NPS EN-1 if it represents an efficient and economical means of connecting a new generating station to the transmission or distribution network. However, it also states that the costs and benefits of alternative connections should be properly considered as set out in EN-5.

4.3.5 Paragraph 4.1.2 states that given the level and urgency of need for infrastructure covered by NPS EN-1, the decision-maker should start with a presumption in favour of granting consent to applications for energy NSIPs. The presumption applies subject to the provisions of Section 104 of the PA 2008 unless any more relevant NPS policies clearly indicate that consent should be refused.

4.3.6 Paragraph 4.1.3 states that in considering any proposed development, the decision-maker should have regard to:

- "*its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and*
- *its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts."*

4.3.7 In the context of the above, paragraph 4.1.4 requires that the decision-maker consider environmental, social and economic benefits and adverse impacts, at national, regional and local levels.

4.3.8 Paragraph 4.1.5 clarifies that development plan documents and other planning guidance documents may be both important and relevant considerations to SoS decision-making. However, where a conflict exists between other planning documents and the NPS, then the NPS prevails.

4.3.9 Paragraph 4.1.7 states requirements should only be imposed on developments where they are relevant to planning, relevant to the proposed development, necessary, enforceable, precise, and reasonable in all other respects.

4.3.10 Paragraph 4.1.8 states that development consent obligations with local authorities under section 174 of the PA 2008 may also be considered by the decision-maker. Such obligations must be relevant to planning, necessary to make the proposed development acceptable in planning terms, directly related to the proposed development, fairly and reasonably related in scale and kind to the proposed development, and reasonable in all other respects.

4.3.11 Paragraph 4.1.9 states that financial viability and technical feasibility considerations are unlikely to be relevant to decision making provided that the decision maker is satisfied that they have been properly assessed by the applicant in the DCO application.

4.3.12 Part 4 of NPS EN-1 outlines the assessment principles which should be taken into consideration for energy NSIPs and those of relevance to the Proposed Development are summarised in the table below.

Table 4.2 NPS EN-1 Assessment Principles

| Topic | Ref | Policy |
|---|---|---|
| Environmental Statement | 4.2.1 - 4.2.11 | Applicants are required to submit an ES outlining the likely significant environmental, social and economic effects and how any likely significant negative effects would be avoided or mitigated.<br>The ES should set out the environmental, social and economic impacts at all stages of development, including construction, commissioning, operation and decommissioning. |
| Habitats and Species Regulations | 4.3.1 | The SoS must consider whether the project may have a significant effect on a European site or a site protected to the same extent by policy under the Conservation of Habitats and Species Regulations 2017, either alone or in combination with other plans or projects.<br>The applicant is required to consult with Natural England and provide the SoS with any information reasonably required to determine whether an Appropriate Assessment is required and, if one is required, the application must provide the SoS such information as may reasonably be required to enable the SoS to conduct the Appropriate Assessment. |

| Topic | Ref | Policy |
|---|---|---|
| Alternatives | 4.4.1 - 4.4.3 | There are specific circumstances where alternatives must be considered, however there is no general requirement to consider alternatives. These specific circumstances include:<br>– the ES must contain information on the reasonable alternatives studied by the applicant and the main reasons for selecting the chosen option, including a comparison of the environmental effects, as required by the Infrastructure EIA Regulations 2017;<br>– some specific legislation requires consideration of alternatives (e.g. Habitats Directive);<br>– NPS EN-1 paragraph 5.3.7 states that to avoid significant harm to biodiversity and geological conservation interests the application should address mitigation issues and proposed reasonable alternatives;<br>– NPS EN-1 section 5.7 states that nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to passing the exception test. Alternative sites in Flood Zones 1 and/or 2 and A and/or B should be assessed and reasons for dismissing sites should be given; and<br>– NPS EN-1 paragraph 5.9.10 states that the applicant should consider the possibility of developing beyond the application boundary or meeting the need in an alternative way. |
| Criteria for 'good design' for energy infrastructure | 4.5.1 - 4.5.6 | Good design covers aesthetics, functionality, sensitive use of materials and sensitive siting of development in relation to surroundings. Applicants are required to justify their proposed design and demonstrate a sustainable structure and efficient use of resources. Applicants are also encouraged to seek independent advice. Decisions will consider the extent to which the application fulfils the ultimate purpose of the infrastructure taking account of relevant operational, safety and security requirements. |

| Topic | Ref | Policy |
|---|---|---|
| Consideration of Combined Heat and Power | 4.6.1 – 4.6.12 | Thermal generating station applications are required to include CHP or at least consider the use of CHP and applicants should consult with stakeholders in this respect including: potential heat customers, Homes England, Local Enterprise Partnerships and Local Authorities. |
| Climate change adaptation | 4.8.1 - 4.8.13 | The SoS must consider the UK Climate Projections available at the time that the applicant's ES was prepared to ensure appropriate mitigation is proposed. The emissions scenario from the Independent Committee on Climate Change should be used at the minimum.<br>Adaptation measures should use the most up to date Climate Change Risk Assessment and consultation should be undertaken with the Environment Agency (EA). |
| Grid connection | 4.9.1 – 4.9.4 | The SoS will need to be satisfied that there is no reason why a grid connection cannot be secured from National Grid, although the connection does not have to be secured at the time that the application is submitted. |
| Pollution control and other environmental regulatory regimes | 4.10.1 – 4.10.8 | The SoS will consider if the proposed development constitutes an acceptable use of land. The applicant is required to demonstrate that all Environmental Permitting requirements can be met as necessary. Applicants must prove that the relevant pollution control authority will be satisfied that adequate pollution controls will be provided and that the proposed development will not make existing pollution levels unacceptable on-site. |
| Safety | 4.11.1- 4.11.4 | The Health and Safety Executive ('HSE') should be consulted on all safety related matters. Energy infrastructure projects may be required to meet the Control of Major Accident Hazards (COMAH) Regulations 2015 and in such instances the applicant should consult with the competent authority. |

| Topic | Ref | Policy |
|---|---|---|
| Hazardous Substances | 4.12.1 – 4.12.3 | Hazardous Substances Consent should be sought by all applications proposing to hold hazardous substances above the relevant thresholds. This could be included in the application for a DCO. |
| Health | 4.13.1 – 4.13.5 | The ES should assess and identify any impacts on human health and propose mitigation measures as necessary. Elements of energy infrastructure which may negatively affect human health are unlikely to be used for a reason for refusal under the PA 2008 since they are generally subject to separate regulation. |
| Common law nuisance and statutory nuisance | 4.14.1- 4.14.3 | Applicants must demonstrate that they have considered potential sources of nuisance under section 79(1) of the Environmental Protection Act 1990 and must propose appropriate mitigation at submission stage to demonstrate that appropriate requirement can be include in a DCO. |
| Security considerations | 4.15.1 – 4.15.5 | National security considerations may be required where a proposed development involves potentially critical infrastructure. The Centre for the Protection of National Infrastructure and the Office for Civil Nuclear Safety are responsible for confirming to the SoS that security issues have been adequately assessed. |

4.3.13 Part 5 of NPS EN-1 sets out generic and technology-specific impacts for all types of energy infrastructure and those relevant to the Proposed Development are summarised in the table below.

Table 4.3 NPS EN-1 generic impacts

| Topic | Ref | Policy |
|---|---|---|
| Air quality and emissions | 5.2.1 - 5.2.13 | The ES should include an assessment of effects on air quality where the proposed development is likely to have an adverse effect on air quality. Paragraph 5.2.7 requires the ES to describe: |

| Topic | Ref | Policy |
|---|---|---|
| | | – any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;<br>– the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;<br>– existing air quality levels and the relative change in air quality from existing levels; and<br>– any potential eutrophication impacts.<br>Air quality considerations will generally be given substantial weight by the SoS in decision making where a proposed development would lead to a deterioration in air quality or cause national air quality limits to be breached in a particular area. Where necessary, mitigation measures will need to be considered for construction and operational emissions. |
| Biodiversity and geological conservation | 5.3.1. – 5.3.20 | The ES should clearly describe any impacts on the following where the development is subject to EIA:<br>– internationally, nationally and locally designated sites of ecological or geological conservation importance;<br>– protected species; and<br>– habitats and other species identified as being of principal importance for the conservation of biodiversity.<br>The ES should demonstrate how opportunities to conserve and enhance biodiversity and geological conservation interests have been optimised.<br>Appropriate mitigation measures should be included within the proposed development to demonstrate that:<br>– construction activities will be confined to the minimum areas required for the works;<br>– best practice will be applied to minimise the risk of disturbance or damage to |

| Topic | Ref | Policy |
|---|---|---|
| | | species or habitats is minimised during construction;<br>– habitats will be restored after construction where practicable; and<br>– existing habitats will be enhanced and new habitats created within landscaping proposals where opportunities exist. |
| Civil and military aviation and defence interests | 5.4.1 – 5.4.21 | Where the proposed development is likely to have an impact on civil/military aviation or other defence assets an assessment of potential effects should be set out in the ES. In preparing this assessment the applicant should consult the MoD, CAA, NATS and any aerodrome likely to be affected. The assessment should consider the potential impacts upon the operation of communications, navigation and surveillance (CNS) infrastructure, flight (civil and military) patterns and other defence assets and aerodrome operational procedures and also the cumulative effects with other relevant projects.<br>Development consent should not be granted where the development would:<br>– prevent an aerodrome from maintaining its licence;<br>– result in harm to aerodromes which outweigh the benefits;<br>– significantly impede or compromise the safe and effective use of defence assets or limit military training; or<br>– impact on the safe and efficient provision of en-route air traffic control services for civil aviation in particular communications, navigation or surveillance infrastructure. |
| Dust, odour, artificial light, smoke, steam and insect infestation | 5.6.1 – 5.6.11 | The ES should include an assessment of the potential for insect infestation and the potential impacts of emissions of odour, dust, steam, smoke and artificial light. This assessment should describe:<br>– the type, quantity and timing of emissions; |

| Topic | Ref | Policy |
|---|---|---|
| | | – aspects of the development which may give rise to emissions;<br>– premises or locations that may be affected by the emissions;<br>– effects of the emission on identified premises or locations; and<br>– measures to be employed in preventing or mitigating the emissions.<br>The local planning authority and the EA should be consulted about the scope and methodology in preparing the assessment. Where necessary mitigation measures should be included as part of any proposed development including the following measures:<br>– engineering: prevention of a specific emission at the point of generation; control, containment and abatement of emissions if generated;<br>– lay-out: adequate distance between source and sensitive receptors; reduced transport or handling of material; and<br>– administrative: limiting operating times; restricting activities allowed on the site; implementing management plans. |
| Flood risk | 5.7.1. – 5.7.25 | A Flood Risk Assessment (FRA), setting out and assessing the risks from all forms of flooding to and from the proposed development, and outlining any required mitigation or management measures will be required for the following projects:<br>– 1 ha or greater in Flood Zone 1 in England;<br>– all proposals in Flood Zones 2 and 3 in England; or<br>– proposals less than 1 ha subject to sources of flooding other than rivers or the sea or where the EA or IDB have indicated that there may be drainage problems.<br>The FRA must meet the minimum requirements set out under paragraph 5.7.5 and be consistent |

| Topic | Ref | Policy |
|---|---|---|
| | | with the Planning Policy Statement 25 (PPS25) Practice Guide. PPS25 and the associated Practice Guide has now been superseded by policy and guidance contained in the NPPF and PPG.<br>Applicants should undertake pre-application consultation with the EA and other relevant bodies where projects are likely to be affected by or add to flood risk.<br>The SoS should not grant development consent in Flood Zone 2 in England unless they are satisfied that the sequential test has been met for the proposed development. The SoS should not consent development in Flood Zone 3 unless they are satisfied that the Sequential and Exception Test requirements have been met. |
| Historic environment | 5.8.1. – 5.8.22 | The ES should provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance.<br>Where available evidence suggests that the development may potentially include assets of archaeological interest then a desk-based assessment should be carried out. Where the proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact.<br>The application documents should clearly set out the level of impact on the significance of any affected heritage assets. |
| Landscape and visual | 5.9.1 – 5.9.23 | The ES should contain a landscape and visual assessment which identifies the impact of proposed development (during construction and operation) on landscape components and character. This assessment should cover the following:<br>– visibility and conspicuousness of the project during construction;<br>– potential impacts on views and visual amenity;<br>– light pollution effects; and |

| Topic | Ref | Policy |
|---|---|---|
| | | – nature conservation. |
| Land use including open space, green infrastructure & Green Belt | 5.10.1 – 5.10.24 | The ES should consider existing and proposed uses surrounding the application site and consider the impact of the proposed development on existing uses on and surrounding the site.<br>Development in the Green Belt should not be granted unless very special circumstances exist. Applicants are required to determine whether their proposal is within an established Green Belt and whether it would be inappropriate development within the meaning of Green Belt policy set out in the Planning Policy Guidance 2: Green Belts document or any successor to it. PPG2 has now been superseded by policy and guidance contained in the NPPF and PPG. |
| Noise and vibration | 5.11.1 – 5.11.13 | The applicant should include a noise assessment where noise impacts are likely to arise from the proposed development. This assessment should assess the noise generating aspects of the development, identify areas that may be sensitive to noise, predict how the proposed development will change the noise environment, and propose measures to mitigate the impacts.<br>Good design principles should be applied to minimise adverse noise impacts: use of quietest cost-effective plant available, containment of noise within buildings wherever possible, optimisation of plant layout to minimise noise emissions, and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission. |
| Socio-economic | 5.12.1 – 5.12.9 | The ES should contain a socio-economic assessment where the project is likely to have a significant socio-economic impact at local or regional level.<br>The assessment should cover all relevant socio-economic impacts including: jobs and training opportunities, local service provision, local infrastructure provision, education facilities, tourism and a cumulative effects assessment.<br>The assessment should consider the potential impacts resulting from the influx of workers during |

| Topic | Ref | Policy |
|---|---|---|
| | | the construction, operation and decommissioning phases of the proposed development with regard to the above criteria. |
| Traffic and transport | 5.13.1 – 5.13.12 | The ES should contain a transport assessment where the project is likely to have significant transport implications. Applicants should consult with the Highways Authorities and Highways Agencies on the assessment and mitigation.<br>Applicants should prepare a travel plan where appropriate including demand management measures to mitigate transport impacts and details of proposed measures to improve access by non-car modes to reduce the need for parking and reduce transport impacts.<br>Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective. |
| Waste management | 5.14.1 - 5.14.9 | Applicants should prepare a Site Waste Management Plan (SWMP) detailing the proposed waste recovery and disposal system for all waste generated by the development, and an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation.<br>Where the project will be subject to the Environmental Permitting (EP) regime, waste management arrangements during operations will be covered by the permit and the considerations set out in Section 4.10 of NPS-EN1 will apply. |
| Water quality and resources | 5.15.1 - 5.15.10 | The ES should contain an assessment of water quality and resources where the project is likely to impact on the water environment. This assessment should describe:<br>– impacts on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges;<br>– impacts of the proposed project on water resources, noting proposed changes to |

| Topic | Ref | Policy |
|---|---|---|
| | | abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies);<br>– existing physical characteristics of the water environment affected by the proposed project and any impact of physical modifications to these characteristics; and<br>– impacts on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions. |

4.3.14 A detailed assessment of the Proposed Development against the above impacts is provided in Section 5 of this Report drawing on the findings of the ES (**Document Reference 6.1**) and other DCO application documents.

### National Policy Statement for Renewable Energy Infrastructure (EN-3) (2011)

4.3.15 NPS-EN3 applies to nationally significant energy from biomass/waste infrastructure in England and Wales with at least 50 MWe electrical generating capacity.

4.3.16 Section 2.3 requires applicants to demonstrate in the ES how energy from waste proposals will be resilient to climate change including how plant will be resilient to the increased risk of flooding and increased risk of drought affecting river flows.

4.3.17 Section 2.4 requires proposals for renewable energy infrastructure to demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology.

4.3.18 Section 2.5 states that energy from waste generating stations should be configured to produce CHP. It also recognises that anaerobic digestion produces methane gas which may also be used as a renewable fuel source although anaerobic digestion plant is not described separately in this NPS.

4.3.19 Section 2.5 also recognises that energy from waste generating stations take fuel that would otherwise be sent to landfill which may also comprise biodegradable waste. Paragraph 2.5.66 requires an assessment to be undertaken that examines the conformity of proposed combustion generating

stations with the waste hierarchy and the effect on the relevant waste plan or plans.

4.3.20 Section 2.5 of NPS EN-3 outlines the assessment principles which should be taken into consideration for energy from waste generating stations in addition to general assessment principles set out in Part 4 of EN-1. Those relevant to the Proposed Development are summarised in the table below.

Table 4.4 NPS EN-3 Assessment Principles

| Topic | Ref | Policy |
|---|---|---|
| Air quality and emissions | 2.5.37 - 2.5.45 | The EIA should include an assessment of air emissions and demonstrate compliance with the Waste Incineration Directive (WID) (Section 5.2 of EN-1). Considerations include pollutants of concern include NOx, SOx, particulates, CO2, metals, dioxins and furans. The decision maker should not regard the proposal as having an adverse impact on health if the requirements of WID are met and local air quality standards are not exceeded. |
| Landscape and visual | 2.5.46 - 2.5.52 | A landscape and visual impact assessment should be undertaken in accordance with Section 5.9 of EN-1. The decision maker should be mindful that a waste generating station will need to generally be at least 25 m high to accommodate the required components (fuel reception, storage facilities, combustion chamber and abatement units). Generating stations are expected to provide sufficient landscaping to visually screen them at low level from surrounding external viewpoints. |
| Noise and vibration | 2.5.53 - 2.5.58 | The impacts of noise and vibration on amenity should be undertaken in accordance with Section 5.11 in EN‑1. The assessment should demonstrate that noise any impacts can be adequately mitigated through requirements. Development consent should not be granted unless the decision maker is confident that the proposals meet the aims set out in paragraph 5.11.9 in EN-1. |
| Odour, insect and vermin infestation | 2.5.59 - 2.5.63 | Generic impacts of dust, odour, artificial light, smoke, steam and insect infestation are set out in Section 5.6 of EN-1. Insect and vermin |

| Topic | Ref | Policy |
|---|---|---|
| | | infestation may be a concern with energy from waste facilities. In energy from waste generating stations the reception, storage and handling of waste should be carried out within defined areas and within enclosed buildings. |
| Waste management | 2.5.64 - 2.5.70 | An assessment should examine the conformity of the scheme with the waste hierarchy and set out the effect of the scheme on the relevant waste plan and the extent to which the generating station contributes to the recovery targets in relevant strategies and plans. The decision maker should be satisfied that the proposed waste generating station is in accordance with the waste hierarchy and will not prejudice the achievement of local or national waste management targets. |
| Residue management | 2.5.71 - 2.5.83 | The ES should include details of the production and disposal of residues and consider the capacity of existing waste management sites for dealing with residues over the planned life of the power station. The decision maker should be satisfied that management plans for residue disposal minimise the amount that cannot be used for commercial purposes. |
| Water quality and resources | 2.5.84 - 2.5.87 | The applicant should assess the potential effects on water quality or resources in accordance with EN-1 Section 5.15 and seek to demonstrate that appropriate measures will be put in place to avoid or minimise adverse impacts of abstraction and discharge of cooling water. The decision maker should be satisfied that the applicant has demonstrated measures to minimise adverse impacts on water quality and resources as described above and in EN-1. |

### National Policy Statement for Renewable Energy Infrastructure (EN-5) (2011)

4.3.21 NPS EN-5 applies to infrastructure for electricity transmission systems in England and Wales with a voltage between 400 kV and 275 kV and electricity distribution systems with a voltage between 132 kV and 230 kV which are carried on towers/poles. Any other kind of electrical infrastructure (e.g.

underground cables) will only be subject to the PA 2008, and therefore covered by this NPS, if it constitutes associated development. The Electrical Connection constitutes associated development (as it is an underground cable) and so NPS EN-5 applies, but in limited form.

4.3.22 Part 2 of NPS EN-5 outlines the assessment principles which should be taken into consideration for electricity network infrastructure proposals in addition to general assessment principles set out in Part 4 of NPS EN-1. Those relevant to the Proposed Development are summarised in **Table 4.5**.

Table 4.5 NPS EN-5 Assessment Principles

| Topic | Ref | Policy |
|---|---|---|
| Climate change | 2.4.1 - 2.4.2 | NPS EN-1 section 4.8 advises that the resilience of the project to climate change should be assessed in the ES. Applications for Electricity Networks Infrastructure should also set out to how the proposed development would be resilient to: the potential effects of flooding (particularly for substations that are vital for the electricity and distribution network), higher average temperatures leading to increased transmission losses and earth movement or subsidence caused by flooding or drought. |
| Consideration of good design | 2.5.1- 2.5.2 | Proposals should demonstrate good design. |
| Landscape and Visual | 2.8.1 - 2.8.11 | The ES should consider generic landscape impacts (NPS EN-1 Section 5.9) and should also provide details of how consideration has been given to undergrounding or sub-sea cables as a way of mitigating impacts. |
| Electric and Magnetic Fields (EMFs): | 2.10.1 - 2.10.16 | Undergrounding cables eliminate the electric field however they produce magnetic fields which are highest directly above the cable. The ES should provide evidence of compliance with the Government's voluntary code of practice 'Power Lines: Demonstrating compliance with EMF public exposure guidelines' and the International Commission on Non-Ionizing Radiation Protection ('ICNIRP') (1998).<br>NPS EN-5 states that the applicant should design the height, position, insulation and protection measures to ensure compliance with the Electricity Safety, Quality and Continuity |

| Topic | Ref | Policy |
|---|---|---|
| | | Regulations 2002. However, EN-5 is clear that no further mitigation is necessary where proposals comply with the current public exposure guidelines and policy on phasing. |

4.3.23 The NPSs are the primary policy documents used in decision making for DCO applications. However, regard must also be had to other national, regional and local planning policies. An overview of the national, regional and local planning context in which this application has been prepared is provided in the paragraphs below. **Appendix A** identifies adopted and emerging national, regional and local planning policies, guidance and strategies which are considered to be relevant to the DCO application. **Appendix B** contains a planning policy compliance checklist which signposts where relevant planning policies identified in **Appendix A** are addressed in Section 5. Where planning policies are not directly considered in Section 5 a policy assessment is provided in **Appendix B**.

## 4.4 Other National Planning Policy

4.4.1 Other national policy documents which have been considered in the preparation of this application include the NPPF 2018, PPG and NPPW. The NPPF 2012 is still considered relevant but only in relation to draft London Plan policies as explained below.

4.4.2 The revised NPPF adopted in July 2018 sets out the Government's strategic planning policies for England. The NPPF does not contain specific policies for NSIPs or for waste management. Paragraph 5 of the NPPF emphasises the importance of NPSs in the determination of NSIPs while recognising that NPPF policies may be considered by the SoS as a relevant matter in decision-making. A summary of relevant NPPF policies is provided at **Appendix A**.

4.4.3 The NPPF 2012 is referenced in this Report but only in relation to draft London Plan policies. The SoS issued a letter on 27th July 2018[2] which confirms that, although the draft London Plan will be examined against the NPPF 2012, the published London Plan should be reviewed immediately to ensure it is consistent with the NPPF 2018. Thus, where there is a policy conflict with draft London Plan policies which are based on the NPPF 2012, the NPPF takes precedence.

4.4.4 The PPG was first published as an online resource in March 2014. The PPG provides detailed guidance on implementing the NPPF policies which is updated on a regular basis. Relevant sections of the PPG are identified at **Appendix A**.

2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730327/20180727_Letter_from_Secretary_of_State_to_the_Mayor_of_London_on_the_London_Plan_and_the_NPPF.pdf

4.4.5 The NPPW published in October 2014 sets out the Government's ambition to develop a more sustainable and efficient approach to resource use and management. **Appendix B** of the NPPW identifies factors that should be considered by waste planning authorities when determining planning applications. Relevant sections of the NPPW are identified at **Appendix A**.

## 4.5 Regional Planning Policy Context

4.5.1 Regional policy documents which have been considered in the preparation of this application include the following:

- The London Plan (2016): provides the overall strategic plan for Greater London setting out a fully integrated economic, environmental, transport and social framework for the development up to 2036. London Plan policies which are relevant to this DCO application are identified at **Appendix A**; and

- The Mayor published the Draft London Plan for public consultation in December 2017 and the Draft London Plan showing Minor Suggested Changes in August 2018. Relevant Draft London Plan policies are also identified at **Appendix A**;

- London Environment Strategy (LES) (2018): sets actions to improve the environment including specific policies and targets for air quality, climate change mitigation and energy and waste;

- Mayor's Transport Strategy (MTS) (2018): sets policies to reshape transport in London over the next 25 years with an emphasis on healthy streets and promoting sustainable travel. The three main themes comprise: healthy streets and healthy people; a good public transport experience; and new homes and jobs;

- London Riverside Opportunity Area Planning Framework (2015): sets out strategies to guide the regeneration of the area and how the Mayor's planning, transport, housing and land functions can maximise the public benefit to Londoners;

- London Plan: The Control of Dust and Emissions During Construction and Demolition SPG (2014): sets out the requirements for Air Quality and Dust Risk Assessments and Air Quality and Dust Management Plans;

- London Plan: Shaping Neighbourhoods: Character and Context SPG (2014): provides specific guidance on how an understanding of character and context can help to manage change in a way that enhances the positive attributes of a place;

- London Plan: Sustainable Design and Construction SPG (2014): provides guidance on flooding/flood risk management, sustainable drainage, flood defences, noise and land contamination;

- London Plan: London View Management Framework (LVMF) (2012): provides a method for assessing development proposals that could affect the 27 protected strategic views of London as designated in London Plan Policies 7.11 and 7.12 (see London Plan Table 7.1);

- London's Wasted Resource: The Mayor's Municipal Waste Management Strategy (MMWMS) (2011): sets policies for the management of London's municipal waste between 2011 and 2031 which recognise the Mayor's vision to develop a low carbon economy, minimising the negative environmental impacts of waste and exploiting its economic benefits;

- Managing risks and increasing resilience: The Mayor's climate change adaptation strategy (2011): sets out the Mayor's detailed approach to manage the current and future risks that climate change poses to the Capital;

- Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy (2011): sets out the Mayor's strategic approach to secure a low carbon energy supply and limited further climate change in London;

- Making Business Sense of Waste: The Mayor's Business Waste Strategy for London (2011): sets out the Mayor's strategy for London's business waste; and

- Thames Estuary 2100 Plan: outlines a strategy for managing flood risk in the Thames Estuary area which the Application Site lies within.

4.5.2 **Appendix A** contains a summary of relevant policies from adopted and emerging regional policy and Mayoral guidance and strategy documents which are material to this DCO application.

### Regional Planning Policy Designations

4.5.3 The Application Site is subject to the following strategic designations in the London Plan:

- Belvedere Industrial Area: the REP site and parts of the Electrical Connection route options form part of the Belvedere Industrial Area which is designated as a Strategic Industrial Location ('SIL') and Preferred Industrial Location ('PIL') (see London Plan Policy 2.17); and

- Bexley Riverside Opportunity Area ('OA'): the REP site and parts of the Electrical Connection route options are within the Bexley Riverside OA which is allocated to deliver a minimum of 4,000 new homes and 7,000 new jobs by 2036 in the London Plan. However, the London Plan states that new development should preserve the areas strategically important role as a provider of waste management and logistics facilities for London (see London Plan Policy 2.13 and Table A1.1 and Table A.3.1 at Appendix A of

this Report). Further details of growth aspirations for Bexley Riverside are outlined in the Bexley Growth Strategy (see **Appendix A**).

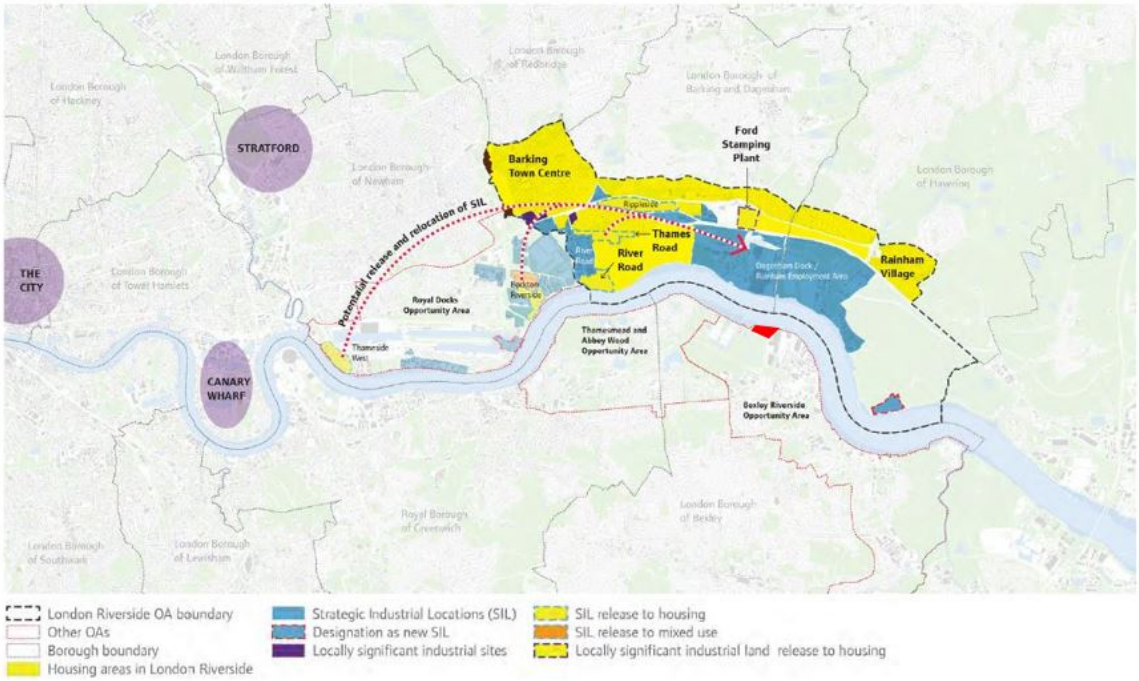
4.5.4 The Application Site is situated in a growth area (including Thamesmead, Abbey Wood, Bexley Riverside and London Riverside) which is expected to receive significant levels of investment in public transport improvements (including Crossrail) and new development. Growth aspirations for these areas are established at a strategic level in the London Plan:

- Thamesmead and Abbey Wood OA - located approximately 1.4 km to the west of the REP site the OA is designated to deliver significant growth including 3,000 new homes and 4,000 new jobs. Detailed planning guidance is provided at the local level in the Thamesmead and Abbey Wood Supplementary Planning Document ('SPD'), adopted in 2009; and

- London Riverside OA - located approximately 1.4 km to the west of the REP site the OA is also designated to deliver significant growth including 26,500 new homes and 16,000 new jobs. Detailed planning guidance is provided in the London Riverside OAPF, adopted in 2015.

4.5.5 The map below identifies the REP site (in red) in the context of the surrounding designated London Plan OAs.

Figure 4.2 REP site and London Plan OAs




Source: Figure 1.7, London Riverside OAPF, 2015

## 4.6 Local Planning Policy Context

4.6.1 Local planning policy and guidance documents for LBB and DBC which have been considered in the preparation of this DCO application include the following:

- Bexley Core Strategy (2012);
- Bexley UDP (2004) Saved Policies (2012);
- Bexley Energy Masterplan (2016);
- Bexley Growth Strategy (2017);
- Dartford Core Strategy (2011);
- Dartford Development Policies Plan and Policies Map (2017);
- Kent Minerals and Waste Local Plan ('KMWLP') 2013-2030 (2016); and
- Kent Local Transport Plan 4: Delivering Growth without Gridlock 2016 – 2031.

4.6.2 The LBB and DBC are both in the process of preparing new draft Local Plans. However, neither LBB or DBC had published draft planning policies for consultation at the time the REP DCO application was submitted.

4.6.3 **Appendix A** of this Report contains a summary of relevant policies from adopted and emerging local policy documents which are relevant to this DCO application.

### Local Planning Policy Designations

4.6.4 The REP site is subject to the following policy designations on the Bexley UDP Saved Policies Proposal Map:

- Primary Employment Area: the REP site is designated as a Primary Employment site (Saved UDP Policy E3);
- Thames Policy Area (Saved UDP Policies TS13 & TS14); and
- Protected View: the southern part of the REP falls within a protected strategic viewing corridor (East London Panorama from Beckton Alps) (Saved UDP Policy ENV39).

4.6.5 In addition to above, the southern boundary of the REP site adjoins land designated as Metropolitan Open Land (MOL) (Saved UDP Policy ENV15) and Area of Metropolitan Importance for Nature Conservation (Policies CS18 and CS17). Part of the Electrical Connection route options (as shown in **Figure 1.2** of the ES Figures (**Document Reference 6.2**) also passes through this land. The Main Temporary Construction Compounds which comprise of previously developed land (a former National Grid substation site) adjacent to the west side of Norman Road are also designated as a Primary Employment Area (Saved UDP Policy E3).

4.6.6 The Dartford Policies Map identifies that the Application Site is within a Biodiversity Opportunity Area (Policies CS14 and DP26) Borough Open Space (Policies CS14 and Policy DP24), and an Air Quality Management Zone (Policy DP5). The following designations border the Application Boundary: Employment Area (Policies CS7 and DP20), Local Wildlife Site (Policies CS14 and DP25) and Nature Improvement Area (Policies CS14 and DP25).

## 4.7 Planning Considerations in Neighbouring Boroughs

4.7.1 Although the Proposed Development does not include any land within adjoining boroughs there is the potential for air quality and heritage effects to impact on neighbouring boroughs. Relevant air quality and heritage policies from the following neighbouring boroughs development plan documents are identified in Table A.9 at **Appendix A**.

- London Borough of Havering (LBH) Core Strategy and Development Control Policies Development Plan Document (2008);
- London Borough of Barking and Dagenham (LBBD) Core Strategy (2010);
- LBBD Borough Wide Planning Policies Development Plan Document (2011); and
- Royal Borough of Greenwich (RBG) Local Plan: Core Strategy with Detailed Policies (2014).

# 5 Planning Assessment

## 5.1 Introduction

5.1.1 Section 104 of the PA 2008 requires the SoS to decide DCO applications in accordance with relevant NPS(s) unless the proposals would contravene specific legal tests set out under section 104 (4), (5), (6) and (8) or the adverse impacts would outweigh its benefits (section 104 (7)). Section 104 (2) (d) of the PA 2008 also requires the SoS to have regard to any Local Impact Report and any other matters which the SoS '*thinks are both important and relevant to decision'.*

5.1.2 This section of the Planning Statement provides an assessment of the Proposed Development against the relevant assessment principles and generic impacts contained within NPS EN-1, EN-3 and EN-5, as well as other matters which may be considered 'important and relevant' to the REP DCO application.

5.1.3 The planning assessment draws conclusions from detailed ES topic assessments which have been submitted as part of the DCO application and considers their conclusions in the context the relevant NPS and the development plan documents. The potential effects and mitigation measures are presented for each topic to demonstrate compliance with the relevant NPS and other relevant planning policies. **Appendix B** contains a planning policy compliance checklist which signposts where each relevant planning policy identified in **Appendix A** is addressed in this Section. Where planning policies are not directly considered in this Section a policy assessment is provided in **Appendix B**.

## 5.2 The Need for New Nationally Significant Infrastructure Projects

5.2.1 NPS EN-1 and EN-3 establish an urgent and substantial need for new energy generation infrastructure, emphasising an expectation that industry will provide this capacity through private led investment such as REP. Alongside the drive for new energy generation is the desire for it to be renewable or low carbon, to meet climate change targets. REP meets these policy objectives, delivering new energy capacity through a renewable/low carbon supply, with no public funding support or subsidy. The climate change driven priorities of NPS EN-1 and EN-3 include the delivery of:

- Positive carbon outcomes and renewable/low carbon energy;
- Sustainable waste management; and
- Optimised design.

5.2.2 London Plan policy is consistent with the NPSs in seeking to reduce London's carbon emissions, gain decentralised energy supply, and divert waste away from landfill through new treatment capacity that will enable London to be self-sufficient (by 2026). Responding directly to the NPSs and London Plan, REP:

- Is an ERF that achieves a positive carbon outcome, not least through the recovery of renewable/low carbon electricity from both food waste and residual waste and has good potential to also contribute to heat demand;

- Constitutes sustainable waste management capacity, diverting waste away from landfill, moving it up the waste hierarchy and providing for the reuse of metals and ash as construction aggregates (reducing reliance on the quarrying of primary aggregates); and

- Delivers good design, not least through incorporating a range of energy recovery and storage technologies, being CHP Enabled, and incorporating river freight as part of the multi-modal transport network thereby significantly reducing the number of trucks on London streets.

5.2.3 At the regional level, the extent of need for new residual waste treatment facilities such as REP is demonstrated in the Applicant's policy based assessment of REP against the adopted and draft London Plans, as presented in the Project and its Benefits Report and the London Waste Strategy Assessment contained at Annex A (**Document Reference 7.2**). London Plan Policy 5.4 aims to supports appropriate development proposals for gas and electricity infrastructure which address identified energy requirements.

5.2.4 The Project and its Benefits report (**Document Reference 7.2**) provides a full assessment of the need and associated benefits of the Proposed Development and the following paragraphs provide an overview of the need for energy and waste infrastructure.

### The Need for New Energy Infrastructure

5.2.5 REP is a major energy infrastructure project recovering energy from waste and providing a reliable heat source for a future distribution network. Section 3 of the Project and its Benefits Report (**Document Reference 7.2**) demonstrates how REP will achieve the priorities of NPS EN-1 and EN-3 by:

- Recovering renewable/low carbon energy from residual waste;

- Reducing carbon emissions; and

- Delivering the potential for CHP.

#### Recovering Renewable/Low Carbon Energy from Residual Waste

5.2.6 NPS EN-3, the technology specific policy for renewable energy infrastructure, expressly includes energy from waste. NPS EN-1 recognises that it is the responsibility of the applicant to ensure that there will be necessary infrastructure and capacity within the network to accommodate the electricity generated.

5.2.7 Section 3 of the Project and its Benefits Report (**Document Reference 7.2**) confirms that the energy recovered through the ERF is renewable/low carbon

as defined in NPS EN-3 and energy recovered through the Anaerobic Digestion facility and Solar Photovoltaic Panels is wholly renewable.

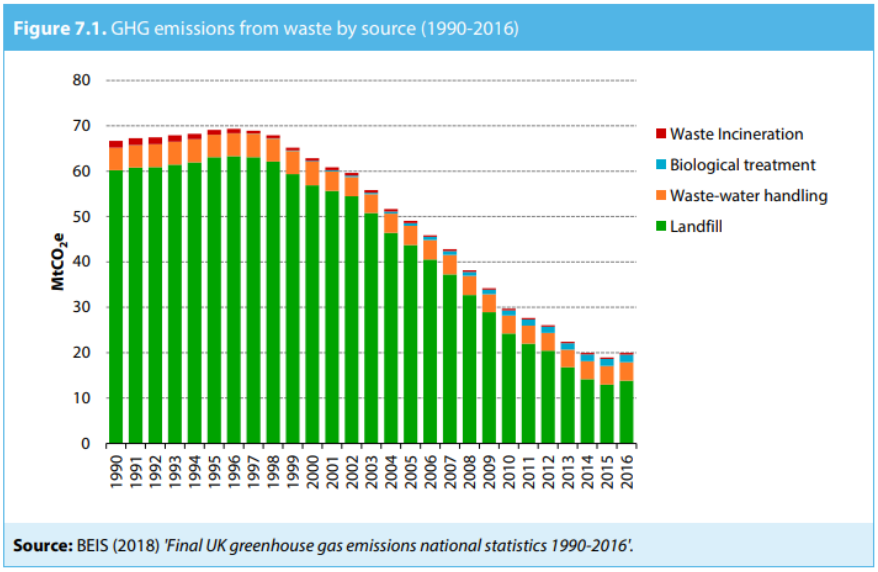
5.2.8 REP will generate renewable/low carbon electricity for the equivalent of c.140,000 homes. In 2017 there was estimated to be almost 100,000 households in LBB, these are predicted to rise to over 125,000 households by 2040. REP will generate the equivalent of Bexley's households' electricity demands now and into the future.

5.2.9 As well as having a viable grid connection which will be delivered by UKPN, REP presents a strong likelihood that electricity will be provided to the London area, enabling energy self-sufficiency and resilience within the capital. REP is an embedded generator which means that the renewable/low carbon electricity recovered will be supplied to the local distribution system. Embedded generation may not be fully utilised where the demand for electricity is lower than that generated however, this this is unlikely to be the case at Littlebrook substation which is in an area with very high electrical load requirements. Further detail about the proposed grid connection is set out in the Electricity Grid Connection Statement (**Document Reference 5.3**).

### Reducing Carbon Emissions

5.2.10 REP diverts waste away from landfill through using non-recyclable wastes as feedstock. A key element of climate change policy is reducing the amount of biodegradable waste sent to landfill because the resultant methane is a potent greenhouse gas. The Committee on Climate Change ('CCC') 2018 Report recognises that modern waste combustion facilities are highly successful in recovering low carbon energy. Figure 4.1 shows that methane emissions from landfill dominate greenhouse gas emissions from the waste sector.

Figure 5.1 CCC 2018 Report Figure 7.1



5.2.11 REP will be highly self-sufficient in its own energy demand therefore reducing its carbon emissions. The use of the river to transport materials to and from REP will minimise road vehicle use, providing a significant benefit to London's overall air quality and, reducing congestion and decreasing carbon emissions from the Proposed Development.

5.2.12 The CHP Assessment **(Document Reference 5.4**) demonstrates that REP meets the stringent target set in draft London Plan Policy SI8 for energy from waste facilities to meet a "*minimum performance of 400g of CO2 equivalent per kilowatt hour of electricity produced".*

### Delivering the potential for CHP

5.2.13 REP is a very real opportunity to deliver a district heating network into London in accordance with national, regional and local policy objectives. NPS EN-1 Section 4.6 encourages the inclusion of CHP within projects and states additional positive weight should be given to applications incorporating CHP. London Plan Policy 5.17C and draft London Plan Policy SI8 encourage the delivery of CHP and combined cooling heat and power in London. NPS EN-3 confirms that the decision-maker should be satisfied that appropriate evidence has been submitted to demonstrate that CHP is included or that opportunities have been fully explored.

5.2.14 REP responds directly to the objectives of NPS EN-1 and relevant London Plan policies by being designed at the outset as CHP Enabled (i.e. fully capable of exporting heat, with all required on site infrastructure in place). The CHP Assessment (**Document Reference 5.4**) demonstrates the feasibility of using CHP within REP. The Proposed Development is located within a Heat Network Priority Area of the draft London Plan and would include all the on-site infrastructure necessary to connect to a heat distribution network.

5.2.15 The CHP Assessment (**Document Reference 5.4**) confirms that, subject to technical and economic feasibility, a heat supply system at REP could export up to 30 MWt of heat to off-site consumers. The preferred District Heating (DH) network solution is intended to supply heat, in the form of hot water, to new-build residential and commercial developments in Thamesmead. The CHP Assessment (**Document Reference 5.4**) also identifies a potential opportunity to export heat from the ERF to support the integrated thermophilic Anaerobic Digestion process subject to detailed design.

5.2.16 The CHP connection would deliver additional scheme benefits; REP would already exceed the high-efficiency cogeneration threshold for delivering primary energy savings when operating in fully condensing (electricity only) mode. However, with the inclusion of heat export the Proposed Development would qualify as a high efficiency cogeneration operation, exceeding the Primary Energy Savings threshold and meeting the GLA's Carbon Intensity Floor target when operating in CHP mode.

5.2.17 The Applicant continues to actively engage with LBB and other key stakeholders to deliver this network, and considers this element of the Proposed Development carries the opportunity for significant and direct societal benefits in the local area. The draft Riverside Energy Park Development Consent Order (draft DCO) (**Document Reference 3.1**) incorporates a requirement in Schedule 2 that requires the Applicant to monitor and review the potential for CHP and to report the findings to LBB.

### The Need for New Waste Infrastructure

5.2.18 Section 4 of the Project and its Benefits Report (**Document Reference 7.2**) demonstrates how REP, as new waste management infrastructure, meets the three waste management policy priorities of

- Delivering the waste hierarchy;
- Enabling self-sufficiency; and
- Achieving site optimisation.

### Delivering the Waste Hierarchy and Enabling Self-sufficiency

5.2.19 The test for REP in relation to waste infrastructure is set out at NPS EN-3, paragraph 2.5.70 which states that applicants must demonstrate that "*with reference to the relevant waste strategies and plans, the proposed waste combustion generating station is in accordance with the waste hierarchy and of an appropriate type and scale so as not to prejudice the achievement of local or national waste management targets in England…"*.

5.2.20 The waste hierarchy seeks to reduce the negative effects of waste management by focusing on the higher levels of the waste hierarchy; reducing the amount of waste produced and re-using or recycling waste. However, the Government accepts that not all waste can be managed this way and consequently supports the efficient recovery of residual waste. DEFRA'S *energy from waste: A Guide to the Debate* confirms this approach, recognises that (page 2):

*'To maintain the energy output from less residual waste resource we will need to divert more of the residual waste that does still exist away from landfill and capture the renewable energy continue the drive towards better, higher-efficiency energy from waste solutions.'*

5.2.21 Recovering energy from residual waste is a core element of the waste hierarchy, supported by European, national and local policy. The Project and its Benefits Report (**Document Reference 7.2**) demonstrates that the ERF is an important element to facilitate delivery of the waste hierarchy in London and the South East.

5.2.22 The London Waste Strategy Assessment contained at Annex A of the Project and its Benefits Report (**Document Reference 7.2**) examines the conformity of

REP within the waste hierarchy and effects on the relevant waste plan as required under the provision of NPS EN-3 and demonstrates that:

- REP is required to deliver sustainable waste management and net self-sufficiency within London;
- There is a need for greater energy recovery capacity than the nominal throughput proposed for the ERF within REP; and
- REP is in the right place in the waste hierarchy and will not prejudice credible recycling within London.

5.2.23 The Anaerobic Digestion facility will also produce a renewable energy supply, in the form of biogas. Accordingly, both the ERF and the Anaerobic Digestion facility will make a positive and significant contribution to the circular economy within London.

5.2.24 The London Waste Strategy Assessment provides a conservative assessment using London Plan data only. Whilst the ERF within REP is promoted to take waste from within London, there is no justification for it to be limited to the capital. ES **Chapter 6** (**Document Reference 6.1**) demonstrates that there is no unacceptable adverse impact caused by transporting waste to REP from further afield, not least because the transport modes available include river freight. Consequently, there is no reasonable objection to the import of waste to the ERF within REP from outside of London.

5.2.25 REP presents an opportunity to provide a sustainable waste management solution for the South East. There is an identified need for c.2 million tonnes of residual waste management capacity across the waste planning authorities adjacent to London. Therefore, in the event that the capital does not need all of REP's throughput in the future, then London can still benefit from the economic, environmental and societal benefits of recovering renewable/low carbon energy from the residual wastes arising across the South East. This approach is supported by national policy (energy from waste Debate Guide) which promotes the development of flexible energy from waste facilities that are able to seek out waste from a range of sources as a means to optimise residual waste as a fuel.

5.2.26 A recent (October 2018) residual waste assessment '*Residual Waste in London and the South East: Where is it going to go?'* produced by Tolvik Consulting Ltd ('the Tolvik Report') recognises that out of the 9.88 million tonnes (Mt) of residual waste generated in London and the South East in 2017, 5.30 Mt was either sent to landfill or exported overseas as refuse derived fuel (RDF) for use in ERF in mainland Europe.

5.2.27 Landfill and RDF both pose risks to long-term sustainable waste management through uncertain future available capacity and environmental risk:

- Landfill: waste disposal to landfill results in the emission of potent methane gases which undermines national and EU climate change objectives. As shown in Figure 4.1, methane emissions from landfill dominate the

greenhouse gas emissions from the waste sector. The future availability of landfill sites remain highly uncertain; the LES recognises that only two of the eight landfill sites commonly used to dispose of London's waste are expected to remain open beyond 2025; and

- RDF: the estimated RDF from London and the South East in 2017 equates to 54% of the total of RDF exported overseas from England predominantly to mainland Europe. RDF is a short-term solution to the UK's waste treatment infrastructure deficit and uncertainty associated with Brexit poses a risk that the exportation of RDF waste from the UK may decline in future.

5.2.28 REP provides an opportunity to provide a more sustainable waste management solution by moving waste up the waste hierarchy while also improving self-sufficiency in London and enabling the UK to gain the economic, environmental and social benefits of energy recovery.

5.2.29 The Tolvik Report demonstrates that there is an infrastructure treatment deficit and an identified need for further energy recovery capacity, in addition to REP. The Tolvik Report's Central sensitivity forecast, which assumes that REP is operational, predicts that by 2025 there could be a cumulative shortfall of 4.66 Mt in non-hazardous landfill (disposal) capacity across London and the South East.

5.2.30 Recovering value from waste generated in London means REP delivers energy, jobs and societal benefits to London; but it should not be constrained to receiving only London's waste. Such a constraint would be contrary to European and national policy and would unreasonably restrict future flexibility and the optimal operation of the ERF.

#### Achieving Site Optimisation

5.2.31 The Proposed Development optimises use of an existing waste management site and would utilise existing river transport infrastructure and operational experience. REP provides complementary technologies and incorporates emissions control technology to ensure that both European and London requirements for air quality are met and exceeded. REP would also be well located to meet substantial local heating demand, including to social housing at Thamesmead.

5.2.32 Waste management demands within London and adjacent authorities are expected to be prevalent for the foreseeable future as demonstrated in the Tolvik Report and at Annex A of the Project and its Benefits Report (**Document Reference 7.2**).

### 5.3 Assessment Against NPS EN-1 and NPS-EN5 Principles

5.3.1 The table below summarises the assessment of the Proposed Development against the principles contained in NPS EN-1 and NPS EN-5 and signposts where further details are provided in this Report and other application

documents. For reference, the requirements of each policy are summarised in Table 4.2 in Section 4.

Table 5.1 Assessment against NPS EN-1 and NPS-EN5 principles

| Policy | Assessment summary | Other application documents |
|---|---|---|
| Environmental Statement | In accordance with NPS-EN1 paragraphs 4.2.1 and 4.2.3 an ES (**Document Reference 6.1**) has been prepared for the REP DCO application which contains an assessment of all likely environmental, social and economic effects at all stages of the Proposed Development.<br>In accordance with NPS EN-1 paragraph 4.2.5, the ES (**Document Reference 6.1**) contains information on the cumulative effects of the Proposed Development in combination with the effects of other proposed and approved developments. | ES (**Document Reference 6.1**)<br>ES Figures (**Document Reference 6.2**)<br>ES technical appendices (**Document Reference 6.3**)<br>ES Non-technical summary (**Document Reference 6.4**) |
| Habitats and Species Regulations | In accordance with NPS EN-1 paragraph 4.3.1 the Applicant consulted Natural England during EIA Scoping and statutory Section 42 consultation as recorded within the Consultation Report and Appendices (**Document Reference 5.1**) and ES (**Document Reference 6.1**).<br>A Habitats Regulations Assessment (**Document Reference 6.5**) has been prepared for the Proposed Development which identifies one European site, Epping Forest Special Area of Conservation, within the ecological zone of influence of REP and concludes that no Likely Significant Effects have been identified and no further specific avoidance or mitigation measures have been proposed. | Habitats Regulations Assessment (**Document Reference 6.5**)<br>Consultation Report and Appendices (**Document Reference 5.1**)<br>ES (**Document Reference 6.1**) |
| Alternatives | In accordance with NPS EN-1 paragraph 4.4.2, ES **Chapter 5** (**Document Reference 6.1**) provides details of the alternatives that have been considered as part of the | ES Chapters 3 and 5 (**Document Reference 6.1**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | Proposed Development as summarised below:<br>– Alternative layouts and design;<br>– Proposed works in the marine environment;<br>– Electrical connection;<br>– Alternative main temporary construction compounds; and<br>– Alternative vehicular access arrangements<br>– Do nothing alternative.<br>The consideration of alternative sites was not deemed necessary. The REP site is ideally suited for the Proposed Development being located in close proximity to the river and existing transport networks/infrastructure, its industrial setting and given that the Applicant owns most of the REP site.<br>The nature of the REP site as an operational waste management site provides limited alternative layout options however four orthogonal layout options were initially considered. The north to south layout Option 2 was considered most suitable for the following reasons:<br>– more in keeping with surrounding infrastructure (RRRF and Thames Water Sewage Treatment Works);<br>– more efficient routing system within the REP site for vehicular deliveries from the jetty and Norman Road;<br>– reduces the blocking of views to and from the River Thames;<br>– less dominant views from Thames River Path and reduced shadowing effects; and | The Project and its Benefits (**Document Reference 7.2**)<br>CHP Assessment (**Document Reference 5.4**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | – allow maximum potential for energy generation from the roof-mounted Solar Photovoltaic installation.<br><br>Three alternative designs of the Main REP Building form (stepped roof, curved roof or flat roof) have been considered and consulted on during the statutory consultation(s). The stepped roof option was presented as the preferred option by the Applicant based on its performance against social, environmental and economic factors. However, the final detailed design of the Proposed Development will be submitted to and approved by the local authority under a Requirement of the DCO.<br><br>Two potential construction options were initially considered to bring plant, equipment and fuel to the site:<br><br>– the installation of a temporary causeway across the intertidal zone; or<br><br>– the use of a lift crane on a jetty head in the river or near the river bank.<br><br>It was concluded that it was not favourable to undertake works within the River Thames and instead the existing jetty and road network would be utilised. This refinement has removed the need for intrusive works in the river greatly reducing the potential for adverse effects on the marine environment which is reflected in the relevant ES assessments.<br><br>Two options for the new electricity connection point were initially considered: Electrical Connection route to Renwick Road, Barking and Electrical Connection route to Littlebrook substation although it was determined through working with UKPN that the Littlebrook substation should be progressed. Following the Scoping Opinion publication, UKPN undertook detailed studies of potential route options which outlines four alternative Electrical | |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | Connection routes to (Routes 1, 1A, 2A and 2B) which are described in the ES (**Document Reference 6.1**) **Chapter 5** (See Section 5.5). The four Electrical Connection route options have been assessed in the PEIR and the ES.<br><br>The REP site provides insufficient space to accommodate all construction laydown. An initial list of nine sites was identified of which three were determined to be technically feasible and subject to fewer environmental constraints. The site on land west of Norman Road was considered to be the most suitable site and forms part of the REP DCO application.<br><br>Alternative access arrangements were not considered necessary due to the presence of suitable existing access points from the existing jetty and from Norman Road. The 'Do Nothing' Alternative scenario is not considered appropriate for the following reasons:<br><br>– established need for new energy generation, including low carbon and renewable energy generation;<br><br>– established need for additional waste treatment capacity in London;<br><br>– policy support for increased use of the river Thames; and<br><br>– missed opportunity in terms of providing investment in the local economy and potential future provision of local district heating through a new CHP connection. | |
| Criteria for 'good design' for energy infrastructure | In accordance with NPS EN-1 paragraph 4.5.1, NPS EN-5 paragraph 2.5.2, NPPF Chapter 12 and London Plan Policy 7.7, good design principles, outlined in the Design and Access Statement (**Document Reference 7.3**) and Design Principles (**Document Reference 7.4**), have been incorporated into the Proposed | Design and Access Statement (**Document Reference 7.3**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | Development from the outset such that the Proposed Development provides an appropriate design response to its setting.<br><br>The DCO application has been prepared in accordance with the Rochdale Envelope principle and as a precautionary approach, maximum design parameters contained in the Design and Access Statement (**Document Reference 7.3**) have been assessed in the ES (**Document Reference 6.1**). The Applicant has had regard to PINS advice note nine (AN9) 'Using the Rochdale Envelope' (April 2012, Version 2). The Design and Access Statement outlines the Applicant's preferred design approach and how this seeks to minimise adverse effects associated with the Proposed Development.<br><br>The Design and Access Statement outlines three alternative indicative designs that were considered for the main REP building including a flat, curved or stepped roof and explores the benefits and disadvantages of each option. The Applicant undertook early non-statutory engagement with local authorities and the local community on these design options as detailed in the Consultation Report (**Document Reference 5.1**). The selected option, indicative design solution no. 3 - stepped building form, has a number of key advantages:<br><br>– Maximises renewable energy outputs;<br><br>– Efficient operational and process requirements;<br><br>– Responds to the context of neighbouring land, building forms and property uses;<br><br>– Mitigates anticipated visual effects; and | Design Principles (**Document Reference 7.4**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | – Meets requirements for safe routine maintenance and access throughout the life of the building.<br><br>The Design and Access Statement (**Document Reference 7.3**) outlines four alternative illustrative site masterplans and explores the benefits and disadvantages of each option. The selected option (illustrative masterplan proposal 2) orientates the main REP building in a north south orientation with the stack at the northern end of the site. The selected option has a number of key advantages: minimises loss of views of the River Thames from elevated positions in Belvedere, allows for efficient delivery of waste to the tipping hall by road and maximises solar energy generation potential.<br><br>As illustrated in the Design and Access Statement the orientation, form, scale, and massing of the Main REP Building has been designed to respond positively to its surroundings. The detailed design of the Proposed Development would be progressed in accordance with the Design Principles (**Document Reference 7.4**) which provides specific design guidelines on:<br><br>– Building, siting, composition and mass;<br><br>– Materials and Use of Colour;<br><br>– Integrated Biodiversity and Landscaping;<br><br>– Safety, Signage and Wayfinding; and<br><br>– Lighting. | |
| Consideration of Combined | In accordance with NPS EN-1 paragraphs 4.6.6 and 4.6.7 the Proposed Development | Planning Statement |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| Heat and Power | includes a CHP connection and the CHP Assessment (Document Reference 5.4) finds that there is an opportunity to export heat from REP to a Local District Heat Network and/or to support the Anaerobic Digestion process within REP in future. The CHP connection would deliver additional scheme benefits: in CHP mode REP would qualify as a high efficiency cogeneration operation, exceeding the Primary Energy Savings threshold, and meeting the GLA's Carbon Intensity Floor target. | Section 4.2 (**Document Reference 7.1**)<br>The Project and its Benefits Report (**Document Reference 7.2**)<br>CHP Assessment (**Document Reference 5.4**) |
| Climate change adaptation | In accordance with NPS EN-1 paragraph 4.8.5, NPS EN-5 paragraph 2.6.1, London Plan Policies 5.1 and 5.2 and LBB Policy CS23 the Proposed Development has been designed considering the impacts of climate change from the outset as explained in the Design and Access Statement (**Document Reference 7.3**). The location, design, build and operation of the Proposed Development has been subject to an assessment of the potential impacts of climate change.<br>The Project and its Benefits (**Document Reference 7.2**) explains how the Proposed Development will contribute to meeting national climate change targets and delivering the Mayor's aspirations for London to be a zero-carbon city by generating renewable/low carbon electricity supply and diverting waste from landfill.<br>The ES (**Document Reference 6.1**) contains technical Chapters (relating to biodiversity and hydrology, flood risk and water resources) which consider the potential impacts of climate change and set out appropriate mitigation measures.<br>A FRA (**Document Reference 5.2**) has also been prepared which considers the potential impact of flooding as a result of climate | Design and Access Statement (**Document Reference 7.3**)<br>FRA (**Document Reference 5.2**)<br>The Project and its Benefits (**Document Reference** 7.2) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | change and sets out appropriate mitigation measures.<br>As explained in Section 4.2, in operation REP will exceed the Mayor's carbon performance standard for energy from waste facilities set out in Draft London Plan Policy SI8 and will also reduce carbon emissions by diverting waste from landfill thereby avoiding the consequent production of greenhouse gases. REP will be highly self-sufficient in its own energy demand so reducing its carbon emissions.<br>It is recommended that REP utilises a CoCP to set out mitigation measures to minimise Greenhouse gasses such as responsibly sourcing local material, limiting vegetation clearance to the minimum area necessary and replacing any vegetation lost as a result of construction works.<br>The operation of REP is expected to contribute positively to the national, local and waste sector emissions inventory through the use of recovered energy from waste, renewable energy generation and energy storage. | |
| Grid connection | In accordance with of NPS EN-1 paragraph 4.9.1 of NPS EN-1, National Grid was consulted on the DCO application as part of the statutory consultation as recorded in the Consultation Report (**Document Reference 5.1**). An Electricity Grid Connection Statement has been prepared which demonstrates there is the necessary infrastructure and capacity within the distribution network to accommodate the electricity generated. | Consultation Report and Appendices (**Document Reference 5.1**)<br>Electricity Grid Connection Statement (**Document Reference 5.3**) |
| Pollution control and other environmental | The Applicant recognises that some issues may be subject to separate regulatory regimes as set out under NPS EN-1 Paragraph 4.10.1. The Other Consents and | Other Consents and Licences (**Document Reference 5.5**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| regulatory regimes | Licences document (**Document Reference 5.5**) submitted with the REP DCO application identifies the other consents and licences required and provides details of when they will be applied for. | |
| Safety | In accordance with NPS EN-1 paragraph 4.11.1, the HSE were consulted during statutory consultation as recorded in the Consultation Report (**Document Reference 5.1**). The HSE provided a consultation response confirming that no pipelines fall within the indicative application boundary but that it does fall within the consultation zones of three major accident hazard pipelines: Henkel Ltd. (HSE ref H3322); Nufarm UK Ltd Crabtree Manorway (HSE ref H0260) and; Calor Gas, Burts Wharf Industrial Estate (HSE ref H4298). | Consultation Report and Appendices (**Document Reference 5.1**) |
| Hazardous Substances | In accordance with NPS EN-1 paragraph 4.12.1, the HSE were consulted during statutory consultation as recorded in the Consultation Report (**Document Reference 5.1**).<br>As set out the Operational Waste Statement (ES **Appendix K.4** (**Document Reference 6.3**) and in ES (**Document Reference 6.1**) **Chapter 13** embedded mitigation measures include spill response procedures and requirements for the correct handling of any hazardous substances in accordance with standard waste auditing procedures and the appropriate Hazardous Waste Regulations. | ES **Chapter 13** (**Document Reference 6.1**)<br>Operational Waste Statement (**Appendix K.4** V ES Technical Appendices (**Document Reference 6.3**)) |
| Health | NPPF paragraph 120 (Chapter 11) states planning decisions should prevent unacceptable risks from pollution of land, air, water or soil quality on human health, the natural environment or general amenity. Policy DP5 states that development will be acceptable where it does not result in | HHRA (**Appendix C.3** ES Technical Appendices (**Document Reference 6.3**)) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | unacceptable impacts, individually or cumulatively on public health.<br><br>In accordance with NPS EN-1 paragraph 4.13.2, the ES (**Document Reference 6.1**) assesses the potential effects on health and wellbeing from traffic, air or water pollution, dust, odour, hazardous waste and substances, noise and pests and identifies measures to avoid, reduce or compensate for these impacts.<br><br>ES **Appendix K.1** (**Document Reference 6.3**) contains a Health Impact Assessment (HIA) which finds that potential impacts on human health relate primarily to air quality and ground conditions effects although these effects are considered to be Not Significant.<br><br>ES **Appendix C.3 (Document Reference 6.3**) contains a Human Health Risk Assessment (HHRA) which assesses the health and well-being impacts on different receptor groups and proposes mitigation where possible and supports **Chapter 7** of the ES (**Document Reference 6.1**). The HHRA identifies that the main potential air quality impacts on health are expected to arise from the uptake of Compounds of Potential Concern (COPC) into the food chain however the assessment concludes that there will be no significant effects in relation to long term exposure to COPCs under the reasonable worst case scenario.<br><br>ES (**Document Reference 6.1**) **Chapter 13** finds that the main potential impacts on health associated with ground conditions are expected to arise from the presence of asbestos within the Made Ground and potentially elevated hazardous ground gas concentrations at the REP site/ Main Temporary Construction Compound. However, subject to implementation of embedded mitigation the potential health impacts of asbestos are anticipated to be | HIA (**Appendix K.1** ES Technical Appendices (**Document Reference 6.3**))<br><br>ES **Chapter 13** (**Document Reference 6.1**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | Negligible. A preliminary ground gas risk assessment has been prepared in **Appendix I.2** of the ES (**Document Reference 6.3**) and following the completion of additional ground investigation, monitoring and assessment, this will be refined and appropriate mitigation measures adopted as part of the Remediation Strategy in the final CoCP. | |
| Common law nuisance and statutory nuisance | In accordance with NPS EN-1 paragraph 4.14.2, a Statutory Nuisance Statement (**Document Reference 7.6**) has been prepared which considers possible sources of nuisance and how they may be mitigated or limited under the provisions of section 79(1) of the Environmental Protection Act 1990.<br>The Statutory Nuisance Statement (**Document Reference 7.6**) outlines the findings on potential air quality impacts, noise levels, and artificial lighting generated by the Proposed Development during construction and operation and concludes that embedded mitigation measures will prevent impacts which are considered to have the potential to result in statutory nuisance under section 79(1) of the Environmental Protection Act 1990.<br>The draft DCO (**Document Reference 3.1**) includes a standard provision which would provide a defence against cases of nuisance, such that this could be relied upon where, for example, the nuisance cannot reasonably be avoided. | Statutory Nuisance Statement (**Document Reference 7.6**)<br>draft DCO (**Document Reference 3.1**) |
| Security considerations | In accordance with NPS EN-1 paragraph 4.15.2, the inclusion of proportionate protective security measures has been considered from the early stages of the project which are detailed within the Design and Access Statement (**Document Reference 7.3**) as summarised below: | Design and Access Statement (**Document Reference 7.3**) |

| Policy | Assessment summary | Other application documents |
|---|---|---|
| | – Provision of robust fencing around the site to ensure site safety and security; and<br>– Ensure that access routes and internal road layouts are designed to allow safe and efficient operation.<br>ES (**Document Reference 6.1**) **Chapter 3** provides further details of safety and security considerations including:<br>– Provision of CCTV covering the entire site and lighting around the palisade fence;<br>– External gates and barriers, outer building doors and strategic internal doors all controlled by an access control system; and<br>– A full Hazard and Operability Study (HAZOP) study will be undertaken through the design phase of the project and REP will be designed, constructed, and operated in compliance with the latest codes of practice and guidance as detailed in ES (**Document Reference 6.1**) **Chapter 3**. | ES **Chapter 3** (**Document Reference 6.1**) |
| Electric and Magnetic Fields (EMFs) | In accordance with NPS EN-5 paragraphs 2.10.1 - 2.10.16 a HIA has been prepared (**Appendix K.1** ES Technical Appendices (**Document Reference 6.3**)) which confirms that the Electrical Connection will be designed to conform with the EMF public exposure levels as noted in ICNIRP 1998 guidance and 1999 EU Recommendation. The HIA finds that the Electrical Connection is considered unlikely to have significant health effects as a result of exposure to EMFs and therefore no further mitigation or monitoring is considered necessary. | HIA (**Appendix K.1** ES Technical Appendices (**Document Reference 6.3**)) |

## 5.4 Waste and Residue Management, Odour, Steam and Insect Infestation

### Waste and Residue Management

5.4.1 NPS EN-1 paragraph 5.14.6 requires applicants to set out the arrangements for the management of all waste generated by development in a statement which should also consider the impact on the capacity of waste management facilities for at least five years of operation. NPS EN-3 paragraphs 2.5.77 and 2.5.78 require Applicants to describe and consider available capacity for dealing with residues arising over the planned life of the power station. NPPW Appendix B advises Waste Planning Authorities to consider litter when identifying suitable waste management sites.

5.4.2 London Plan Policy 5.3 requires developments to minimise waste generation and maximise reuse and/or recycling. LBB Policy CS09 requires waste to be managed in accordance with the waste hierarchy and in ways that protect human health and the environment. Draft London Plan Policy SI7 also requires development to provide adequate storage space for the separate collection of dry recyclables and food waste.

5.4.3 In accordance with NPS EN-1, NPS EN-3 and relevant development plan policies outlined above, the Outline CoCP (**Document Reference 7.5**) identifies the proposed management measures for waste arisings from the construction of REP as summarised below:

- A pre-construction site waste management plan (SWMP) will be prepared for the Proposed Development and implemented by the Project Director to assist in mitigating the environmental impact of construction waste;
- The Project Director will be required by the SWMP to fulfil 'Duty of Care' requirements including using licensed waste carriers, recovery / recycling / disposal at licensed waste facilities and the recording of waste movements through use of waste transfer notes; and
- Specific impacts associated with the storage of construction waste on the REP site can be managed by creating designated areas for the segregation and storage of waste.

5.4.4 The Operational Waste Statement (ES Appendix K.4 (**Document Reference 6.3**)) provides details of the proposed management routes for operational waste arisings over the lifetime of the development from the following sources: operational (office, maintenance and hazardous), Anaerobic Digestion and ERF as summarised in the following paragraphs.

5.4.5 Operational waste arisings will be managed as summarised below:

- Office - waste will be collected separately where practicable for recycling off-site. Residual waste will be fed into the ERF process at REP and food waste will be collected separately and fed into the Anaerobic Digestion element of REP;

- Maintenance - general waste (air filters, scrap metal, insulation material, oils and chemicals) will be recycled wherever possible, or managed in accordance with the relevant regulations and consigned off site; and

- Hazardous – any hazardous waste would be managed in accordance with standard waste auditing procedures and the appropriate Hazardous Waste Regulations.

5.4.6 The Anaerobic Digestion process results in two main outputs; biogas and digestate (both a liquid and a solid) which would be managed as follows:

- Biogas would be upgraded to biomethane which could either be used for Compressed Natural Gas (CNG) production or injected into a local gas network. CNG could be used as fuel for on-site vehicles however if this is not feasible then REP would incorporate a 'CHP engine' to generate electricity and heat to be used on-site; and

- Digestate would be transported off-site for use as agricultural fertiliser however should this not be possible then it would be used as a fuel for REP.

5.4.7 The ERF process results in two main outputs; Incinerator Bottom Ash (IBA) and Air Pollution Control Residue (APCR) which would be managed as follows:

- IBA would be transported in sealed containers via the River Thames to the IBA Facility at the Port of Tilbury for treatment/recycling where metal will be extracted for recycling and the remainder used as secondary aggregate within the construction sector; and

- APCR would be transported by road in sealed containers to a recycling facility (for example, Carbon8 in Brandon, Suffolk) where the APCR would to be converted into carbon negative secondary aggregates used by in the construction sector.

5.4.8 In addition, any non-compliant waste which arrives at the ERF would be removed in accordance with standard waste auditing procedures. The Operational Waste Statement (ES **Appendix K.4** (**Document Reference 6.3**)) provides examples of such procedures used within the operational RRRF.

### Odour, insect and vermin infestation

5.4.9 NPS EN-1 paragraph 5.6.1 recognises the potential for energy infrastructure to release a '*range of emissions such as odour, dust, steam, smoke, artificial light and infestation of insects'* which could have potential harmful effects on amenity. Furthermore, NPS EN-3 paragraph 2.5.59 identifies that insect and vermin infestation may be a concern with energy from waste facilities and advises that the reception, storage and handling of waste in energy from waste stations should be carried out within defined areas and within enclosed buildings. NPPW Appendix B advises Waste Planning Authorities to consider odour, vermin and birds when identifying suitable waste management sites.

5.4.10 A detailed assessment of the potential impacts from dust, smoke and odour emissions is presented in ES (**Document Reference 6.1**) **Chapter 7** and summarised in Section 5.6 of this Report.

5.4.11 REP would not emit any dark smoke as emissions are tightly controlled in accordance with EU Directives requirements although there would be occasions when there will be visible water vapour plumes from the exhaust stacks.

5.4.12 REP would be subject to the same operating procedures and standards as the existing RRRF which has operated successfully since 2011 without any issues arising with vermin and insects. In accordance with the relevant provisions of NPS EN-3 outlined above, all waste would be delivered to site by river or road and would be transported within sealed containers which are not opened until the waste is handled, stored and treated within an enclosed building. The building will operate under negative air pressure and thus no odour will be emitted to attract vermin. The Proposed Development is therefore not expected to give rise to any issues related to vermin and insects.

## 5.5 Transport

5.5.1 NPS EN-1 paragraph 5.13.1 states that: "*The transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks.*" Paragraph 5.13.3 requires that the applicant should undertake a transport assessment and consult with the Highways Agency (now Highways England) and Highways Authority regarding appropriate mitigation.

5.5.2 NPPF paragraph 110 (Chapter 9) requires development to maximise the use of sustainable transport modes to reduce the need for major transport infrastructure and paragraph 109 confirms that development should only be prevented on transport grounds where the residual impacts of development are severe (Chapter 9). NPPF paragraph 110 (Chapter 9) states that developments should provide access to public transport facilities and be designed to give priority to pedestrian/cycle movements and create safe layouts. NPPW Appendix B advises Waste Planning Authorities to consider traffic and access when identifying suitable waste management sites.

5.5.3 London Plan Policy 6.3, LBB Policy CS15 and DBC Policies CS15 and DP3 require developments to be supported by a transport assessment (TA) which assesses the impacts on transport capacity and the transport network and to promote sustainable travel modes through the preparation of Travel Plans and other management measures. London Plan Policy 6.14, Draft London Plan Policy T7, LBB Policy CS15 and DBC Policy CS16 promote the movement of freight by rail and waterways to help relieve congestion within London.

5.5.4 Draft London Plan Policy T4 also requires developments to be supported by a TA which assesses impacts on network capacity at local, network-wide and strategic level and implements the Healthy Streets Approach, set out under

Draft Policy T2, which requires development to deliver patterns of land use that facilitate residents making shorter, regular trips by walking or cycling.

5.5.5 In accordance with the relevant development plan policies outlined above, a TA has been prepared to inform ES (**Document Reference 6.1**) **Chapter 6** which assesses transport impacts on network capacity at local, network-wide and strategic level.

5.5.6 In accordance with NPS EN-1 paragraphs 5.13.1 and 5.13.3 and relevant development plan policies, ES **Chapter 6** (**Document Reference 6.1**) presents a robust assessment of potential transport impacts which considers the construction, operation and decommissioning effects of the Proposed Development based on traffic surveys undertaken in April 2018.

5.5.7 The assessment is undertaken under three scenarios: the nominal scenario which assumes that 75% of waste input will be transported to the ER by river and 25% by road, a 100% by river scenario and the reasonable worst-case scenario which assumes that 100% of waste input will be transported by road. The headline findings are summarised below.

- At construction phase the Proposed Development, without embedded mitigation, the Proposed Development could give rise to adverse driver delay effects at one junction;
- The A206/ A2016/ Bexley Road roundabout would be subject to temporary moderate adverse effects;
- However, the draft Construction Transport Management Plan (CTMP) (ES **Appendix B.1** (**Document Reference 6.3**) outlines embedded mitigation measures which would reduce these effects to Minor adverse or Negligible which is Not Significant;
- At operational and decommissioning phase the effects generated by REP are Negligible across both the nominal scenario and reasonable worst-case scenario, which is Not Significant; and
- Further transport mitigation would be secured through the implementation of the Operational Worker Travel Plan (ES **Appendix B.1** (**Document Reference 6.3**)) which would further control the number of vehicles on-site at any point and reduce reliance on private vehicles for workers and REP staff.

5.5.8 The Proposed Development is not likely to have any residual significant transport effects and therefore no further mitigation in addition to that outlined above is necessary.

5.5.9 The applicant has consulted Highways England and the Highways Authorities (TfL, LBB and KCC) as part of statutory consultation as recorded in the Consultation Report (**Document Reference 5.1**) and ES (**Document Reference 6.1**) **Chapter 6**.

5.5.10 In accordance with NPS EN-3 paragraph 2.5.25 and NPPF paragraph 110, the REP site benefits from proximity to existing transport routes (including road and waterways) and infrastructure (the Middleton Wharf jetty) and maximises the use of existing sustainable transport infrastructure. Furthermore, during operation, materials (fuel and residues) would normally be transported by the following mode split: 75% by river and 25% by road.

## 5.6 Air quality and Emissions

5.6.1 NPS EN-1 paragraph 5.2.1 explains that the construction, operation and decommissioning of infrastructure development "*can involve emissions to air which could lead to adverse impacts on health, on protected species and habitats, or on the wider countryside.*"

5.6.2 NPS EN-1 paragraph 5.6.5 requires applicants to undertake an assessment in the ES which describes: aspects of the development which may give rise to emissions and the type, quantity and timing of those emissions; effects of emissions on identified premises or locations; and measures to prevent or mitigate against the effects of emissions. NPS EN-3 paragraph 2.5.43 confirms that the decision maker should not regard the proposal as having an adverse impact on health if the assessment demonstrates that the requirements of WID are met and local air quality standards are not exceeded.

5.6.3 Paragraph 5.2.7 states that the applicant should undertake an assessment as part of the ES including:

- "*any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;*
- *the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;*
- *existing air quality levels and the relative change in air quality from existing levels; and*
- *any potential eutrophication impacts*."

5.6.4 NPPF paragraph 170 (Chapter 15) states that development should not contribute to unacceptable levels of air pollution and should improve air quality wherever possible. NPPF paragraph 181 (Chapter 15) states that development should comply with relevant limit values or national objectives for pollutants, considering the presence of Air Quality Management Areas (AQMA) and cumulative impacts. NPPW Appendix B advises Waste Planning Authorities to consider air emissions, including dust, when identifying suitable waste management sites.

5.6.5 The whole of LBB is designated as an AQMA. Part of the Application Site within DBC is within an AQMA as designated on the Dartford Policies Map.

5.6.6 London Plan Policy 7.14, LBB Policies CS15 and ENV41 and DBC Policy DC52 require that developments should minimise increased exposure to poor air quality, not lead to further deterioration of existing poor air quality and make provision to address local air quality problems. LBB Policy CS15 seeks to manage the highway network in a manner that improves air quality and LBB Policy CS18 aims to protect sites of biological significance from adverse air quality effects. Development plan policies of the neighbouring boroughs of LBBD, LBH and RBG are also relevant to the consideration of air quality effects. LBH Policy DC52, LBBD Policy CR1 and BR14, and RBG Policy E(a) and Policy E(c) aim to protect existing air quality from negative impacts of development and require developments likely to effect air quality to undertake an air quality assessment considering emission levels for prescribed pollutants.

5.6.7 Draft London Plan Policy SI1 aims to reduce exposure to air quality and requires that development proposals should not: lead to further deterioration of existing poor air quality, create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits, reduce air quality benefits from existing air quality improvement measures or create unacceptable risk of high levels of exposure to poor air quality. Draft London Plan Policy SI3 requires district heating systems to meet the requirement of Policy SI1.

5.6.8 In accordance with NPS EN-1 paragraphs 5.2.1, 5.2.7 and 5.6.5 and relevant development plan policies, an assessment of the likely air quality and emissions impacts, has been undertaken in the EIA and the findings, including appropriate mitigation measures where relevant, are presented in the ES (**Document Reference 6.1**) **Chapter 7**.

5.6.9 ES (**Document Reference 6.1**) **Chapter 7** presents a robust assessment of potential air quality impacts which considers the construction, operation and decommissioning effects of the Proposed Development on a worst-case basis and uses realistic maximum emission rates for the ERF. Embedded mitigation measures are included within the Proposed Development to reduce and offset adverse air quality effects as follows:

- Site location: the REP site is in an industrial location with the closest sensitive human receptors over 750 m to the south. This provides a buffer zone between the Proposed Development and sensitive human receptor locations;

- Stack height: a high stack achieves better dispersion of air emissions resulting in lower concentrations at sensitive receptor locations. A stack sensitivity analysis has been completed to provide an optimised stack height to adequately disperse emissions;

- Emission limit values for design and operation of the equipment: Combustion emissions from REP are controlled by the requirements of the Industrial Emissions Directive (2010/75/EU) (IED), emerging Waste

Incineration Directive BREF and the Medium Combustion Plant Directive; and

- Construction dust: the outline CoCP (**Document Reference 7.5**) is anticipated to employ the dust mitigation measures that are outlined in the dust risk assessment.

5.6.10 The air quality assessment headline findings for the REP site and Main Temporary Construction Compounds are summarised below:

- At construction and decommissioning stages the main potential air quality effects include dust deposition and associated elevation in $PM_{10}$ concentrations and emissions of NOx from road traffic, plant and equipment;
- The risk of dust impacts arising during construction is Low taking account of the proposed embedded mitigation measures. Further mitigation will be required during the construction phase of REP. At decommissioning stage a full construction dust risk assessment will need to be carried out prior to identify the appropriate mitigation;
- At operational stage the main potential air quality effects include impacts from road emissions, river emissions and ERF stack emissions;
- The magnitude of impact from road traffic is Negligible at all locations, including worst case locations, and road traffic impacts are therefore considered not significant;
- The magnitude of impact from vessel emissions is Negligible at all locations and river traffic impacts are considered not significant;
- The impact of emissions from REP have been assessed, using detailed dispersion modelling to identify maximum concentrations as well as concentrations at worst case receptors and the findings demonstrate that impacts at human health receptors are considered not significant for all pollutants and impacts on terrestrial habitats are also considered not significant;
- The Anaerobic Digestion Plant operation would result in potentially significant localised NOx concentrations effecting terrestrial biodiversity receptors in the Crossness LNR in the immediate vicinity of the REP site. ES (**Document Reference 6.1**) **Chapter 11** assesses the potential significance of this effect as being Not Significant; and
- The potential for dust and odour impacts from the operation of REP is considered to be unlikely and therefore Not Significant. Waste will be delivered in closed ISO containers within the waste reception halls which would operate under negative pressure with no outflow of air and air from within the bunker area would be used as combustion air, with odorous compounds being burnt.

5.6.11 The headline findings of the air quality assessment for the Electrical Connection and the Cable Route Temporary Construction Compounds are summarised below:

- The potential dust emissions magnitude resulting from breaking up of concrete and tarmac, earthworks, other construction activities and trackout is expected to be Small;
- The expected level of traffic during construction of the Electrical Connection and Cable Route Temporary Construction Compounds is below the threshold for a detailed assessment (IAQM 2017) and therefore any impacts are therefore considered to be Negligible; and
- The operation of the Electrical Connection will not give rise to any emissions to air during operation and therefore is not anticipated to give rise to significant adverse effects to the environment.

5.6.12 The Proposed Development is not likely to have any significant air quality effects and therefore no further mitigation is necessary.

## 5.7 Hydrology and Water Resources

5.7.1 NPS-EN1 paragraph 5.15.2 and NPS-EN3 paragraph 2.5.85 require applicants to assess the effects on water quality and resources. NPS-EN1 Paragraph 5.15.3 states that the ES should describe:

- Impacts on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges;
- Impacts of on water resources, noting proposed changes to abstraction rates (including mains supplies and reference to Catchment Abstraction Management Strategies);
- Existing physical characteristics of the water environment and any impact on these characteristics; and
- Impacts on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions.

5.7.2 London Plan Policy 5.14, LBB Policy CS09 and DBC Policy CS25 require developments to protect water courses and the quality of surface water and groundwater having regard to the Thames River Basin Management Plan. London Plan Policy 5.15 requires, inter alia, that development minimises the use of mains water. DBC Policy CS25 requires that all non-residential developments of more than 1,000 $m^2$ meet the BREEAM 'excellent' standards of water efficiency. KWMLP Policy DM 10 states that waste development will be acceptable where it does not result in the deterioration of any water resource and water body and have an unacceptable impact upon groundwater Source Protection Zones.

5.7.3 Draft London Plan Policy SI5 requires developments to protect and improve the water environment in line with the Thames River Basin Management Plan.

5.7.4 The headline findings of the EIA water quality assessment, contained in ES (**Document Reference 6.1**) **Chapter 12**, are summarised below:

- The potential effects arising during the construction and decommissioning phases of the Proposed Development would be controlled by embedded mitigation measures, such that the effects are likely to be Negligible and therefore Not Significant;
- The potential effects arising during the operational phase of REP would be controlled by embedded mitigation measures, such that the effects are likely to be Negligible and therefore Not Significant; and
- The Electrical Connection comprises an underground cable and will not therefore give rise to impacts upon hydrology and water resources during the operational phase.

5.7.5 Embedded mitigation measures are included within the Proposed Development to reduce and offset significant adverse effects upon hydrology, flood risk and water resources during the operational phase as follows:

- EA set limits on quality of water discharged from the REP site under the Environmental Permit
- Surface water management infrastructure designed in accordance with CIRIA C753 and guidance set out by the Lead Local Flood Authority (LLFA) such that the surface water run-off regime replicates that existing prior to development;
- Implementation of SuDS (i.e. interceptors and silt traps);
- Setting finished levels of power generation and ancillary infrastructure above the modelled breach flood level of the River Thames; and
- No significant adverse cumulative effects are anticipated on account of construction phase and operational phase mitigation measures being employed at REP and 'Other Developments' being constructed/operational simultaneously with REP.

## 5.8 Flood Risk

5.8.1 NPS EN-1 paragraph 5.7.4 states that all energy projects in Flood Zones 2 and 3 should be accompanied by a FRA. A FRA (**Document Reference 5.2**) has been prepared which assess the risks of all forms of flooding to and from the Proposed Development and demonstrates how flood risks will be managed, taking climate change into account.

5.8.2 NPPF paragraph 155 (Chapter 14) states in areas at risk of flooding inappropriate development should be avoided by directing development away from areas at highest risk and, where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere. NPPF paragraph 158 (Chapter 14) states that the sequential approach should be applied to steer new development to areas with the lowest risk of flooding. NPPF paragraph 162 (Chapter 14) confirms that the sequential test does not apply to allocated sites evidenced by a sequential test although the exception test may need to be applied.

5.8.3 London Plan Policies 5.12 and 5.13, Draft London Plan Policy SI13, LBB Policy CS09 and DBC Policy CS24 all require, inter alia, developments to manage water supplies and resources sustainably, prioritise the use of SuDS where appropriate to control surface water run-off, ensure adequate waste water capacity and manage surface water as close to the source as possible having regard to the Thames Estuary 2100 and Catchment Flood Management Plans. LBB Policy CS09 and DBC Policy CS24 require, inter alia, flood risk to be managed as advocated in national planning policy. LBB Policy CS09 and CS08 requires flood risk management proposals to follow the recommendations of the LBB Strategic Flood Risk Assessment and to take account of climate change. KWMLP Policy CSW 6 requires that waste management proposals avoid Groundwater Source Protection Zone 1 and Flood Zone 3b.

5.8.4 Draft London Plan Policy SI12 states that FRAs should minimise and mitigate against flood risk and address residual risk; requires proposals to contribute towards measures set out in the Thames Estuary 2100 Plan; and requires development adjacent to flood defences to protect the integrity of flood defences and allow for future maintenance.

5.8.5 The key tests in respect of flood risk are contained at NPS EN-1 paragraph 5.7.9 which states that the decision maker should be satisfied where relevant that:

- "*the application is supported by an appropriate FRA;*
- *the Sequential Test has been applied as part of site selection;*
- *a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;*
- *the proposal is in line with any relevant national and local flood risk management strategy;*
- *priority has been given to the use of sustainable drainage systems (SuDs) and*
- *in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development."*

5.8.6 The FRA (**Document Reference 5.2**) has been prepared in consultation with the EA, LBB and KCC (as LLFAs in accordance with NPS EN-1) paragraph 5.7.7 which considers the REP site and the Littlebrook Power Station substation. In respect of key tests set out in NPS EN-1, the FRA finds that:

- The REP site and Electrical Connection Point at Littlebrook substation are within Flood Zone 3 (high probability). Although both areas benefit from flood defences which afford protection for up to a 1 in 1,000 years' event there is a residual risk of flooding from the failure of tidal flood defences.
- Mitigation measures have been built in to the proposals which are designed to cater for the predicted impacts of climate change:
- Finished floor levels within the REP site will be set above the 0.5% (1 in 200 year) AEP flood level, including an allowance for climate change;
- Flood sensitive equipment is to be located a minimum of 400 mm above the finished floor level in the north-western part of the REP site; and
- Below ground cable installation works at Littlebrook substation will be undertaken in accordance with UKPN Engineering Design Standard EDS 07-0106 (Substation Flood Protection).

5.8.7 A surface water management strategy (Section 7) has been prepared for the REP site in accordance with paragraph 5.7.18 which is designed to limit surface water outflows to the greenfield rate in accordance with the requirements of the LLFA. The EA has confirmed that the use of SuDS would not be appropriate due to the high-water table and potential risk of groundwater contamination. The surface water run-off regime at Littlebrook substation will be unaffected by the proposals;

- The REP site lies within a designated growth area such that, in accordance with paragraph 5.7.12 and NPPF 2018 paragraph 162 (Chapter 14) it is not necessary to apply the Sequential Test;
- The Exception Test has been applied and it is concluded that the proposals accord with the requirements of the NPPF 2018 and paragraph 5.7.15 in that the Proposed Development will:
  - provide wider sustainability benefits to the community that outweigh flood risk in terms of providing a decentralised source of renewable/low carbon electricity and delivering the potential for CHP;
  - comprise previously developed land; and
  - be safe for its lifetime without increasing flood risk elsewhere.

5.8.8 The Proposed Development incorporates safe access and exit arrangements which ensure that operational staff/visitors are safe during periods of flooding (See Section 9.3 of the FRA (**Document Reference 5.2**)).

## 5.9 Noise and Vibration

5.9.1 NPS EN-1 paragraph 5.11.1 acknowledges that excessive noise can have wide-ranging impacts on the quality of human life, health, and use and enjoyment of areas, as well as on wildlife and biodiversity (paragraph 5.11.2). Where noise impacts arise, NPS EN-1 paragraph 5.11.4 and NPS-EN3 paragraph 2.5.53 both require that a noise assessment should be provided, to include: a description of the noise generating aspects of the proposal, identification of noise sensitive areas, the characteristics of the existing noise environment, and a prediction of how the noise environment will change.

5.9.2 NPPF paragraph 170 (Chapter 15) states that development should be prevented where it would contribute to or be subject to unacceptable risk from noise pollution. NPPF paragraph 180 (Chapter 15) requires potential adverse noise impacts for development to be reduced to a minimum through mitigation measures to avoid to significant adverse health impacts and protect tranquil areas which are valued for being relatively undisturbed by noise. NPPW Appendix B advises Waste Planning Authorities to consider noise, light and vibration when identifying suitable waste management sites.

5.9.3 London Plan Policy 7.15, LBB Policy CS09, DBC Policy DP5 and KMWLP Policy DM11 require, inter alia, new development, individually or cumulatively, to avoid significant adverse noise and vibration impacts on health and quality of life. London Plan Policy 7.15 promotes the use of new technologies and practices to reduce noise at source and requires mitigation measures to be included provided they do not place an unreasonable burden on businesses.

5.9.4 Draft London Plan Policy D12 states that development should be designed to ensure that established noise uses can continue or grow without unreasonable restrictions being placed on them reflecting the Agent of Change Principle. Draft London Plan Policy D13 states that noise should be managed to avoid significant adverse noise impacts on health and quality of life, mitigate adverse noise impacts without placing unreasonable restrictions on existing noise-generating uses and adopt new technologies and practices to reduce noise at source and on the transmission path.

5.9.5 In accordance with the provisions of NPS EN-1, NPS EN-3 and relevant development plan policies outlined above, an assessment of the likely noise and vibration impacts associated with the Proposed Development has been undertaken in the EIA and the findings are presented in **Chapter 8** of the ES (**Document Reference 6.1**).

5.9.6 NPS EN-1 paragraph 5.11.12 states that mitigation measures relating to noise and vibration may include engineering, layout design, or administrative measures. In accordance with NPS EN-1 paragraph 5.11.12 the site has been selected due to its distance from noise sensitive receptors and specific plant has also been selected to reduce the noise impact. The proposed site layout places noisier items of plant including the stack at the northern boundary of the site, furthest away from the nearest noise sensitive receptors. Embedded

mitigation measures are included within the outline CoCP (**Document Reference 7.5**) to minimise noise from the construction activities.

5.9.7 The headline findings of the EIA noise and vibration assessment are summarised below:

- The construction and decommissioning phases of the Proposed Development are likely to give rise to a Negligible temporary effect at the defined Noise Sensitive Receptors;
- The construction effects associated with the Electrical Connection route are not considered to be significant with mitigation measures as detailed in the outline CoCP (**Document Reference 7.5**);
- The noise effects from REP have been calculated to be at least 5 dB below the background sound levels at the nearest sensitive receptors during both the daytime and night-time assessment periods. On this basis, the effect is considered to be Negligible and not significant;
- The operation of the Electrical Connection is not anticipated to give rise to significant adverse noise effects and has been scoped out as agreed through the Scoping Opinion; and
- The cumulative assessment finds that there are no overlapping noise sensitive receptors of significance and therefore significant adverse cumulative operational effects are not anticipated to be likely.

5.9.8 The Proposed Development is not likely to have any significant noise and vibration effects and therefore no further mitigation is necessary in addition to the embedded mitigation measures detailed in the outline CoCP (**Document Reference 7.5**).

## 5.10 Biodiversity and Geological Conservation

5.10.1 In respect of biodiversity and geological conservation, NPS EN-1 paragraph 5.3.3 advises that the applicant should ensure that the ES "*clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity.*"

5.10.2 Part of the Application Site in Dartford is within a Biodiversity Opportunity Area and borders a Local Wildlife Site and a Nature Improvement Area as designated on the Dartford Policies Map. Part of the Application Site in Bexley is within an Area of Metropolitan Importance for Nature Conservation as designated on the Bexley Saved UDP Policies Proposals Map.

5.10.3 NPPF paragraph 170 (Chapter 15) states, inter alia, that development should enhance the environment by minimising impacts and providing net biodiversity gains wherever possible. NPPF paragraph 175 (Chapter 15) states that:

- Development should be refused where significant harm to biodiversity cannot be avoided, mitigated or, as a last resort, compensated for;

- Development which is likely to have an adverse effect on a site of special scientific interest (SSSI) should not be permitted except where the benefits clearly outweigh the impacts on site specific features of special scientific interest and the national network of SSSIs;

- Development resulting in the loss or deterioration of irreplaceable habitats should be refused, unless there are exceptional reasons and a compensation strategy exists; and

- The NPPF confirms that such exceptional reasons may include NSIPs where the public benefit would clearly outweigh the loss of habitat.

5.10.4 NPPW Appendix B advises Waste Planning Authorities to consider impacts on nature conservation when identifying suitable waste management sites. London Plan Policy 7.19, LBB Policy CS18 and DBC Policy DP25 require developments to make a positive contribution to the protection, enhancement, creation and management of biodiversity wherever possible and should not adversely affect designated sites, protected species or priority species. DBC Policy DP25 states that development in designated nature conservation sites will not be permitted and development near such sites must demonstrate that it would not adversely impact defining features of ecological value. LBB Policy CS17, ENV32 and ENV33 all aim, inter alia, to resist development of open land and land within and adjoining SSSIs respectively except where it can be demonstrated that there would be no damage to scientific or nature conservation interests. LBB Policy ENV28 also seeks to resist development in LNRs which would undermine its special characteristics. KMWLP Policy DM2 states that waste development should not have an unacceptable adverse impact on environmental sites of international, national and local importance.

5.10.5 London Plan Policy 7.19 confirms that where a proposal would affect a site of recognised nature conservation interest, the following hierarchy will apply: avoid adverse impact, then minimize impact and then seek mitigation and finally seek appropriate compensation only where the benefits of development clearly outweigh the biodiversity impacts.

5.10.6 Draft London Plan Policy G.6 aims to secure net biodiversity gain; requires development near SINCs or green corridors to consider the potential impact of indirect effects; and protect SINCs but where harm to a SINC is unavoidable and/or the benefits of the development clearly outweigh the biodiversity impacts then the following mitigation hierarchy should be applied: avoid damaging the significant ecological features of the site then minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site and then seek appropriate compensation off-site based on biodiversity offsets.

5.10.7 In accordance with the provisions of NPS EN-1 and relevant development plan policies outlined above, an assessment of the likely effects on internationally,

nationally and locally designated sites of ecological or geological conservation importance, on protected species, and on habitats and other species of principal importance has been undertaken in the EIA and presented in ES (**Document Reference 6.1**) **Chapter 11** (Biodiversity) and **Chapter 13** (Ground conditions).

5.10.8 ES **Chapter 11** concludes that the Proposed Development with embedded mitigation would not result in any residual adverse ecological effects on the limited number of ecological features identified taking account of the policy objective to achieve biodiversity net gain.

5.10.9 In accordance with NPS EN-1 paragraph 5.3.18 embedded mitigation measures have been included within the Proposed Development from the outset to minimise ecological receptors, as summarised below:

- The REP site is on previously developed land comprised of hardstanding;
- Trenchless installation techniques will be used for the Electrical Connection route and for route option 1 an offset of at least 5 m from the top of ditch bank will be applied to reduce impacts to water voles;
- Noise effects during construction will be mitigated through measures as detailed in Section 5.9 of this Report and operational noise effects will be mitigated through selection of integrated plant with low noise outputs;
- Impacts from airborne emissions have been minimised through an optimised stack height to adequately disperse emissions;
- The Outline Lighting Strategy (ES **Appendix K.3** (**Document Reference 6.3**) has been prepared in consultation with an ecologist to ensure effects to designated areas from light spill are avoided or minimised. A Full Lighting Design will be a DCO requirement; and
- The REP site SWMS will manage run-off from the REP site in a sustainable manner which will deliver 'betterment' over the existing runoff regime.

5.10.10 In addition, further mitigation and enhancement will be secured to compensate for the impact of the Proposed Development as follows:

- A financial contribution to the Environment Bank with a legal agreement for contribution towards enhancement of habitats outside the Application Boundary is proposed to compensate for the loss of habitats of ecological value within the REP site;
- Designated areas of ecological value and protected or notable species within or adjacent to REP will be protected from significant indirect adverse effects by measures outlined in the Biodiversity Mitigation Strategy contained within the outline CoCP (**Document Reference 7.5**) and the subsequent detailed CoCP; and

- An Outline Biodiversity and Landscape Mitigation Strategy (**Document Reference 7.6**) has been prepared which makes provision for further mitigation including: parameters that will be applied when replacing/creating habitats, a 'reasonable worst case' natural capital valuation of habitat lost and disturbed and offsetting monitoring and reporting obligations.

5.10.11 NPPF paragraph 178 (Chapter 15) requires, inter alia, that planning decisions should ensure that a site is suitable for its proposed use, including any mitigation, taking account of ground conditions, risks arising from land instability and contamination and potential environmental impacts. NPPW Appendix B advises Waste Planning Authorities to consider protection of water quality and land instability when identifying suitable waste management sites.

5.10.12 London Plan Policy 7.20 and LBB Policy CS18 require, inter alia, development proposals to protect and enhance geodiversity wherever possible. London Plan Policy 5.21 and LBB Policy CS09 support the remediation of contaminated sites particularly where this will ensure that brownfield land can be brought to beneficial use such as employment growth. London Plan paragraph 5.95A requires development to make provision for mitigation where potentially contaminating activities are proposed.

5.10.13 LBB Policy ENV40 requires applicants to survey sites to determine the source of pollutants and necessary remedial measures necessary to prevent hazards. DBC Policy DP5 states that development should not result in unacceptable material impacts on amenity and safety factors including land instability and ground contamination.

5.10.14 Draft Policy London Plan Policy GG2 aims to enable the redevelopment of brownfield land and prioritise the development of land which is well-connected by public transport infrastructure.

5.10.15 In respect of geology and ground conditions, in accordance with the provisions of NPS EN-1 and relevant development plan policies outlined above, **Chapter 13** of the ES (**Document Reference 6.1**) presents an assessment of impacts on ground conditions and the findings are summarised below:

- Potential effects on all sensitive geological receptors is anticipated to be Negligible provided the further recommended assessments are undertaken to enable appropriate mitigation measures to be included at the construction stage;

- Potential effects on ground, groundwater and surface water contamination and hazardous ground gases do not pose an unacceptable constraint to the Proposed Development; and

- Appropriate design and construction methods would provide embedded mitigation and reduce residual impacts to an acceptable level.

5.10.16 In accordance with NPS EN-1 paragraph 5.3.18 the outline CoCP (**Document Reference 7.5**) provides for the following embedded mitigation measures;

requirement for a Foundation Works Risk Assessment (FWRA), adherence to the EA guidance 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination' (2001), the option for trenchless installation techniques along the ECR where it passes through the former historical inert landfill south of Bob Dunn Way and other measures to reduce exposure to construction dust and vapour.

5.10.17 The CoCP, to be secured as a DCO requirement, would provide additional mitigation measures including: a protocol in the event of previously undiscovered contamination being encountered during construction.

5.10.18 The following best practice working methods would be implemented at construction and operational stages to provide further mitigation: the preparation and adherence to a Materials Management Plan (MMP) and adherence to the Applicant's existing Environmental Management System and the Waste Duty of Care Code of Practice (March 2016).

## 5.11 Townscape and Visual Impact

5.11.1 NPS EN-1 paragraph 5.9.1 acknowledges that the landscape and visual effects of energy projects will vary according to the type of development, its location and the landscape setting. NPS EN-1 paragraphs 5.9.5 – 5.9.7, NPS EN-3 paragraph 2.5.48 and NPS EN-5 paragraph 2.8.4 advise applicants to carry out a landscape and visual impact assessment of the effects during construction and operation, including light pollution effects on local amenity and nature conservation.

5.11.2 NPPW Appendix B advises Waste Planning Authorities to consider landscape and visual impacts when identifying suitable waste management sites. London Plan Policy 7.6 and LBB Policy ENV39 require developments to make a positive contribution to the street scene and cityscape and incorporate the highest quality materials and design appropriate to its context. Bexley Core Strategy paragraph 3.3.5 confirms that large buildings for waste management will very likely be appropriate in strategic employment locations.

5.11.3 Although the Bexley Saved UDP Policies Proposals Map (2004) and LBB Policy ENV39 identify that the REP site falls within the East London Panorama from Beckton Alps strategic viewing corridor this is not assessed in the ES (**Document Reference 6.1**) because the relevant part of Policy ENV39 is now out of date and therefore not relevant to the REP DCO application. This view is not designated as one of the 27 protected strategic views of London under London Plan Policy 7.11 and is not included in the current London View Management Framework (LVMF) SPG (2012) nor has it been included in previous versions of the SPG (2007 and 2010).

5.11.4 In accordance with the provisions of NPS EN-1, NPS EN-3 and relevant development plan policies outlined above, an assessment of the likely townscape and visual effects of the Proposed Development has been undertaken and the findings are presented in the ES (**Document Reference**

**6.1**) **Chapter 9**. The maximum parameters of the building envelope have been assessed in ES **Chapter 9** which represents the reasonable worst-case scenario for the Proposed Development and assumes that REP will have a maximum stack height of 113 m Above Ordnance Datum (AOD), a maximum building height of 65 m AOD and that the finished building materials are not known.

5.11.5 As set out in ES **Chapter 9**, in accordance with NPS-EN3 paragraphs 2.5.50 - 2.5.51 embedded mitigation has been included in the Proposed Development and the CoCP to minimise the potential for townscape and visual effects including but not limited to:

- Construction areas would be laid out to minimise adverse impacts arising from temporary structures, construction activities and lighting;
- Use of construction site lighting outside normal working hours would be restricted to the minimum necessary for workforce and public safety, and for security. Directional luminaries would be used to limit unwanted light spills;
- Tree protection fencing;
- Hoardings erected around the area of construction works, to create a temporary visual barrier to construction activities and also as a safety measure, to prevent access to the general public;
- Temporal measures including the removal of all temporary structures and stockpiles when no longer required, and prompt reinstatement of construction areas;
- Replacement of trees, shrubs and hedgerows which have been removed to accommodate the Electrical Connection, subject to underground constraints and as far as practicable. Replacement planting would be maintained for a minimum of 12 months to ensure full and successful establishment;
- Orientation of the Main REP Building on a north-south axis to allow for visual permeability through the REP site from Belvedere to the River Thames; and
- An Outline Biodiversity and Landscape Mitigation Strategy (secured as a DCO Requirement) has been prepared (**Document Reference 7.6**).

5.11.6 In addition to above, the following Design Principles (**Document Reference 7.4**) have been applied to the Proposed Development in order to minimise potential effects:

- A stepped building form design has been progressed to reduce the physical envelope of the Main REP building and its perception of scale as explained in the Design and Access Statement (**Document Reference 7.3**);

- A simplicity of architectural form, with form following function, resulting in a dynamic interplay of buildings along the riverscape, and an inter-connecting family of building forms on the site;

- Celebrating the historical industrial nature of the site, and its industrial character with glimpses of process operations through semi-solid screens which break down the solidity of the building masses;

- Use of graded colour schemes, materials, and branding to reduce the perceived height of the Main REP Building - with upper elements of buildings lighter and lower levels darker;

- The choice of colours will draw on the initial colour studies illustrated in the DAS and the context colour palettes, allowing the building and structures to respond to the surrounding landscape, townscape and riverscape and provide harmony to the building; and

- Neutral and non-reflective colour palette for façade materials to avoid glare, with accent colours used to assist way orientation, and intuitive wayfinding, and enhance the REP identity and sense of place.

5.11.7 The headline findings of the townscape and visual assessment presented in ES (**Document Reference 6.1**) **Chapter 9** are summarised below:

- During the construction phase, the following activities present the key potential for townscape and visual effects to arise: site clearance works, earthworks, construction of internal roads, construction lighting, temporary buildings, movement of large scale construction equipment and presence of temporary hoardings, protective fencing and signage;

- There is potential for the construction of REP and the Main Temporary Construction Compounds to give rise to significant Moderate adverse residual effects on certain Visual Receptors and the Character of the REP site;

- The Main REP Building and the stack present the key potential for townscape and visual effects to arise during the operational phase. Although REP is within an existing industrial area the maximum parameters of REP are larger than the adjacent existing developments and so there would be a change to the skyline and to the scale of development;

- There is potential that the operational phase of REP could give rise to significant Moderate adverse residual effects on certain visual receptors within 1 km of REP's stack and/or of greater sensitivity (SA-1-East, 2, 3 and SA-1 West, 6, 11);

- There is also the potential that the operational phase of REP could give rise to significant Moderate adverse impacts on certain townscape receptors (Crossness Conservation Area; character; designated Public Open Space;

landscapes, and scrubland habitats; appearance; and scale, grain and massing and legibility); and

- The construction, operation and decommissioning of the Electrical Connection is not expected to give rise to any significant Moderate adverse residual effects.

5.11.8 No further mitigation or enhancement is considered necessary in addition to the design process that will be progressed in accordance with Design Principles (**Document Reference 7.4**). This will include design development of colours and materials in context to the surroundings and in line with Context Colour Palettes, details of this are set out within the Design and Access Statement (**Document Reference 7.3**).

5.11.9 In accordance with the provisions of NPS EN-1 section 4.5 and NPS EN-3 paragraphs 2.5.46 to 2.5.52 the Applicant has sought to adopt good design principles from the outset of the project.

## 5.12 Historic Environment

5.12.1 NPS EN-1 paragraph 5.8.1 advises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment. Accordingly, NPS EN-1 paragraph 5.8.8 states that the applicant is required to '*provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance'.*

5.12.2 NPPF paragraph 189 (Chapter 16) requires applicants to describe the significance of any heritage assets, including their setting, affected by development providing a level detail which is proportionate to the assets' importance and where a site has potential archaeological interest applicants should submit a desk-based assessment and a field evaluation where necessary. NPPF paragraph 194 (Chapter 16) states that convincing justification should be provided for development which would lead to any harm to designated heritage assets significance and that substantial harm to grade II listed buildings, parks or gardens should be exceptional and that substantial harm to assets of the highest significance[3] should be wholly exceptional. The NPPF confirms that non-designated archaeological assets of equivalent significance to scheduled monuments, should also assessed as designated heritage assets. NPPW Appendix B advises Waste Planning Authorities to consider conserving the historic environment when identifying suitable waste management sites.

5.12.3 London Plan Policy 7.8, LBB Policy CS19, DBC Policies DP12 and DP13, and KMWLP Policies DM 5 and DM6 require that development proposals incorporate measures that identify, record and protect on-site archaeology and identify, conserve and restore/re-use heritage assets where appropriate. Where

[3]Scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites

development would affect a heritage asset or its setting London Plan Policy 7.8 requires the incorporation of sympathetic design measures to conserve its significance. Development plan policies of the neighbouring boroughs of LBBD and LBH are also relevant to the consideration of heritage effects. LBH Policies CP18 and DC67 and LBBD Policies BP2 and CP2 require inter alia development affecting heritage assets to preserve or enhance their character and appearance and maintain their significance.

5.12.4 Draft London Plan Policy HC1 requires, inter alia, development proposals affecting heritage assets or their setting to conserve their significance through sympathetic design and to identify enhancement opportunities early in the design process. The draft policy also requires development should minimise harm to assets of archaeological significance through design and appropriate mitigation and by making provision for the protection of significant archaeological assets and landscapes where appropriate.

5.12.5 In accordance with the provisions of NPS EN-1 paragraph 5.8.1 and relevant development plan policies outlined above, a full assessment has been undertaken in the EIA of the potential impacts of the Proposed Development on the historic environment presented in ES (**Document Reference 6.1**) **Chapter 10** and supported by a Heritage DBA (ES **Appendix F.1**, **Document Reference 6.3**) and a geo-archaeological deposit model (ES **Appendix F.2**, **Document Reference 6.3**).

5.12.6 ES (**Document Reference 6.1**) **Chapter 10** concludes that there is Low potential for previously unrecorded archaeological remains within the REP site and Main Temporary Construction Compound and that there are no designated heritage assets within the REP site, Main Temporary Construction Compound or Electrical Connection route although the Electrical Connection route passes a number of Conservation Areas.

5.12.7 **Figure 10.1** shows archaeological assets and archaeological priority areas and **Figure 10.2** shows designated and built heritage assets within the wider study area at ES (**Document Reference 6.1**) ES **Appendix F.1** (**Document Reference 6.3**). The wider study area of the REP site contains 13 designated and built heritage assets located up to 2.5km away from the REP site which include: one scheduled monument (Lesnes Abbey), one Conservation Area (Crossness Conservation Area), two grade I Listed buildings, five grade II* Listed buildings, two grade II listed workshops, a grade II listed jetty at Dagenham Dock and four locally listed 20th century concrete Police Boxes.

5.12.8 The heritage assessment considers all the above heritage assets to be of high heritage significance and potentially sensitive to indirect impacts through changes to their setting.

5.12.9 The headline findings from the historic environment assessment are summarised below:

- The construction of REP has the potential to affect non-designated geo-archaeological heritage assets however the significance of this effect is considered Minor and Not Significant in EIA terms;

- Subject to the following further mitigation works the scheme would result in a Minor Beneficial Residual Effect: a written scheme of investigation (WSI) will be agreed through a Statement of Common Ground with relevant parties which will make provision, if required, for the excavation of two boreholes for palaeoenvironmental assessment, analysis and publication;

- The construction of the Electrical Connection Route Options has potential for previously unrecorded sub-surface archaeological remains of Local Significance however the partial removal of potential fragmentary deposits is considered a Negligible Adverse Magnitude of Impact and the significance of this effect is considered permanent Negligible and not significant in EIA terms;

- Subject to the following further mitigation works the scheme would result in a Negligible Residual Effect: a WSI identifying areas for further archaeological investigations will be secured as requirement 7 of the draft DCO (**Document Reference 3.1**); and

- The construction and operational stages of the Proposed Development will result in no more than a Minor adverse impact on the significance of designated and built heritage assets. Taking into consideration the presence of a significant number of tall industrial structures in proximity to the REP site, the potential effects will be experienced within a context where industrial structures are already present in the same area. The decommissioning of the REP site will remove any slight adverse effects that will have been introduced during its operation.

## 5.13 Socio-economic Impact

5.13.1 NPS EN-1 paragraph 5.12.1 states that "*the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels".* Paragraph 5.12.2 – 5.12.3 advises that an assessment should be undertaken of all relevant socio-economic impacts, which may include: the creation of jobs and training opportunities, the provision of additional local services and improvements to local infrastructure, effects on tourism, the impact of a changing influx of workers during different phases of the project, and cumulative effects.

5.13.2 NPPF paragraph 80 (Chapter 6) states that significant weight should be placed on the need to support economic growth and paragraph 82 requires that planning decisions recognise the locational requirements of different sectors. NPPF paragraphs 92 to 94 (Chapter 8) require an integrated approach to the location of economic uses and community facilities to meet community's needs. NPPF paragraphs 117 and 118 (Chapter 11) support the development of under-utilised land and brownfield land. NPPF paragraph 180 (Chapter 15) seeks to

protect the environment, health and amenity against adverse effects from development.

5.13.3 NPPW Appendix B advises Waste Planning Authorities to consider the potential to export heat from ERFs as an energy source when identifying sites for such facilities.

5.13.4 The Proposed Development supports the following objectives of London Plan Policy 1.1 which include; a city that meets the challenges of economic and population growth (a); an internationally competitive and successful city (b); and a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities (f).

5.13.5 London Plan Policy 5.16 states that the Mayor will seek to create positive environmental and economic impacts from waste processing and Objective 3 of the MMWMS seeks to increase the generation of low carbon energy from waste to generate economic value. Bexley Core Strategy paragraphs 4.5.1 and 4.11.2 explain that Bexley's economy has a strategic role in providing waste management services which places it at the forefront of sustainable waste management in London. DBC Policy CS8 states the Council will support key growth sectors including environmental technologies and DBC Policy CS9 requires developments to provide skills training and education commensurate with their size to ensure the provision of a locally skilled workforce. The KMWLP aims to enable waste developments to contribute to deliver social and economic benefits though employment opportunities.

5.13.6 LBB Policy CS01 promotes sustainable development which maximises the efficient use of physical resources whilst addressing pollution issues. LBB Policy CS13 supports developments which intensify existing land-uses and improve local job opportunities and LBB Policy G4 states that the Council aim to provide all sections of the borough's population have access to, jobs, leisure, social and community facilities.

5.13.7 LBB Policy CS12 states that the Council will promote sustained economic and employment growth while the Bexley Growth Strategy aims to secure the highest rates of economic growth in London and increase and improve employment, skills, infrastructure and participation to support the competitiveness of Bexley, London and the wider south east.

5.13.8 The following draft London Plan Policies are also considered relevant and summarised below:

- Draft London Plan Policy S17 - requires no biodegradable or recyclable waste to be sent to landfill by 2026;

- Draft London Plan Policy S18 - requires the equivalent of 100% of London's waste to be managed within London (i.e. net self-sufficiency) by 2026 and seeks to optimise the capacity of existing waste management sites;

- Draft London Plan Policy SD1– aims to ensure that Opportunity Areas maximise the delivery of affordable housing; contribute to regeneration objectives by tackling spatial inequalities and environmental, economic and social barriers; and support SILs by intensifying and making more efficient use of land. The Application Boundary is located within the Bexley Riverside Opportunity Area;

- Draft London Plan Policy GG1 - seeks to ensure changes to the physical environment achieve an overall positive contribution to London considering access to community facilities, infrastructure and economic opportunities;

- Draft London Plan Policy GG2 – aims to make the best use of land by enabling the redevelopment of brownfield land and prioritise the development of land which is well-connected by public transport infrastructure;

- Draft London Plan Policy GG5 – aims to enhance London's global economic competitiveness by planning for sufficient employment space and providing physical and social infrastructure, including housing, to support London's growth;

- Draft London Plan Policy GG6 – aims to improve London's resilience by: promoting a low carbon circular economy and transitioning towards a zero carbon city by 2050; ensuring that development is designed to adapt to a changing climate; and taking an integrated approach to the delivery of infrastructure across the public, private, community and voluntary sectors;

- Draft London Plan Policy E8 – supports the development of business growth and employment opportunities for Londoners; and

- Draft London Plan Policy SI2 – states that major development should be net zero-carbon and requires development to reduce greenhouse gas emission by applying the energy hierarchy.

5.13.9 In accordance with the provisions of NPS EN-1 paragraph 5.12.1 and relevant development plan policies outlined above, a socio-economic assessment has been undertaken as part of the EIA which assesses the likely significant effects on the local, regional and national economy during construction, operation and decommissioning of the Proposed Development. The socio-economic assessment is presented in the ES (**Document Reference 6.1**) **Chapter 14** and the headline findings are summarised below:

- The construction and decommissioning phase of the Proposed Development results in a Slight/Moderate Beneficial impact on the labour market; construction at the REP site would support an equivalent of 837 temporary construction jobs and contribute £93.3 million GVA to the wider economy during the construction and operational phase of the Proposed Development;

- The employment effects result in a Negligible impact on community infrastructure; the study area can accommodate the construction of REP in terms of the available labour market. The temporary nature of the construction phase means that it is unlikely that specialist skilled workers from outside the study area would relocate permanently. Experience from RRRF shows that workers from outside the local area would likely stay in local hotels/B&Bs during the working week;

- The operation of REP on the labour market results in a likely Minor Beneficial effect; it would provide an estimated minimum 75 FTE direct jobs (65% jetty/site operational jobs, 20% operational jobs and 15% technician/fitter jobs). Operational employment demand would not result in any noticeable labour market pressure within the wider region or exert negative pressure through labour shortages and wage increases. Based on average GVA levels, REP operation would provide approximately £16.8m GVA per annum and £24.9m GVA per annum to the local and national economy respectively; and

- The operation of the REP on community infrastructure is Negligible; the anticipated number of construction workers likely to relocate to the study area is minimal however the community infrastructure baseline shows that there is availability within local facilities to accommodate workers.

5.13.10 The cumulative assessment identifies that the construction of REP is expected to overlap with 77 general construction schemes and 4 specialist major thermal energy generation schemes (50MWe+) although the assessment concludes that no additional cumulative effects are expected at construction or operational phase.

5.13.11 NPS EN-1 paragraph 5.12.9 states that mitigation measures relating to socio-economic impacts could include improvements to the visual and environmental experience for visitors and the local community through high quality design.

5.13.12 ES (**Document Reference 6.1**) **Chapter 14** concludes that the Proposed Development is not anticipated to have any significant effects on the labour market or community infrastructure and that although the assessment is not reliant on embedded mitigation the Applicant has sought to incorporate further mitigation into the Proposed Development, including:

- Making a number of bookings with specific local accommodation providers who have capacity to accommodate workers;

- Existing preference to recruit in the borough for RRRF where possible and a similar approach is likely to be followed for the Proposed Development; and

- Good design principles have been applied from the outset of the Proposed Development as detailed in the Design and Access Statement (**Document**

**Reference 7.3**) and that the design will be progressed in accordance with Design Principles (**Document Reference 7.4**).

## 5.14 Civil and military aviation and defence interests

5.14.1 NPS EN-1 paragraph 5.4.1 advises that civil and military aviation and defence interests can be affected by new energy development and NPS EN-1 paragraph 5.4.10 states that an assessment of potential effects should be set out within the ES (**Document Reference 6.1**). NPS EN-1 paragraph 5.4.11 states that, in addition, the Ministry of Defence (MoD), Civil Aviation Authority (CAA), NATS and any aerodrome likely to be affected by the proposed development should be consulted.

5.14.2 London Plan Policy 7.13 states that development should ensure a safe and secure environment is maintained in London that is resilient against emergencies including fire, flood, weather, terrorism and related hazards.

5.14.3 In accordance with NPS EN-1 paragraph 5.4.11, the MoD, CAA and NATS were all consulted during statutory section 42 consultation, as detailed in the Consultation Report (**Document Reference 5.1**). The MoD, CAA and NATS raised no objection to the Proposed Development to date as recorded in the Consultation Report .

5.14.4 In accordance with NPS EN-1 paragraph 5.4.10, an assessment of potential effects on civil and military aviation and defence interests has been undertaken as part of the EIA and the findings are presented in the Statement on Aviation (ES **Appendix K.5** (**Document Reference 6.3**)).

5.14.5 It is considered that sufficient mitigation exists, in the form of notification with safeguarded airfields and with relevant stakeholders at the appropriate time to limit any potential effects. Additionally, appropriate aviation lighting would be applied to any structures exceeding height thresholds (e.g. 60 m AGL for temporary cranes). Once the grid coordinates of the Proposed Development are finalised, they would be reported to the relevant aviation authorities (e.g. CAA, MOD, DGC) as required in the CoCP, so that they could be recorded on aviation mapping. Coupled with the precedent for existing comparable structures already set in the immediate locality of the REP site, effects to civil or military aviation or defence interests are not anticipated to be significant alone or in combination with other developments.

## 5.15 Land Use Including Open Space & Green Belt

5.15.1 NPS EN-1 paragraph 5.10.1 acknowledges that an energy infrastructure project "*will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development*." Accordingly, applicants should consult the local community (paragraph 5.10.6) and the ES (**Document Reference 6.1**) should include an assessment of the impact of the proposed development on existing and proposed land uses near the project.

5.15.2 NPPW Appendix B advises Waste Planning Authorities to consider potential land use conflict when identifying suitable waste management sites. DBC Policy DP5 states that development should not materially impede the continuation of lawfully existing uses and that applications should not be approved where such impacts cannot be adequately mitigated.

5.15.3 In accordance with NPS EN-1 paragraph 5.10.1 the Applicant has undertaken extensive pre-application consultation with statutory consultees, land interests and the local community via a structured consultation programme, as recorded within the Consultation Report (**Document Reference 5.1**).

5.15.4 Furthermore, in accordance with NPS EN-1 paragraph 5.10.6, an assessment of the potential impact of the Proposed Development on surrounding land uses has been undertaken as part of the cumulative assessment within each technical chapter of the EIA (transport, air quality, noise and vibration, townscape and visual impact (TVIA), historic environment, terrestrial biodiversity, hydrology, flood risk and water resources, ground conditions and socio economics) and is recorded within the ES (**Document Reference 6.1**) Chapters 6-14.

5.15.5 In terms of the existing site, there are not expected to be any adverse impacts on the REP site as a result of the Proposed Development since it is currently used for range of operations associated with energy generation and waste management. As explained in Section 2.3, the REP site is currently used in connection with the existing RRRF operated by Cory for private vehicle circulation areas, the jetty access ramp, staff and visitor parking, open container storage, contractor maintenance, an electrical substation and associated landscape/habitat areas. The Proposed Development would result in an intensification of the existing use of the REP site for energy generation and waste management uses which would complement the existing RRRF.

5.15.6 NPS EN-1 paragraph 5.10.19 notes that there may be little that can be done to mitigate the direct effects of the energy project on the existing use of the proposed site; however, the effects may be minimised through the application of good design principles, including site layout of the project.

5.15.7 In accordance with NPS EN-1 paragraph 4.5.1, NPS EN-5 paragraph 2.5.2, NPPF Chapter 12 and London Plan Policy 7.7, good design principles, outlined in the Design and Access Statement (**Document Reference 7.3**) and Design Principles (**Document Reference 7.4**), have been incorporated into the Proposed Development from the outset such that the Proposed Development provides an appropriate design response to its setting. The design process will be progressed in accordance with the Design Principles, including design development of colours and materials in context to the surroundings and in line with Context Colour Palettes.

### MOL

5.15.8 As identified in Section 4.6, part of Electrical Connection Route 1 (shown on **Figure 1.2** of the ES Figures (**Document Reference 6.2**)) would pass through an area of MOL between the REP site and the A206 (Eastern Way) (see **Figure A.4**, ES **Appendix A** (**Document Reference 6.3**)). Saved UDP Policy ENV15 contains a presumption against development on MOL except where the development would maintain the open character and/or visual amenities of MOL. The London Plan confirms that NPPF Green Belt policy applies equally to MOL in London (Paragraph 7.56).

5.15.9 NPS EN-1 paragraph 5.10.4 confirms that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open and that the most important attribute of Green Belt is its openness. London Plan Policy 7.17 and Draft London Plan Policies G3 and G4 confirm that the Mayor will protect MOL from development which would have an adverse impact upon its openness.

5.15.10 NPS-EN1 paragraph 5.10.10 requires applicants to determine if development proposed in the Green Belt would be inappropriate development as defined in current national green belt policies.

5.15.11 The Proposed Development is not expected to have an adverse impact on the openness of MOL as the only development proposed within areas of MOL will be engineering operations associated with the laying of underground cables for the Electrical Connection. NPPF paragraph 146 (Chapter 13) classifies such engineering operations as not being inappropriate in the Green Belt provided they preserve its openness. As such, in accordance with NPS EN-1 paragraph 5.10.10, NPPF paragraph 143 (Chapter 13) and Saved UDP Policy ENV15 the Proposed Development is not inappropriate development and is not expected to be harmful to MOL.

### Other Open Space

5.15.12 Part of Electrical Connection Route 1 in DBC (**Figure 1.2** of the ES Figures (**Document Reference 6.2**)) would pass through an area of Borough Open Space. DBC Policy DP24 protects designated open space against development which would reduce its quality. The Proposed Development would not have any permanent effects on the quality of DBC Borough Open Space as the only development proposed within this area will be engineering operations associated with the laying of underground cables for the Electrical Connection.

5.15.13 The next section considers other designated land uses within and in the vicinity of the Application Boundary identified in relevant local planning policy documents which may constitute other important and relevant considerations.

## 5.16 Other Important and Relevant Considerations

### Employment Land

5.16.1 As identified in Section 3.6, under the provisions of Saved UDP Policy E3 the REP site and Main Temporary Construction Compounds are designated a Primary Employment Area which form part of the Belvedere Industrial Area. The London Plan identifies the Belvedere Industrial Area as a Strategic Industrial Locations (SIL) and a Preferred Industrial Location (PIL).

5.16.2 LBB Policy E3 states that Primary Employment Areas will be safeguarded for industrial and commercial use. London Plan Policy 2.17 states that designated SILs will be protected for industrial and other related activities including "*waste management and environmental industries (such as renewable energy generation) and utilities"*. The London Plan is clear that development proposals in SILs should be refused unless they fall within the broad type of industrial activities outlined in this Policy. Draft London Plan Policy E5 also confirms that waste management uses are appropriate in SILs.

5.16.3 In accordance with the objectives of the development plan outlined above, the Proposed Development is an acceptable use within the Belvedere Industrial Area SIL. The Proposed Development will intensify the existing use of the REP site for waste management and low carbon/renewable energy generation activities. The proposed use of the Main Temporary Construction Compounds does not conflict with the Primary Employment Area (Saved UDP Policy E3) or SIL/PIL designations. The Proposed Development would not have an impact on the supply of land for industrial and commercial use as the only development proposed within this area would be temporary.

5.16.4 Furthermore, it is anticipated that the Proposed Development would operate without compromising the function of the surrounding Belvedere Employment Area SIL.

### Mineral Safeguarding

5.16.5 NPS EN-1 paragraph 5.10.9 states that applicants should safeguard any mineral resources within the proposed site as far as possible, taking account of the long-term potential of the land use after decommissioning.

5.16.6 The eastern end of the ECR Option 2B (shown on **Figure 1.2** of the ES Figures (**Document Reference 6.2**)) runs through a Mineral Safeguarding Area for sand and gravel resources in Dartford as designated in the KMWLP. The ECR is non-minerals development which necessitates a Minerals Assessment for the Proposed Development.

5.16.7 The Minerals Assessment contained at Appendix C demonstrates that the potential for sterilisation is negligible; the parcels of land affected are small and very unlikely to ever gain consent to be used for mineral working. Furthermore, the value of any mineral is not known and in any event it is not practicable or viable to extract the underlying mineral prior to ECR being laid. However,

anything raised incidental to construction of the ECR would be used where possible.

5.16.8 In accordance with the provisions of KMWLP Policy DM7 it would not be practicable or viable to extract the underlying minerals and the impact on the sterilisation of minerals would be negligible.

### River Thames

5.16.9 London Plan Policy 7.26 and Draft London Plan Policy SI15 promote the use of waterways for transporting bulk materials via waterways. London Plan Policy 6.1 aims to increase the use of the Thames for freight use particularly during construction to minimise congestion and improve road safety. LBB Policy CS15 supports proposals to improve the sustainability of freight movement in the borough.

5.16.10 In accordance with the objectives of the development plan outlined above, the aim of REP is for the majority of waste to be delivered to REP by barge from WTSs along the River Thames, utilising the existing jetty which is located immediately to the north of RRRF and the REP site.

5.16.11 LBB Policy TS13 seeks to protect views and the skyline within the Thames Policy Area. As explained in Section 5.11 of this Report, the Main REP Building is orientated to allow for visual permeability through the REP site from Belvedere to the River Thames, and from the Thames Path through the REP site. The ES (**Document Reference 6.1**) TVIA (**Chapter 9**) demonstrates that the Proposed Development would not result in any adverse effects on Thameside Walk or Thames Path.

5.16.12 LBB Policy TS14 requires all developments on the waterside within the Thames Policy Area to extend the publicly accessible river walk however the Thames Path already runs along the full length of the northern boundary of the REP site (identified as footpath FP3 on **Figure 2.4** at ES **Appendix B.1** (**Document Reference 6.3**). The TA contained at ES **Appendix B.1** (**Document Reference 6.3**) confirms that the Thames Path (FP3) would not be affected by the Proposed Development as it would lie outside of the area of works to reconfigure the REP site entrance.

5.16.13 LBB Policy TS15 resists development on Thames-side which would diminish wildlife habitats. The ES (**Document Reference 6.1**) ecological assessment (**Chapter 11**) demonstrates that the Proposed Development would not result in any residual adverse ecological effects, including on Thames-side.

### Wharves

5.16.14 The existing jetty used to facilitate the transport of waste and other materials to and from the existing RRRF is a safeguarded wharf (Middleton Wharf). The

2018 Safeguarded Wharves Review[4] recommends that Middleton Wharf is retained as a safeguarded wharf partially on the basis that a new jetty has been constructed relatively recently as part of the existing RRRF operated by the Applicant.

5.16.15 London Plan Policy 7.26 states that development which increases the use of safeguarded wharves for waterborne freight transport will be supported. Furthermore, London Plan Policy 5.17 requires boroughs to protect safeguarded wharves for waste management use. LBB Policy CS15 also seeks to protect viable safeguarded wharves on the River Thames.

5.16.16 In accordance with the objectives of the development plan outlined above, the Proposed Development will increase the use of an existing safeguarded wharf to enhance waste processing capacity in London.

[4]GLA Safeguarded Wharves Review, WSP, Appendix 2: Strategic Assessment of Wharves - South East Sub-Region, February 2018

# 6 Planning Balance and Conclusions

## 6.1 Statutory requirements

6.1.1 Section 104(2) of the PA 2008 requires the SoS to have regard to the following in determining DCO applications:

a) *"any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),*

b) *any local impact report (within the meaning given by section 60(3)) submitted to the Commission before the deadline specified in a notice under section 60(2),*

c) *any matters prescribed in relation to development of the description to which the application relates, and*

d) *any other matters which the SoS thinks are both important and relevant to the decision."*

6.1.2 Section 104(3) of the PA 2008 requires that the SoS "*must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies*." Section 104(7) of the PA 2008 provides that: "[*t]his subsection applies if the [Secretary of State] is satisfied that the adverse impact of the proposed development would outweigh its benefits*".

6.1.3 Section 5 of this Planning Statement considers the extent to which the Proposed Development complies with the relevant NPSs as well as other matters which the decision-maker may consider to be both important and relevant to their decision.

6.1.4 In accordance with section 104(7) of the PA 2008, this section weighs up the potential likely benefits and effects of the Proposed Development. NPS EN-1 paragraph 4.1.3 states that the decision-maker should take account of:

- "*its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits;*
- *its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts*."

6.1.5 NPS EN-1 paragraph 4.1.2 states that given the level and urgency of need for infrastructure covered by NPSs, the decision-maker should start with a presumption in favour of granting consent to applications for energy NSIPs. The presumption applies subject to the provisions of Section 104 of the PA 2008 unless any more relevant NPS policies clearly indicate that consent should be

refused. This report finds that the Proposed Development is in general conformity with the relevant NPSs and has not identified any reasons which indicate that the consent should be refused.

## 6.2 Benefits

6.2.1 In considering DCO applications NPS EN-1 requires the SoS to weigh the potential adverse impacts against the potential benefits.

6.2.2 REP is urgently needed to provide resilience to London and the South East's infrastructure, replace closing landfill sites, and move waste up the waste hierarchy. It is wholly policy compliant, delivering: increased renewable/low carbon energy supply; reduced greenhouse gas emissions; CHP; sustainable waste management; river freight; and optimised design. In reality, there is considerable uncertainty on the outcome of future waste arisings within London and the South East including how it will be managed. The Project and its Benefits Report (**Document Reference 7.2**)) demonstrates that not only is there a need for REP, but that the general need for additional recovery capacity in the South East is greater than the nominal throughput proposed for the ERF within REP.

6.2.3 REP, as an NSIP, and one with strategic importance beyond London, provides the resilience and flexibility required to ensure that the capital can become the sustainable city it wants to be, at no cost to the taxpayer. It is wholly compliant with relevant planning policy, delivering: increased renewable/low carbon energy supply; reduced greenhouse gas emissions; CHP; sustainable waste management; river freight; and optimised design. The Proposed Development would create the following economic, societal and environmental benefits:

a. Contribute to delivering the urgent and substantial need for new renewable/low carbon electricity supply and storage as established in NPS EN-1 by generating sufficient power from waste and solar to supply the equivalent of c.140,000 homes pa;

b. Deliver the waste hierarchy at the National level and in London without prejudicing local waste management targets;

c. Provide substantial private investment in sustainable waste management to efficiently recover renewable/low carbon energy by diverting waste from landfill (the greatest source of greenhouse gasses in the waste sector);

d. Contribute to meeting climate change targets and delivering the Mayor's aspirations for London to be a zero-carbon city by generating renewable/low carbon electricity supply and diverting waste from landfill;

e. Deliver flexible, decentralised, renewable/low carbon, secure and reliable electricity supply, which will assist in reducing the percentage of London's electricity demand that is sourced from outside the Capital;

f. Deliver realistic connection prospects for heat distribution, including the Thamesmead redevelopment. REP will be CHP enabled to be ready to connect into a future district heating network;

g. Deliver battery storage that will improve the efficiency and resilience of London's and the UK's electrical supply. Battery storage is a new technology and REP actively supports this growth sector. In this respect REP exceeds the expectations set out in the NPSs;

h. Enable London and the South East to efficiently and effectively manage an increased amount of its own waste, whilst benefitting from renewable/low carbon electricity supply;

i. Deliver a diversity of employment opportunities on-site, off-site and throughout the supply chain. The Proposed Development would deliver an equivalent of 140 permanent jobs during construction and 75 Full Time Equivalent (FTE) jobs during the operational phase;

j. Support the local and national economy: REP operation would provide approximately £16.8m GVA and £24.9m GVA per annum to the local and national economy respectively, assuming average levels of GVA; and

k. Remove waste lorries from roads through using river transport. RRRF typically operates with a minimum 75% of waste input delivered by river and the ERF within REP would also normally operate with a high percentage of waste transported by river.

## 6.3 Other Effects and Mitigation

6.3.1 The Proposed Development has been subject to a comprehensive EIA which has assessed all potential impacts. The likely impacts of the Proposed Development have been minimised wherever practicable through specification, siting and design and where significant residual impacts remain mitigation has been provided.

6.3.2 In accordance with NPS EN-1, EN-3 and EN-5, mitigation for the Proposed Development has been developed based on the EIA findings and in consultation with stakeholders. Measures to reduce the effects of the Proposed Development have been incorporated into the specification, siting and design as explained in the Design and Access Statement (**Document Reference 7.3**). Further mitigation measures are set out in application documents, primarily in ES **Chapter 17** (**Document Reference 6.1**), the CTMP (ES **Appendix B.1** (Document Reference 6.3), the outline CoCP (**Document Reference 7.5**), Design Principles (**Document Reference 7.4**) and where appropriate incorporated into the draft DCO (**Document Reference 3.1**).

6.3.3 The Proposed Development would have a limited number of significant adverse effects as identified in ES (**Document Reference 6.1**) **Chapter 16** as follows:

- Transport impacts at construction / decommissioning stage including increased delay to drivers through queueing and bus services providing a reduced or altered service. However, further mitigation measures set out in the CTMP (ES **Appendix B.1** (**Document Reference 6.3**) mean that the residual effects will be Not Significant;

- Townscape and visual impacts at construction / decommissioning stage including effects to the character and features of townscape at the Application Site and effects on the views and visual amenity of viewpoints, cultural heritage assets and PRoW. During operation townscape and visual impacts include effects to the character and features of townscape to the Application Site, cultural heritage assets, designated Open Space, landscapes and scrubland habitats, scale grain and massing, appearance and legibility and effects on the views and visual amenity of viewpoints, cultural heritage assets and PROW; and

- Ground conditions impacts at construction / decommissioning and operational stages including exposure to asbestos and accumulation of ground gas. However, further mitigation measures set out in the Outline Remedial Strategy (ORS) and Outline CoCP (**Document Reference 7.5**) mean that the residual effects will be Not Significant.

6.3.4 After further mitigation has been taken into account ES (**Document Reference 6.1**) **Chapter 16** finds that the Proposed Development will not have significant adverse residual effects with the exception of townscape and visual impacts. These effects are identified in ES (**Document Reference 6.1**) **Chapter 9** and summarised below:

- Moderate adverse effects on the Application Site and visual receptors during construction; and

- Moderate adverse effects on Crossness Conservation Area; the character, and appearance of the REP site; scale, grain and massing, and legibility, and on the landscape of Crossness Nature reserve marshland adjacent to the REP site, and scrubland habitats on the REP site.

6.3.5 The design process will be progressed in accordance with Design Principles (**Document Reference 7.4**). This will include design development of colours and materials in context to the surroundings and in line with Context Colour Palettes as detailed in the Design and Access Statement (**Document Reference 7.3**).

6.3.6 It is relevant to consider that any development on the REP site would have an effect on townscape character due to the current absence of permanent buildings on this land. The residual townscape and visual impact effects will need to be weighed against the considerable economic, societal and environmental benefits of the Proposed Development (outlined in Section 6.2).

## 6.4 Conclusion

6.4.1 Section 104 of the PA 2008 requires that the DCO application should be decided in accordance with NPS EN-1, EN-3 and EN-5 unless the Proposed Development would contravene specific legal tests set out under section 104 (4), (5), (6) and (8) or the adverse impacts would outweigh its benefits (section 104 (7)). The Proposed Development does not contravene any legal tests set out under section 104 (4), (5), (6), (7) or (8) of the PA 2008 and is in conformity with NPS EN-1, EN-3 and EN-5.

6.4.2 NPS EN-1 paragraph 4.1.3 explains that the decision-maker will weigh up a proposal's contribution to meeting the need for energy infrastructure and wider benefits, against the potential adverse impacts of the proposal and measures to avoid, reduce or compensate for any adverse impacts.

6.4.3 The likely impacts of the Proposed Development have been minimised wherever practicable through specification, siting and design and, where significant residual impacts remain, mitigation has been incorporated into the draft DCO (**Document Reference 3.1**).

6.4.4 The benefits of the Proposed Development, notably the contribution to meeting the urgent national need for renewable/low carbon electricity supply and the demonstrated need for new waste infrastructure in South East England, outweigh the limited adverse impacts.

6.4.5 NPS EN-1 paragraph 3.1.3 states that all development consent applications for energy infrastructure should be assessed "*on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part".* Accordingly, the decision-maker "*should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008*" (NPS EN-1 paragraph 3.1.4).

6.4.6 Given the need for energy infrastructure as identified in NPS EN-1 paragraphs 3.1.3 and 3.1.4, it is considered that the Proposed Development would contribute materially towards meeting the urgent national need for renewable/low carbon electricity supply.

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# Appendix A Planning Policy Context

## Contents



## Tables

## Figures

## A.1.1. National Planning Policy Context

### National Policy Statements

A.1.1. Policy related to Nationally Significant Infrastructure Projects (NSIPs) is contained in National Policy Statements. The relevant NPSs for Riverside Energy Park (REP) are:

- Overarching National Policy Statement for Energy (EN-1)
- National Policy Statement for Renewable Energy Infrastructure (EN-3)
- National Policy Statement for Electricity Networks Infrastructure (EN-5)

A.1.2. A summary of policies contained in the NPSs which are applicable to REP is contained in Section 4 of this Report and therefore not repeated here.

### National Planning Policy Framework (NPPF) (2018)

A.1.3. The revised National Planning Policy Framework was published in July 2018 (NPPF 2018). The document sets out the Government's planning policies and how these are expected to be applied. The NPPF 2018 emphasises the importance of National Policy Statements (NPSs) for major infrastructure in the determination of Nationally Significant Infrastructure Projects (NSIPs), whilst also noting that:

*"The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy".*

A.1.4. The central theme of the NPPF 2018 is the presumption in favour of sustainable development and the supporting core planning principles include the protection and conservation of the natural, built and historic environment and the promotion of sustainable growth and development. Key policies relevant to the Proposed Development are summarised below.

A.1.5. Chapter 4 (Decision-making) expects local planning to approach decision on proposed development in a positive and creative way. Paragraph 54 on planning conditions and obligations states:

"Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition."

A.1.6. Chapter 6 (Building a strong, competitive economy) places a strong emphasis on supporting business growth and improved productivity stating that"

significant *weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development"* (paragraph 80).

A.1.7. Paragraph 82 states planning decisions should recognise and address the specific locational requirements of different sectors.

A.1.8. Chapter 8 (Promoting healthy and safe communities), paragraph 92, encourages planning decisions to plan positively for the provision of community facilities and other local services to enhance the sustainability of communities and residential environments.

A.1.9. Chapter 9 (Promoting sustainable transport) encourages appropriate opportunities to promote sustainable transport modes. Paragraph 108 states that planning decisions should ensure that: a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; b) safe and suitable access to the site can be achieved for all users; and c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

A.1.10. Paragraph 109 expects development to "only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

A.1.11. Chapter 11 (Making effective use of land) encourages policies and decision to promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.

A.1.12. Paragraph 119 states LPAs should take a proactive role in identifying and helping to bring forward land, including suitable sites on brownfield registers.

A.1.13. Chapter 12 (Achieving well-designed places) states that the creation of high quality buildings and places is fundamental to what the planning and development process should achieve. Paragraph 128 states that "*Design quality should be considered throughout the evolution and assessment of individual proposals"* and that "*Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important for clarifying expectations and reconciling local and commercial interests".*

A.1.14. The NPPF 2018 explicitly supports the transition to a low carbon future and encourages the development of renewable energy generation infrastructure. Chapter 14 (Meeting the challenge of climate change, flooding and coastal change) recognises that planning plays a key role in supporting the delivery of renewable and low carbon energy and associated infrastructure. Under this policy applicants are not required to demonstrate the overall need for renewable or low carbon energy and local authorities should recognise that such projects

provide a valuable contribution to cutting greenhouse gas emissions (paragraph 154a).

A.1.15. In respect of flood risk, paragraph 155 states that: “Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk. Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere”.

A.1.16. Paragraph 158 states that the sequential approach should be applied in areas at risk of flooding in order to steer new development to areas with the lowest risk of flooding. However, Paragraph 162 confirms that the sequential test does not need to be undertaken for planning applications located on allocated sites evidenced by a sequential test although the exception test may need to be applied if relevant aspects of the proposal have not been considered at the plan-making stage or if more recent information about existing or potential flood risk should be considered.

A.1.17. Paragraph 160 states that the exception test is passed where the following can be demonstrated that: a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

A.1.18. Chapter 15 (Conserving and enhancing the natural environment), paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by:

a. “*protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*

b. *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*

c. *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

d. *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

*e. remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

A.1.19. Paragraph 175 refers to the need to conserve and enhance biodiversity through the application of four principles:

- If significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Proposed Development likely to have an adverse effect on a SSSI should not normally be permitted;
- Development resulting in the loss or deterioration of irreplaceable habitats should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- Opportunities to incorporate biodiversity improvements in and around developments should be encouraged especially where this can secure measurable net gains for biodiversity.

A.1.20. Paragraph 178 require that planning decision should ensure that "a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation".

A.1.21. Paragraph 180 identifies the need to ensure that the effects of pollution on health, the natural environment or general amenity has been considered in decision-making. Sources of pollution include: ground conditions (paragraph 178), lighting (paragraph 180), noise (paragraph 180) and air pollution (paragraph 181).

A.1.22. Paragraph 180 states planning decisions should: a) mitigate and reduce potential adverse impacts resulting from noise from new development to a minimum and also avoid noise giving rise to significant adverse impacts on health and the quality of life; and b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

A.1.23. Paragraph 181 states that planning decisions should "sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications". Planning decisions should also "ensure

that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."

A.1.24. Paragraph 182 states that "Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed".

A.1.25. Chapter 16 'Conserving and enhancing the historic environment' sets out the Government's policies for the conservation and enhancement of designated and non-designated features of the historic environment.

A.1.26. Paragraph 189 and 190 state that planning decisions should be based on the significance of the heritage asset and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to understand the potential impact of the proposal upon the significance of that asset.

A.1.27. When considering impacts on the significance of a designated heritage asset paragraph 193 states that great weight should be given to the asset's conservation irrespective of whether the harm amounts to substantial harm, total loss or less than substantial harm.

A.1.28. Paragraph 194 states that any harm to a designated heritage asset should require clear and convincing justification and that substantial harm to grade II listed assets should be exceptional and substantial harm to grade II* or grade I listed assets should be wholly exceptional.

A.1.29. Paragraph 196 states that where development will lead to less than substantial harm to a designated heritage asset then this harm should be weighed against the public benefits of the proposal including securing its optimum viable use.

A.1.30. Paragraph 197 specifies that the effect of proposals on the significance of non-designated assets should also be considered. This paragraph requires the decision-maker to take into account the effect on the significance of non-designated heritage assets and to tale a balanced judgement to be made having regard to the scale of harm or loss and the significance of the asset(s) potentially affected.

### National Planning Policy for Waste (NPPW) (2014)

A.1.31. The National Planning Policy for Waste (NPPW) was published in October 2014, setting out the Government's ambition to develop a more sustainable and efficient approach to resource use and management.

A.1.32. The NPPW recognises that planning can help to deliver the Waste Management Plan for England (2013) by helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment.

A.1.33. Section 4 states that local authorities should identify sites for waste management facilities in local plans and that waste planning authorities should consider the suitable siting of energy recovery facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers.

A.1.34. Section 7 on determining planning applications, point 5, states that waste planning authorities should "concern themselves with implementing the planning strategy in the Local Plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced"

A.1.35. Appendix B states that in considering the suitability of sites, waste planning authorities should consider the factors below in determining planning applications:

a. Protection of water quality and resources and flood risk management: considerations will include the proximity of vulnerable surface and groundwater or aquifers. The suitability of locations subject to flooding, with consequent issues relating to the management of potential risk posed to water quality from waste contamination, will also need care.

b. Land instability: locations that are liable to be affected by land instability, will not normally be suitable for waste management facilities.

c. Landscape and visual impacts: considerations will include (i) the potential for design-led solutions to produce acceptable development which respects landscape character; (ii) the need to protect landscapes or designated areas of national importance (National Parks, the Broads, Areas of Outstanding Natural Beauty and Heritage Coasts) (iii) localised height restrictions.

d. Nature conservation: considerations will include any adverse effect on a site of international importance for nature conservation (Special Protection Areas, Special Areas of Conservation and Ramsar Sites), a site with a nationally recognised designation (Sites of Special Scientific Interest, National Nature Reserves), Nature Improvement Areas and ecological networks and protected species.

e. Conserving the historic environment: considerations will include the potential effects on the significance of heritage assets, whether designated or not, including any contribution made by their setting.

f. Traffic and access: considerations will include the suitability of the road network and the extent to which access would require reliance on local roads, the rail network and transport links to ports.

g. Air emissions, including dust: considerations will include the proximity of sensitive receptors, including ecological as well as human receptors, and the extent to which adverse emissions can be controlled using appropriate and well-maintained and managed equipment and vehicles.

h. Odours: considerations will include the proximity of sensitive receptors and the extent to which adverse odours can be controlled using appropriate and well-maintained and managed equipment.

i. Vermin and birds: considerations will include the proximity of sensitive receptors. Some waste management facilities can attract vermin and birds and where birds congregate in large numbers, they may be a major nuisance to people living nearby and cause a hazard to aircraft at locations where close to aerodromes or low flying areas. The primary aim is to guard against new or increased hazards caused by development. The most important types of development in this respect include facilities intended for the handling of household or commercial wastes.

j. Noise, light and vibration: considerations will include the proximity of sensitive receptors. The operation of large waste management facilities can produce noise affecting both the inside and outside of buildings, including noise and vibration from goods vehicle traffic movements to and from a site. Intermittent and sustained operating noise may be a problem if not properly managed particularly if night-time working is involved. Potential light pollution aspects will also need to be considered.

k. Litter: litter can be a concern at some waste management facilities.

l. Potential land use conflict: proposed development should be considered taking account of site suitability for the envisaged waste management facility.

### Planning Practice Guidance (online resource)

A.1.36. The Planning Practice Guidance (PPG) was first published as an online resource in March 2014; it provides detailed guidance on implementing the NPPF policies which is updated on a regular basis. The key sections of the PPG which may have a bearing on REP are listed below:

- Air quality;
- Climate change;
- Conserving and enhancing the historic environment;
- Environmental Impact Assessment;
- Flood risk and costal change
- Land affected by contamination;

- Land Stability;
- Natural environment: noise;
- Renewable and low carbon energy; and
- Waste.

### Noise Policy Statement for England (NPSE)

A.1.37. The Noise Policy Statement for England (NPSE) was published in March 2010 by the Department for Environment, Food and Rural Affairs (DEFRA). The document seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. It also sets out the long term vision of Government noise policy:

"To promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development."

A.1.38. The NPSE clarifies that noise should not be considered in isolation of the wider benefits of a scheme or development, and that the intention is to minimise noise and noise effects as far as reasonably practicable having regard to the underlying principles of sustainable development.

A.1.39. The NPSE defines two established concepts from toxicology as applied to noise impacts by organisations such as the World Health Organisation. They are:

- NOEL – No Observed Effect Level - the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise; and
- LOAEL – Lowest Observed Adverse Effect Level - the level above which adverse effects on health and quality of life can be detected.

A.1.40. The NPSE extends these to the concept of a significant observed adverse effect level:

- SOAEL – Significant Observed Adverse Effect Level - The level above which significant adverse effects on health and quality of life occur.

A.1.41. The NPSE notes, in paragraph 2.22, "It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times".

### UK Post-2010 Biodiversity Framework

A.1.42. The UK Post-2010 Biodiversity Framework was published in July 2012. It was produced by Joint Nature Conservation Committee (JNCC) and the Department for Environment, Food and Rural Affairs (Defra), on behalf of the Four Countries'

Biodiversity Group (4CBG), through which the environment departments of all four governments in the UK work together.

A.1.43. The Framework covers the period from 2011 to 2020 and identifies the activities required to complement the country biodiversity strategies, and where work in the country strategies contributes to international obligations.

A.1.44. Many of the tools developed under the UK Biodiversity Action Plan ('UKBAP') remain of relevance; for example, information about the lists of priority habitats and species, which can be found on the priority species and habitats web-pages. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work in the countries and have been adopted as the list of Habitats and Species of Principal Importance for the purpose of conserving biodiversity, which are required to be identified and taken into consideration in accordance with Section 41 of the Natural Environment and Rural Communities Act, 2006.

### A.1.2. Regional Planning Policy Context

A.1.45. At the regional level, The London Plan (consolidated with alterations since 2011) was published in March 2016. The London Plan policies that are relevant are summarised in the table below:

Table A1.1 London Plan relevant policies

| Theme | Policy / Objective |
|---|---|
| Strategic vision and objectives | Policy 1.1 (Delivering the strategic vision and objectives for London)<br><br>States that growth and change in London will be managed to realise the Mayor's vision for London's sustainable development to 2036. This includes six key objectives including a city that meets the challenges of economic and population growth. |
| Inner London | Policy 2.13 (Opportunity areas and intensification areas)<br><br>The Mayor will encourage boroughs to implement planning frameworks to realise the potential of OAs and development proposals within OAs should support the strategic policy directions set out in Annex A.<br><br>Annex A allocates the Bexley Riverside OA for a minimum of 4,000 new homes and 7,000 new jobs by 2031 recognising that planned improvements in public transport accessibility (especially Crossrail 1) will provide scope for intensification. Annex A emphasises that development proposals should take account of the area's strategically |

| Theme | Policy / Objective |
|---|---|
| | important role in waste management, logistics facilities (Howbury Park) and safeguarded wharves on the River Thames. |
| | Policy 2.17 (Strategic Industrial Locations (SILs))<br><br>The Mayor will protect designated SILs for industrial activities and other related uses including waste management and environmental industries (such as renewable energy generation) and utilities. Part B states that development proposals in SILs should be refused unless they fall within the broad type of industrial activities outlined in this Policy. Part C states that development proposals within or adjacent to SILs should not compromise the integrity or effectiveness of these locations. |
| Climate change | Objective: *"A city that becomes a world leader in improving the environment locally and globally, taking the lead in tackling climate change, reducing pollution, developing a low carbon economy and consuming fewer resources and using them more effectively."* |
| | Policy 5.1 (Climate change mitigation)<br><br>Aims to reduce London's carbon dioxide emissions to 60% below 1990 levels by 2025. |
| | Policy 5.2 (Minimising carbon dioxide emissions)<br><br>Development proposals should contribute to minimising carbon dioxide emissions in accordance with the energy hierarchy: 1 Be lean: use less energy; 2 Be clean: supply energy efficiently; and 3 Be green: use renewable energy. |
| | Policy 5.3 (Sustainable design and construction)<br><br>Sustainable design standards should be integral to the construction and operation of proposals in order to improve the environmental performance of new development and adapt to the effects of climate change. |

| Theme | Policy / Objective |
|---|---|
| | Policy 5.4A (Electricity and gas supply)<br><br>States that the Mayor will work with the boroughs and energy companies to support appropriate development proposals for gas and electricity infrastructure which address identified energy requirements. |
| | Policy 5.5 (Decentralised energy networks)<br><br>Aims for 25% of heat and power used in London to be generated by localised decentralised energy (DE) systems by 2025. This policy identifies that energy from waste plants will provide an important source of energy for London's future district heating networks. |
| | Policy 5.7 (Renewable energy)<br><br>Aims to increase the proportion of energy generated from renewable sources. Requires that in preparing local plans renewable energy systems should be located and designed to minimise any potential adverse impacts on biodiversity, the natural environment and historical assets and air quality. |
| | Policy 5.8 (Innovative energy technologies)<br><br>States that the Mayor will support the use of innovative energy technologies to reduce use of fossil fuels and carbon dioxide emissions including conversion technologies such as anaerobic digestion, gasification and pyrolysis for the treatment of waste. |
| | Policy 5.12 (Flood risk management)<br><br>States that development proposals should comply with NPPF policies on flood risk, the associated technical Guidance on flood risk and have regard to the EA Thames Estuary 2100 Plan and Catchment Flood Management Plans. The policy sets out criteria in respect of the Exception Test and development adjacent to flood defences, requiring that development is set back from defences to allow their management, maintenance and upgrading. |

| Theme | Policy / Objective |
|---|---|
| | Policy 5.13 (Sustainable drainage)<br><br>Outlines a drainage hierarchy for the control and disposal of surface water run-off, requiring that SuDS are used unless there are practical reasons for not doing so. |
| | Policy 5.14 (Water quality and wastewater infrastructure)<br><br>Requires that water quality is protected and improved, having regard to the Thames River Basin Management Plan. |
| | Policy 5.15 (Water use and supplies)<br><br>Requires, inter alia, that development minimises the use of mains water and that rainwater harvesting is promoted. |
| | Policy 5.16 (Waste net self-sufficiency)<br><br>Aims to manage 100% of London's waste within London and achieve zero biodegradable or recyclable waste to landfill by 2026. The policy recognises that generating low carbon energy from non-recyclable waste will help achieve these aims while creating environmental and economic benefits from waste processing. |
| | Policy 5.17 (Waste capacity)<br><br>Identifies the need to increase London's waste processing capacity as a Mayoral priority and states that waste management proposals will be evaluated in terms of: locational suitability; proximity to the waste sources; achieving high reuse performance; achieving a positive carbon outcome; environmental impact and transport impact.<br><br>Energy from waste facilities are required to meet a minimum $CO_2$eq performance of 400 grams of $CO_2$eq per kilowatt hour (kwh) of electricity produced. Furthermore, opportunities should be taken to provide combined heat and power and combined cooling heat and power. |
| | Policy 5.21 (Contaminated Land)<br><br>The Mayor supports bringing contaminated land in to beneficial use through the remediation of contaminated |

| Theme | Policy / Objective |
|---|---|
| | sites and will work with strategic partners to ensure that the development of brownfield land does not result in significant harm to human health or the environment. Appropriate measures should be taken to ensure that development on contaminated land does not activate or spread contamination. |
| Transport | Policy 6.1 (Strategic approach)<br><br>The Mayor will improve the integration of transport and development by increasing the use of the Blue Ribbon Network, especially the Thames, for freight use and facilitating the efficient distribution of freight whilst minimising its impacts on the transport network. |
| | Policy 6.3 (Assessing effects of development on transport capacity)<br><br>Requires development proposals to asses impacts on transport capacity and the transport network and states that development should not adversely affect safety on the transport network. The policy states that Transport Assessments should be prepared in accordance with TfL's Transport Assessment Best Practice Guidance and construction logistics plans and delivery and servicing plans should be in accordance with the London Freight Plan. |
| | Policy 6.9 (Cycling)<br><br>The Mayor will seek to increase cycling prevalence in London through ensuring development provides appropriate cycle parking and creating decluttered streetscapes that provide access for all. |
| | Policy 6.10 (Walking)<br><br>The Mayor will seek to increase walking in London through creating high quality pedestrian environments and simplified, decluttered streetscapes that provide access for all. |

| Theme | Policy / Objective |
|---|---|
| | Policy 6.13 (Parking)<br><br>Presents the approach to parking provision, with maximum standards for car parking and minimum standards for cycle parking. |
| | Policy 6.14 (Freight)<br><br>States that the Mayor will work to improve freight distribution and promote movement of freight by rail and waterway to help relieve congestion within London. The policy encourages the increased use of the blue ribbon network for freight transport and the uptake of construction logistics plans, delivery and servicing plans and more innovative freight solutions in order to minimise congestion and improve safety. |
| Living spaces and places | Policy 7.7 Location and Design of Tall and Large Buildings<br><br>Sets out the design standards and locational preferences for tall buildings. The policy requires that tall and large buildings do not affect their surroundings adversely in terms of noise, amongst other considerations. |
| | Policy 7.8 Heritage assets and archaeology<br><br>States that development should identify, value, conserve, restore, re-use and incorporate heritage assets. Where development affects heritage assets and their settings, proposals should conserve their significance, by being sympathetic to their form. The policy goes on to note that new development should make provision for the protection of archaeological resources, landscapes and significant memorials. |
| | Policy 7.11 London View Management Framework<br><br>Table 7.1 identifies 27 designated protected strategic views of London which have been assessed as making a significant contribution to the image and character of London at the strategic level. |
| | Policy 7.12 Implementing the London View Management<br><br>*“New development should not harm, and where possible should make a positive contribution to, the characteristics* |

| Theme | Policy / Objective |
|---|---|
| | *and composition of the strategic views and their landmark elements. It should also preserve or enhance viewers' ability to recognise and to appreciate strategically important landmarks in these views and, where appropriate, protect the silhouette of landmark elements."* |
| | Policy 7.13 Safety, security and resilience to emergency<br><br>States that development proposals should contribute to the minimisation of potential physical risks. Development should also include measures to design out crime and terrorism. |
| | Policy 7.14 Improving air quality<br><br>Expects development proposals to minimise exposure to existing poor air quality and promote sustainable design and construction to reduce emissions. Development proposals should "*promote sustainable design and construction to reduce emissions from the demolition and construction of buildings following the best practice guidance in the Greater London Authority and London Councils' 'The control of dust and emissions from construction and demolition'".* Development should not lead to further deterioration of existing poor air quality (such as areas designated as AQMAs).<br><br>Development is required to be at least 'air quality neutral' and that were provision needs to be made to reduce emissions, this is to be made on-site. Furthermore, where "*development requires a detailed air quality assessment and biomass boilers are included, the assessment should forecast pollutant concentrations. Permission should only be granted if no adverse air quality impacts from the biomass boiler are identified*".<br><br>The Policy states that boroughs should have policies that "*seek reductions in levels of pollutants referred to in the Governments National Air Quality Strategy having regard to the Mayor's Air Quality Strategy"* and take *"account of the findings of the Air Quality Review and Assessments and Action Plans, in particular where Air Quality Management Areas have been designated".* |

| Theme | Policy / Objective |
|---|---|
| | Policy 7.15 Reducing and managing noise, improving and enhancing the acoustic environment and promoting appropriate soundscapes<br><br>States that development proposals should seek to manage noise by avoiding significant adverse noise impacts on health and quality of life as a result of the new development. Proposals are supported that improve and enhance the acoustic environment, and mitigate and minimise the existing and potential adverse impacts of noise.<br><br>The policy notes that development proposals should utilise new technologies and improved practices to reduce noise at source, and on the transmission path from source to receiver. |
| | Policy 7.17 Metropolitan open land<br><br>The Mayor strongly supports the current extent of Metropolitan Open Land (MOL) and inappropriate development on MOL will be refused, except in very special circumstances. Essential ancillary facilities for appropriate uses will only be acceptable where they maintain the openness of MOL. |
| | Policy 7.19 Biodiversity and access to nature<br><br>Expects development proposals to wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity. Developments that have a significant adverse impact on European or nationally designated sites, protected species or priority species will be resisted. |
| | Policy 7.20 Geological conservation<br><br>States that all development proposals should, wherever possible, make a positive contribution to the protection and enhancement of geodiversity. Development should be resisted where they have significant adverse impacts on existing/proposed European or national designations, and protect regionally important geological sites. |

| Theme | Policy / Objective |
|---|---|
| | Policy 7.26 Increasing the use of the blue ribbon network for freight transport<br><br>Expects development proposals to protecting existing facilities for waterborne freight traffic. It goes on to note that proposals adjacent to safeguarded wharves should be designed to minimise the potential for conflicts of use and disturbance. Development close to waterways should maximise water transport for bulk materials especially during construction. |
| | Policy 7.29 The River Thames<br><br>Notes the role of the River Thames as a strategically important and iconic feature of London. Development proposals within the Thames Policy Area identified in LDFs should be consistent with the Thames Strategy. |

A.1.46. A summary of the relevant Mayoral guidance and strategy documents is set out in the table below:

Table A1.2 Relevant Mayoral strategy and planning guidance documents

| Document | Policy/ Objectives |
|---|---|
| London Environment Strategy (LEnvS) (2018) | Sets out the Mayor's integrated Environment Strategy which outlines actions to improve the environment including specific draft policies and targets for air quality, climate change mitigation and energy, and waste. The Mayor is required to prepare a London Environment Strategy by the Greater London Authority Act 1999, as amended by the Localism Act 2011. |
| Mayor's Transport Strategy (MTS) (2018) | Sets out the Mayor's policies and proposals to reshape transport in London over the next 25 years with an emphasis on healthy streets and promoting sustainable travel. Its three main themes which comprise: healthy streets and healthy people; a good public transport experience; and new homes and jobs. |
| London Riverside Opportunity Area Planning | The OAPF puts forward strategies to guide the regeneration of the area setting out how the Mayor's |

| Document | Policy/ Objectives |
|---|---|
| Framework (OAPF) (2015) | planning, transport, housing and land functions can be coordinated to maximise the public benefit to Londoners. |
| The Control of Dust and Emissions During Construction and Demolition SPG (2014) | Sets out the requirements for an 'Air Quality and Dust Risk Assessment (AQDRA)' to be submitted at the time of a planning application, with an 'Air Quality and Dust Management Plan' (AQDMP) submitted prior to commencement of works. |
| Sustainable Design and Construction SPG (2014) | The SPG provides guidance on flooding/flood risk management, sustainable drainage and flood defences and requires that surface water run-off from developments is limited to greenfield rates.<br><br>With regard to noise, the SPG states that "*noise should be reduced at source and then designed out of a scheme to reduce the need for mitigation measures*".<br><br>The SPG also provides guidance on land contamination. This includes the Mayors priorities in which "*Developers should set out how existing land contamination will be addressed prior to the commencement of their development*". |
| Shaping Neighbourhoods: Character and Context SPG (2014) | Provides specific guidance on the attributes of character and context in London (physical, cultural, social, economic, perceptions and experience) and information on resources that inform an understanding of character and context in London.<br><br>The document also presents an analysis of the interrelationships between different aspects of character and examples of good practice in how an understanding of character and context can be used to help manage change in a way that enhances the positive attributes of a place. |
| London Plan: London View Management Framework (LVMF) (2012) | Provides a method for assessing development proposals that could affect the 27 protected strategic views of London as designated in London Plan Policies 7.11 and 7.12 (see London Plan Table 7.1) which include: panoramas across substantial parts of London ('London Panoramas'); views of landmarks framed by objects in the landscape ('Linear Views'); road prospects along the River Thames ('River |

| Document | Policy/ Objectives |
|---|---|
| | Prospects'); or views of the urban townscape ('Townscape Views'). |
| London's Wasted Resource: The Mayor's Municipal Waste Management Strategy (MMWMS) (2011) | Sets policies for the management of London's municipal waste between 2011 and 2031 which recognise the Mayor's vision to develop a low carbon economy by minimising the negative environmental impacts of waste and exploiting its economic benefits. |
| Managing risks and increasing resilience: The Mayor's climate change adaptation strategy (2011) | Sets out the Mayor's detailed approach to manage the current and future risks that climate change poses to the Capital. |
| Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy (2011) | Sets out the Mayor's strategic approach to secure a low carbon energy supply and limited further climate change in London. |
| Making Business Sense of Waste: The Mayor's Business Waste Strategy for London (2011) | Sets out the Mayor's strategy for managing London's business waste. |
| Thames Estuary 2100 Plan | The Plan sets out a strategy for managing flood risk on the Thames Estuary area throughout this century. The Application Site lies within the Thamesmead Policy Unit and the recommended flood risk management policy for this area is to take further action to keep up with climate and land use change so that flood risk does not increase. |

## A.1.3. Emerging Regional Planning Policy Context

### Draft London Plan

A.1.47. The Mayor published the Draft London Plan for consultation between 1 December 2017 and 2 March 2018 and subsequently published the Draft London Plan showing Minor Suggested Changes on 13 August 2018. The published provisional timetable indicates that the new London Plan will be examined in early 2019 and the final plan published by Autumn 2019.

A.1.48. The NPPF 2012 is referenced in Chapters 6-14 of the ES (**Document Reference 6.1**) in relation to the draft London Plan policies. The SoS letter issued on 27th July 2018 confirms that, although the draft London Plan will be examined against the NPPF 2012, the published London Plan should be reviewed immediately to ensure it is consistent with the NPPF. Thus, where there is a policy conflict with draft London Plan policies which are based on the NPPF 2012 the NPPF takes precedence. The table below summarises Draft London Plan policies that are relevant.

Table A1.3 Draft London Plan relevant policies

| Theme | Policy / Objective |
|---|---|
| Chapter 1 Planning London's Future | Chapter 1 sets out six Good Growth Policies which frame the objectives of the plan (Policies GG1-6). |
| | Policy GG1 – Building strong and inclusive communities<br>Seeks to "*to ensure that London continues to generate a wide range of economic and other opportunities, and that everyone is able to benefit from these to ensure that London is a fairer, more inclusive and more equal city.*" |
| | Policy GG2 – Making the best use of land<br>*"those involved in planning and development must… enable the development of brownfield land, prioritising Opportunity Areas, surplus public sector land, sites which are well-connected by existing or planned Tube and rail stations, and sites within and on the edge of town centres, as well as utilising small sites."* |
| | Policy GG3 – Creating a healthy city<br>Aims to improve Londoners health and reduce health inequalities. The policy states a push to "*improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution.*" |
| | Policy GG5 – Growing a good economy |

| Theme | Policy / Objective |
|---|---|
| | Aims to "*conserve and enhance London's global economic competitiveness and ensure that economic success is shared amongst all Londoners and "Plan for sufficient employment and industrial space in the right locations to support economic development and regeneration."* |
| | Policy G–6 - Increasing efficiency and resilience<br>Aims to "*improve energy efficiency and support the move towards a low carbon circular economy, contributing towards London becoming a zero carbon city by 2050".* |
| Chapter 2 Spatial Development Patterns | Policy SD1 - Opportunity Areas<br>Sets out policy to ensure that OAs fully realise their growth and regeneration potential. This relates to Bexley Riverside OA and Thamesmead and Abbeywood OA. |
| Chapter 3 Design | Policy D2 - Delivering good design<br>Sets out processes and actions aimed at ensuring development delivers good design. |
| | Policy D7 Public realm<br>Identifies the criteria which should be considered when designing areas of public realm. |
| | Policy D10 Safety, security and resilience to emergency<br>Requires that *"Development proposals should maximise building resilience and minimise potential physical risks, including those arising as a result of fire, flood and related hazards"*. |
| | Policy D11 Fire safety<br>Requires that development proposals must achieve the highest standards of fire safety. |
| | Policy D12 Agent of Change<br>Places the responsibility for mitigating impacts from existing noise-generating activities on proposed new development. |
| | Policy D13 Noise<br>Sets out criteria by which development proposals should manage noise to reduce, manage and mitigate noise to improve health. |

| Theme | Policy / Objective |
|---|---|
| Chapter 6 Economy | Policy E4 Land for industry, logistics and services to support London's economic function<br><br>Requires that "*A sufficient supply of land and premises in different parts of London to meet current and future demands for industrial and related functions should be maintained"* and that provision is made for the operational requirements of waste management and utilities infrastructure such as energy and water. Prioritises the retention of additional industrial capacity in locations that are accessible to the strategic road network or have potential for the transport of goods by rail and/or water transport. |
| | Policy E5 Strategic Industrial Locations (SIL)<br><br>Requires that SILs (including Belvedere Industrial Area) *"should be managed proactively… to sustain them as London's largest concentrations of industrial, logistics and related capacity for uses that support the functioning of London's economy"*. Supports development proposals in SILs where the uses proposed fall within the broad industrial-type activities, including utilities infrastructure. |
| | Policy E8 - Sector growth opportunities and clusters<br><br>States that sector-specific employment opportunities and business growth opportunities should be supported. |
| Chapter 7 Heritage and Culture | Policy HC1 Heritage conservation and growth<br><br>Sets out requirements for developments in respect of conserving heritage assets, and their settings, and the identification of assets of archaeological significance and avoidance or minimisation of harm through design and appropriate mitigation.<br>The policy also notes that "*where heritage assets have been identified as being At Risk, boroughs should identify specific opportunities for them to contribute to regeneration and place-making, and they should set out strategies for their repair and re-use*". |
| Chapter 8 Green Infrastructure | Policy G3 Metropolitan Open Land<br><br>Seeks to protect MOL from inappropriate development. |

| Theme | Policy / Objective |
|---|---|
| and Natural Environment | Policy G4 Local green and open space<br><br>Requires the protection of local green and open spaces. |
| | Policy G6 Biodiversity and access to nature<br><br>States that Sites of Importance for Nature Conservation (SINCs) should be protected and that the greatest protection should be given to the most significant sites. |
| | Policy G7 Trees and woodlands<br><br>Requires that *"Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees, there should be adequate replacement…"* |
| Chapter 9 Sustainable Infrastructure | Policy SI1 Improving air quality<br><br>Aims to "*ensure that new developments are designed and built, as far as is possible, to improve local air quality and reduce the extent to which the public are exposed to poor air quality. This means that new developments, as a minimum, must not cause new exceedances of legal air quality standards, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits".*<br><br>The policy notes that development proposals should not:<br>*a)* "*lead to further deterioration of existing poor air quality*<br>*b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits*<br>*c) reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality*<br>d) *create unacceptable risk of high levels of exposure to poor air quality."* |
| | Policy SI2 Minimising greenhouse gas emissions<br><br>Aims for all major development to be net zero-carbon and achieve a minimum on-site reduction of at least 35% beyond Building Regulations (2013). |

| Theme | Policy / Objective |
|---|---|
| | Requires major development to include a detailed energy strategy to demonstrate how the zero-carbon target will be met and where it is clearly demonstrated that the zero-carbon target cannot be achieved on-site, any shortfall should be provided through:<br>– *"a cash in lieu contribution to the borough's carbon offset fund, or*<br>– *off-site provision provided that an alternative proposal is identified and delivery is certain."*<br>The policy also states that *"Boroughs should ensure that all developments maximise opportunities for on-site electricity and heat production from solar technologies (photovoltaic and thermal)".* |
| | Policy SI3 Energy infrastructure<br><br>Supports increasing the amount of new renewable energy sources in London and the development of energy masterplans for large-scale development locations. States that in locations where a heat network is planned but not yet in existence development should be designed for connection. |
| | Policy SI5 Water infrastructure<br><br>Requires that "*In order to minimise the use of mains water, water supplies and resources should be protected and conserved in a sustainable manner".* |
| | Policy SI7 Reducing waste and supporting the circular economy<br><br>Sets targets for waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal. |
| | Policy SI8 Waste capacity and net waste self-sufficiency<br><br>Sets targets to manage London's waste sustainably and criteria against which development proposals for new waste sites or to increase the capacity of existing sites should be evaluated. |
| | Policy SI9 Safeguarded waste sites<br><br>States that "*Existing waste sites should be safeguarded and retained in waste management use".* |

| Theme | Policy / Objective |
|---|---|
| | Policy SI12 Flood risk management<br><br>States that *"Development proposals should ensure that flood risk is minimised and mitigated, and that residual risk is addressed".*<br><br>The policy requires that *"current and expected flood risk from all sources across London should be managed in a sustainable and cost-effective way in collaboration with the Environment Agency, the Lead Local Flood Authorities, developers and infrastructure provided".* |
| | Policy SI13 Sustainable drainage<br><br>States that *"Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible in line with the following drainage"* and that *"Drainage should be designed and implemented in ways that promote multiple benefits including increased water use efficiency, improve water quality, and enhance biodiversity, urban greening, amenity and recreation."* |
| | Policy SI15 Water transport<br><br>States that "*Development proposals to facilitate an increase in the amount of freight transported on London's waterways should be supported"* and that *"Development proposals close to navigable waterways should maximise water transport for bulk materials during demolition and construction phases".* |
| Chapter 10 Transport | Policy T1 Strategic Approach to Transport<br><br>Development Plans should support the "*strategic target of 80% of all trips in London to be made by foot, cycle or public transport by 2041"* by:<br><br>– Encouraging greater integration of land use and transport as well as further improvements to the public transport which creates greater connectivity;<br><br>– Reducing congestion by encouraging a modal shift from car use to public transport;<br><br>– Promoting consolidation of deliveries in order to minimise the delivery trips; and |

| Theme | Policy / Objective |
|---|---|
| | – Investing in high quality interchanges and rebalancing the public transport network to make active methods of travel more attractive. |
| | Policy T2 Healthy Streets<br><br>Encourages Development Plans to facilitate more trips by walking and cycling through improving street environments. |
| | Policy T3 Transport capacity, connectivity and safeguarding<br><br>Seeks to safeguard transport enhancements including a crossing of the River Thames at Gallions Reach or Belvedere, public transport river crossings in east London, extension of river transport services in east London and the DLR extension from Gallions Reach to Thamesmead. |
| | Policy T4 Assessing and mitigating transport impacts<br><br>Requires Transport Assessments to support applications for development, identifying where required, appropriate mitigation for transport impacts and ensuring that proposals don't increase road danger. |
| | Policy T5 Cycling<br><br>Sets out the approach to removing barriers to cycling and creating environments in which people choose to cycle. It sets out the minimum cycle parking standards and the Mayor's aspirations for improvements to the strategic cycle network across London. |
| | Policy T6 Car Parking<br><br>Sets out differing parking standards for Central Activities Zone, Inner London, Outer London and other parts of London for residential, office, retail, hotel, leisure and disabled person parking standards. |
| | Policy T7 Deliveries, servicing and construction<br><br>States that development proposals should "*facilitate sustainable servicing and deliveries*" and requires that Construction Logistics Plans and Delivery and Servicing |

| Theme | Policy / Objective |
|---|---|
| | Plans should be developed *"in accordance with Transport for London guidance and in a way which reflects the scale and complexities of developments"*.<br>Requires that development proposals must consider the use of rail/water for the transportation of material and enable the use of safer, lower trucks with increased levels of direct vision. |
| | Policy T9 Funding transport infrastructure through planning<br>Identifies the requirement to support transport infrastructure development through the Mayoral CIL and section 106 agreements. |

### Draft Economic Development Strategy for London

A.1.49. The Draft Economic Development Strategy for London was published for consultation in December 2017. It identifies a need for substantial investment in new infrastructure, including energy and waste, to support economic growth across London. It identifies London's industrial areas as essential to the functioning of the capital's economy as they provide space for uses including waste and utilities operations.

A.1.50. The strategy also identifies a need to recover value from waste materials and to remove the reliance on landfill for treating London's waste, as available landfill capacity is expected to be reached by 2026. The strategy states that to achieve the aspiration of London becoming a zero-waste city, "*65 per cent of London's municipal waste will be recycled and the rest turned to energy".*

## A.1.4. Local Planning Policy Context

A.1.51. The Indicative Application Boundary falls within two local planning authorities, London Borough of Bexley (LBB) and Dartford Borough Council (DBC). The main REP site is wholly located within the LBB whilst the electrical connection route is located partially within the LBB and DBC administrative areas.

A.1.52. The LBB Development Plan Framework consists of: Bexley Core Strategy (adopted 2012); Bexley Unitary Development Plan (UDP) Saved Policies (2004, updated in 2012); and the Bexley Energy Masterplan (adopted 2016). The Bexley Growth Strategy (adopted 2017) is intended to underpin future planning policy and should inform development and investment decisions in the borough although it is not a planning policy document.

A.1.53. The DBC Development Plan consists of: Dartford Core Strategy (2011), the Dartford Development Policies Plan and Policies Map (2017), and the Kent Minerals and Waste Local Plan 2013-30 (2016).

A.1.54. The Kent Local Transport Plan 4: Delivering growth without gridlock 2016-2031 may also be relevant.

### Bexley Local Plan Designations

A.1.55. Several local planning designations apply to the REP site. These are shown on the Bexley Saved UDP Policies Proposals Map (2004) and an extract is provided in **Figure A1.1**:

- Primary Employment site (Saved UDP Policy E3);
- Thames Policy Area and access to the riverside (Saved UDP Policies TS13 & TS14); and
- Protected view: the southern part of the REP site falls within a protected strategic viewing corridor (East London Panorama from Beckton Alps) (Saved UDP Policy ENV39)

A.1.56. The southern boundary of the REP Site adjoins land designated as Metropolitan Open Land (MOL) (Saved UDP Policy ENV14) and Area of Metropolitan Importance for Nature Conservation (Policies CS18 and CS17). Part of the Electrical Connection route (as shown on **Figure 1.2 Document Reference 6.2**) also passes through this land.

**Figure A1.1 – Bexley Saved UDP Policy Map (2004)**


### Bexley Core Strategy (2012)

A.1.57. The Bexley Core Strategy (2012) sets out the council's long term vision for the development of the borough up to 2026. The Core Strategy has a focus on the principles of sustainable development in the borough. **Table A1.4** sets out the policies that are relevant.

Table A1.4 Bexley Core Strategy relevant policies

| Theme | Policy |
|---|---|
| Sustainable Development | CS01 – Achieving Sustainable Development<br>States that sustainable development will be achieved by maximising the effective and efficient use of natural and physical resources whilst addressing pollution issues, such as contamination, noise and air quality, to contribute to the health and well-being of the community and the environment. |
| Flood Management | CS08 – Climate Change and Flood Risk Management<br>All developments should plan for, adapt to, and mitigate the impacts of climate change, by reducing the carbon emissions related to the construction and operation of all development. The Council will investigate opportunities for the funding and development of decentralised energy networks in the Belvedere Employment Area. |
| Sustainability and the Environment | CS09 – Using Bexley's resources sustainably<br>The Council will seek to maximise the effective and efficient use of natural and physical resources, while contributing to the health and wellbeing of the community and environment. The Council will support the decontamination and redevelopment of brownfield sites to support new housing and employment growth, particularly in the Thames Gateway growth area. |
| | CS13 - Access to jobs<br>Seeks to ensure that residents in the borough are provided with opportunities to access training and a variety of local jobs. The Council will achieve this by:<br>– "*supporting development proposals that diversify the local employment offer*" (a);<br>– "*supporting development proposals that intensify land-uses*…" (b); and<br>– "*reducing resident's need to travel long distances by supporting the creation of a diverse local economy which offers a wide range of local job opportunities, …*" (c). |
| | CS17 – Green Infrastructure<br>The Council will aim to protect, enhance, and promote Bexley's green infrastructure such as open space and |

| Theme | Policy |
|---|---|
| | waterways. This includes protecting metropolitan open land from inappropriate development. |
| | CS18 – Biodiversity and Geology<br>The Council will seek to protect and enhance its biodiversity and geological assets by complying with national and regional policy and guidance. Consideration will be given to potential impacts on the Thames Estuary and Marshes SPA. The Council will seek to protect, conserve and enhance Bexley's SSSIs and SINCs. The Council will seek protection and enhancement of the natural habitat as far as practicable, seeking biodiversity enhancements and improved access to nature, particularly in areas of deficiency. |
| Economy | CS03 – Belvedere Geographic Region<br>Identifies a future opportunity to link proposed regeneration areas at Veridion Park, Imperial Gateway and Tavy Bridge to the Riverside energy from waste incinerator by way of a high-pressure heat main. Requires that new development mitigates against all types of flood risk, through flood resilience and resistance. |
| | CS12 – Bexley's future economic contribution<br>The Council will allocate sufficient and appropriately located employment land (including Riverside) to meet the boroughs requirements and promote sustained economic and employment growth.<br>Belvedere Employment Area is noted as one of two principal locations of employment uses. |
| Transport | CS15 – Integrated Transport System<br>The Council will seek to improve the efficiency and sustainability of freight movement in the borough, while protecting viable safeguarded wharves on the River Thames. |
| Heritage | CS19 - Heritage and archaeology<br>The Council will conserve and enhance the significance of heritage assets, their setting, and the wider historic environment. Where archaeological evidence is identified, it should be retained in situ wherever possible. Where archaeological evidence cannot be retained, the |

| Theme | Policy |
|---|---|
| | appropriate levels of archaeological investigation and recording should be undertaken prior to the redevelopment of the site. |
| Waste | Policy CS20 Sustainable waste management<br>The Council will support regionally significant waste management infrastructure. Development should ensure that waste is managed in a manner which protects human health and the environment and in accordance with the principles of the waste hierarchy. |

### Bexley UDP (2004) Saved Policies (2012)

A.1.58. The Bexley UDP was adopted in 2004. Since 2004, many alterations to the document have occurred. In 2007, several UDP policies had expired and by 2012, some of the remaining policies were superseded by the adoption of the Bexley Core Strategy in 2012. The saved policies will continue to form part of Bexley's Development Plan Framework until they are replaced by policies in the new Bexley Local Plan. **Table A1.5** sets out the saved policies that are relevant.

Table A1.5 relevant Bexley Saved UDP policies

| Theme | Policy |
|---|---|
| General strategy | Policy G1<br>States that the Council will "*seek to protect, maintain and improve the quality of the built and natural environment for the economic and social wellbeing of the borough whilst making efficient and effective use of the borough's land resources. In particular, proposals for development which would detract from the overall environmental quality of an area will not be acceptable".* |
| | Policy G4<br>States that the Council will "*within available resources, seek to provide adequate means and opportunities for all sections of the borough's population to have access to housing, jobs, leisure, social and community facilities".* |
| Sustainability and the Environment | ENV15 - Metropolitan Open Land<br>There will be a presumption against permitting the construction of new buildings, or the change of use of land or buildings on Metropolitan Open Land for purposes other than: |

| Theme | Policy |
|---|---|
| | – agriculture and forestry;<br>– predominantly open air recreation;<br>– nature conservation;<br>– educational and institutional uses in extensive grounds;<br>– cemeteries; or<br>– other uses which would maintain the open character or visual amenities of Metropolitan Open Land. |
| | ENV28 Local Nature Reserves<br>The Council will declare and manage sites in which it has a legal interest and that are of special importance to the local community for wildlife and nature conservation as Local Nature Reserves (LNRs). Development will be resisted in these areas that would endanger the preservation of those special characteristics that lead to designation. |
| | ENV32 – Sites of Special Scientific Interest (SSSI)<br>Development will not be permitted within SSSIs as indicated on the proposals map, unless it can be shown that there would be no damage to scientific or nature conservation interests. |
| | ENV33 – Development of land adjoining Sites of Special Scientific Interest<br>Development will be resisted unless it can be shown that there would be no damage to scientific or nature conservation interests. |
| | ENV39 – Built Environment<br>In order to protect and enhance the quality of the built environment, the Council will seek to ensure that all new developments, are satisfactorily located and of a high standard of design and layout. The Council will consider the extent to which the proposal:<br>– is compatible with the character of the surrounding area, would not prejudice the environment of the occupiers of adjacent property, or adversely affect the street scene by reason of its (a) scale, (b) massing, (c) height, (d) layout, (e) elevational treatment, (f) materials and/or (g) intensity of development; |

| Theme | Policy |
|---|---|
| | – is appropriately landscaped, including the retention of appropriate trees and shrubs and the incorporation of public art where relevant;<br>– has any unreasonable effect on the surrounding area by reason of noise and any emissions to land, air, or water, and is not, by reason of its location, itself adversely affected by such conditions as may already be in existence within the neighbourhood;<br>– makes adequate provision for vehicle parking in accordance with the Council's vehicle parking standards;<br>– takes due account of the need to deter crime, both against individuals and against public or private property whilst maintaining an attractive environment; and<br>– takes into consideration important local and strategic views, particularly where the proposed development is one which significantly exceeds the height of its surroundings or is located on a prominent skyline ridge. |
| | ENV40 - Contamination and remedial treatment of land<br>Sites that are known or suspected of being contaminated must undertake surveys to determine the source of any pollutants and any remedial measures necessary to prevent these causing hazards. The Council may require applicants to enter into a legal agreement to ensure that the necessary remedial measures are made. |
| | ENV41 - Air Quality Strategies<br>The Council will require an applicant to prepare an Air Quality Assessment where proposals:<br>– *"include industrial activities with potentially significant air borne emissions;*<br>– *have the potential to increase significantly the volume of traffic flows or the ratio of heavy goods vehicles, or the level of congestion so as to place air quality objectives at risk;*<br>– *have the potential to increase the personal exposure of individuals at non-occupational locations to levels of air pollution which are likely to exceed objectives set in either national or local Air Quality Strategies; and/or*<br>– *are located in (or are likely to effect) an Air Quality Management Area, which would significantly change* |

| Theme | Policy |
|---|---|
| | *the pattern of traffic flows or could lead to emissions of one or more of the pollutants specified in the national Air Quality Strategy."*<br>The policy also states the "*The Council may resist or impose conditions on applications where an air quality assessment shows that the proposed development will have an adverse effect on the achievement of national or local air quality objectives".* |
| Economy | E1 – Criteria for proposed industrial and commercial development<br>Proposals for industrial uses will be resisted unless the following conditions are met:<br>– there should be no material adverse effects on the health, safety or amenities of the occupants of residential areas or neighbouring properties;<br>– the development is satisfactory in terms of design, scale and layout;<br>– the development satisfies the requirements in Policy T6 with regards to effects on the local highway network and the availability of public transport, and adequate site access can be provided;<br>– adequate provision is made for vehicle parking in accordance with the Council's current standards and turning space.<br>In addition, the Council will take account of the following when considering proposals for industrial and commercial development:<br>– provision of appropriate landscaping, including the retention of suitable trees and shrubs and nature conservation features; and<br>– the need for safeguards against discharges from the development that could lead to the build-up of high levels of pollution or find their way into water courses. |
| | E3 - Primary Employment Areas<br>The Council encourage industrial uses to locate in the Primary Employment Areas. Land within the Primary Employment Area will be safeguarded for industrial and commercial use only. |

| Theme | Policy |
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| | E4 - Secondary Employment Areas<br>The Council will support the development of secondary employment areas. Industrial and commercial uses are first preference in terms of use. |
| Transport | T6 – Optimising use of the existing transport network<br>The Council will not support any development that would either cause local traffic flows to rise above the design flow for a road or would generate additional traffic on a road on which flows are already exceeded design flow.<br>Development will only be supported if the affected road is included in an improvement programme that would increase capacity and the development is able to undertake un-programmed road improvements, and/or there are no environmental, or other planning or road traffic objections to such highway improvements taking place. |
| | Policy T17 - Off-street parking spaces<br>Off-street parking spaces should be provided in new developments and located to discourage on-street parking and respect the amenity of nearby residents. |
| Thames-side | TS6 - Belvedere Industrial Area<br>The Council will only permit the following uses within the Belvedere Industrial Area: business; storage and distribution; general industry; road haulage and supporting services; and hiring of plant and equipment except for in the Special Industrial Zones.<br><br>The REP Site was previously designated as a Special Industrial Zone under now extant UDP Policy E13. |
| | TS13 – Thames Policy Area Character<br>The Council will protect and enhance the Thames Policy Area, giving attention to achieving good quality design, and protection of views and the skyline. Providing an attractive and safe Riverside Walk along the Thames is also supported. |
| | TS14 – Developments on the Thames-side<br>The Council requires all developments on the waterside of the River Thames to provide improved access to the |

| Theme | Policy |
|---|---|
| | waterside, and where appropriate, an extension of the publicly accessible river walk. |
| | TS15 – Protection of wildlife on the Thames-side<br>The Council will promote the protection of wildlife and the improvement for wildlife of the river and of habitats on Thames-side.<br>Development that diminishes these habitats will be resisted. |
| Minerals and Waste | WAS2 - Waste processing<br>Planning applications for the transfer, disposal and processing of waste must:<br>– demonstrate no significant adverse amenity impacts on residential or commercial areas;<br>– demonstrate no significant adverse environmental impacts (pollution, noise, smells, and traffic generation);<br>– have good connections to primary and secondary roads;<br>– use rail and river transport for the transport of waste wherever possible;<br>– accord with the Waste Recycling Plan;<br>– not conflict with Policy E13 and policies contained in Chapter 5; and<br>– development for waste processing facilities, including energy from waste should be of an appropriate scale to ensure that waste is processed close to the point at which it is generated, in accordance with the proximity principle. |

### Bexley Energy Masterplan (2015)

A.1.59. The Bexley Energy Masterplan was published in 2015 and produced by consultants Ramboll. The Energy Masterplan sets out a framework for future energy supply options to support the Core Strategy sustainability targets. The study is centred on the Riverside Resource Recovery Facility (RRRF).

A.1.60. Chapter 4 ‘Energy Supply Appraisal’ identifies RRRF as the primary heat source, the facility processes 670,000 tonnes of London’s waste per annum and generates a gross power output of over 60 MWe which supplies electricity around 100,000 homes. The Energy Masterplan recognises that the facility has

the necessary infrastructure for heat off-take to be provided without substantial alteration and estimates that around 28.6 MTh of heat is available for export to a heat network.

A.1.61. Chapter 6 'Heat Network Infrastructure Proposals' models the three-potential heat network route scenarios:

- Scenario 1: District Heat (DH) pipeline route extends along Yarnton Way and would require installation of pipes across the busy junction between the A2016;
- Scenario 2: DH pipeline route extends along the A2041 requires the crossing of the Eastern Way dual carriageway possibly along the footbridge that currently crosses Eastern Way; and
- Scenario 3: extending the DH pipeline route south east from the RRRF requires a long stretch of pipe along the Bronze Age Way (A2016) and three road crossings.

A.1.62. Chapter 7 present a techno-economic analysis of the three DH scenarios and the key findings are summarised below:

- Scenarios 1 and 2 present a good opportunity for utilising heat from the RRRF to serve the Peabody Thamesmead housing and nearby developments since both scenarios are found to generate IRRs that would be attractive to private sector Energy Service Companies (ESCos);
- Scenario 3a DH network route into Erith presents a good opportunity for utilising heat from the RRRF, although at a lower heat sale price, it is at the borderline of being attractive to a private sector ESCo; and
- Scenario 3b does not present high enough Internal Rate of Return (IRR) to attract private investment from an ESCo. However, the IRRs reach 7% at the mid-range heat and electricity sale prices so there may be opportunity for a network with a larger proportion of public sector funding and involvement.

A.1.63. The study identifies an opportunity for the RRRF to supply heat to the Peabody Thamesmead housing estate, Belvedere Growth Area and Yarnton Way employment land developments as part of a new district heat network. The study recommends that Bexley pursue scenarios 1 and 2 and identifies potential for a connection across the Thames upon construction of a new crossing.

### Bexley Growth Strategy (2017)

A.1.64. The Bexley Growth Strategy was adopted in 2017, it details the Council's proposals to manage housing and economic growth, and associated supporting infrastructure. The strategy is not a planning policy document; however, the document is intended to inform future planning policy, including the emerging draft new Bexley Local Plan.

A.1.65. The document highlights the ambitions for economic development in Bexley:

- Economic Ambition 1 – Use growth to secure economic development;
- Economic Ambition 2 – Create a broader, more resilient and higher quality economic base;
- Economic Ambition 3 - Make Bexley a thriving and ambitious place of opportunity through education and employment; and
- Economic ambition 4 - Enhance Bexley's image.

A.1.66. The Growth Strategy sets out a number of key economic objectives and those of relevance include:

- *"Economic objective 1: use growth to secure economic development;*
- *Economic objective 2: create a broader, more resilient and higher quality economic base; and*
- *Economic objective 3: make Bexley a thriving and ambitious place of opportunity through education and employment."*

A.1.67. The vision for the growth area of Belvedere includes the provision of 8,000 new homes and 3,500 new jobs, made possible by changes in connectivity and infrastructure provision.

A.1.68. The document recognises that the delivery of growth is dependent on the close coordination of highway and utility planning. The Council will therefore seek to facilitate the coordinated delivery of utilities services under the highway.

A.1.69. The document highlights the protection and enhancement of biodiversity and strategic green corridors including the network of SINCs.

A.1.70. The document also states that the Council will seek to use modern technology to identify cost effective utility solutions such as utilising existing heat sources (including the RRRF) to supply market competitive, low carbon energy to new developments and existing properties.

### Thamesmead and Abbey Wood Supplementary Planning Document (SPD) (2009)

A.1.71. The Thamesmead and Abbey Wood SPD was adopted by LBB and RBG in 2009, it identifies projects and guidance to guide the future development of the Thamesmead and Abbey Wood area. Section 3.3 (Key principles) supports the potential use of district heat networks and low carbon energy technologies to help meet current and future demand for energy.

### Dartford Local Plan Designations

A.1.72. The Dartford Policies Map, adopted in 2017, identifies several designations on or around the Application Site. The Application Site is within a 'Biodiversity Opportunity Area' (Policy CS14/Policy DP26) 'Borough Open Space' (Policy CS14/Policy DP24), and an 'Air Quality Management Zone' (Policy DP5).

A.1.73. The following designations also border the Application Boundary: 'Employment Area' (Policy CS7/Policy DP20), 'Local Wildlife Site' (Policy CS14/Policy DP25) and 'Nature Improvement Area' (Policy CS14/Policy DP25). The relevant Dartford Core Strategy policies are summarised in **Table A1.6** and **Table A1.7** provides summary of the relevant Dartford Development Policies Plan policies.

### Dartford Core Strategy (2011)

A.1.74. The Dartford Core Strategy was adopted in 2011. The document sets out the Borough's future needs in terms of housing, transport, growth, and the environment. The core principles drive the decision making within the borough. **Table A1.6** lists the policies that are relevant.

Table A1.6 Dartford Core Strategy relevant policies

| Theme | Policy |
|---|---|
| Managing Development | Policy CS8 - Economic Change<br>The Council will seek a transformation of the economy by focusing on key growth sectors, including environmental technologies and construction. |
| | Policy CS9 - Skills and Training<br>Seeks to ensure the provision of a locally skilled workforce to support the economic transformation of the borough, by requiring developments to contribute to the delivery of skills training and education commensurate with their size. |
| Transport | CS16 – Transport Investment<br>The Council will seek an appropriate level of contributions from development, either financially or in kind, to fund the infrastructure required. Off-site transport improvements relating directly to an individual development, including site access and local junction and road improvements will be required through S106 and S278 agreements in addition to any pooled payments towards the Strategic Transport Infrastructure programme. |
| Sustainability and the Environment | CS14 – Green Space<br>Aims to create approximately 300 ha of new or improved green spaces by 2026 and requires developments to |

| Theme | Policy |
|---|---|
| | contribute to the green grid network. New development should contribute to the green grid network as follows:<br>– Sites of 20 ha and over: at least 30% of the site area as green space;<br>– Sites of between 20ha and 2ha: at least 20% of the site area as green space; and<br>– Sites of less than 2ha will be considered on a site by site basis.<br>Where on-site open space is not appropriate or feasible, contributions may be sought for off-site improvements towards open space provision for community use, biodiversity enhancements and flood risk mitigation.<br>The Council will protect and enhance existing open spaces, including locally important sites, areas of nature conservation, SSSIs, and local wildlife sites. |
| | CS23 – Minimising Carbon Emissions<br>To minimise carbon emissions through energy efficiency and the use of renewable energy, the Council will:<br>– Require all new developments to demonstrate that reductions in energy use through design and layout has been explored and applied.<br>– New non-residential development over 1,000 sqm must meet BREEAM ‘excellent’.<br>– Work in partnership to establish an enabling body to facilitate a local network generating and distributing decentralised energy, to maximise the opportunities for low/zero carbon generation. |
| | CS24 – Flood Risk<br>To manage and mitigate flood risk, the Council will:<br>– Ensure that sites in Flood Zone 2 and 3a, shown to be acceptable for development following application of the Sequential Test and that the Exception Test can be passed, and that residual risk is managed through a Flood Risk Assessment (FRA) and an appropriate Flood Plan;<br>– Require the SuDS ‘management train’ to be applied, as appropriate, in all new development; and<br>– Identify and implement a green infrastructure network through the safeguarding of existing areas of open space |

| Theme | Policy |
|---|---|
| | and a requirement for generous provision of green space and water bodies in new development. |
| | CS25 – Water Management<br>The Council will manage the supply and quality of water and waste water treatment by:<br>– Monitoring development to ensure that the pace of development does not outstrip the supply of water and waste water treatment capacity; and<br>– Requiring all non-residential developments of 1,000sqm and above to meet the BREEAM 'excellent' standards of water efficiency. |

### Dartford Development Policies Plan (2017)

A.1.75. The Dartford Development Policies Plan was adopted in 2017 and forms the second part of the Dartford Local Plan. The plan sets out the main planning policies that will be used to assess planning applications. **Table A1.7** lists the policies that are relevant to the REP DCO application.

Table A1.7 Dartford Development Policies Plan relevant policies

| Theme | Policy |
|---|---|
| Sustainable Development | DP1 - Dartford's Presumption in Favour of Sustainable Development<br>The policy makes clear that DBC will work with applicants to "*enable appropriately located development that improves the economic, social and environmental conditions in the Borough".* |
| Design | DP2 - Good Design in Dartford<br>Requires the provision of good high quality design, including "*early consideration should be given to the achievement of on-site flood alleviation".* |
| Transport | DP3 – Transport impacts of development<br>Development will only be permitted where it is appropriately located and makes suitable provision to minimise and manage the arising transport impacts. |

| Theme | Policy |
|---|---|
| | Development will not be permitted where the localised residual impacts result in severe impacts on one or more of the following:<br>– Road traffic congestion and air quality;<br>– Safety of pedestrians, cyclists and other road-users; and<br>– Excessive pressure for on-street parking. |
| Sustainability and the Environment | DP5 – Environmental and Amenity Protection<br>Development will only be permitted where it does not result in unacceptable material impacts, individually or cumulatively, on neighbouring uses, the boroughs environment or public health. This includes noise disturbance or vibration; odour; light pollution; ground contamination; air and water quality; and intensity of use.<br>Developments should not materially impede the continuation of existing use. Planning applications on or in the immediate vicinity of landfill sites must be accompanied by a full technical analysis of the site and its surroundings. Analysis must show that landfill gas will not be a hazard and that development will not cause adverse impacts on groundwater. |
| | DP11 – Sustainable technology and construction<br>Development should be well located, innovatively and sensitively designed and constructed to tackle climate change, minimise flood risk and natural resource use and must aim to increase water efficiency.<br>In determining applications for small and large-scale low/zero carbon technology and installations, the economic and environmental benefits of the proposal will be weighed against the individual and cumulative impact of the development.<br>Development will only be permitted in line with national policy and where the following factors have been satisfactorily taken into consideration:<br>– Character, and visual and residential amenity;<br>– Landscape, topography, and heritage;<br>– Shadow flicker and glare (if relevant);<br>– Electronic and telecommunication interference/ navigation and aviation issues (if relevant); |

| Theme | Policy |
|---|---|
| | – Quality of agricultural land taken (where applicable);<br>– Ensuring installations are removed when no longer in use and land is then restored;<br>– Potential effects on Policies Map designations/ protected sites or areas in the Borough including Green Belt, heritage assets, and SSSIs/ areas of high biodiversity value; and<br>Potentially significant water supply, flooding or wastewater implications. |
| | DP24 – Open space<br>Development on playing fields, sports pitches, and land shown on the policies map will not be permitted unless it is demonstrated that one of the following criteria is satisfied:<br>– Where the sports/open/green space will be retained in its current quality, with development limited to a small proportion;<br>– Where development will result in a significant loss in the quantity of open space or loss of sports pitches, replacement provision will be delivered within accessible walking distance of the site; and<br>– Development of non-designated space will only be permitted where a convincing case is made in justification. |
| | DP25 – Nature conservation and enhancement<br>Development on the hierarchy of designated sites, featuring nationally recognised and locally protected sites, shown on the Policies Map will not be permitted. Development located within close proximity to designated sites, or with likely effects on them, should demonstrate that the proposal will not adversely impact on the features of the site that define its value or ecological pathways to the site.<br>Furthermore, proposals should seek to avoid any significant adverse impact on existing biodiversity features. Any potential loss or adverse impact must be mitigated.<br>Developments will be expected to preserve and, wherever possible, enhance existing habitats and ecological quality, including those of water bodies, particularly where located in Biodiversity Opportunity Areas.<br>In all development proposals, existing trees should be retained wherever possible. If retention is demonstrated not to be feasible, replacement provision should be of an |

| Theme | Policy |
|---|---|
| | appropriate tree species and maturity and/ or canopy cover considering the tree that is being replaced and the location. |
| Economy | DP20 – Identified employment areas<br>Development for B-class and industrial sui generis uses will be permitted at these locations where industrial development provides for the compatible operation of different activities within the employment area. Redevelopment will be permitted only where it is clearly shown that significant overriding local economic and job benefits will be achieved.<br>Proposals must be acceptable regarding hours of operation, traffic, noise, fumes, smell, dust, paint or other chemical over-spray, vibration, glare or light spill, electronic interference, or other harmful or nuisance creating material impacts on neighbours or environmental assets. |
| Heritage | DP12 – Historic Environment Strategy<br>Development should contribute to the conservation and enjoyment of the borough's historic environment. Where heritage is at risk, landowners will be expected to work proactively to preserve or enhance these assets. Development proposals which may also affect the significance of heritage assets or their setting should demonstrate how these assets will be protected, conserved or enhanced.<br>The policy notes that a heritage assessment should accompany all planning applications affecting heritage assets. |
| | DP13 – Designated Heritage assets<br>A heritage statement should establish the significance of the heritage asset to enable the assessment the impact of a development proposal. Any harm or loss will require clear and convincing justification.<br>In determining planning applications, the LPA will pay close regard to:<br>– The significance of the heritage asset;<br>– The desirability of maintaining and, where possible, enhancing significance; and<br>– The desirability of ensuring viable uses are found for heritage assets, consistent with their conservation.<br>Where a proposal will lead to substantial harm or total loss of significance, permission will be refused unless it can be |

| Theme | Policy |
|---|---|
| | clearly demonstrated that the development is necessary for substantial public benefits to be achieved that will outweigh the harm or loss.<br>Where a proposal will lead to less than substantial harm, this will be weighed against the public benefits of the proposal. |

### Kent Local Transport Plan 4: Delivering Growth without Gridlock 2016-2031

A.1.76. The Kent Local Transport Plan 4: Delivering Growth with Gridlock was adopted in 2016, and sets out the strategy for transport priorities across Kent, and details of the transport investment required to support the growth.

A.1.77. The Kent Local Transport Plan (LTP) sets out the strategic transport priorities across the county. The relevant priorities are as follows:

- New Lower Thames Crossing – a new lower Thames crossing located to the east of Dartford and Gravesend is required to alleviate pressure on the Dartford Crossing and unlock opportunities for development. Capacity on the Dartford Crossing is overloaded for large periods of the day and it is extremely vulnerable to incidents.

A.1.78. The LTP proposes the following transport improvement measures within the vicinity of the Application Site:

- Improvements/new bridge at A282 Junction 1a;
- Pedestrian/cycle bridge over River Darent at the Northern Gateway Strategic site; and
- Measures to address the impacts of Dartford Crossing traffic on the local road network - the A282 (Dartford Crossing) suffers from congestion at peak times and during traffic incidents.

### Kent Minerals and Waste Local Plan 2013-30 (2016)

A.1.79. The Kent Minerals and Waste Local Plan was adopted in 2016. The plan sets out the strategic objectives for the County of Kent's minerals and waste, and development management policies that the County Council will consider when assessing the planning applications for the period from 2013-2030.

A.1.80. The relevant strategic objectives of the plan for waste include the following:

- *"Promote the management of waste close to the source of production in a sustainable manner";*
- *"Enable minerals and waste developments to contribute to the social and economic fabric of their communities through employment opportunities";*

- *"Use waste as a resource to provide opportunities for the generation of renewable energy for use within Kent through energy from waste and technologies such as gasification and aerobic/anaerobic digestion."*

A.1.81. **Table A1.8** sets out the policies that are relevant:

Table A1.8 Kent Minerals and Waste Local Plan relevant policies

| Theme | Policy |
|---|---|
| Development Management Policies | CSW1 – Sustainable development<br>The Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF, NPPW and the Waste Management Plan for England.<br>Waste development that accords with the development plan should be approved without delay, unless material considerations indicate otherwise. |
| | Policy CSW 6 (Location of Built Waste Management Facilities)<br>Requires that new waste management facilities avoid Groundwater Source Protection Zone 1 and Flood Zone 3b. |
| | DM1 – Sustainable Design<br>Proposals for minerals and waste development will be required to demonstrate that they have been designed to:<br>– Minimise greenhouse gas emissions and other emissions;<br>– Minimise energy and water consumption and incorporate measures for water recycling and renewable energy technology and design in new facilities where possible;<br>– Maximise the re-use or recycling of materials;<br>– Utilise sustainable drainage systems wherever practicable;<br>– Protect and enhance the character and quality of the site's setting and its biodiversity interests or mitigate and if necessary compensating for any predicted loss; and<br>– Minimise the loss of Best and Most Versatile Agricultural Land. |
| | DM2 – Environmental and landscape sites of international, national and local importance<br>Proposals for minerals and/or waste development will be required to ensure that there is no unacceptable adverse impact on the integrity, character, appearance and function, |

| Theme | Policy |
|---|---|
| | biodiversity interests, or geological interests of sites of international, national and local importance. This includes local sites (local nature reserves), national sites (Area of Outstanding Natural Beauty (AONB) and international sites (Special Areas of Conservation and Special Protection Areas). |
| | DM5 – Heritage Assets<br>Proposals for minerals and waste developments will be required to ensure that Kent's heritage assets and their settings, including locally listed heritage assets, registered historic parks and gardens, Listed Buildings, conservation areas, World Heritage Sites, Scheduled Ancient Monuments, archaeological sites and features and defined heritage coastline are conserved in a manner appropriate to their significance.<br>Proposals should result in no significant adverse impact on Kent's historic environment and, wherever possible, opportunities must be sought to maintain or enhance historic assets. |
| | DM6 – Historic Environment Assessment<br>Proposals that are likely to affect important heritage assets will only be granted following: a preliminary historic environment assessment; appropriate provision for preservation in situ; and agreement of mitigation of the impacts on the significance of the heritage assets. |
| | DM7 – Safeguarding mineral resources<br>Planning permission will only be granted for non-mineral development that is incompatible with minerals safeguarding, where it can be demonstrated that either:<br>– The mineral is not of economic value or does not exist; or<br>– that extraction of the mineral would not be viable or practicable; or<br>– The mineral can be extracted satisfactorily, having regard to Policy DM9, prior to the non-minerals development taking place without adversely affecting the viability or deliverability of the non-minerals development; or<br>– The incompatible development is of a temporary nature that can be completed and the site returned to a condition that does not prevent mineral extraction within the timescale that the mineral is likely to be needed; or |

| Theme | Policy |
|---|---|
| | – Material considerations indicate that the need for the development overrides the presumption for mineral safeguarding such that sterilisation of the mineral can be permitted following the exploration of opportunities for prior extraction; or<br>– It constitutes development that is exempt from mineral safeguarding policy, namely householder applications, infill development of a minor nature in existing built up areas, advertisement applications, reserved matters applications, minor extensions and changes of use of buildings, minor works, non-material amendments to current planning permissions; or<br>– It constitutes development on a site allocated in the adopted development plan. |
| | DM8 – Safeguarding minerals management, transportation production and waste management facilities<br>Planning permission will only be granted for development that is incompatible with safeguarded minerals management, transportation or waste management facilities, where it is demonstrated that either:<br>– It constitutes development of the following nature: advertisement applications; reserved matters applications; Minor extensions and changes of use and buildings; minor works; and non-material amendments to current planning permissions; or<br>– It constitutes development on the site that has been allocated in the adopted development plan; or<br>– Replacement capacity, of the similar type, is available at a suitable alternative site, which is at least equivalent or better than to that offered by the facility that it is replacing; or<br>– It is for a temporary period and will not compromise its potential in the future for minerals transportation; or<br>– The facility is not viable or capable of being made viable; or<br>– Material considerations indicate that the need for development overrides the presumption for safeguarding; or<br>– It has been demonstrated that the capacity of the facility to be lost is not required. |

| Theme | Policy |
|---|---|
| | DM9 – Prior extraction of minerals in advance of surface development<br>Planning permission for, or incorporating, mineral extraction in advance of development will be granted where the resources would otherwise be permanently sterilised provided that:<br>– The mineral extraction operations are only for a temporary period; and<br>– The proposal will not cause unacceptable adverse impacts to the environment or communities. |
| | DM20 – Ancillary Development<br>Proposals for ancillary development within or in close proximity to mineral and waste development will be granted providing:<br>– The proposal is necessary to enable the main development to proceed; and,<br>– It has been demonstrated that there are environmental benefits in providing a close link with the existing site that outweigh the environmental impacts. |
| | DM21 – Incidental mineral extraction<br>Planning permission for mineral extraction that forms a subordinate and ancillary element of other development will be granted provided that operations are only for a temporary period. |
| Delivery Strategy for Minerals | CSW3 – Waste reduction<br>All new development should minimise the production of construction, demolition and excavation waste and manage any waste. |

### Other relevant local planning policies

A.1.82. **Table A1.9** sets out relevant policies from neighbouring boroughs development plan documents.

Table A1.9 Other relevant local planning policies

| Document | Policy |
|---|---|
| London Borough of Havering (LBH) Core Strategy and Development Control Policies Development Plan Document (2008) | Policy DC52 - Air Quality<br>Describes the measures developments must adopt during construction and occupation in order to achieve higher environmental standards. It states that:<br>*"Planning permission will only be granted where new development, both singularly or cumulatively, does not cause significant harm to air quality, and does not cause a breach of the targets set in Havering's Air Quality Management Area Action Plan".*<br>The policy requires a formal assessment where development is likely to cause a breach of emission levels for prescribed pollutants and where the assessment confirms a breach, planning permission will only be granted if suitable mitigation measures are put in place through conditions or legal agreement. |
| | Policy CP18 – Heritage<br>"*Development affecting sites, buildings, townscapes and landscapes of special architectural, historical or archaeological importance must preserve or enhance their character or appearance. Contributions may be sought towards the preservation or enhancement of historic assets where appropriate."* |
| | DC67 – Buildings of Heritage Interest<br>Development affecting Listed buildings or their setting will only be allowed where it does not involve the demolition of a Listed Building and it does not adversely affect a Listed Building or its setting. |
| London Borough of Barking and Dagenham (LBBD) Core Strategy (2010) | Policy CR1 - Climate Change and Environmental management<br>Seeks to protect water and air quality from the impacts of development. |
| | Policy CP2 - Protecting and Promoting our Historic Environment |

| Document | Policy |
|---|---|
| | Requires development proposals to respects and historic assets, reinforce local distinctiveness and promote respect for the local historic context. |
| LBBD Borough Wide Planning Policies Development Plan Document (2011) | Policy BR14 - Air Quality<br>Describes the measures that development must adopt during construction and occupation to achieve higher air quality standards. It states that:<br>"*Where development is likely to have a significant negative impact on air quality, the Council will request the submission of an air quality impact assessment. The Council will have regard to national air quality strategy objectives and consider whether the development is expected to:*<br>– *Lead to a breach or worsening of a breach of an EU Limit Value (this can include introduction of new exposure to cause a breach).*<br>– *Lead to a breach or worsening of a breach of an Air Quality Objective, or cause a new Air Quality Management Area to be declared.*<br>– *Interfere with or prevent the implementation of actions within an Air Quality action plan.*<br>– *Interferes with the implementation of a local Air Quality Strategy.*<br>– *Leads to an increase in emissions, degradation in air quality or increase in exposure below the level of a breach of an Air Quality Objective."* |
| | Policy BP2: Conservation Areas and Listed Buildings<br>"*Development proposals which affect a listed building or its setting will be expected to demonstrate that any social and economic benefits of the scheme are balanced to ensure the development is in keeping with its significance including its special architectural and historic interest."* |
| Royal Borough of Greenwich (RBG) Local | Policy E(a) – Pollution<br>"Planning permission will not normally be granted where a proposed development or change of use |

| Document | Policy |
|---|---|
| Plan: Core Strategy with Detailed Policies (2014) | would generally have a significant adverse effect on the amenities of adjacent occupiers or uses, and especially where proposals would be likely to result in the unacceptable emission of noise, light, vibrations, odours, fumes, dust, water and soil pollutants or grit.<br><br>Housing or other sensitive uses will not normally be permitted on sites adjacent to existing problem uses, unless ameliorating measures can reasonably be taken and which can be sought through the imposition of conditions…" |
| | Policy E(c) - Air Pollution states:<br>"*Development proposals with the potential to result in any significant impact on air quality will be resisted unless measures to minimise the impact of air pollutants are included. Such planning applications should be accompanied by an assessment of the likely impact of the development on air quality.*<br>*All new developments with a floor space greater than 500sqm or residential developments of 10 or more units are required to reduce carbon dioxide (CO2), particulate matter (PM10) and nitrogen dioxide (NO2) emissions from transport through the use of measures such as those set out in DEFRA guidance 'Low Emissions Strategies: using the planning system to reduce transport emissions Good Practice Guidance-January 2010".* |

### A.1.5. Emerging Local Planning Policy Context

#### Draft Bexley New Local Plan

A.1.83. The LBB is preparing a new Local Plan which will set out the policies to guide development across the borough up till 2040. LBB is expected to undertake a consultation on the preferred approach to Local Plan policies in January 2019 (the 'Regulation 18 consultation'). The published draft timetable indicates that the new Local Plan will be adopted by summer 2020.

### Draft Dartford New Local Plan

A.1.84. DBC is in the process of preparing a new local plan. DBC consulted on the 'Dartford New Local Plan Strategic Issues' document between June and July 2018 (the 'Regulation 18 consultation'). The document provides information about the strategic development issues which the new Local Plan will address including housing, economic development, transport, community infrastructure and environmental matters however the document does not set out policies.

A.1.85. DBC is expected to undertake a consultation on the preferred and alternative options for the development strategy including draft policies in 2019 (the 'Regulation 19 consultation'). The published draft timetable indicates that the new Local Plan will be adopted from late 2020 at the earliest.

# Appendix B Planning Policy Compliance Checklist

## Tables

## Table B.1 National Planning Policy Compliance Checklist

| Document | Policy | Planning Statement Reference / Policy Assessment |
|---|---|---|
| National Planning Policy Framework ('NPPF') (2018) | Chapter 6 Building a strong, competitive economy | Paragraph 5.2.24, 5.5.5, 5.5.6 & 5.5.9 |
| | Chapter 8 Promoting healthy and safe communities | Paragraph 5.9.5 |
| | Chapter 9 Promoting sustainable transport | Paragraph 5.5.2, 5.11.4 & 5.11.15 |
| | Chapter 12 Achieving well-designed places | Table 5.1 page 60<br>Paragraph 5.15.7 |
| | Chapter 13 Protecting Green Belt land | Paragraph 5.15.11 |
| | Chapter 14 Meeting the challenge of climate change, flooding and coastal change | Paragraph 5.8.2 and 5.8.6 bullet point 7 |
| | Chapter 15 Conserving and enhancing the natural environment | Paragraphs 5.6.4, 5.9.2, 5.10.3, 5.10.11 & 5.13.2 |
| | Chapter 16 Conserving and enhancing the historic environment | Paragraph 5.12.2 |
| National Planning Policy for Waste ('NPPW') (2014) Appendix B Locational Criteria | Protection of water quality and resources and flood risk management | Paragraph 5.10.11 |
| | Land instability | Paragraph 5.10.11 |
| | Landscape and visual impacts | Paragraph 5.11.2 |
| | Nature conservation | Paragraph 5.10.4 |

| Document | Policy | Planning Statement Reference / Policy Assessment |
|---|---|---|
| | Conserving the historic environment | Paragraph 5.12.2 |
| | Traffic and access | Paragraph 5.5.2 |
| | Air emissions including dust | Paragraph 5.6.4 |
| | Odours | Paragraph 5.4.9 |
| | Vermin and birds | Paragraph 5.4.9 |
| | Noise, light and vibration | Paragraph 5.9.2 |
| | Litter | Paragraph 5.4.1 |
| | Potential land use conflict | Paragraph 5.15.2 |

Table B.2 Regional Planning Policy Compliance Checklist

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| The London Plan (2016) | 1.1 Delivering the strategic vision and objectives for London | Paragraph 5.13.4 |
| | 2.13 Opportunity areas and intensification areas | Paragraph 4.5.3 |
| | 2.17 Strategic Industrial Locations | Paragraph 4.5.3 & 5.16.2 |
| | 5.1 Climate change mitigation | Table 5.1 page 63 |
| | 5.2 Minimising carbon dioxide emissions | Table 5.1 page 63 |
| | 5.3 Sustainable design and construction | Paragraph 5.4.2 |
| | 5.4 Electricity and gas supply | Paragraph 5.2.3 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | 5.5 Decentralised energy networks | The Proposed Development supports the policy aim for 25% of heat and power used in London to be generated by localised decentralised energy systems by 2025. |
| | 5.7 Renewable energy | The Proposed Development supports the policy aim to increase the proportion of energy generated from renewable sources. |
| | 5.8 Innovative energy technologies | The Proposed Development is supported by the policy which encourages the use of innovative energy technologies, including anaerobic digestion, to reduce fossil fuel consumption and carbon dioxide emissions. |
| | 5.12 Flood risk management | Paragraph 5.8.3 |
| | 5.13 Sustainable drainage | Paragraph 5.8.3 |
| | 5.14 Water quality and wastewater infrastructure | Paragraph 5.7.2 |
| | 5.16 Waste net self-sufficiency | Paragraph 5.13.5 |
| | 5.17 Waste capacity | Paragraph 5.16.15 |
| | 5.21 Contaminated land | Paragraph 5.10.12 |
| | 6.1 Strategic approach (London's transport) | Paragraph 5.16.9 |
| | 6.3 Assessing effects of development on transport capacity | Paragraph 5.5.3 |
| | 6.9 Cycling | The Proposed Development supports the policy aim of increasing cycling prevalence in London through ensuring development provides appropriate cycle parking. The TA (ES **Appendix B1** (**Document Reference 6.3**)) finds that |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | accessing the REP site via cycling would be highly feasible for workers and confirms that cycle parking for staff and visitors will be provided in sheltered and secure locations and that on-site welfare facilities will provide showers, lockers and drying areas. |
| | 6.10 Walking | The Proposed Development supports the policy aim of increasing walking in London. The TA (ES **Appendix B1** (**Document Reference 6.3**)) finds that accessing the REP site by walking would be highly feasible for workers. |
| | 6.13 Parking | The TA (ES **Appendix B1** (**Document Reference 6.3**)) confirms that car parking will be provided for some drivers and that there will be facilities available for electric charging and potentially for alternative fuel vehicles where there is demand. |
| | 6.14 Freight | Paragraph 5.5.3 |
| | 7.7 Location and Design of Tall and Large Buildings | Paragraph 5.15.7 & Table 5 page 60 |
| | 7.8 Heritage assets and archaeology | Paragraph 5.12.3 |
| | 7.13 Safety, security and resilience to emergency | Paragraph 5.14.2 |
| | 7.14 Improving air quality | Paragraph 5.6.6 |
| | 7.15 Reducing and managing noise, improving and enhancing the acoustic environment and promoting appropriate soundscapes | Paragraph 5.9.3 |
| | 7.17 Metropolitan open land | Paragraph 5.15.9 |
| | 7.19 Biodiversity and access to nature | Paragraph 5.10.4 & 5.10.5 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | 7.20 Geological conservation | Paragraph 5.10.12 |
| | 7.26 Increasing the use of the blue-ribbon network for freight transport | Paragraph 5.16.9 |
| | 7.29 The River Thames | The Proposed Development complies with the LBB Thames Area Policies as explained in Table B.3. |

Table B.3 Local Planning Policy Compliance Checklist

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| Bexley Core Strategy (2012) | Objective 4. Minimise waste generated in the borough through increasing re-use and recycling, recover and disposal. | The Proposed Development supports the objective to increase the re-use and recycling, recovering and disposal of waste. |
| | CS01 Achieving Sustainable Development | Paragraph 5.13.6 |
| | CS03 Belvedere geographic region | The Proposed Development supports the policy objective to export heat from the REP site to surrounding uses in LBB. The CHP Assessment (**Document Reference 5.4**) confirms that, subject to technical and economic feasibility, a heat supply system at REP could export up to 30 MWt of heat to off-site consumers. |
| | CS08 Climate change and flood risk management | Paragraph 5.8.3 |
| | CS09 Using Bexley's resources sustainably | Paragraph 5.4.2, 5.7.2, 5.8.3, 5.9.3 & 5.10.12 |
| | CS12 Bexley's future economic contribution | Paragraph 5.13.7 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | CS13 Access to jobs | Paragraph 5.13.6 |
| | CS15 Integrated and sustainable transport system | Paragraph 5.16.9 |
| | CS17 Green infrastructure | Paragraph 4.6.5 & 5.10.4 |
| | CS18 Biodiversity and geology | Paragraph 4.6.5, 5.6.6, 5.10.4 & 5.10.12 |
| | CS19 Heritage and archaeology | Paragraph 5.12.3 |
| | CS20 Sustainable waste management | The Proposed Development is supported by this policy which states that the Council will support regionally significant waste management infrastructure.<br>The Proposed Development will manage waste on-site in a manner which protects human health and the environment and in accordance with the principles of the waste hierarchy as explained in the Operational Waste Statement (ES **Appendix K.4** (**Document Reference 6.3**)) and summarised in paragraphs 5.4.4 – 5.4.8 of this report. |
| Bexley Unitary Development Plan ('UDP') (2004) Saved Policies (2012) | ENV15 Metropolitan Open Land – acceptable uses | Paragraph 4.6.5 & 5.15.11 |
| | ENV28 Local Nature Reserves sites | Paragraph 5.10.4 |
| | ENV32 Sites of Special Scientific Interest (SSSI) – boundaries and protection | Paragraph 5.10.4 |
| | ENV33 Development adjoining SSSI | Paragraph 5.10.4 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | ENV39 Built Environment - criteria for development, including strategic views | Paragraph 4.6.4, 5.11.2 & 5.11.3 |
| | ENV40 Contamination and remedial treatment of land | Paragraph 5.10.13 |
| | ENV41 Air quality strategies and preparations of an Air Quality Assessment | Paragraph 5.6.6 |
| | E1 Criteria for proposed industrial and commercial development | The Proposed Development complies with this policy as set out below.<br>ES **Appendix K.1** (**Document Reference 6.3**) contains a Health Impact Assessment which demonstrates that potential impacts on human health relate primarily to air quality and ground conditions effects although these effects are considered to be Not Significant.<br>It has been demonstrated that in accordance with NPS EN-1 paragraph 4.5.1, NPS EN-5 paragraph 2.5.2, NPPF Chapter 12 and London Plan Policy 7.7, good design principles, outlined in the Design and Access Statement (**Document Reference 7.3**) and Design Principles (**Document Reference 7.4**), have been incorporated into the Proposed Development from the outset such that the Proposed Development provides an appropriate design response to its setting.<br>The TA (ES **Appendix B1** (**Document Reference 6.3**)) demonstrates that adequate site access will be provided by utilising existing river and road transport and that access by bus, train, walking and cycling would be highly feasible for workers. ES (**Document Reference 6.1**) **Chapter 6** finds that the Proposed |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | Development is not likely to have any residual significant transport effects and therefore no further mitigation in addition to that outlined above is necessary.<br>ES (**Document Reference 6.1**) **Chapter 12** demonstrates that appropriate mitigation has been made to safeguard against any discharges; the potential effects on water quality and resources (including existing, new and changes to discharges) are found to be Negligible and therefore Not Significant. |
| | E3 Primary Employment Areas | Paragraph 4.6.4, 5.16.1 & 5.16.2 |
| | T6 Optimising use of the existing transport network | The proposed Development is considered to comply with this policy. Local junction modelling of the three main junctions closest to the site undertaken in the TA (ES **Appendix B1** (**Document Reference 6.3**)) indicates that the junctions would operate within capacity and that there will be negligible to minor increases to queues, delays and operating capacity of the junctions with the addition of development traffic. |
| | TS13 Thames Policy Area Character | Paragraph 4.6.4 & 5.16.11 |
| | TS14 Access to riverside | Paragraph 4.6.4 & 5.16.12 |
| | TS15 wildlife habitats - riverside and other watercourses | Paragraph 5.16.13 |
| | WAS2 - Waste processing | The Proposed Development complies with this policy.<br>It has been demonstrated that there will be no significant adverse impacts through air quality, noise or traffic effects as explained in Section 5.6, 5.9 and 5.5 of this report. |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | The REP site has good connections to existing transport infrastructure including road access and the operation of REP will maximise the use of existing rail and river transport infrastructure for the transport of waste.<br>REP is considered to be of an appropriate scale taking account of the proximity principle.<br>The Project and its Benefits Report (**Document Reference 7.2**) identifies a need for c.2 million tonnes of residual waste management capacity required across the waste planning authorities adjacent to London which is greater than the nominal throughput proposed for the ERF within REP. |
| Dartford Core Strategy (2011) | DP1 - Dartford's Presumption in Favour of Sustainable Development | The Proposed Development is supported by this policy which seeks to enable development that improves economic, social and environmental conditions in DBC. |
| | DP2 - Good Design in Dartford | The Proposed Development has been designed to minimise potential risks from potential hazards including flooding as explained in Section 4.6 of this report and the FRA (**Document Reference 5.2**). |
| | CS8 Economic Change | Paragraph 5.13.5 |
| | CS9 Skills and Training | Paragraph 5.13.5 |
| | CS14 Green space | The policy requires new development on sites of 20 ha to contribute to the green grid network by providing at least 30% of the site area as green space.<br>The Order Land within Dartford comprises an area of approximately 20.8 ha. It will be unfeasible for the Proposed Development to provide additional green space in Dartford since the Order Land within Dartford comprises the Electrical |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | Connection cable route working corridor. However, the Proposed Development would not have any permanent effects on the quality of green space as the only development proposed within green space in Dartford will be engineering operations associated with the laying of underground cables for the Electrical Connection. |
| | CS16 Transport investment | Paragraph 5.5.3 |
| | CS23 Minimising carbon emissions | Table 5.1 page 63 |
| | CS24 Flood risk | Paragraph 5.8.3 |
| | CS25 Water management | Paragraph 5.7.2 |
| Dartford Development Policies Plan (2017) | DP1 Dartford's Presumption in Favour of Sustainable Development | The Proposed Development is supported by the policy which seeks to enable development that improves the economic, social and environmental conditions in Dartford. |
| | DP3 Transport impacts of development | Paragraph 5.5.3 |
| | DP5 Environmental and amenity protection | Paragraph 4.6.6, 5.9.3, 5.10.13 & 5.15.2<br>Table 5.1 page 65 |
| | DP11 Sustainable technology and construction | The Proposed Development has been assessed with consideration to the following factors in this report and other application documents as follows:<br>– Character, and visual and residential amenity (Design and Access Statement (**Document Reference 7.3**));<br>– Landscape and topography (Section 5.11 and ES **Chapter 9** (**Document Reference 6.1**)), and heritage |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | (Section 5.12 and ES **Chapter 10** (**Document Reference 6.1**));<br>– Aviation issues (Section 5.14 and Statement on Aviation (**Document Reference 7.7**));<br>– Decommissioning of plant at the end of its lifetime (ES **Chapters 6 -15** (**Document Reference 6.**1));<br>– Potential effects on Green Belt, heritage assets, and SSSIs/ areas of high biodiversity value designations (Sections 5.10 and 5.15 and ES **Chapter 10** (**Document Reference 6.1**)); and<br>– Water supply, flooding or wastewater implications (Sections 5.7 and 5.8 and ES **Chapter 12** (**Document Reference 6.1**)).<br>The ES (**Document Reference 6.1**) **Chapter 16** finds that the Proposed Development will not have significant adverse residual effects with the exception of townscape and visual impacts which could potentially result in Moderate adverse effects. |
| | DP12 Historic Environment Strategy | Paragraph 5.12.3 |
| | DP13 Designated heritage assets | Paragraph 5.12.3 |
| | DP20 Identified employment areas | The Proposed Development (Electrical Connection route options) borders a designated Employment Area but does not encroach on to designated Employment Area land. |
| | DP24 Open space | Paragraph 4.6.6 & 5.15.12 |
| | DP25 Nature conservation and enhancement | Paragraph 4.6.6 & 5.10.4 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| Kent Minerals and Waste Local Plan 2013-2030 (2016) | CSW1 Sustainable development | The Proposed Development is supported by the policy aim to encourage sustainable development in line with the approach in NPPF, NPPW and Waste Management Plan for England. |
| | CSW3 Waste reduction | The Proposed Development complies with this policy. Section 5.4 of this report, the Operational Waste Statement (ES **Appendix K.4** (**Document Reference 6.3**)) and Outline CoCP (**Document Reference 7.4**) identify the proposed management routes for waste arisings from the construction of REP. |
| | DM1 Sustainable design | The Proposed Development complies with this policy. In accordance with NPS EN-1 paragraph 4.5.1, NPS EN-5 paragraph 2.5.2, NPPF Chapter 12 and London Plan Policy 7.7, good design principles, outlined in the Design and Access Statement (**Document Reference 7.3**) and Design Principles (**Document Reference 7.4**), have been incorporated into the Proposed Development from the outset such that the Proposed Development provides an appropriate design response to its setting. |
| | DM2 Environmental and landscape sites of international, national and local importance | Paragraph 5.10.4 |
| | DM7 Safeguarding mineral resources | Paragraph 5.16.5 - 5.16.8<br>**Appendix C** of this report |
| | DM8 Safeguarding minerals management | The Minerals Assessment contained at **Appendix C** of this report demonstrates that it would not be practicable or viable to extract the underlying mineral prior to Electrical Connection route being laid although anything raised incidental to construction would be used where |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | possible. Further, the benefits of the Proposed Development, notably the contribution to meeting the urgent national need for renewable/low carbon electricity supply and the demonstrated need for new waste infrastructure in South East England, outweigh the negligible impact on the Minerals Safeguarding Areas. |
| | DM9 Prior extraction of minerals in advance of surface development | The Minerals Assessment contained at **Appendix C** of this report states prior to the Electrical Connection route being laid any underlying mineral raised incidental to construction would be used where possible. |
| | DM20 Ancillary Development | The Proposed Development is supported by this policy. The Electrical Connection route comprises associated development for REP. |

Table B.4 Other Relevant Local Planning Policies

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| LBH Core Strategy and Development Control Policies Development Plan Document (2008) | DC52 Air Quality | Paragraph 5.6.6 |
| | CP18 Heritage | Paragraph 5.12.3 |
| | DC67 Buildings of Heritage Interest | Paragraph 5.12.3 |
| LBBD Core Strategy (2010) | CR1 Climate Change and Environmental Management | Paragraph 5.6.6 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | CP2 Protecting and Promoting our Historic Environment | Paragraph 5.12.3 |
| LBBD Borough Wide Planning Policies Development Plan Document (2011) | BR14 Air Quality | Paragraph 5.6.6 |
| | BP2 Conservation Areas and Listed Buildings | Paragraph 5.12.3 |
| RBG Local Plan: Core Strategy with Detailed Policies (2014) | E(a) Pollution | Paragraph 5.6.6 |
| | E(c) Air Pollution | Paragraph 5.6.6 |

Table B.5 Draft Planning Policy Documents

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| Draft London Plan showing Minor Suggested Changes (2018) | GG1 Building strong and inclusive communities | Paragraph 5.13.8 bullet point 4 |
| | GG2 Making the best use of land | Paragraph 5.13.8 bullet point 5 |
| | GG5 Growing a good economy | Paragraph 5.13.8 bullet point 6 |
| | GG6 Increasing efficiency and resilience | Paragraph 5.13.8 bullet point 7 |
| | SD1 Opportunity Areas | Paragraph 5.13.8 bullet point 1 |
| | D2 Delivering good design | The Proposed Development complies with this policy. In accordance with NPS EN-1 paragraph 4.5.1, NPS EN-5 paragraph 2.5.2, NPPF Chapter 12 and London Plan Policy 7.7, good design |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | principles, outlined in the Design and Access Statement (**Document Reference 7.3**) and Design Principles (**Document Reference 7.4**), have been incorporated into the Proposed Development from the outset such that the Proposed Development provides an appropriate design response to its setting. |
| | D10 Safety, security and resilience to emergency | The Proposed Development complies with this policy. The Proposed Development has been designed to minimise potential risks from hazards resulting from flood and pollution as explained in Section 5.6, 5.8 and 5.10 of this report. |
| | D11 Fire safety | An assessment of Risk of Major Accidents and Disasters (ES **Appendix K.6**) has been prepared for the Proposed Development. Table 1 sets out a summary of accidents and disasters, including risk of fire, and explains where these risks are addressed within the ES.<br>The REP ERF plant has an extremely good safety record and can be shut down automatically or manually in event of malfunction. A full Hazard and Operability Study (HAZOP) study will be undertaken through the design phase of the project and REP will be designed, constructed, and operated in compliance with the latest codes of practice and guidance as detailed in ES (**Document Reference 6.1**) **Chapter 3**. Further details of security procedures are described in ES (**Document Reference 6.1**) **Chapter 3**. |
| | D12 Agent of change | Paragraph 5.9.4 |
| | D13 Noise | Paragraph 5.9.4 |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | E4 Land for industry, logistics and services to support London's economic function | The Proposed Development is supported by this policy which aims to support maintain a sufficient supply of land for industrial and related functions including waste management and utilities. |
| | E5 Strategic Industrial Locations (SIL) | Paragraph 5.16.2 |
| | E8 - Sector growth opportunities and clusters | The Proposed Development is supported by this policy which aims to support employment opportunities and business growth opportunities in London. |
| | HC1 - Heritage conservation and growth | Paragraph 5.12.4 |
| | G3 Metropolitan open land | Paragraph 5.15.9 |
| | G4 Local green and open space | Paragraph 5.15.9 |
| | G6 Biodiversity and access to nature | Paragraph 5.10.6 |
| | SI1 Improving air quality | Paragraph 5.16.9 |
| | SI2 Minimising greenhouse gas emissions | Paragraph 5.13.8 bullet point 9 |
| | SI3 Energy infrastructure | Paragraph 5.6.7 |
| | SI5 Water infrastructure | Paragraph 5.7.3 |
| | SI7 Reducing waste and supporting the circular economy | Paragraph 5.4.2 |
| | SI8 Waste capacity and net waste self-sufficiency | Paragraph 5.2.12 & 5.2.13<br>Table 5.1 page 64 |
| | SI9 Safeguarded waste sites | The Proposed Development is supported by this policy which aims to retain |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | existing waste sites in waste management use. |
| | SI12 Flood risk management | Paragraph 5.8.4 |
| | SI13 Sustainable drainage | Paragraph 5.8.3 |
| | SI15 Water transport | Paragraph 5.16.9 |
| | T2 Healthy Streets | Paragraph 5.5.4 |
| | T3 Transport capacity, connectivity and safeguarding | The Proposed Development would not prevent the indicative transport schemes listed under Policy T3. The schemes have been considered in the TA (ES **Appendix B1** (**Document Reference 6.3**)) as part of the cumulative assessment which finds that two schemes, listed under Policy T3, are located within the EIA zone of influence however neither of these schemes are located within the Application Boundary. |
| | T4 Assessing and mitigating transport impacts | Paragraph 5.5.4 |
| | T5 Cycling | The Proposed Development supports the policy aim of increasing cycling prevalence in London through ensuring development provides appropriate cycle parking. The TA (ES **Appendix B1** (**Document Reference 6.3**)) finds that accessing the REP site via cycling would be highly feasible for workers and confirms that cycle parking for staff and visitors will be provided in sheltered and secure locations and that on-site welfare facilities will provide showers, lockers and drying areas |
| | T6 Car Parking | The TA (ES **Appendix B1** (**Document Reference 6.3**)) confirms that car |

| Document | Policy | Planning Statement reference / policy assessment |
|---|---|---|
| | | parking will be provided for some drivers and that there will be facilities available for electric charging and potentially for alternative fuel vehicles where there is demand. |
| | T7 Freight and servicing | Paragraph 5.5.3 |

# Appendix C Minerals Assessment

## Contents



## Tables



## Figures



## Annexes

## C1. Introduction

C1.1 Cory Environmental Holdings Limited (trading as Cory Riverside Energy (Cory)) is applying to the Secretary of State under the Planning Act 2008 (PA 2008) for powers to construct and operate (including maintenance) an integrated Energy Park, to be known as Riverside Energy Park (REP). The principal elements of REP comprise complementary energy generating development, with an electrical output of up to 96 megawatts (MWe), and an associated Electrical Connection (together referred to as the 'Proposed Development'). As the generating capacity of REP will be in excess of 50 MWe, it is classified as a Nationally Significant Infrastructure Project (NSIP) under Sections 14 and 15 of the PA 2008 and therefore requires a Development Consent Order (DCO) to authorise its construction and operation.

C1.2 The REP site would be located adjacent to an existing Energy Recovery Facility (ERF) operated by Cory (referred to as Riverside Resource Recovery Facility (RRRF)) situated at Norman Road in Belvedere, within the London Borough of Bexley (LBB).

C1.3 The underground Electrical Connection Route (ECR) would run from the REP site in a south easterly direction to terminate at the Littlebrook substation in Dartford. This route takes the Electrical Connection through areas of sand and gravel resource that are safeguarded within the Kent Minerals and Waste Local Plan, as adopted July 2016 (Kent MWLP).

C1.4 The ECR does not constitute minerals development and consequently, under policy Kent MWLP DM7, a Minerals Assessment is required.

C1.5 Cory has held pre-application discussions with officers of Kent County Council, whose advice has informed the preparation of this Minerals Assessment.

## C2. Description of the Electrical Connection and its Construction along the Route

C1.6 REP would be connected to the existing electricity distribution network via a new 132 kilovolt (kV) distribution connection ('the Electrical Connection') by UK Power Networks (UKPN). It is proposed that the Electrical Connection would be routed predominantly via the existing road network and would be underground, except for the connection point within REP, and at the connection point in the Littlebrook National Grid substation, where UKPN would connect to the existing National Electricity Transmission System (NETS).

C1.7 The Electrical Connection would comprise a trefoil of cables (3 cables laid together to comprise a single 3-phase circuit), buried in a cable trench typically 450mm wide and with 900mm cover (except where there is potential for trenchless installation or a localised deeper trench to be required to pass below a specific constraint) when laid under highway footways and carriageways, with jointing pits approximately every 500 m along the route. To provide 900mm

typical cover, with c. 160mm diameter ducts and 50mm duct bedding, the excavation required would typically be 1.2m deep. The proposed ECR generally follows existing carriageway routes.

C1.8 Where works are undertaken along footpaths and verges, a 3m wide working corridor would be likely.

C1.9 UKPN has undertaken some detailed engineering investigations at key locations to confirm locations of utilities, highway and ground conditions and to prove available ducting routes. A limited number of locations may require a solution other than open trenching. This would include trenchless installation techniques such as localised Horizontal Directional Drilling (HDD), boring or the installation of cables under or over an existing structure. This is most likely to occur at railway crossings, waterways or similar locations where trenching is not possible. Other locations may arise generally along the route where an alternative to open trenching is required due to an unforeseen constraint however, given the extent of study undertaken so far, the likelihood of this occurring is considered low. The location of such potential works continues to be refined, however the Application has excluded the potential to undertake trenchless installation within the extent of a former inert landfill immediately to the southwest of the highway crossing of the River Darent.

C1.10 Should consent be granted in 2020, it is anticipated that construction and commissioning of REP would commence in 2021 and be fully completed in 2025 with a construction period of c. months until 2024. Commissioning would include receiving waste for treatment for reliability testing (12-15 months) and electricity generation from 2024 to 2025, resulting in the commencement of normal operation thereafter. The Electrical Connection would take up to 24 months and would need to be completed in advance of first export generation by any of the key components of REP.

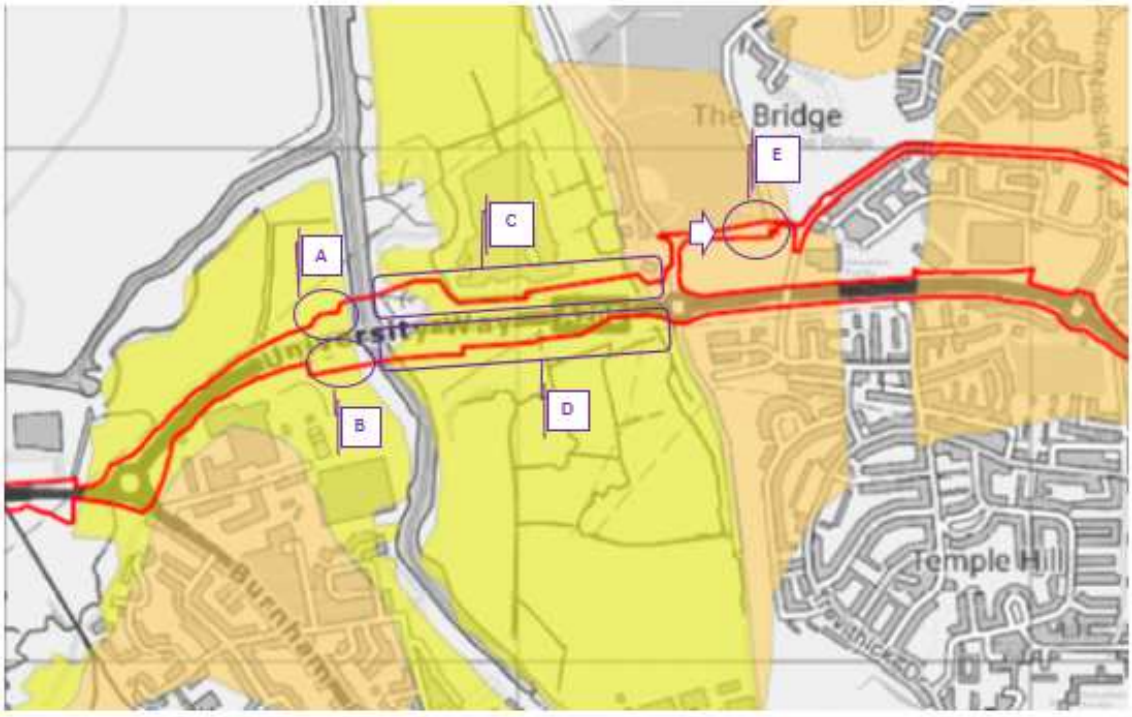
## C3. Areas considered within the Minerals Assessment

C1.11 Figure 1 (Annex A) presents the totality of the ECR. Figure 1 (Annex A) shows that is only the eastern end that falls within the Minerals Safeguarding Areas identified for resources of: River Terrace Deposits; and Sub-Alluvial River Terrace Deposits.

C1.12 Figure 2 (Annex B) focusses on the eastern end of the ECR within Kent. At this scale of mapping, Figure 2 (Annex B) shows that most of the ECR is proposed to align with, or alongside, the existing road network. Mineral resource is likely to have been extracted prior to road construction or is anyway sterilised by it. In situ mineral resource would not be worked in such close proximity to the highway. In these positions, the ECR would not affect mineral resources.

C1.13 However, there are some sections of the ECR that widen out beyond the public highway. Figure 3 focusses on these areas, to identify each with the letters A to E. These areas are considered in more detail in this Minerals Assessment.

**Figure 1: ECR Sections that extend beyond the highway (extract Figure 2 (Annex B))**




## C4. Policy Review

C1.14 Policy DM7, Safeguarding Mineral Resources, is the relevant policy of the Kent MWLP. It states that planning permission will only be granted for non-mineral development that is incompatible with minerals safeguarding, where it is demonstrated that any one of seven clauses apply or overrides the presumption to safeguard the mineral. These seven clauses are reviewed in Table 1.

Table 1: Summary Review of Policy DM7, Kent MWLP

| Policy DM 7 clause | | Summary Response |
|---|---|---|
| 1 | The mineral is not of economic value or does not exist | Borehole data indicates that there is mineral resource; the economic value of it is not known. |
| 2 | That extraction of the mineral would not be viable or practicable | The ECR is located in areas where the extraction of the mineral would be neither viable nor practicable. |
| 3 | The mineral can be extracted satisfactorily, having regard to Policy DM9, prior to the non-minerals development taking place without adversely affecting the viability or deliverability of the non- minerals development | The mineral cannot be readily extracted prior to the non-minerals development taking place. |

| Policy DM 7 clause | | Summary Response |
|---|---|---|
| 4 | The incompatible development is of a temporary nature that can be completed and the site returned to a condition that does not prevent mineral extraction within the timescale that the mineral is likely to be needed | The ECR is not a temporary development. |
| 5 | Material considerations indicate that the need for the development overrides the presumption for mineral safeguarding such that sterilisation of the mineral can be permitted following the exploration of opportunities for prior extraction | The ECR is one element of a NSIP. |
| 6 | It constitutes development that is exempt from mineral safeguarding policy … | The ECR does not constitute development that is exempt from mineral safeguarding policy. |
| 7 | It constitutes development on a site allocated in the adopted development plan | The route of the ECR is not allocated in the adopted development plan. |

C1.15 Clauses 4, 6 and 7 of policy DM 7 describe the types of proposals for development that are excluded from mineral safeguarding. None of these apply to the ECR and these clauses are not considered further.

C1.16 Clauses 1, 2, 3 and 5 describe the circumstances where planning permission can be granted for development that is not excluded from mineral safeguarding, but could potentially sterilize mineral resources. Paragraph 4.26 of the Safeguarding SPD[1] advises that:

C1.17 'The 'or' after each of the clauses in Policy DM 7 means that only one criterion needs to be satisfied. However, sequentially it will make sense for consideration of the economic value (clause 1) and viability and practicability of extractions being considered first before considering practicability of prior extraction (clause 2) and whether the need for the development outweighs the safeguarding of the mineral (clause 5).'

C1.18 Each of these clauses is considered in the order suggested.

Clause 1

C1.19 A series of borehole logs are available from years 1986 to 1990, which were undertaken in preparation for the A206 Dartford Northern By-pass. They are

[1] Safeguarding Supplementary Planning Document, Kent County Council, April 2017. https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/planning-policies/minerals-and-waste-planning-policy#tab-1

available from the British Geological Survey website, http://shop.bgs.ac.uk/georecords/.

C1.20 These borehole logs indicate deposits of river gravels, alluvium and chalk to various depths along the route of the road; they indicate that there is some mineral resource in this area. Much of this resource is expected to have been extracted or otherwise sterilised by development of the A206.

C1.21 Land to the south of the A206 and lying between the River Darent and Temple Hill, is identified as site M7 in the Minerals Sites Plan Options Consultation of September 2017.[2] This also indicates that there is a viable mineral resource present in the vicinity of the ECR.

C1.22 However, as shown in Figure 4 (Annex C), the ECR and the proposed allocation at site M7 are separate from each other.

Clause 2

C1.23 Referring to Figure 3, the furthest extent of the ECR from the carriageway of the A206 is 70m (the bulge in the route north of the 'y W' in University Way (within the area marked 'C'). Otherwise, the ECR generally lies between 20 to 40 m from the highway. In general, it is unlikely that any mineral reserve would be extracted in such proximity to a public highway, in order to address concerns of health and safety on site, highway safety, amenity and landscape impact. If any of the land were to be part of a mineral working, this area is more likely to be used for stockpiling soils and overburden, an activity that should be possible to occur over the ECR.

C1.24 The areas marked 'A' and 'B' are small and essentially land locked, not only by the A206 but also by the River Darent, the River Cray, industrial development and public rights of way. It is extremely unlikely that these areas would ever gain consent for mineral working.

C1.25 The area marked 'C' also lies alongside the River Darent and is crossed by public rights of way. A large portion of the area to the north of the A206 is a water body that appears to be manmade, this may indicate former mineral extraction. Again, it is considered extremely unlikely that this area would ever gain consent for mineral working. It is also noted that this side of the A206 is not proposed for future mineral working within the current emerging Minerals Sites Plan, the priority for development is given to site M7, and site M11 which is located further to the north.

C1.26 The area marked 'D' similarly lies alongside the River Darent and the adjacent national trail. However, to the south of the ECR is the proposed allocation site M7. As shown in Figure 4 (Annex C), the ECR and site M7 are separate from each other. Access to site M7 (should it be allocated and later worked) might be gained via the roundabout to the north east of the proposed allocation site. At this point, the ECR running south of the A206 comes back into alignment with

[2] file:///C:/Users/Kirsten/Downloads/Minerals%20Sites%20Options%20Consultation%20Document.pdf

that highway. The ECR should not affect the potential for any future working of site M7.

C1.27 The area marked ‘E’ is another small and discrete parcel of land. Reference to Google Street View (19.10.2018) indicates that when the photograph was taken (May 2017) the site was subject to construction (see Figure 5). The location of the photograph, and direction of the view, are indicated on Figure 3.

C1.28 Planning permission reference 13/0733/FUL (for a college development on the adjacent land) indicates that the field to the south of the ECR would be used for playing fields. In any event this field is small (c.2ha) and relatively close to housing (within c.100m). Again, it is considered extremely unlikely that planning permission would ever be gained to extract minerals from this area, which is also not promoted in the emerging Minerals Sites Plan.

**Figure C1.2: Extract from Google Street View, looking east from Joyce Green Lane**


C1.29 In short, whilst the ECR does extend beyond the highway into the mineral safeguarding areas, this encroachment is limited in surface area and extends into parcels of land that are unlikely to be worked for mineral in the future. The potential effect of sterilisation of the safeguarded mineral is negligible.

Clause 3

C1.30 Not least recognising the limited extent of the impact, it is not practicable to commit to extract the mineral prior to construction of the ECR. The ECR may

be laid either by open trench or by DHH, most likely the latter where the route goes under the River Darent, which is also the area of greatest intrusion into the mineral safeguarding area. Where open trench is used, the underlying mineral may be suitable material for the Electrical Connection to be laid upon. In this way, the existing mineral can be put to good use within the Proposed Development, and in line with paragraph 4.28 of the Safeguarding SPD:

*'If the County Council is satisfied that the Mineral Assessment information adequately demonstrates the prior extraction would not be viable, the promoter/applicant is encouraged to utilise any mineral resource excavated through incidental extraction during the construction of any permitted application, in the interests of sustainable development.*

Clause 5

C1.31 The NPPF1 (at paragraph 206) advises that planning permission should not normally be granted in Mineral Safeguarding Areas if it might constrain potential future use for mineral working. This Minerals Assessment recognises the ECR as a non-mineral development located within Mineral Safeguarding Areas and has consequently considered the potential impact on the safeguarded resource.

C1.32 The level of constraint posed by the ECR is very limited: the ECR affects only a small part of the Minerals Safeguarding Areas; and, the parcels of land crossed by the ECR are themselves unlikely to be worked. The ECR would not result in a material impact on the Minerals Safeguarding Areas.

C1.33 NPS EN-1,2 the primary basis for decision making presents the Government's policy for the development of nationally significant energy infrastructure. Paragraph 2.1.2 makes clear:

*'… energy is vital to economic prosperity and social well-being and so it is important to ensure that the UK has secure and affordable energy. Producing the energy the UK requires and getting it to where it is needed necessitates a significant amount of infrastructure, both large and small scale. The energy NPSs consider the large scale infrastructure that play a vital role in ensuring we have the secure energy supplies we need.'*

C1.34 REP responds directly to this very urgent and substantial need for new energy infrastructure. REP is urgently needed to provide resilience to London and the South East's infrastructure, to replace closing landfill sites, and to move waste up the waste hierarchy. Through sustainable waste management it delivers: increased renewable/low carbon energy supply; reduced greenhouse gas emissions; CHP; increased river freight; and optimised design. This substantial and urgent need for energy infrastructure, and the material benefits delivered by REP, should outweigh the negligible effect on the Minerals Safeguarding Areas.

C1.35 Paragraph 3.1.4 advises the decision-maker to 'give substantial weight to the contribution that projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008'.

C1.36 The ECR is not considered to materially affect any reasonably workable mineral resource within the Minerals Safeguarding Areas. Consequently, the balance must fall to REP and this element, the ECR.

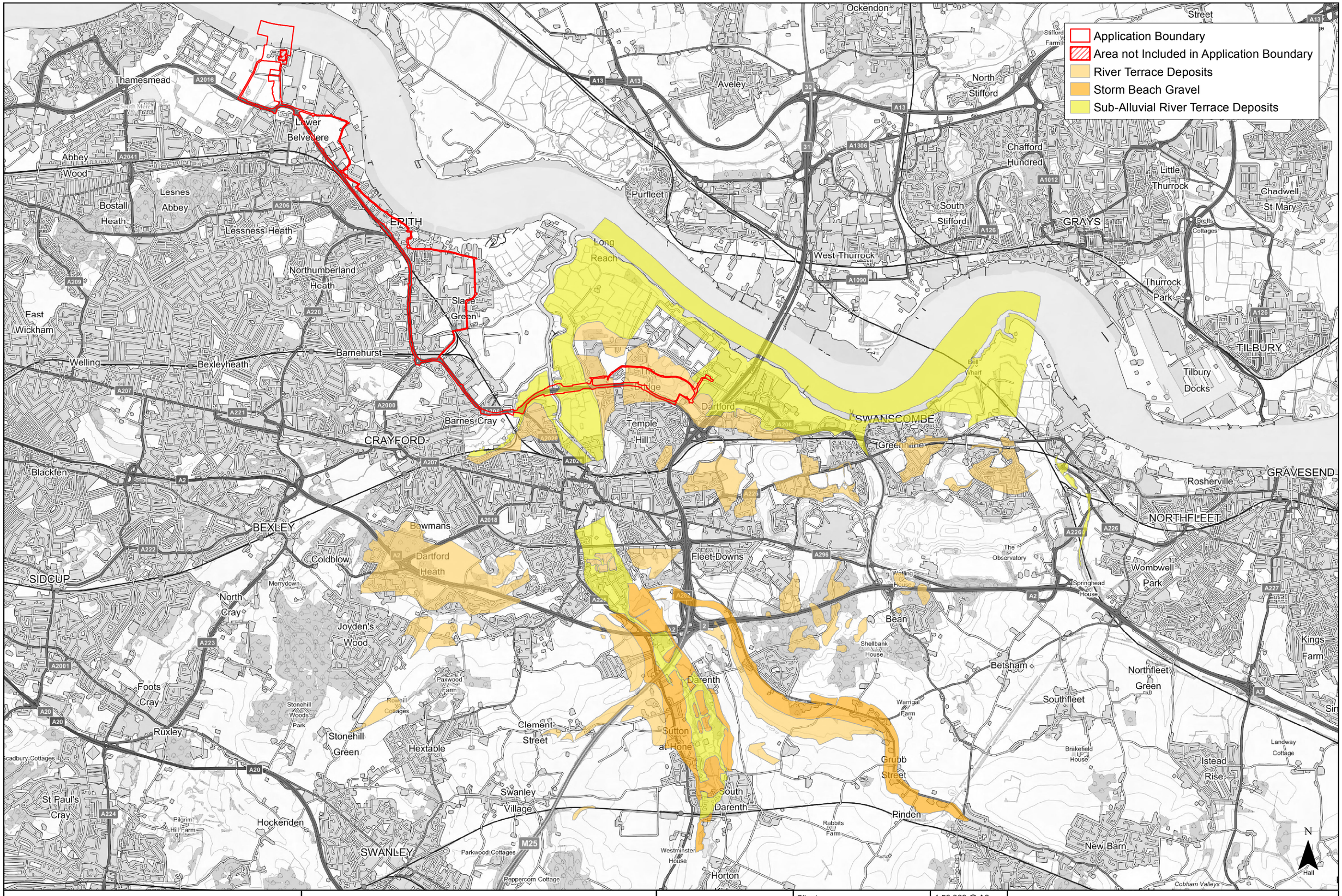
## C5. Conclusions

C1.37 The ECR element of REP is non-minerals development proposed to be located within the Minerals Safeguarding Areas. However, this Minerals Assessment demonstrates that the potential for sterilisation is negligible; the parcels of land affected are small and very unlikely to ever gain consent to be used for mineral working.

C1.38 It is not practicable or viable to extract the underlying mineral prior to ECR being laid. However, anything raised incidental to construction of the ECR would be used where possible.

C1.39 There is potential for mineral to exist, but the value is not known. REP is a nationally significant infrastructure project responding to an urgent and substantial need recognised by Government and set out as such in policy. The planning balance must go in favour of the NSIP, rather than the negligible impact on the Minerals Safeguarding Areas.

# Annex A Figure 1




RIVERSIDE ENERGY PARK

0 0.5 1 km



pba peterbrett

Client: CORY RIVERSIDE ENERGY

1:50,000 @ A3

18/10/18

Drawn: TL

Checked: RN

REP Application Boundary and Minerals Safeguarding Areas in Dartford, Kent

Figure 1 | Rev A

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# Annex B Figure 2

Application Boundary
River Terrace Deposits
Sub-Alluvial River Terrace Deposits

Slade Green
North End
Whitehall La
Howbury Grange
Thamesside Road
The Bridge
Rennie Drive
Marsh St North
University Way
A206
Bob Dunn Way
Queen Eliz
Iron Mill Lane
Crayford Way
Barnes Cray
Burnham Road
Temple Hill
Henderson
Trevithick Dr
Littlebrook Manor Way
Attlee Dr
B3228
Crayford Road
A2026
River Darent
Dartford
Temple Hill
Cotton La
Station Road
Dartford Road
Overy Street
New Town
St Vincents Road
A282
East Hill
Darenth Road
Park R
Watling Street
Swanscombe
Bowmans

RIVERSIDE ENERGY PARK

0 0.5 1 km



pba peterbrett

Client: CORY RIVERSIDE ENERGY

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The ECR crossing Minerals Safeguarding Areas in Dartford, Kent

Figure 2 | Rev A

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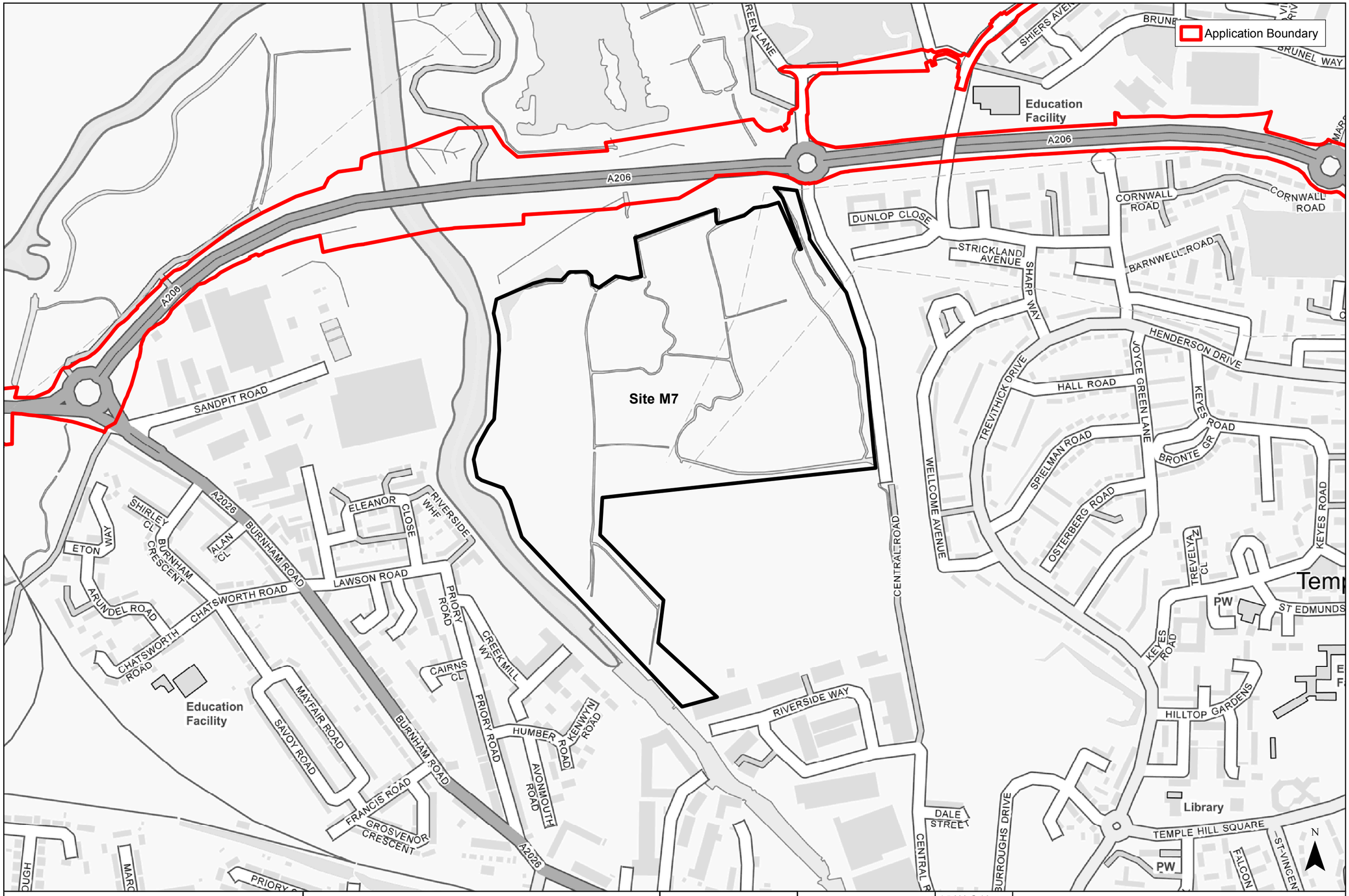
# Annex C Figure 4




RIVERSIDE ENERGY PARK

0 100 200 Meters



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Location of Site M7 in relation to the Application Boundary

Figure 4 | Rev A

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