

PLANNING STATEMENT: 5.2

Cory Decarbonisation Project

PINS Reference: EN010128 March 2024

Revision A

ECARBONISATION

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 - Regulation 5(2)(q)

TABLE OF CONTENTS

TA	BLE O	F CONTENTS1		
EXE	EXECUTIVE SUMMARY			
1.	INTRODUCTION AND PURPOSE OF THE DOCUMENT			
	1.1.	Introduction1		
	1.2.	Document Structure		
	1.3.	The Applicant4		
	1.4.	Requirement for Development Consent5		
2.	SITE DESCRIPTION AND PROPOSED SCHEME DESCRIPTION			
	2.1.	Site Description		
	2.2.	Proposed Scheme Description14		
3.	THE (CONSENTING FRAMEWORK		
	3.1.	The Consenting Framework Provided by The Planning Act 2008 (As Amended) 20		
	3.2.	National Policy Statements		
	3.3.	Other Relevant Planning Policy		
4.	THE P	PRINCIPLE OF DEVELOPMENT40		
	4.1.	Introduction		
	4.2.	National Policy Statement EN-1		
	4.3.	Marine Policy Statement		
	4.4.	Other Legislation, Policies and Strategies45		
	4.5.	Development Plan Policy		
	4.6.	Alternatives		
	4.7.	Mitigation Hierarchy		
	4.8.	Conclusion		
5.	METF	ROPOLITAN OPEN LAND61		
	5.1.	Introduction61		
	5.2.	Context		
	5.3.	Policy Review		
	5.4.	Policy Analysis		
	5.5.	Very Special Circumstances		
	5.6.	Conclusion		

6.	OPEN	PEN SPACE AND GREEN INFRASTRUCTURE	
	6.1.	Introduction	80
	6.2.	Context	80
	6.3.	Policy review	85
	6.4.	Policy Analysis	90
	6.5.	Decision making Factors	99
	6.6.	Conclusion	102
7.	MARI	NE AND TERRESTRIAL BIODIVERSITY	104
	7.1.	Introduction	104
	7.2.	Policy Review	104
	7.3.	Habitat Regulations	106
	7.4.	Sites of Special Scientific Interest (SSSI)	107
	7.5.	Marine Conservation Zones (MCZ)	107
	7.6.	Regional and Local Sites	108
	7.7.	Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats	110
	7.8.	Protection and enhancement of habitats and species	111
	7.9.	Mitigation hierarchy	114
	7.10.	Conclusion	115
8.	OTHE	R PLANNING CONSIDERATIONS	117
	8.1.	Introduction	117
	8.2.	Matters relevant to Determination	117
	8.3.	Air Quality and Emissions	122
	8.4.	Greenhouse Gas Emissions	126
	8.5.	Civil and Military Aviation and Defence Interests	133
	8.6.	Dust, Odour, Artificial Light, Smoke, Steam and Insect Infestation	133
	8.7.	Flood Risk	136
	8.8.	Historic Environment	139
	8.9.	Townscape and Visual	142
	8.10.	Land Use	146
	8.11.	Noise and Vibration	153
	8.12.	Socio-Economics	156
	8.13.	Traffic and Transport	161

	8.14.	Resource and Waste Management	164
	8.15.	Water Quality and Resources	166
9.	WEIG	HING IMPACTS AND BENEFITS	169
	9.1.	Introduction	169
	9.2.	Adverse Impacts of the Proposed Scheme	170
	9.3.	Benefits of the Proposed Scheme	175
	9.4.	Conclusion and Residual Risks	179
10.	PLAN	INING BALANCE	181
	10.1.	The Consenting Framework	181
	10.2.	Benefits	184
	10.3.	Other Effects and Mitigation	186
	10.4.	Conclusion	187
11.	REFE	RENCES	188

FIGURE

Figure 1 Hierarchy of adopted policy documents for decision making	35
Figure 2 Interaction of the Design Principles and Optioneering Principles	57

TABLE

Table 1 NPS EN-1 Assessment Principles
--

ANNEXES

APPENDIX A

Section 35 Direction Notice 6 October 2022

APPENDIX B

Section 35 Direction Notice 28 February 2024

APPENDIX C

Planning History

APPENDIX D

Figures

CORY EXECUTIVE SUMMARY

This Planning Statement has been prepared by WSP UK Limited on behalf of Cory Environmental Holdings Limited ('the Applicant'). It accompanies the application for a Development Consent Order ('the DCO Application') in relation to the Cory Decarbonisation Project ('the Proposed Scheme') in Bexley, London. The DCO Application has been made under section 37 of the Planning Act 2008 (as amended) ('PA 2008') and submitted to the Secretary of State ('the SoS') for Energy Security and Net Zero ('DESNZ'). The resultant development consent order, if made by the SoS, would be known as the Cory Decarbonisation Order.

The Applicant is seeking development consent for the proposed construction, operation, maintenance and decommissioning of a carbon capture facility to capture carbon dioxide from energy from waste facilities Riverside 1 and Riverside 2 (at the time of writing, construction works for Riverside 2 are being undertaken) at the Riverside Campus, located adjacent to the River Thames at Belvedere in the London Borough of Bexley ('LBB'). The technology to be utilised is referred to as post-combustion carbon capture as the carbon dioxide ('CO₂') is captured from the flue gas produced during the combustion of waste in Riverside 1 and 2. The Proposed Scheme is designed to remove at least 95% of the carbon dioxide from the flue gas from each of Riverside 1 and Riverside 2, resulting in overall negative emissions of greenhouse gases.

The Proposed Scheme also incorporates: a Proposed Jetty, to export the liquified CO₂ offsite to permanent storage; the Mitigation and Enhancement Area, to provide improved access to open land, habitat mitigation, compensation and enhancement and contribute to biodiversity net gain; temporary construction compounds; and utilities connections and site access works.

By way of letter dated 6th October 2022, the SoS made a Direction, under section 35(1) of the PA 2008, that the Proposed Scheme should be treated as development for which development consent under the PA 2008 is required and is therefore a Project of National Significance ('PNS'). This position was confirmed in letter dated 28 February 2024.

The Overarching National Policy Statement ('NPS') for Energy (EN-1) ('NPS EN-1') [3] is relevant to the Proposed Scheme and has effect as set out paragraph 1.3.10, which states that: '*EN-1, in conjunction with any relevant technology specific NPS, will be the primary policy for Secretary of State decision making on projects in the field of energy for which a direction has been given under section 35.*'

Consequently, the Proposed Scheme falls to be determined under Section 104 of the PA 2008 [1]. Section 104 applies where a national policy statement has effect in relation to development of the description to which the application relates.

Paragraph 2.3.3 confirms the importance of secure, affordable and reliable low carbon energy and the step change required to deliver it:

'Our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050, including through delivery of our carbon budgets and Nationally Determined Contribution. This will require a step change in the decarbonisation of our energy system.'

At paragraph 3.5.1, NPS EN-1 recognises that step change will require carbon capture and storage identifying that there *'is an urgent need for new carbon capture and storage (CCS) infrastructure to support the transition to a net zero economy.*' At paragraph 3.5.4, it is emphasised that, as set out in the Net Zero Strategy, the Government's aim is to use CCUS technology to capture and store 20-30MtCO2 per year by 2030, which will require the timely development and deployment of CCS infrastructure. At paragraph 3.5.5 the NPS advises that the UK has an estimated 78 billion tonnes of CO2 storage capacity under the seabed of the UK continental shelf, one of the largest potential CO2 storage capabilities in Europe. In this context, NPS EN-1 goes on to state that:

'To support the urgent need for new CCS infrastructure, CCS technologies, pipelines and storage infrastructure are considered to be CNP [Critical National Priority] infrastructure.' (paragraph 3.5.8).

Section 104(3) of the PA 2008 requires the SoS to determine the application in accordance with any relevant national policy statement except to the extent that certain circumstances apply, including section 104(7) - that the adverse impact of the proposed development would outweigh its benefits.

Part 4 of EN-1 sets out the assessment principles and general policies against which applications relating to energy infrastructure are to be decided. Paragraph 4.1.10 explains that the NPS provide 'the "benchmark" for what is, or is not, an acceptable nationally significant energy development.' A presumption in favour of granting consent is adopted, unless any more specific and relevant policies set out in the relevant NPS clearly indicate that consent should be refused.

This position is set in the context that government is committed to net zero and decarbonisation of the energy sector using carbon capture and storage. The Committee on Climate Change ('CCC') (an independent, statutory body established under the Climate Change Act 2008) states that to achieve UK net-zero by 2050, CCS is a necessity not an option (CCC, 2019). This is in response to international efforts to limit the global temperature increase in this century to 2°C, compared to pre-industrial levels, while pursuing efforts to limit the increase even further to 1.5°C. Recently, the International Panel on Climate Change has advised that global temperatures are likely to breach the 1.5°C threshold during the 21st century, albeit this is more than likely to be a temporary overshoot (IPCC, 2022). It therefore stresses the need to implement adaptation to climate change. This emphasises the urgency for using CCS whilst other projects and technologies progress.

Paragraphs 4.2.10 and 4.2.11 make clear that this level of policy support does not negate the need to follow the requirements of the NPS, or any other relevant legal and regulatory requirements. In particular 'applicants must apply the mitigation hierarchy and demonstrate that it has been applied. ... Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated.'

Having followed this approach, NPS EN-1 paragraph 4.2.16 confirms that the starting point for the Secretary of State's decision making will be '*that such infrastructure is to be treated as if it*

has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances.'

This includes, as confirmed at paragraph 4.2.17, that the starting point for the Secretary of State will be that the Proposed Scheme does provide the very special circumstances required to justify development in the Green Belt, which applies to the Metropolitan Open Land designation found within the Order Limits.

At Part 5, NPS EN-1 presents the generic impacts that arise from development of all types of energy infrastructure, here they are not specific to any development type. However, compliance with these tests will be a key part of the Secretary of State's decision making.

This Planning Statement is intended to assist the Examining Authority ('ExA') by demonstrating that development consent should be granted for the Proposed Scheme due to its compliance with planning policy. The Planning Statement sets out a high-level description of the project for which development consent is sought (section 2).

Section 3 provides an overview of the consenting framework relevant to the Proposed Scheme, with sections 4 to 6 addressing the principle of development and key policy matters of particular relevance to the Proposed Scheme. Sections 7 and 8 pick up all other relevant policy considerations including that contained within the relevant NPS, national, and development plan policy.

Section 9 weighs the benefits and impacts of the Proposed Scheme, as directed by NPS EN-1 and in light of section 104(7) of the PA 2008. Section 10 considers the overall planning balance and concludes that the Application has demonstrated compliance with NPS EN-1, the Marine Policy Statement and the South East Inshore Marine Plan, as well as the relevant policies of the National Planning Policy Framework and the local development plan and Government climate change policy, which are important and relevant considerations.

The Proposed Scheme will provide CNP infrastructure contributing to the government's carbon capture ambitions set out in NPS EN-1 and the British Energy Security Strategy to achieve '20 to 30MT CCUS' by 2030. The Proposed Scheme will capture at least 95% of CO2 emissions from each of Riverside 1 and Riverside 2, which when operating at their consented throughput is equivalent to approximately 1.6Mt CO2 per year. would contribute to the achievement of 0.8% of the national target in the sixth Carbon Budget; and at paragraph 13.8.24 the chapter confirms that the payback period, 'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme' is less than 5 weeks.

Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year. The Proposed Scheme will not only enable the Applicant to meet net zero in their operations but will also contribute toward this goal for other hard to abate industries that do not have this technology available to them.

Whilst the Proposed Scheme does not include CO₂ storage, it will produce liquified CO₂ that will require storage, most likely in the UK offshore area which has been recognised in the Marine Policy Statement as 'one of the most promising hub locations within Europe' and will contribute

to the growth of the CCS sector. The Proposed Scheme will contribute to the CCUS Vision, helping the UK become a global leader in CCUS.

Whilst there is no specific development plan policy for CCS, the London Plan commits to London becoming a zero-carbon city by 2050, the achievement of which is reflected in the Bexley Local Plan.

The Proposed Scheme is informed by good design, the evolution of which is presented in the **Design Approach Document (Document Reference 5.6)** and is underpinned by the control framework provided through the **Design Principles and Design Code (Document Reference 5.7)**. Through the submitted documents the Applicant has demonstrated how the mitigation hierarchy has been applied, and all residual adverse effects identified in the Environmental Statement are those that cannot be avoided, reduced, or mitigated. Locally focussed environmental, social and economic benefits are set out in the **Project Benefits Report (Document Reference 5.4)** and the Proposed Scheme is underpinned by the **Design Principles and Design Code (Document Reference 5.7)** incorporating strong mitigation proposals, not least as presented in the **Outline LaBARDS (Document Reference 7.9).**

In relation to planning policy, the Proposed Scheme will result in the loss of, and some compromise to, land designated as Metropolitan Open Land and features of open space and green infrastructure (Erith Marshes SINC, Southeast London Green Chain and Crossness LNR). However, it does not result in the loss of Accessible Open Land.

The Proposed Scheme has identified and acknowledged the potential adverse impacts which may arise as a result of project delivery. This Planning Statement demonstrates that the residual significant adverse effects are limited, and generally apply at the local level. They arise having applied the mitigation hierarchy; they are the residual impacts that cannot be avoided. Following the application of the Proposed Scheme's mitigation measures, these residual effects are difficult to further reduce. None of the residual adverse impacts fall within the categories of posing an unacceptable risk or interference as set out at paragraph 4.1.7 of NPS EN-1 and Chapter 20 of the ES confirms that all risks of the Proposed Scheme achieve ALARP (as low as reasonably practicable).

The Proposed Scheme will bring material global, national and local level benefits by way of its contribution to the decarbonisation of emissions in London and southeast England and is defined in NPS EN-1 as CNP infrastructure. It is therefore considered that the SoS can be satisfied that the identified important and relevant benefits outweigh the limited harm to MOL and open space/green infrastructure features. Consequently, the loss of, and compromise to, these features should not be considered a reason for refusal.

The delivery of net zero is of national and international significance and indeed is of fundamental importance to the future of the UK economy and human survival, as recognised by the Paris Agreement, COP26, and the passing into law of the net zero target.

The Planning Statement demonstrates conclusively that the need for, and benefits that would be delivered by, the Proposed Scheme substantially outweigh the limited adverse impacts identified and would justify the granting of compulsory powers. The Applicant concludes that the Proposed Scheme is acceptable in planning terms and that a DCO should therefore be made.

1. INTRODUCTION AND PURPOSE OF THE DOCUMENT

1.1. INTRODUCTION

- 1.1.1. WSP has been instructed by Cory Environmental Holdings Limited (hereafter referred to as the Applicant) to prepare a Planning Statement (Document Reference 5.2), for the Cory Decarbonisation Project (hereafter, the 'Proposed Scheme'). The Proposed Scheme will be located at Norman Road, Belvedere in the London Borough of Bexley (LBB) (National Grid Reference/NGR 549572, 180512). The following figures are available in the Environmental Statement ('ES') Volume 2 (Document Reference 6.2):
 - Figure 1-1: Site Boundary Location Plan; and
 - Figure 1-2: Satellite Imagery of the Site Boundary Plan.
- 1.1.2. The Applicant intends to construct and operate the Proposed Scheme to be linked with the River Thames. It comprises of the following key components, which are described below, and further detail is provided within **Chapter 2: Site and Proposed Scheme Description of the ES Volume 1 (Document Reference 6.1)**:
 - The Carbon Capture Facility (including its associated Supporting Plant and Ancillary Infrastructure): the construction of infrastructure to capture a minimum of 95% of carbon dioxide (CO₂) emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2 once operational, which is equivalent to approximately 1.3Mt CO₂ per year. The Carbon Capture Facility will be one of the largest carbon capture projects in the UK.
 - The Proposed Jetty: a new and dedicated export structure within the River Thames as required to export the CO₂ captured as part of the Carbon Capture Facility.
 - The Mitigation and Enhancement Area: land identified as part of the Landscape, Biodiversity, Outline Landscape, Biodiversity and Recreation Strategy
 Delivery Plan (LaBARDS) (Document Reference 7.9) to provide improved access to open land, habitat mitigation, compensation and enhancement (including forming part of the drainage system and Biodiversity Net Gain delivery proposed for the Proposed Scheme) and planting. The Mitigation and Enhancement Area provides the opportunity to improve access to outdoor space and to extend the area managed as the Crossness Local Nature Reserve (LNR).
 - Temporary Construction Compounds: areas to be used during the construction phases for activities including, but not limited to office space, warehouses, workshops, open air storage and car parking, as shown on the Works Plans (Document Reference 2.3). These include the core Temporary Construction Compound, the western Temporary Construction Compound and the Proposed Jetty Temporary Construction Compound.



- Utilities Connections and Site Access Works: The undergrounding of utilities required for the Proposed Scheme in Norman Road and the creation of new, or the improvement of existing, access points to the Carbon Capture Facility from Norman Road.
- 1.1.3. Together, the Carbon Capture Facility, the Proposed Jetty, the Mitigation and Enhancement Area, the Temporary Construction Compounds and the Utilities Connections and Site Access Works are referred to as the 'Proposed Scheme'. The land upon which the Proposed Scheme is to be located is referred to as the 'Site' and the edge of this land referred to as the 'Site Boundary'. The Site Boundary represents the Order Limits for the Proposed Scheme as shown on the **Works Plans** (Document Reference 2.3).
- 1.1.4. The purpose of the Planning Statement is to assist the Examining Authority ('ExA') and the Secretary of State ('SoS') in their assessment of the Proposed Scheme by setting out how it accords with relevant planning policy, notably the National Policy Statement ('NPS') for energy infrastructure, as well as other existing and emerging relevant policy at national, regional, and local level.
- 1.1.5. The Planning Statement demonstrates that the Proposed Scheme should be granted development consent, having given regard to the decision-making criteria of the Planning Act 2008 (as amended) ('PA 2008') [1] which, at section 104 directs the SoS to have regard to any relevant NPS and that s/he must decide the application in accordance with the NPS unless to do so would contravene specific legal tests, including that the adverse impacts would outweigh its benefits. 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, marine policy documents, any matters prescribed in relation to the development of the description to which the application relates (the Infrastructure Planning (Decisions) Regulations 2010) [2]; and any other matters which the SoS thinks are both important and relevant to the decision.
- 1.1.6. This document demonstrates how the Applicant has taken account of the policies mandated by section 104(2), notably the NPS EN-1 [3] designated in January 2024, the Marine Policy Statement [4] and the South East Inshore Marine Plan [4], and the extent to which the Proposed Scheme complies with these policies.
- 1.1.7. It considers and applies the Infrastructure Planning (Decisions) Regulations 2010 [2] to the Proposed Scheme, taking accounting of the results of the ES (Document Reference 6.1 6.4).
- 1.1.8. It also considers other matters that will be "important and relevant" to the SoS's determination of the DCO Application including:
 - UK Government energy and climate change policy;
 - the National Planning Policy Framework ('NPPF'); and
 - the development plan.



- 1.1.9. The NPPF and development plan are considered in the context that, in the event of any conflict between a NPS and other documents or policy, the NPS takes precedence (NPS EN-1, paragraph 4.1.15).
- 1.1.10. It considers the applicability of sections 104(4)-(6) to the Proposed Scheme, in light of the results of the ES.
- 1.1.11. The Planning Statement sets out the key benefits and likely significant adverse environmental effects of the Proposed Scheme drawing upon other relevant application documents that provide more detail including the Project Benefits Report and the ES.
- 1.1.12. It demonstrates conclusively that the need for, and benefits that would be delivered by, the Proposed Scheme substantially outweigh the limited adverse impacts identified. The Applicant concludes that the Proposed Scheme is acceptable in planning terms and that the DCO should be made.

1.2. DOCUMENT STRUCTURE

- 1.2.1. This Planning Statement is structured as follows:
 - Section 1 provides an introduction to the Planning Statement;
 - Section 2 describes the Site and the Proposed Scheme;
 - Section 3 sets out the consenting framework relevant to the Proposed Scheme, including the applicability of sections 104(4)-(6) of the PA 2008 and the Infrastructure Planning (Decisions) Regulations 2010, to signpost how the submitted application meets the expectations of NPS EN-1;
 - Section 4 considers the principle of the Proposed Scheme against the relevant sections of NPS EN-1, the Marine Policy Statement, the NPPF, development plan policy, and relevant UK government energy and climate change policy;
 - Section 5 considers the Proposed Scheme against policy relevant to Metropolitan Open Land;
 - Section 6 considers the Proposed Scheme against policy relevant to open space and green infrastructure;
 - Section 7 the Proposed Scheme against policy relevant to terrestrial and marine biodiversity;
 - Section 8 considers all other important and relevant impacts of the Proposed Scheme against national and development plan policy;
 - Section 9 sets out the benefits and adverse impacts of the Proposed Scheme;
 - Section 10 provides the planning balance and overall conclusion of the planning analysis; and
 - Section 11 provides references.
- 1.2.2. The Planning Statement contains the following Appendices:
 - Appendix A Section 35 Direction 6 October 2022



- Appendix B Letter regarding Section 35 Direction 28 February 2024
- Appendix C Relevant Planning History of Riverside 1, Riverside 2 and Surrounds.
- Appendix D Figures
- 1.2.3. The Planning Statement should be read in conjunction with the other documents submitted with the DCO Application, in particular:
 - The Glossary (Document Reference 1.7);
 - The Plans (Document References 2.1 2.12);
 - Draft DCO and Explanatory Memorandum (Document References 3.1 3.3)
 - Consultation Report (Document Reference 5.1);
 - Policy Accordance Tracker (Document Reference 5.3), considering the NPS EN-1, South East Inshore Marine Plan, NPPF and Local Planning Policy.
 - Project Benefits Report (Document Reference 5.4);
 - Design Approach Document (DAD) (Document Reference 5.6);
 - Environmental Statement (Document References 6.1 6.4);
 - Draft Heads of Terms for a development consent obligation (s106) (Document Reference 7.1);
 - Terrestrial Site Alternatives Report (TSAR) (Document Reference 7.5);
 - Jetty Site Alternatives Report (JSAR) (Document Reference 7.6); and
 - Outline Landscape, Biodiversity, Access and Recreation Delivery Strategy (LaBARDS) (Document Reference 7.9).

1.3. THE APPLICANT

- 1.3.1. The Applicant is Cory Environmental Holdings Limited. Cory Environmental Holdings Limited (Cory) is part of the Cory Group, one of the UK's leading resource management companies, with an extensive river logistics network in London underpinned by a long history and deep connection to the city stretching back to the late 1700s.
- 1.3.2. Cory has invested heavily in London's waste recycling, energy generation and river logistics infrastructure. In addition to its commercial customers, Cory is a trusted partner for several local authorities in London (serving a combined population of approximately 3 million people). It operates essential infrastructure which London relies heavily upon on a day-to-day basis.
- 1.3.3. Its core activity, recovering energy from residual waste, is undertaken at the Riverside Campus, located adjacent to the River Thames at Belvedere in the London Borough of Bexley.
- 1.3.4. Riverside 1 gained consent under the section 36 of Electricity Act 1989 in June 2006. This has been amended over time, with the extant section 36 consent and deemed



planning permission dated 21 December 2021, which permits the facility to accept up to 850,000 tonnes per annum ('tpa') of residual waste to generate up to 80.5 megawatts ('MW') of electricity.

- 1.3.5. Riverside 1 has been operating since 2011, and in 2022, processed 789,000 tonnes of residual waste and generated 565 gigawatt hours of electricity (sufficient to power 195,000 homes).
- 1.3.6. Riverside 2 gained consent through the Riverside Energy Park Order 2020, made by the Secretary of State on 9th April 2020. This has been amended by the Riverside Energy Park (Correction) Order 2021 which came into force on 10 March 2021 and the Riverside Energy Park (Amendment) Order 2023, which came into force on 17 February 2023. The Riverside Energy Park Order 2020 (as amended) consents an energy generating station with an output of up to 96MW and limits annual throughput to 805,920 tonnes residual waste.
- 1.3.7. Riverside 2 is currently under construction and due to be operational in 2026, and is expected to provide a typical annual throughput of 665,000 tonnes of residual waste and nominal rated electrical output of 76MW.
- 1.3.8. Together, Riverside 1 and Riverside 2 will provide over 1.5 million tpa of residual waste management capacity, making a substantial contribution to addressing the waste needs of London and Southeast England.

1.4. REQUIREMENT FOR DEVELOPMENT CONSENT

- 1.4.1. The PA 2008 [1] defines certain thresholds for large-scale development in the fields of energy, transport, water or waste. These are listed in Part 3 of the PA 2008 [1] and are defined as Nationally Significant Infrastructure Projects ('NSIP').
- 1.4.2. Due to the nature and scale of the Proposed Scheme there was uncertainty as to whether it would fall within the existing definition of a NSIP.
- 1.4.3. Under Section 35(1) of the PA 2008 [1], '[t]he Secretary of State may give a direction for development to be treated as development for which development consent is required.' This is subject to the provisions of Sections 35 and 35ZA.
- 1.4.4. By way of letter dated 6th October 2022 (Appendix A), the SoS made a Direction, under Section 35(1) of the PA 2008 [1] that the Proposed Scheme should be treated as development for which development consent under the PA 2008 [1] (as amended) is required and that it is therefore a Project of National Significance (PNS). The SoS was satisfied that [3]:
 - 'The Proposed Project is in the field of energy and development and will be wholly within England;
 - The Proposed Project does not currently fall within the existing definition of a "nationally significant infrastructure project" and therefore it is appropriate to consider use of the power in section 35(1) of the Planning Act 2008; and



- Cory's request constitutes a "qualifying request" in accordance with section 35ZA(11) of the Planning Act 2008.'
- 1.4.5. The SoS highlighted that one of the reasons that the Proposed Scheme should be considered as a PNS is that:

'The carbon capture element of the Proposed Project would provide and support the decarbonisation of energy from waste derived CO₂ emissions in the UK, delivering over a million tonnes of CO₂ savings per annum, and supporting the achievement of a fully de-carbonised district heating network that crosses local authority areas.'

1.4.6. A hydrogen project also formed part of the section 35 request, but that element has subsequently been removed from the Proposed Scheme. By letter dated 28th February 2024 (Appendix B), the SoS confirmed that:

'7. The Secretary of State notes that the Section 35 Direction was granted on the basis that each individual project met the nationally significant threshold i.e. the Carbon Capture and Storage Project was nationally significant, independent of the Hydrogen Project, and vice-versa.

8. The Secretary of State is satisfied that the reasoning set out in the Section 35 Direction and its Annex continues to apply to the Carbon Capture and Storage Project, even if the Hydrogen Project is not brought forward as part of the development consent application.'

- 1.4.7. As a result of this Direction, development consent is required for the Proposed Scheme.
- 1.4.8. The Applicant considers that the Proposed Scheme is 'EIA development' for the purposes of Infrastructure Planning (EIA) Regulations 2017 [4] (hereafter referred to as 'the EIA Regulations').
- 1.4.9. As such, a Regulation 8 (of the EIA Regulations) [4] letter, along with the EIA Scoping Report [5], was submitted to the SoS on 18th April 2023. This confirmed that the Applicant intended to submit an application for development consent, which would include an ES, in Q1 2024. The Planning Inspectorate, on behalf of the SoS, adopted a Scoping Opinion on 26th May 2023 [6] and an ES (Document Reference 6.1-6.4) has been prepared as part of the DCO Application, based on that Scoping Opinion.



2. SITE DESCRIPTION AND PROPOSED SCHEME DESCRIPTION

2.1. SITE DESCRIPTION

- 2.1.1. The Site refers to the land within which the Proposed Scheme would be located. The Site is displayed in Figure 1-1: Site Boundary Location Plan (Volume 2) of the ES (Document Reference 6.2) and Figure 1-2: Satellite Imagery of the Site Boundary Plan (Volume 2) of the ES (Document Reference 6.2). The Site is located in Belvedere, within the LBB.
- 2.1.2. The Proposed Scheme will be located at the Riverside Campus, adjacent to the River Thames at Belvedere in the London Borough of Bexley. The Site extends across some 77ha, comprising Riverside 1 and Riverside 2, the River Thames, Middleton Jetty and the Belvedere Power Station Jetty (disused), a substantial portion of the Crossness Local Nature Reserve, a network of fields and ditches and a range of third party landholdings.
- 2.1.3. Multiple businesses operate within and in the vicinity of the Site. Munster Joinery is a window and door manufacturing company, with premises on Norman Road that are part of its distribution operations dealing with products manufactured at their facility in Warwickshire. The Norman Road premises will require demolition to allow for the construction of the Proposed Scheme. In addition, Iron Mountain Record Storage Facility is located just outside of the northern section of the Site, the Morgan Pub is approximately 20m south of the Site, and Travelodge Belvedere is approximately 30m south of the Site. The closest residential properties are located approximately 50m southeast of the Site Boundary at Clydesdale Way.
- 2.1.4. The Erith Marshes Site of Importance for Nature Conservation and Crossness Local Nature Reserve are located within the Site alongside a network of fields and surface water ditches. These areas are also designated Metropolitan Open Land and as open space in LBB's local plan.
- 2.1.5. The Site is accessed by Norman Road, which connects with the A2016 Picardy Manorway to the south and east. Belvedere Railway Station is located approximately 580m south of the Site Boundary and there are numerous bus stops in the surrounding area. Public Right of Way Footpath 1 (FP1), FP2, the England Coast Path (FP3/National Cycle Network (NCN1)), FP4 and FP242 pass through the Site. A portion of the Southeast London Green Chain, a green infrastructure designation, also falls within the Site Boundary.
- 2.1.6. A full Site description is within Chapter 2: Site and the Proposed Scheme (Volume 1) of the ES (Document Reference 6.1).

DEVELOPMENT PLAN DESIGNATIONS

CORY

- 2.1.7. There are numerous development plan policy allocations and designations within the London Plan (adopted 2021) [7] and Bexley Local Plan (adopted 2023) [8] relevant to the Site, these are listed below:
 - Belvedere Industrial Area, a Strategic Industrial Location, and Bexley Riverside Opportunity Area - Policies E5 and SD1 of the London Plan and Policies SP1, SP3, and DP7 of the Bexley Local Plan.
 - Safeguarded/Strategic Waste Site Policy SI9 of the London Plan and Policy SP12 of the Bexley Local Plan.
 - Safeguarded Wharf -Policy SI 15 of the London Plan and Policy SP11 of the Bexley Local Plan
 - River Thames and Thames Policy Area Policy DP19 of the Bexley Local Plan.
 - Metropolitan Open Land Policy G3 of the London Plan and SP8 Bexley Local Plan.
 - Erith Marshes Site of Importance to Nature Conservation (SINC), Crossness Local Nature Reserve (LNR), and Southeast London Green Chain - Policy SP8 of the Bexley Local Plan.
 - Thames Marshes corridor Strategic Green Wildlife Corridor Policy SP8 of the Bexley Local Plan.
 - Riverside Resource Recovery (RRR) Energy from Waste Facility Strategic Waste Management Site – Policy SP12 of Bexley Local Plan.
- 2.1.8. Sections 4, 5, 6, 7 and 8 of this Planning Statement and the **Policy Accordance Tracker (Document Reference 5.3)** consider relevant development plan policy and the Proposed Scheme's compliance with these.

PLANNING HISTORY OF THE SITE

2.1.9. Appendix D details the relevant planning history for land within and adjacent to the Site. A commentary on the most relevant applications intersecting with the Proposed Scheme is provided below. It is noted that the draft DCO includes provision to ensure that development under these permissions does not constitute a breach of the DCO or vice versa and that the implementation of these permissions or the DCO would not make any implementation of another unlawful.

Interaction with Riverside 1 and Riverside 2

2.1.10. The Site Boundary of the Proposed Scheme overlaps with those of Riverside 1 and Riverside 2, as set out below.

Riverside 1

Consent under section 36 of the Electricity Act 1989

2.1.11. The Secretary of State for the Department of Trade and Industry granted consent for Riverside 1 (referred to as the Riverside Resource Recovery Facility) on 15 June



2006, under section 36 of the Electricity Act 1989 and accompanied by a Direction under section 90(2) of the TCPA 1990.

- 2.1.12. Both this original s.36 consent and deemed permission underwent various amendments in 2007, 2015, 2016 and 2017.
- 2.1.13. On 15 April 2021, an application was made under section 36C of the Electricity Act 1989 (planning register reference 21/01744/ALA), to (in summary):
 - amend the power generation description to increase the energy generation limit from 'up to 72MW' to 'up to '80.5MW'; and
 - amend conditions of the deemed planning permission to increase the maximum waste throughput from 785,000 tpa to 850,000 tpa; and
 - amend the contemporaneous s.36 variation and to incorporate into any new deemed planning permission the amendments authorised by the Secretary of State in the Riverside Energy Park Order 2020 (as amended, see below) in order to provide for the co-existence of both Riverside 1 and 2.
- 2.1.14. This application was approved on 17 December 2021. The relevant consents have been implemented.
- 2.1.15. To the east of Riverside 1, there is an area of wetland and grassy habitat that was created when Riverside 1 was built. It has had minimal management since its creation. Granting of the Order would make provision for the LCO₂ Piping and Utilities Connection to the Jetty to pass over this area and for the Access Trestle to be connected with the Riverside 1 main building. The Order would include provisions for any habitat affected to be appropriately mitigated.
- 2.1.16. To the south of Riverside 1, there is an area of amenity grassland and tree planting placed over water attenuation tanks. Granting of the Order would make provision for the Flue Gas Supply Ductwork from Riverside 1 to the Cabon Capture Facility to pass over this area. The Order would include provisions for waste treatment operations to be retained and for any habitat affected to be appropriately mitigated.
- 2.1.17. Provision has been made on the western side of the Riverside 1 main building for the plant and pipework necessary for the use of heat from Riverside 1 in a district heat network (reference 16/02167/FUL03, approved 27 January 2022). Granting of the Order would make provision for certain interactions with Riverside 1 in the area of the permission, with the provision of heat into a district heat network to be retained.

Battery Energy Storage System

2.1.18. On 24 August 2021, planning permission was gained (reference 20/03208/FUL) for the '*installation, operation and maintenance of a battery energy storage scheme*' on land to the east of Riverside 1. This consent is still extant but has not been implemented to date.



2.1.19. Granting of the Order would make provision for the LCO₂ Piping and Utilities Connection to the Jetty to pass over this area and for the Access Trestle to be connected with the Riverside 1 main building.

Private Wire Connection

- 2.1.20. On 1 September 2021, planning permission was gained (reference 20/03209/FUL) for the '*installation, operation and maintenance of a private wire connection*' which starts at the south west corner of Riverside 1 and travels down to Borax North and Borax South, also utilising the public highway (Norman Road). The private wire has been laid underground and consequently development under this permission has commenced.
- 2.1.21. Granting of the Order would make provision for certain interactions with Riverside 1 and for the Carbon Capture Facility in the area of the permission.

Realignment of Ditch 9

- 2.1.22. On 27 January 2022, planning permission was granted for the '*realignment of Ditch 9*' on land which runs east-west along the southern boundary of the Riverside Campus and then parallel with Norman Road, on its western side. This consent has been implemented and ongoing monitoring and management of ditches in the area (as required by condition 4 of the permission) is being undertaken.
- 2.1.23. Granting of the Order would make provision for certain interactions with Riverside 1 and for the Carbon Capture Facility in the area of the permission, with appropriate migration to be provided as required.

Riverside 2

- 2.1.24. The Riverside Energy Park Order 2020 was made by the Secretary of State for Energy and Climate Change on 9th April 2020 (planning register reference 19/00998/ALA). This has been amended by the Riverside Energy Park (Correction) Order 2021 which came into force on 10 March 2021 and the Riverside Energy Park (Amendment) Order 2023, which came into force on 17 February 2023. Development commenced in January 2023.
- 2.1.25. Requirement 5 of the Riverside Energy Park Order (reference 19/00998/ALA12, approved 2 November 2021) includes landscape and biodiversity mitigation details including that to be provided around the periphery of the Riverside Campus. Granting of the Order would make provision for certain interactions with Riverside 2, with provision for replacement planting as required.

Carbon Capture Facility Area

East Paddock

2.1.26. Planning permission has been granted for development including wader scrapes, viewing platform, bird hide and wind pump across the Crossness Local Nature Reserve, with none located within the East Paddock. The most recent consent is for the 'permanent retention of existing portacabin ... and two unauthorised storage



containers, used collectively for storage and welfare purposes in the ongoing management & maintenance of the Crossness Nature Reserve', which was approved on 16 January 2018.

2.1.27. Granting of the Order would make provision for the Carbon Capture Facility in this location.

Stable Paddock

- 2.1.28. Planning permission has been granted for development including wader scrapes, viewing platform, bird hide and wind pump across the Crossness Local Nature Reserve, with none located within the Stable Paddock, except as noted below. The most recent consent is for the 'permanent retention of existing portacabin ... and two unauthorised storage containers, used collectively for storage and welfare purposes in the ongoing management & maintenance of the Crossness Nature Reserve', which was approved on 16 January 2018.
- 2.1.29. On 14 April 2010, planning permission was granted (reference 10/00255/FUL) for the *'demolition of existing building and erection of a stable building'* within the Stable Paddock. This consent has been implemented.
- 2.1.30. Granting of the Order would make provision for this consent to be built over, to provide the Carbon Capture Facility, with the stable block to be relocated.

Borax North

- 2.1.31. The application boundaries for both Riverside 1 and Riverside 2 (under construction) incorporate the Borax North land parcel, to be used as temporary construction compound.
- 2.1.32. Articles 12 and 15 and requirement 8 of the Riverside Energy Park Order (reference 19/00998/ALA09, approved 12 January 2022) allow for the provision of temporary access into Borax North land parcel for the duration of construction. Granting of the Order would make provision for this access to become permanent.
- 2.1.33. On 11 July 2016, outline planning permission (reference 15/02926/OUTM) was granted for 'the construction of a data centre (Use Class B8), sub-stations, formation of new access, car parking and landscaping' across both Borax North and Borax South land parcels. Reserved matters have been discharged but development has not commenced and the consent has now expired.
- 2.1.34. Granting of the Order would make provision for the Carbon Capture Facility in this location.

Borax South

- 2.1.35. The application boundaries for both Riverside 1 and Riverside 2 (under construction) incorporate the Borax South land parcel, to be used as temporary construction compound.
- 2.1.36. Articles 12 and 15 and requirement 8 of the Riverside Energy Park Order (reference 19/00998/ALA09, approved 12 January 2022) allow for the provision of temporary



access into Borax North land parcel for the duration of construction. Granting of the Order would make provision for this access to become permanent.

- 2.1.37. On 11 July 2016, outline planning permission (reference 15/02926/OUTM) was granted for 'the construction of a data centre (Use Class B8), sub-stations, formation of new access, car parking and landscaping' across both Borax North and Borax South land parcels. Reserved matters have been discharged but development has not commenced and the consent has now expired.
- 2.1.38. Granting of the Order would make provision for the Carbon Capture Facility in this location.

Creekside

- 2.1.39. The application boundaries for both Riverside 1 and Riverside 2 (under construction) incorporate the Creekside land parcel, to be used as temporary construction compound.
- 2.1.40. On 13 August 2012, planning permission was granted (reference 11/00778/FUL) for the 'provision of 3m high boundary fencing with new vehicular access points and alterations to existing vehicular access.' The application boundary incorporates all of Creekside, Munster Joinery and Gannon land parcels. The consent has been implemented.
- 2.1.41. Granting of the Order would make provision for this consent to be built over, to provide the Carbon Capture Facility.

Munster Joinery

- 2.1.42. On 13 August 2012, planning permission was granted (reference 11/00778/FUL) for the 'provision of 3m high boundary fencing with new vehicular access points and alterations to existing vehicular access.' The application boundary incorporates all of Creekside, Munster Joinery and Gannon land parcels. The consent has been implemented.
- 2.1.43. On 28 August 2014, planning permission was granted (reference 13/00918/FULM) for the 'erection of building comprising 3 industrial units for mixed-use within Class B1 (business), Class B2 (general industrial) and B8 (storage/distribution) with associated ancillary works.' This consent has been partially implemented, with the single built out premises occupied by Munster Joinery.
- 2.1.44. Granting of the Order would make provision for this consent to be built over, to provide the Carbon Capture Facility. The Applicant is seeking to continue discussion to relocate Munster Joinery offsite.

Gannon

- 2.1.45. The application boundaries for both Riverside 1 and Riverside 2 (under construction) incorporate the Gannon land parcel, to be used as temporary construction compound.
- 2.1.46. On 13 August 2012, planning permission was granted (reference 11/00778/FUL) for the 'provision of 3m high boundary fencing with new vehicular access points and



alterations to existing vehicular access.' The application boundary incorporates all of Creekside, Munster Joinery and Gannon land parcels. The consent has been implemented.

2.1.47. Granting of the Order would make provision for this consent to be built over, to provide the Carbon Capture Facility.

Middleton Jetty

- 2.1.48. The site parcel of the Middleton Jetty falls within the Site Boundary of the Riverside Energy Park (Riverside 2) DCO (EN010093) which was granted on the 9th of April 2020 and is currently under construction, in addition to the Riverside Energy from Waste application (Riverside 1) (99/02388/CIRC24) which was granted on the 15th of June 2006 and has been constructed.
- 2.1.49. There are no other extant planning permissions on this parcel of land which will be impacted by the Proposed Scheme.

Mitigation and Enhancement Area

Norman Road Field

- 2.1.50. On 12 October 2007, planning permission was granted (reference 07/08166/FUL) for the 'creation of a seasonal wetland on 0.47 hectare of the site and the remaining 0.84 hectare converted to a species rich neutral grassland.' This was later amended (reference 08/01834/FUL, approved 20 March 2008) to not include a 5 metre wide buffer zone around the wetland. This consent has been implemented.
- 2.1.51. Granting of the Order would make provision for this area to be incorporated into the Mitigation and Enhancement Area.

Crossness Local Nature Reserve (LNR)

- 2.1.52. On 21 January 1994, outline planning permission was granted (reference 91/01318/OUT for the 'construction of a sewage sludge incinerator using the fluidised bed process with dewatering, ash collection and gas cleaning facilities.' The reserved matters have been discharged and the consent has been implemented.
- 2.1.53. The consent was subject to = a s.106 agreement, also dated 21 January 1994, with principal commitment for Thames Water to 'maintain and enhance the Conservation Land for a period of 99 years from the date of approval of the Management Plan by the Chief Planning Officer ...' (paragraph 4.3 of the s.106 agreement. The Conservation Land referred to within the s.106 agreement is the Crossness LNR). A copy of this section 106 is included at Appendix A of the Statement of Reasons (Document Reference 4.1).
- 2.1.54. The Crossness LNR has been the subject of a number of planning permissions; the first recorded on the planning register is reference 05/02909/FULM, approved on 7 December 2005 for the '*extension to wader scrape, renovation of the existing viewing platform and paths and installation of wind pump*.' The most recent recorded on the



planning register is reference 17/02290/FUL approved on 16 January 2018 for the 'permanent retention of existing portacabin ... and two unauthorised storage containers, used collectively for storage and welfare purposes in the ongoing management & maintenance of the Crossness Nature Reserve'.

2.1.55. Granting of the Order would make provision for this area to be incorporated into the Mitigation and Enhancement Area.

Sea Wall Field and West Paddock

2.1.56. Whilst the West Paddock and Sea Wall Field are located within the Mitigation and Enhancement Area, granting of the Order would make provision for Flue Gas Suply Ductwork from Riverside 2 to the Cabon Capture Facility in this location, with appropriate mitigation.

The Proposed Jetty

- 2.1.57. There are no records relevant to the Belvedere Power Station Jetty (disused) available on the planning register online.
- 2.1.58. The Belvedere Power Station ceased operation in the mid 1980s. The site was subsequently developed for warehousing and is currently occupied by Iron Mountain Records Ltd.
- 2.1.59. Granting of the Order would make provision for some of this land to be used as a temporary construction compound and for maintenance of the Proposed Jetty, whilst allowing Iron Mountain operations to continue.

2.2. PROPOSED SCHEME DESCRIPTION

2.2.1. A full description of the Proposed Scheme is within **Chapter 2: Site and Proposed** Scheme Description (Volume 1) of the ES (Document Reference 6.1).

CARBON CAPTURE FACILITY

- 2.2.2. The Carbon Capture Facility is the installation of post combustion carbon capture technology to capture carbon dioxide ('CO₂') from Riverside 1 (in operation) and Riverside 2 (due to be operational by 2026). It will capture a minimum of 95% of CO₂ emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2.
- 2.2.3. Assuming a nominal assumed throughput, this is equivalent to approximately 1.3Mt CO₂ per year. **Table 13-10** of **Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1)** demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline.
- 2.2.4. Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year of CO₂. As such, the



Proposed Scheme will be part of a global, national and regional effort to enable the decarbonisation of emissions in the UK, London and the southeast of England in particular.

- 2.2.5. The Carbon Capture Facility could be delivered with the construction of two separate Carbon Capture Plant(s), one for Riverside 1 and one for Riverside 2; or the construction of a single Carbon Capture Plant. A single Carbon Capture Plant will have the same capacity as two plants and will be able to process the flue gas from both Riverside 1 and Riverside 2.
- 2.2.6. The Carbon Capture Facility is likely to contain the following elements shown in Figure 2-1: The Key Elements of the Carbon Capture Facility (Volume 2) of the ES (Document Reference 6.2) and the Works Plans (Document Reference 2.3):
 - Carbon Capture Plant(s) (Work No. 1A), each comprising:
 - Flue Gas Pre-Treatment;
 - Back Pressure Turbine and Generator;
 - Solvent Regeneration System;
 - Rich Solvent/Lean Solvent Heat Exchanger; and
 - Solvent Storage.
 - Absorber Column(s) and Stack(s) (Work No. 1B)
 - CO₂ Processing Plant(s) (Work No. 1C), each comprising:
 - Compression;
 - Dehydration;
 - Liquefaction; and
 - CO₂ Vents.
 - LCO₂ Buffer Storage (Work No. 1D) comprising:
 - Temporary Storage; and
 - Boil Off Gas Processing.
 - Supporting Plant (Work No. 1E), comprising:
 - Cooling System;
 - Chemical Storage and Distribution Handling Facilities;
 - Water Treatment Plant (Process Water Supply);
 - Wastewater Treatment Plant; and
 - Gatehouse, Control Room, Welfare, Stores and Workshop.

MODIFICATION AND INTERCONNECTION WITH RIVERSIDE 1 AND RIVERSIDE 2

- 2.2.7. The modifications and interconnections to Riverside 1 and Riverside 2 will consist of the following:
 - Flue Gas Supply Ductwork (Work No. 2B);
 - Process Steam and Condensate (Work No. 2A); and
 - Electrical Connections (Work No. 2C).

MARITIME WORKS (WORK NO. 4)

Proposed Jetty (Work No. 4B)

- 2.2.8. A new and dedicated export structure is required to export the LCO₂. The Proposed Jetty will be located in the River Thames approximately 130m downstream of the existing Middleton Jetty, with its front face approximately 140m from the southern bank of the River. The Proposed Jetty will comprise the following key features:
 - Loading Platform;
 - Breasting Dolphins;
 - Mooring Dolphins;
 - Access Trestle; and
 - Access Catwalks.

Proposals for Belvedere Power Station Jetty (disused) (Work No. 4A)

- 2.2.9. The Belvedere Power Station Jetty (disused) lies in the northeast corner of the Site Boundary within the River Thames and is located within the intertidal zone. The Belvedere Power Station Jetty (disused) is an 180m long open pile structure with a concrete deck and an open pile dolphin on each end.
- 2.2.10. Currently, two options are being considered for the decommissioned jetty:
 - Option 1 Demolition; or
 - Option 2 Retention (with modification).

Proposed Dredging (Work No. 4C)

2.2.11. Proposed dredging requirements for the construction and operation phases of the Proposed Scheme are set out in section 2.4 and 2.6 of Chapter 2: Site and Proposed Scheme Description (Volume 1) of ES (Document Reference 6.1).

PIPING AND UTILITIES CONNECTION TO JETTY (WORK NO. 5)

2.2.12. The LCO₂ will be pumped from the LCO₂ Buffer Storage Area to the Proposed Jetty via Above Ground Pipelines^a. The pipelines will follow a route on the landside elevated process pipe and duct bridge, leading to the elevated process pipe bridge on the Proposed Jetty.

LCO₂ GEOLOGICAL STORAGE LOCATIONS

2.2.13. The final CO₂ storage locations do not form part of the Proposed Scheme. Of the options listed within **Chapter 3: Consideration of Alternatives (Volume 1) of of the ES (Document Reference 6.1)** the final CO₂ storage location is likely to be the carbon capture and storage project in the Viking area of the southern North Sea [12].

UTILITIES CONNECTION AND SITE ACCESS WORKS

- 2.2.14. The Utilities Connections and Site Access Works will comprise of the following components:
 - Water Supply;
 - Wastewater Discharge;
 - Other Utilities; and
 - Site Access Works from Norman Road into the Carbon Capture Facility
- 2.2.15. The Proposed Scheme will establish a one-way site road network system for operational staff vehicles and HGV. This system will likely involve entrances connecting to and from Norman Road, one located at the southern end of the Carbon Capture Facility and the Gatehouse and one to the north of the Carbon Capture Facility connecting to and from Norman Road. Further information regarding the access roads within the Site will be defined through detailed design.

ANCILLARY INFRASTRUCTURE

- 2.2.16. The ancillary infrastructure required for the Proposed Scheme includes the following:
 - Heat recovery and heat transfer system;
 - Main electrical infrastructure;
 - Drainage infrastructure;
 - Access Roads and Site Fencing;
 - Lighting and CCTV; and
 - Operator Contractor Maintenance Laydown Area.

^a While certain process pipework may have the potential for a buried network, this does not apply to the LCO₂ pipework, which operates at sub-zero temperatures. Burial of this pipework would result in the freezing of the surrounding ground, causing frost heave and potential damage to both the pipework and other facilities within the Site. Above Ground LCO₂ Pipelines also facilitate maintenance activities.

MITIGATION AND ENHANCEMENT AREA (WORK NO. 7)

- 2.2.17. The Mitigation and Enhancement Area is located to the south and west of the Carbon Capture Facility. No new operational infrastructure associated with the Carbon Capture Facility or Proposed Jetty is proposed to be located on the land within the Mitigation and Enhancement Area.
- 2.2.18. An outline and an explanation of the reasoning for the proposals being considered for the Mitigation and Enhancement Area is set out in the **Outline LaBARDS (Document Reference 7.9).**
- 2.2.19. The Mitigation and Enhancement Area is crossed by the existing PRoW FP2. A series of additional permissive paths are proposed as improved connections and access for users of this area. Raised walkways are intended to be provided so that Crossness LNR and Norman Road Field remain accessible during wet periods. Permissive paths and waymarked circular active routes will be used to provide improved connections within the Mitigation and Enhancement Area (including improvements to FP2 and the England Coast Path (FP3/NCN1)) improving the connections to the surrounding areas such as Southmere Park and Thamesmead.
- 2.2.20. Additionally, several examples of new features that are being considered for implementation within the Mitigation and Enhancement Area are described below. Further information is also set out in the **Design Approach Document (Document Reference 5.6)** and the **Outline LaBARDS (Document Reference 7.9)**. These include:
 - approximately three areas of proposed improvements to coastal and floodplain grazing marsh habitat located to the west and southern sections of the Carbon Capture Facility;
 - boardwalks located to the south of the Carbon Capture Facility;
 - tree planting to provide screening along the southern and western sides of the Carbon Capture Facility and Riverside Campus;
 - outdoor classroom or similar located to the west of the Carbon Capture Facility;
 - proposed car park with associated footpath access to Norman Road Field via new bridge located adjacent to the south section of the Carbon Capture Facility;
 - new ditches and sluice gates; and
 - relocated stable block for graziers.

BIODIVERSITY NET GAIN OPPORTUNITY AREA

2.2.21. The proposed works to be undertaken within the BNG Opportunity Area are intended to provide compensation for ecological losses resulting from the construction of the Proposed Scheme. The BNG Opportunity Area is located within land at the former Thamesmead Golf Course, which is located approximately 1km to the west of the Site Boundary and is shown on **Figure 7-7: Proposed Habitat and Creation**

Enhancements (Volume 2) of the ES (Document Reference 6.2). Habitat creation and enhancements are proposed including:

- creation of Open Mosaic Habitat and Reedbed; and
- enhancement of Neutral Grassland to improve its ecological value through management and planting of new species such as seeding with wildflowers.

3. THE CONSENTING FRAMEWORK

3.1. THE CONSENTING FRAMEWORK PROVIDED BY THE PLANNING ACT 2008 (AS AMENDED)

SECTION 104 OF THE PLANNING ACT 2008

- 3.1.1. The Proposed Scheme falls to be determined under Section 104 of the PA 2008 [1]. Section 104 applies where a national policy statement has effect in relation to development of the description to which the application relates.
- 3.1.2. NPS EN-1 [3] has effect in respect of the Proposed Scheme as a result of paragraph 1.3.10 of NPS EN-1 which states that: "*EN-1, in conjunction with any relevant technology specific NPS, will be the primary policy for Secretary of State decision making on projects in the field of energy for which a direction has been given under section 35.*"
- 3.1.3. Under section 104 (4) (7) of the PA 2008 [1], the SoS must determine such applications in accordance with the relevant NPS, except to the extent that doing so would:
 - (4) lead to the UK being in breach of its international obligations;
 - (5) lead to the SoS being in breach of any duty imposed on them by or under any legislation;
 - (6) be unlawful by virtue of any enactment; or
 - (7) result in adverse impacts of the development outweighing its benefits.
- 3.1.4. The Proposed Scheme would not itself, nor in the application of the NPS to it, result in the UK being in breach of its international obligations (Section 104(4)), it would in fact contribute to meeting climate change targets as the Proposed Scheme is a carbon capture facility, this is discussed further in Section 4 of this Planning Statement. It would not be unlawful by virtue of any enactment to decide the DCO Application in accordance with the relevant NPSs (section 104(6)) or put the SoS in breach of any duty imposed on them by or under any legislation (section 104(7)) indeed it is considered that the Proposed Scheme will help the SoS achieve its duties under the Climate Change Act 2008 (in helping carbon budgets to be met), and would be consistent with the duties under the Environment Act 2021 and the Natural Environment and Rural Communities Act 2006 (duty to conserve and enhance biodiversity) given it will achieve Biodiversity Net Gain and an improved position more generally than the current baseline.
- 3.1.5. Section 104(7) applies if the SoS is satisfied that the adverse impact of the Proposed Scheme would outweigh its benefits, this is addressed in some detail in this Planning Statement, particularly at Section 9.
- 3.1.6. Under section 104, alongside the NPS, the SoS must also have regard to:

- any local impact report (within the meaning given by section 60(3)) submitted to the SoS before the deadline specified in a notice under section 60(2);
- appropriate marine planning policy documents in this case the Marine Policy Statement and the South East Inshore Marine Plan;
- any matters prescribed in relation to development of the description to which the application relates (as prescribed by the Infrastructure Planning (Decisions) Regulations 2010); and
- any other matters which the SoS thinks are both important and relevant to their decision.
- 3.1.7. The Infrastructure Planning (Decisions) Regulations 2010 [2] sets out matters to which the SoS must have regard to when deciding applications for development consent relating to:
 - listed buildings, conservation areas and ancient monuments;
 - in the context of marine licensable activities, protecting the environment and human health and preventing interference with legitimate uses of the sea;
 - hazardous substances; and
 - biodiversity.
- 3.1.8. The ES demonstrates that the Proposed Scheme:
 - will not affect any listed buildings, conservation areas or ancient monuments, or their setting (as detailed in Chapter 9: Historic Environment (Volume 1) of the ES (Document Reference 6.1); or
 - will not cause likely significant effects to human health (Chapter 14 of the ES), marine ecology (Chapter 7 of the ES) or navigation (Chapter 18 of the ES), and none to terrestrial ecology, save for localised air quality impacts (Chapter 7 of the ES).
- 3.1.9. Currently it is considered unlikely that the Proposed Scheme would involve the presence of a hazardous substance under which section 12(2B) of the Planning (Hazardous Substances) Act 1990 applies. However, the Other Consents and Licences Report (Document Reference 5.5) provides details of any other consents and licences the Proposed Scheme requires, should such a consent be required the Applicant will seek consent under the relevant regulations. This would ensure that impacts to neighbouring uses could be safely managed.
- 3.1.10. In light of this, the Applicant considers that the SoS will be able to make a positive decision in respect of the Proposed Scheme when having regard to these prescribed matters. As such, these Regulations are not considered further in this Planning Statement.
- 3.1.11. Paragraph 4.1.15 of NPS EN-1 is clear that other matters that the SoS can consider "important and relevant" in decision making can include development plan documents or other documents in the Local Development Framework. It is also clear, however,

that where there is any conflict, the NPS prevails for the purposes of decision making given the national significance of infrastructure.

- 3.1.12. Consideration of the Proposed Scheme against other relevant planning policy including the NPPF and development plan policy is provided in Sections 4 to 8 of this Planning Statement, with a detailed analysis in the Policy Accordance Tracker (Document Reference 5.3).
- 3.1.13. Whilst there is a similarity between the status of NPS under the PA 2008 regime and the statutory development plan under the Town and Country Planning Act regime, it is important to recognise that the requirement (as set out in section 38(6) of the Planning and Compulsory Purchase Act 2004) [9] of planning applications to be decided in accordance with the development plan unless material considerations indicate otherwise, does not apply to applications made under the PA 2008, which enables the two regimes to not be in conflict.

3.2. NATIONAL POLICY STATEMENTS

OVERVIEW

- 3.2.1. Large-scale infrastructure developments such as the Proposed Scheme are underpinned by a complex set of UK and local policies. These include policies which directly support renewable energy generation and carbon capture technology, and more general policies relating to the potential impacts of development proposals.
- 3.2.2. NPSs are designated under the PA 2008 [1] to set out national policy and to form the framework for decision-making on applications for development consent.
- 3.2.3. The current suite of energy NPS was designated by the DESNZ in January 2024, and comprises:
 - The Overarching National Policy Statement for Energy (EN-1) [10];
 - Fossil Fuel Electricity Generating Infrastructure (EN-2) [11];
 - Renewable Energy Infrastructure (EN-3) [12];
 - Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) [13];
 - Electricity Networks Infrastructure (EN-5) [14]; and
 - Nuclear Power Generation (EN-6) [15].
- 3.2.4. EN-1 is the only NPS relevant to determination of the Proposed Scheme.
- 3.2.5. NPS EN-3 (as originally designated) was relevant to the positive determination of the Riverside Energy Park Order 2020. As is explained in the **Project Benefits Report** (Document Reference 5.4) NPS EN-3, the technology specific policy for renewable energy infrastructure, as designated in January 2024, continues, expressly at paragraph 1.6.1, to support energy from waste as being a form of renewable energy generating station desired by that policy. This position confirms that Riverside 1 and Riverside 1 remain, in current national policy, recognised as an important and relevant contribution to meeting the critical national priority for low carbon

infrastructure. This is also reflected in the recognition at paragraph 4.2.5 of EN-1 that energy from waste plans can be considered as low carbon infrastructure that is of critical national priority.

3.2.6. NPS EN-2, EN-4, EN-5 and EN-6 are not relevant to the Proposed Scheme and are not considered further.

NPS EN-1 THE CRITICAL NATIONAL PRIORITY FOR LOW CARBON INFRASTRUCTURE INCLUDING NEW CCS INFRASTRUCTURE

3.2.7. At paragraph 2.2.1, NPS EN-1 advises that:

"In June 2019, the UK became the first major economy to legislate for a 2050 net zero Greenhouse Gases ('GHG') emissions target through the Climate Change Act 2008 (2050 Target Amendment) Order 2019. In December 2020, the UK communicated its Nationally Determined Contributions to reduce GHG emissions by at least 68 per cent from 1990 levels by 2030.23 In April 2021, the government legislated for the sixth carbon budget (CB6), which requires the UK to reduce GHG emissions by 78 per cent by 2035 compared to 1990 levels."

3.2.8. Paragraph 2.3.3 confirms the importance of secure, affordable and reliable low carbon energy and the step change required to deliver it:

'Our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050, including through delivery of our carbon budgets and Nationally Determined Contribution. This will require a step change in the decarbonisation of our energy system.

- 3.2.9. Paragraph 2.5.1 confirms the Government's position: '*Given the vital role of energy to economic prosperity and social well-being, it is important that our supplies of energy remain secure, reliable and affordable.*'
- 3.2.10. NPS EN-1, paragraph 3.5.1 states that 'There is an urgent need for new carbon capture and storage (CCS) infrastructure to support the transition to a net zero economy.' At paragraph 3.5.4, it is emphasised that, as set out in the Net Zero Strategy, the Government's aim is to use CCUS technology to capture and store 20-30MtCO2 per year by 2030, which will require the timely development and deployment of CCS infrastructure. Paragraph 3.5.5 the NPS advises that the UK has an estimated 78 billion tonnes of CO2 storage capacity under the seabed of the UK continental shelf, one of the largest potential CO2 storage capabilities in Europe. In this context, the NPS goes on to state that: 'To support the urgent need for new CCS infrastructure, CCS technologies, pipelines and storage infrastructure are considered to be CNP infrastructure.' (paragraph 3.5.8).
- 3.2.11. Part 4 of EN-1 sets out the assessment principles and general policies against which applications relating to energy infrastructure are to be decided. Paragraph 4.1.10 explains that the NPS provide '*the "benchmark" for what is, or is not, an acceptable*

nationally significant energy development.' A presumption in favour of granting consent is adopted, unless any more specific and relevant policies set out in the relevant NPS clearly indicate that consent should be refused.

- 3.2.12. Paragraph 4.2.1 makes clear that 'Government has committed to fully decarbonising the power system by 2035, subject to security of supply, to underpin its 2050 net zero ambitions.'
- 3.2.13. A substantial increase in electrical supply will be a key component to delivery, with the UK's strategy to increase supply of low carbon energy 'dependent on deployment of renewable and nuclear power generation, alongside hydrogen and CCUS. Our energy security and net zero ambitions will only be delivered if we can enable the development of new low carbon energy sources of energy at speed and scale.' (NPS EN-1, paragraph 4.2.2). In light of this, the NPS goes on to say that:

'Government has therefore concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure.' (NPS EN-1, paragraph 4.2.4)

- 3.2.14. In light of this, the Proposed Scheme is of critical national priority. The weight to be applied to this status is made clear in the NPS, with paragraph 4.2.7 stating that the CNP policy is '*relevant during Secretary of State decision making and specifically in reference to any residual impacts that have been identified*' and further detail provided in paragraphs 4.2.8 to 4.2.22. In particular:
- 3.2.15. Paragraph 4.2.15 states that: 'Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts. The exception to this presumption of consent are residual impacts on shore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.'
- 3.2.16. NPS EN-1 policy 4.2.16 makes clear that decision-making for CNP Infrastructure, such as the Proposed Scheme, will be undertaken from the starting point *'that such infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances.'*
- 3.2.17. Importantly in the context of the Proposed Scheme, paragraph 4.2.17 goes on to state that the Secretary of State will take as a starting point that CNP Infrastructure will meet various tests, including the very special circumstances test required to justify development in Green Belt. This is important in terms of Metropolitan Open Land policy present in the development plan, which is stated to have the same position as

Green Belt policy, in which exceptional circumstances are required to be demonstrated to justify inappropriate development. As a starting point therefore, the CNP infrastructure status of the Proposed Development means that this test can be assumed to be made out. This is discussed in further detail in section 5 of this Planning Statement.

3.2.18. Paragraphs 4.2.18 to 4.2.22 go on to consider the position in respect of HCA or MCZ residual impacts. As the Proposed Scheme does not have any adverse effects on integrity to the UK national site network under the Habitats Regulations (demonstrated at Information to Inform a HRA (Appendix 7-3 of the ES Volume 3 (Document Reference 6.3)) nor are there any likely significant effects in respect of Marine Conservation Zones (demonstrated at Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1), these provisions are not relevant to the Proposed Scheme.

NPS EN-1 THE NEED FOR NEW NATIONALLY SIGNIFICANT ENERGY INFRASTRUCTURE PROJECTS AND MATTERS FOR DECISION MAKING

- 3.2.19. As is recognised by paragraphs 4.2.6 and 4.2.7 of the NPS, this CNP status builds on the overall need case in Part 3 of EN-1, which confirms the need for significant amounts of new large-scale energy infrastructure to meet the governments energy objectives, and that the need for such infrastructure is urgent. Paragraph 3.1.2 recognises that *'it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts*' and that these will be minimised by the application of policy in Parts 4 and 5 of the NPS. As discussed above, Part 3.5 sets out the need for new CCS infrastructure.
- 3.2.20. Part 3.2 sets out the matters relevant to the SoS's decision making, recognising the need for a wide range of different types of energy infrastructure to deliver the governments energy supply objectives. Paragraphs 3.2.3 and 3.2.4 confirm that it is not the role of the planning system to deliver specific amounts of or limit any form of infrastructure, or to compare the costs of individual development or technology types. Generally, the NPS recognises that diversity in energy infrastructure is required to deliver policy priorities.
- 3.2.21. Paragraphs 3.2.6 to 3.2.8 of EN-1 confirm that the need for the low carbon energy infrastructure sought through this NPS is demonstrated, that it should be given substantial weight, and that the contribution made by any one project does not need to be considered:

"The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part. In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

- 3.2.22. As a carbon capture facility, the Proposed Scheme does not feature in sections 15-21 of PA 2008 [1].
- 3.2.23. Consequently, paragraph 3.2.12 of NPS EN-1 applies, which confirms that 'any application for development consent would need to be considered in accordance with this NPS. In particular: where the application is for CCS infrastructure not covered by sections 15-21 of the Planning Act, the Secretary of State should give substantial weight to the need established at paragraphs 3.5.1 to 3.5.8 of this NPS.' (fourth bullet)
- 3.2.24. Part 4.9 of NPS EN-1 provides specific context to carbon capture and storage, recognising the post-combustion technologies that comprise the Proposed Scheme. Paragraph 4.9.5 confirms that the 'government has made its ambitions for CCS clear committing to providing funding to support the establishment of CCS in at least four industrial clusters by 2030'
- 3.2.25. Part 5 of EN-1 then sets out the potential generic impacts which arise from energy infrastructure and the policies in respect of those impacts. These are set out and the Proposed Scheme is assessed against these policies in sections 5 to 8 of this Planning Statement, with the full analysis provided in the Policy Accordance Tracker (Document Reference 5.3).

NPS EN-1 ASSESSMENT PRINCIPLES

- 3.2.26. Part 4 of EN-1 sets out the general policies for the DCO submissions and assessment of applications relating to energy infrastructure. The below table summarises the assessment principles set out in part 4 of EN-1, and where this detail can be found within the DCO application.
- 3.2.27. Compliance with the relevant assessment principles, summarising the content of these referenced documents, is described in detail in the **Policy Accordance Tracker (Document Reference 5.3)**.

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
Paragraphs 4.1.5 to 4.1.7	Weighing impacts and benefits	This Planning Statement, particularly Sections 9 and 10, and the Project Benefits

Table 1 NPS EN-1 Assessment Principles

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
		Report (Document Reference 5.4).
Paragraphs 4.1.8 and 4.1.9	Consideration of Land Rights	Statement of Reasons (Document Reference 4.1).
Paragraphs 4.1.10 and 4.1.15	Other documents that the SoS may consider both important and relevant to their decision- making may include the local development plan.	This Planning Statement, particularly Sections 4 to 9 and the Policy Accordance Tracker (Document Reference 5.3) .
Paragraph 4.1.16 to 4.1.8	Matters in relation to requirements and development consent obligations.	The Draft DCO (Document Reference 3.1), particularly Schedule 2, Requirements and the Heads of Terms for a section 106 Agreement, (Document Reference 7.1).
Paragraphs 4.1.19 and 4.1.20	Early engagement both before and at the formal pre-application stage between the applicant and key stakeholders.	The Consultation Report (Document Reference 5.1) and the respective chapters of the ES (Document Reference 6.1), Engagement with relevant stakeholders is ongoing.
Paragraphs 4.1.21 and 4.1.22	Financial viability and technical feasibility	The Applicant's extensive experience delivering and operating large scale, complex infrastructure, including R1 and R2, enables it to be confident that the Proposed Scheme will be commercially viable and will be funded if development consent is granted. Further detail is provided in the the Funding Statement (Document Reference 4.2)

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
		and Policy Accordance Tracker (Document Reference 5.3).
Paragraphs 4.2.10 – 4.2.12	Applicants for CNP infrastructure must continue to show how their application meets the requirements in this NPS and the relevant technology specific NPS, applying the mitigation hierarchy, as well as any other legal and regulatory requirements.	This Planning Statement, particularly Chapters 4 to 9. The ES (Document Reference 6.1 - 6.4) (particularly Chapters 5 to 21) demonstrates how the mitigation hierarchy has been applied. The Mitigation Schedule (Document Reference 7.8) sets out the proposed mitigation measures.
Paragraphs 4.3.1 to 4.3.17	Requirement for ES and consideration of it.	The ES (Document Reference 6.1 - 6.4).
Paragraphs 4.3.18 to 4.3.29	The SoS's consideration of alternatives in decision making	The ES (Document Reference 6.1 - 6.4) (Chapter 3). The TSAR (Document Reference 7.5). The JSAR (Document Reference 7.6)
Paragraphs 4.4.4 to 4.4.6	The ES should assess the project, identifying any potential adverse health impacts, including cumulative, and identify measures to avoid, reduce or compensate for these impacts as appropriate.	The ES Volume 1 (Document Reference 6.1), particularly Chapters: 5 (Air Quality); 6 (Noise and Vibration); 14 (Population, Health and Land Use); 17 (Ground Conditions and Soil); and 21 (Cumulative Effects).
NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
----------------------------------	--	---
		The Outline LaBARDS (Document Reference 7.9) particularly section 8.
Paaragraph 4.5.8 and 4.5.9	Applicants for a Development Consent Order must take account of any relevant Marine Plans and are expected to complete a Marine Plan assessment as part of their project development, using this information to support an application for development consent. A Deemed marine licence can be granted as part of a Development Consent Order	The Marine Planning Statement and the South East Inshore Marine Plan are considered in this Planning Statement particularly Chapters 3 to 9; the Policy Accordance Tracker (Document Reference 5.3); and the ES (Document Reference 6.1-6.4), particularly Chapter 8. Early engagement with the MMO occurred as set out in the Consultation Report (Document Reference 5.1) and engagement is ongoing. A Deemed Marine Licence is included in the Draft DCO (Document Reference 3.1).
Paragraphs 4.6.6 to 4.6.17	Energy NSIP proposals should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible	Appendix 7-1 Biodiversity Net Gain Report of the ES Volume 3 (Document Reference 6.3). The assessment concludes that the overall net change in biodiversity in the terrestrial and marine environments both on-site and offsite is 10.03% for Area Habitat Biodiversity Units (AHBU), and 13.47% for Watercourse Biodiversity Units (WBU).
Paragraphs 4.7.5 to 4.7.8	Applicants must demonstrate in their application documents how the design process was	The Design Principles and Design Code (Document Reference 5.7) and the

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
	conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected.	Design Approach Document (DAD) (Document Reference 5.6).
Paragraphs 4.8.8 to 4.8.13	Applications for thermal stations must either include CHP proposals or contain evidence demonstrating that the possibilities for CHP have been fully explored	The Proposed Scheme is not a proposal to develop a generating station or EfW facility. The Proposed Scheme is not considered an extension of the generating station (Section 35 Direction, Appendix A) and B). The Proposed Scheme is for the installation of Carbon Capture and Storage facilities only. As such, there is no requirement for a CHP Assessment to be provided. However, as part of Cory's on-going commitment to harnessing opportunities in relation to heat, the Proposed Scheme is being designed to connect to the proposed Riverside Heat Network, which is being developed alongside Riverside 1 and Riverside 2 – this will include specific infrastructure for that purpose as described further in Chapter 2: Site and
		Description (Volume 2) of the ES (Document Reference 6.1).

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
Paragraphs 4.9.11 to 4.9.22	Applications are advised to address the following matters: (a) technically feasible plans for the CO ₂ capture plant; (b) an ES that addresses impacts arising from the project, including the latest research on Amine degradation; documentation to ensure compliance with all other existing policy; details of how the CO ₂ is intended to be transported and stored; and	These matters are addressed, particularly through the: Works Plans (Document Reference 2.3) and the Engineering Plans (Document Reference 2.5). The ES (Document Reference 6.1 - 6.4), particularly Chapter 5: Air Quality which addresses Amine degradation including the latest research. The Policy Accordance Tracker (Document Reference 5.3). Details of LCO ₂ buffer storage in Chapter 2: Site and Proposed Scheme Description of the ES Volume 1 (Document Reference 6.1) and in the Project Benefits Report (Document Reference 5.4). As confirmed in the Other Consents and Licences Report (Document Reference 5.5) an application will be made to the Environment Agency for an Environmental Permit.
Paragraphs 4.10.5 and 4.10.12	The ES should take account of the projected impacts of climate change, assess the impacts on and from their proposed project across a range of scenarios and demonstrate a high level of climate change resilience,	The ES (Document Reference 6.1), particularly Chapter 12: Climate Resilience and Appendix 11- 2 Flood Risk Assessment (Document Reference 6.3).

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
	including the application of adaptation measures.	
Paragraphs 4.11.5 to 4.11.9	The applicant must liaise with National Grid who own and manage the transmission network in England and Wales or the relevant regional DNO or TSO to secure a grid connection.	The Proposed Scheme will not generate electricity. Power for the Proposed Scheme will be sourced from Riverside 1 and Riverside 2.
Paragraphs 4.12.5 to 4.12.8	Pollution from industrial sources in England and Wales is controlled through the Environmental Permitting (England and Wales) Regulations 2016. The Environmental Permitting Regulations require industrial facilities to have an Environmental Permit and meet limits on allowable emissions to operate. Applicants should make contact with relevant regulators to discuss requirements for an Environmental Permit and other consents, such as marine licences.	As confirmed in the Other Consents and Licences Report (Document Reference 5.5) an application will be made to the Environment Agency for an Environmental Permit. The draft DCO (Document Reference 3.1), particularly Schedule 11, Deemed Marine Licence. Consultation with the relevant regulators is documented in the Consultation Report (Document Reference 5.1) and the ES (Document Reference 6.1-6.4).
Paragraphs 4.13.5 to 4.13.7	Consultation with the HSE on matters relating to safety	It is not currently anticipated that the Proposed Scheme would be subject to the COMAH Regulations. The ES (Document Reference 6-1) particularly Chapter 20: Major Accidents and Disasters.

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
		Outline CoCP (Document Reference 7.4).
		Outline EPRP (Document Reference 7.11).
		pNRA Appendix 19-1 of the ES Volume 3 (Document Reference 6.3).
		The HSE was consulted during Scoping and Statutory Consultation as detailed in the Consultation Report (Document Reference 5.1)
Paragraphs 4.14.5 and 4.14.6	Consultation with the HSE and potentially Hazardous Substances Consent (HSC)	Carbon dioxide is not classed as a Hazardous Substance and HSC is not required for the Proposed Scheme.
		The HSE was consulted during Scoping and Statutory Consultation as detailed in the Consultation Report (Document Reference 5.1)
		Outline EPRP (Document Reference 7.11)
Paragraph 4.15.5	Identify possible sources of statutory nuisance under section 79(1) of the Environmental Protection Act 1990 (EPA) and how they may be mitigated or limited.	Matters considered to be a statutory nuisance have been assessed within the ES (Document Reference 6.1- 6.4), particularly Chapters 5 (Air Quality), 6 (Noise and Vibration) and 10 (Townscape and Visual).
		Mitigation measures are set out in the:
		Outline CoCP (Document Reference 7.4);

NPS EN-1 Reference	Requirements of EN-1	Reference within DCO Application
		Outline Lighting Strategy (Document Reference 7.3)
		Mitigation Schedule (Document Reference 7.8) Schedule 2 (Requirements) of the Draft DCO (Document Reference 3.1).
		Further information is set out in the Statement of Statutory Nuisance (Document Reference 5.9).
Paragraphs 4.16.6 and 4.16.7	Consultation on matters of national security	The Proposed Scheme does not fall into the definition of critical infrastructure developed by NPSA and no national security considerations are considered to apply. In any event, the Carbon Capture Facility will be designed to be a secure site

3.3. OTHER RELEVANT PLANNING POLICY

INTRODUCTION

3.3.1. Whilst the application must be determined in accordance with the relevant NPS, under section 104 of the PA 2008 [1], regard must also be had to any other matters of importance and relevance, which may include relevant policies in the NPPF [19] and local development Plan. Figure 1 shows the hierarchy of adopted policy documents for decision making, which are summarised in this section. An assessment of the Proposed Scheme against these policy documents is provided within Sections 4 to 9 of this Planning Statement.



Figure 1 Hierarchy of adopted policy documents for decision making

- 3.3.2. Whilst the relevant NPS provide the primary decision-making framework for the DCO application, matters incorporated within other adopted policy, guidance and strategy documents are nonetheless likely to constitute important and relevant considerations in determining such applications.
- 3.3.3. This Planning Statement takes into consideration relevant development plan policies, being those of the London Plan [7] and the London Borough of Bexley Local Development Plan [11]. Compliance with the relevant policies have been considered throughout the planning assessment, and a detailed assessment is within the **Policy Accordance Tracker (Document Reference 5.3**).

MARINE POLICY STATEMENT [4] AND SOUTH EAST INSHORE MARINE PLAN [5]

- 3.3.4. The Marine and Coastal Access Act 2009 [20] introduced the marine planning system, including the creation of the Marine and Management Organisation ('MMO') and the need to obtain licences for specified marine activities. The Marine and Coastal Access Act 2009 [20] also sets out the framework for the creation of Marine Policy Statements which will regulate the objectives and priorities for the marine planning system.
- 3.3.5. The UK Marine Policy Statement (MPS) [4] was originally adopted in 2011 and most recently updated in September 2020. The MPS is the framework for preparing Marine

Plans and taking decisions affecting the marine environment. The MPS builds on the shared UK wide high-level marine objectives, and provides an overview of relevant national policy, including the NPPF and associated NPS.

- 3.3.6. Paragraph 3.3.1 of the MPS states that 'A secure, sustainable and affordable supply of energy is of central importance to the economic and social well being of the UK. The marine environment will make an increasingly major contribution to the provision of the UK's energy supply and distribution.'
- 3.3.7. Paragraph 3.3.4 sets out the considerations for decision makers in examining and determining applications for energy infrastructure, these include:
 - the national level of need for energy infrastructure, as set out in EN-1;
 - the positive wider environmental, societal and economic benefits of low carbon electricity generation and carbon capture and storage as key technologies for reducing carbon dioxide emissions; and
 - the UK's programme to support the development and deployment of carbon capture and storage.
- 3.3.8. Paragraphs 3.3.31 3.3.35 set out the relationship between carbon capture and storage and the marine environment and details any potential impacts. The MPS focuses on storage of CO₂ which is not part of the Proposed Scheme, however it does recognise that carbon capture technologies can reduce the potential for further acidification of the marine environment.
- 3.3.9. Paragraphs 3.4.1 3.4.7 provide details on how shipping has been considered in the MPS, and its potential impacts. The MPS recognises that shipping is an essential and valuable economic activity for the UK, but notes that impacts to the environment can occur. Chapter 3: Alternatives (Volume 1) of the ES (Documents Reference 6.1) provides details on why shipping was chosen to transport LCO₂ from the Proposed Scheme; Chapter 8: Marine Biodiversity (Volume 1) and Chapter 11: Water Environment and Flood Risk (Volume 1) in particular (Document Reference 6.1) assesses the impact of the Proposed Scheme on the marine environment.
- 3.3.10. Paragraph 3.4.7 states that "decision makers should take into account and seek to minimise any negative impacts on shipping activity, freedom of navigation and navigational safety". The impact of the Proposed Scheme on marine navigation, and the proposed mitigation measures, is set out in Chapter 19: Marine Navigation (Volume 1) of the ES (Document Reference 6.1)
- 3.3.11. Paragraphs 3.6.1 3.6.9 sets out the potential impacts of dredging which can be required for development in marine environments. Details of the scale of dredging required, and the potential disposal methods are set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1) of the ES (Document Reference 6.1)** and the **Limits of Dredging Plan (Document Reference 6.2)**. Impacts on water quality resulting from the proposed dredging works set out within **Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1)**.

Impacts on marine biodiversity are set out in **Chapter 8: Marine Biodiversity** (Volume 1) of the ES (Document Reference 6.1), and waste disposal is covered in Chapter 16: Materials and Waste (Volume 1) of the ES (Document Reference 6.1).

3.3.12. As stated above, the MPS is the framework for preparing Marine Plans, rather than providing specific polices. For this reason the planning analysis within this Planning Statement focuses on the policies from the relevant Marine Plan (South East Inshore Marine Plan [5]), rather than the MPS.

SOUTH EAST INSHORE MARINE PLAN [5]

- 3.3.13. The Marine Plan of consideration is the South East Inshore Marine Plan (June 2021)
 [5] which was published in June 2021 and provides a policy framework to inform decision-making on what activities take place in the marine environment and how the marine environment is developed, protected and improved up until 2041.
- 3.3.14. Paragraph 53 of the South East Inshore Marine Plan states:

"Decisions made in relation to Nationally Significant Infrastructure Projects fall under Section 58(3) of the Marine and Coastal Access Act 2009. As such, the public authority (Secretary of State) making such decisions 'must have regard' to the South East Marine Plan alongside any relevant National Policy Statements or other relevant considerations."

- 3.3.15. Policies of particular relevance to the Proposed Scheme include promoting appropriate activities and uses and marine infrastructure to support the marine economy and benefit society, and protecting the marine environment. These are considered, as relevant, in Sections 7 to 8 of this Planning Statement.
- 3.3.16. The River Thames has a large influence on the South East Inshore Marine Plan area given its high density. In paragraph 2.1 the Plan set out the vision for the Thames to facilitate more sustainable passenger and freight transport with improved access, infrastructure, local employment and air quality, to benefitting the Greater Thames area.

NATIONAL PLANNING POLICY FRAMEWORK [19]

3.3.17. The National Planning Policy Framework (NPPF) was originally adopted in March 2012 and most recently updated in December 2023. It sets out the Government's planning policies for England and forms the basis for applications to be considered under the Town and Country Planning Act 1990 [21] as amended. Paragraph 5 of the NPPF makes it clear that the document does not contain specific policies for NSIP and that such applications are to be determined in accordance with the decision-making framework set out in the PA 2008 [1] and relevant NPS, as well as any other matters that are considered to be important and relevant. However, paragraph 5 goes on to confirm that matters that can be considered to be both important and relevant to NSIP may include the NPPF and the policies within it.

- 3.3.18. The policies contained within the NPPF are expanded upon and supported by the Planning Practice Guidance ('PPG') [22], which was originally published in March 2014 and is updated regularly with changes to government guidance.
- 3.3.19. Policies of particular relevance to the Proposed Scheme include promoting sustainable transport; requiring good design; promoting healthy communities; conserving and enhancing the natural and historic environment; and meeting the challenge of climate change and mitigating its effects. These are considered, as relevant, in Sections 4 to 9 of this Planning Statement.

DEVELOPMENT PLAN POLICY

- 3.3.20. NPS EN-1 [3] advises that other matters that the SoS may consider both relevant and important to their decision making may include local development plan policy. (paragraph 4.1.12). The development plan documents relevant to the Proposed Scheme are:
 - the London Plan [10]; and
 - the Bexley Local Plan [11].

LONDON PLAN [10]

- 3.3.21. The London Plan is the Spatial Development Strategy for the Greater London Authority (GLA). It sets out a framework for how London will develop between 2019 and 2041. The London Plan 2021 is part of the statutory development plan for London, and therefore policies in it are applicable across all London Boroughs.
- 3.3.22. The Mayor of London's vision for Good Growth underpins the policies set out. The vision is for growth that is socially and economically inclusive and environmentally sustainable, in order to achieve sustainable development in London.
- 3.3.23. Key policy allocations and designations relevant to the Site are set out at section 2 of this Planning Statement. In addition, policy SI2 presents the London Plan's priorities for minimising greenhouse gas emissions, requiring major development to be net zero carbon, including '*reducing greenhouse gas emissions in operation*...'. Paragraph 9.2.1 confirms that:

'The Mayor is committed to London becoming a zero-carbon city. This will require reduction of all greenhouse gases, of which carbon dioxide is the most prominent. London's homes and workplaces are responsible for producing approximately 78 per cent of its greenhouse gas emissions. If London is to achieve its objective of becoming a zero-carbon city by 2050, new development needs to meet the requirements of this policy. Development involving major refurbishment should also aim to meet this policy.'

3.3.24. The Proposed Scheme is assessed against all relevant London Plan policy in Sections 4 to 9 of this Planning Statement, with the full analysis presented in **the Policy Accordance Tracker (Document Reference 5.3).**

BEXLEY LOCAL PLAN [11]

- 3.3.25. The Proposed Scheme is located in the London Borough of Bexley. The statutory development plan for the area currently comprises the following documents:
 - Bexley Local Plan; and
 - Bexley Local Plan Policies Map.
- 3.3.26. The Bexley Green Infrastructure Study [23] ('GI Study') was produced to provide LBB with a sound and robust evidence base to support the Bexley Local Plan and provides recommendations that will inform future strategies. It has been used as a reference document within this Planning Statement.
- 3.3.27. Key policy allocations and designations relevant to the Site are set out in section 2 of this Planning Statement. In addition, policies of relevance to the DCO Application include those providing a positive framework for sustainable development, economic growth, high quality design, community wellbeing, enhancing the environment, water and land transport, and climate change.
- 3.3.28. The Proposed Scheme is assessed against all relevant Bexley Local Plan policy in Sections 4 to 9 of this Planning Statement, with the full analysis presented in **the Policy Accordance Tracker (Document Reference 5.3).**

4. The Principle of Development

4.1. INTRODUCTION

- 4.1.1. The principle of development for the Proposed Scheme is the delivery of carbon capture technology, directly to address CO₂ emissions from the residual waste treatment facilities Riverside 1 and Riverside 2. It is important to note that the continued operation of Riverside 1 and Riverside 2 does not fall within the ambit of the Proposed Scheme. These facilities are fully consented and would be able to continue to operate irrespective of the existence of the Proposed Scheme. As such, the continued operation of these facilities does not need to be justified in planning terms within this Planning Statement.
- 4.1.2. This section considers national and development plan policy relevant to the development of carbon capture and storage in the UK, and demonstrates how the Proposed Scheme will deliver the policy priorities set out in:
 - NPS EN-1;
 - other national legislation and strategies; and
 - development plan policy.

4.2. NATIONAL POLICY STATEMENT EN-1

- 4.2.1. Government policy on energy and energy infrastructure development Part 2 of NPS EN-1 [3], outlines the policy context for the development of nationally significant energy infrastructure which will be required to ensure the UK can provide a secure, reliable, and affordable supply of energy, and meet decarbonisation targets.
- 4.2.2. Paragraph 2.2.1 confirms that

'In June 2019, the UK became the first major economy to legislate for a 2050 net zero Greenhouse Gases ('GHG') emissions target through the Climate Change Act 2008 (2050 Target Amendment) Order 2019. In December 2020, the UK communicated its Nationally Determined Contributions to reduce GHG emissions by at least 68 per cent from 1990 levels by 2030.23 In April 2021, the government legislated for the sixth carbon budget (CB6), which requires the UK to reduce GHG emissions by 78 per cent by 2035 compared to 1990 levels.'

- 4.2.3. Paragraph 2.3.3 sets out the Government's objectives to ensure the UK energy supply always remains secure, reliable, affordable and consistent with meeting the net zero 2050 target, and it recognises that a step change in the decarbonisation of our energy system is required.
- 4.2.4. At paragraph 2.3.4, NPS EN-1 recognises that to meet these objectives a significant amount of new energy infrastructure is necessary, including the infrastructure needed to capture, transport and store carbon dioxide (CO₂), and that new energy infrastructure will provide opportunities for the UK, including supporting jobs in the clean energy industry and local supply chains.

- 4.2.5. Paragraph 2.3.6 of EN-1 confirms the UK needs to transform its energy system in order to tackle emissions while ensuring a secure a reliable supply, and affordable bills for households and businesses, this includes increasing energy supply of clean energy, and where carbon is still emitted, the industry and infrastructure to capture, transport, and store it, needs to be developed.
- 4.2.6. Part 2.4 sets out the expectations for decarbonising the power sector, recognising (at paragraph 2.4.1) that since 2011 'overall *GHG* emissions from the power sector have more than halved, from ~145MtCO2e in 2011 to ~60MtCO2e in 2019 (see figure 1). This can be mainly attributed to the proportion of renewable generation more than quadrupling from 10 per cent to 43 per cent between 2011 and 2020 whilst the share of electricity generation from coal reduced from 29 per cent to 2 per cent over the same period.'
- 4.2.7. However, more work is now required to meet the net zero target and at paragraph 2.4.4, NPS EN-1 sets out the government's business models being developed to 'incentivise the deployment of Carbon Capture, Utilisation and Storage (CCUS) facilities and low carbon hydrogen production in the UK.'
- 4.2.8. The British Energy Security Strategy [24] is referenced at paragraph 2.5.6, which emphasises the need for the UK to reduce dependence on oil and gas, improve energy efficiency, and accelerate deployment of carbon capture, utilisation, and storage.
- 4.2.9. As is explained in the Project Benefits Report (Document Reference 5.4) Riverside 1 and 2 are important elements of the infrastructure sought by NPS EN-1 and EN-3 to ensure 'that our supplies of energy remain secure, reliable and affordable.' (NPS EN-1 paragraph 2.5.1). They are consented energy generating stations, with the latter to be operational by 2026. The Proposed Scheme responds directly to 'the government's wider objectives for energy infrastructure [to] include contributing to sustainable development and ensuring that our energy infrastructure is safe.' (NPS EN-1, paragraph 2.6.1) The Proposed Scheme brings the ability to deliver net zero targets and achieve the planning policies of the NPS, 'which both respect the principles of sustainable development and can facilitate, for the foreseeable future, the consenting of energy infrastructure on the scale and of the kinds necessary to help us maintain safe, secure, affordable and low carbon supplies of energy.' (NPS EN-1, paragraph 2.6.5)

THE NEED FOR NEW NATIONALLY SIGNIFICANT ENERGY INFRASTRUCTURE PROJECTS

4.2.10. At paragraph 3.3.19, NPS EN-1 advises:

'Given the changing nature of the energy landscape, we need a diverse mix of electricity infrastructure to come forward, so that we can deliver a secure, reliable, affordable, and net zero consistent system during the transition to 2050 for a wide range of demand, decarbonisation, and technology scenarios.'

- 4.2.11. The speed with which that decarbonisation needs to occur is made clear at paragraph 3.5.1, which confirms that 'There is an urgent need for new carbon capture and storage (CCS) infrastructure to support the transition to a net zero economy.' Paragraph 3.5.2 recognises the Committee on Climate Change's advise 'that CCS is a necessity not an option.'
- 4.2.12. Paragraph 3.5.4 states the Government's aim to use CCS technology to capture and store 20-30MtCO2 per year by 2030, which will require timely development and deployment of CCS infrastructure. Consequently, paragraph 3.5.8 confirms that to 'support the urgent need for new CCS infrastructure, CCS technologies, pipelines and storage infrastructure are considered to be CNP infrastructure.'
- 4.2.13. The Proposed Scheme is the Applicant's timely response to the demonstrated urgent need for low carbon energy infrastructure. It will make an important and relevant contribution to energy decarbonisation through the capture of some 1.3 million tonnes of CO₂. As the first post-combustion carbon capture facility to be proposed for energy from waste, it demonstrates the Applicant's appetite for early deployment of a technology that will contribute to the achievement of net zero by 2050 and the achievement of the Government's CCS ambitions for 2030. As confirmed at paragraph 3.5.9 of NPS EN-1, 'the alternatives to new CCS infrastructure for delivering net zero by 2050 are limited. (...) CCCS therefore has an essential role to play, either on its own or in combination with measures such as electrification and fuel switching.'

THE CRITICAL NATIONAL PRIORITY FOR LOW CARBON INFRASTRUCTURE

- 4.2.14. Paragraphs 4.2.1 to 4.2.3 of EN-1 reiterate that the government is fully committed to decarbonising the power system by 2035, and that the UK's strategy to increase supply of low carbon energy is dependent on deployment of renewable and nuclear power generation, alongside hydrogen and CCUS^b, while maintaining high environmental standards, including good design, and minimising impacts.
- 4.2.15. Paragraph 4.2.4 of EN-1 confirms the critical national priority for the provision of nationally significant low carbon infrastructure, and the definition of low carbon infrastructure for the purpose of the NPS is defined in paragraph 4.2.5. As has already been confirmed within this Planning Statement, the Proposed Scheme falls within the NPS definition and is confirmed to be critical national priority (CNP) infrastructure.

^b Reference throughout relevant policy is made to both carbon capture and storage (CCS) and carbon capture, utilisation and storage (CCUS). The abbreviations are used interchangeably throughout this Planning Statement as relevant to the document being considered. In terms of the Proposed Scheme, there is no material difference in the term. The Proposed Scheme is for the capture of carbon dioxide, with onsite buffer storage prior its permanent storage. There is no utilisation proposed.

- 4.2.16. At paragraphs 4.2.10 to 4.2.14, NPS EN-1 advises that applicants for CNP infrastructure must continue to show how their application meets the requirements in EN-1, therefore, applicants must demonstrate how the mitigation hierarchy has been applied, seek advice of the appropriate Statutory Nature Conservation Bodies, and demonstrate that all residual impacts are those that cannot be avoided, reduced, or mitigated, and the SoS must be satisfied that this has been met.
- 4.2.17. The DCO Application for the Proposed Scheme is accompanied by an ES (Document Reference 6.1 6.4) which has been prepared in accordance with the EIA Regulations 2017 [4], assessing the likely significant effects of the Proposed Scheme and applying the mitigation hierarchy. The ES identifies limited residual significant adverse effects, all of which are considered in more detail in sections 5 to 9 of this Planning Statement. The Applicant has a demonstrated its ability to deliver high quality, strategic infrastructure projects underpinned by good design (not least through the construction and operation of Riverside 1 and Riverside 2). The Proposed Scheme is no different and is underpinned by the Design Principles and Design Code (Document Reference 5.7).
- 4.2.18. Critically, and of relevance to the principle of development, none of these residual impacts relate to National Network Sites or Marine Conservation Zones; in the language of NPS EN-1 (paragraph 4.2.15) they are non-HRA and non-MCZ impacts, as explained below.
- 4.2.19. A Habitats Regulations Assessment ('HRA') has been undertaken; this is provided in Information to Inform a HRA (Appendix 7-3 of the ES Volume 3 Document Reference 6.3).
- 4.2.20. One likely significant effect (LSE) was identified at the screening stage that could potentially affect the Epping Forest SAC. This was changes in air quality during the operation phase of the Proposed Scheme. A Stage 2 Appropriate Assessment was undertaken to provide the required information for the competent authority to make an informed decision on the Proposed Scheme.
- 4.2.21. The Appropriate Assessment determined that none of the four Qualifying Features of Epping Forest SAC receive an adverse effect on their integrity, as air quality changes across the five pollutants modelled would be <1.0% (rounded to 1dp), a changed classed as 'negligible'. Therefore, no adverse effects on integrity have been identified on Epping Forest SAC, and no further HRA stages are required.
- 4.2.22. Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the likely significant effects of the Proposed Scheme on Marine Conservation Zones (MCZ). The Medway Estuary MCZ is located approximately 25km downstream and southeast of the Site Boundary.
- 4.2.23. When considering the impact of the Proposed Scheme with the mitigation measures applied, the assessment concludes that during construction there will be Minor Adverse (not significant) effects and in operation there will be Negligible (not significant) effects on the Medway Estuary MCZ as a result of the Proposed Scheme.

- 4.2.24. It can therefore be concluded that the Proposed Scheme is not predicted to result in a risk to hindering the achievement of the stated conservation objectives for the Medway Estuary MCZ.
- 4.2.25. Consequently, the residual impacts resulting from the Proposed Scheme are non-HRA and non-MCZ impacts, and as such are unlikely to outweigh the urgent need for CNP infrastructure.
- 4.2.26. There are exceptions to this presumption in favour of the CNP infrastructure, identified, at paragraph 4.2.15 as those "residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk." The ES (Document Reference 6.1 6.4) has considered each of these impacts (as relevant to the Proposed Scheme) and demonstrates that there is no such outcome.
- 4.2.27. Consequently, the presumption in favour of the Proposed Scheme applies, the principle of development is not diminished and remains compliant with the primary policy for the determination of this project of national significance delivering CNP infrastructure, benefiting from the presumptions set out in paragraph 4.2.17 of the NPS.

CARBON CAPTURE AND STORAGE (CCS)

- 4.2.28. Part 4.9 of NPS EN-1 provides the policy framework for CCS confirming (at paragraph 4.9.4) that 'Carbon capture technologies offer the opportunity to decarbonise the electricity system whilst maintaining security of supply, providing reliable low carbon generation capacity.'
- 4.2.29. Paragraph 4.9.5 repeats the government's ambitions to capture 20-30Mt of CO₂ per year by 2030, and at paragraph 4.9.8 recognises '*an estimated offshore CO2 storage capacity of 78Gt/CO2, enough to store the equivalent of current total UK annual* emissions *for over 200 years.*'
- 4.2.30. The submitted DCO Application is relevant only to the Proposed Scheme, the construction and operation of the Cory Decarbonisation Project within the Order Limits. However, it is not submitted as an incomplete concept. On 5 December 2023, Cory announced an exclusive commercial relationship with Viking CCS to collaborate on the transport and storage of shipped CO₂ captured from the Riverside Campus, utilising their planned pipeline from the Port of Immingham to the North Sea. Consequently, whilst allowing for flexibility for an alternative solution to be developed if required, a complete solution is outlined with Viking CCS identified to provide a transport and storage solution, completing the long term capture of CO₂ from Riverside 1 and 2. More information is provided in the Project Benefits Report (Document Reference 5.4).

4.2.31. The Proposed Scheme will capture in the region of 1.6Mt CO₂ per year. It is CNP infrastructure sought by NPS EN-1 and will enable the timely deployment of this technology necessary to achieve the government's net zero targets, and its early aspirations for infrastructure delivery. That this outcome can be achieved without unacceptable adverse effects is demonstrated through this Planning Statement. Indeed, as demonstrated in section 9, the important and relevant benefits to be realised through the Proposed Scheme significantly outweigh the limited adverse effects that are to be expected from a development of this nature.

4.3. MARINE POLICY STATEMENT

- 4.3.1. Part 3.3 of the Marine Policy Statement [4] discusses energy production and infrastructure development, and how the marine environment can contribute, and be impacted by such developments.
- 4.3.2. Paragraph 3.3.1 states 'a secure, sustainable and affordable supply of energy is of central importance to the economic and social well being of the UK. The marine environment will make an increasingly major contribution to the provision of the UK's energy supply and distribution', recognising that a priority for marine planning is to secure the UK's energy objectives, while protecting the environment.
- 4.3.3. Paragraphs 3.3.31 3.3.35 set out how the marine environment can support CCS, and how CCS can potentially impact the marine environment. Paragraph 3.3.31 identifies that the UK offshore area is thought to be one of the most promising locations for the permanent storage of CO₂ in Europe.
- 4.3.4. Paragraph 3.3.34 states that the CCS sector could be work £3bn a year by 2030, and sustain up to 100,000 jobs, additionally by removing CO₂ emissions from worldwide electricity generation it will 'considerably *reduce the potential for further acidification of the marine environment.*'

4.4. OTHER LEGISLATION, POLICIES AND STRATEGIES

THE PARIS AGREEMENT (2016) [24]

4.4.1. The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change that seeks to address greenhouse gas emissions mitigation, adaptation and finance. The legally binding international treaty on climate change was adopted by 196 Parties and entered into force on 4 November 2016. Its goal is to substantially reduce global greenhouse gas emissions to limit the global temperature increase in this century to 2°C, compared to pre-industrial levels, while pursuing efforts to limit the increase even further to 1.5°C. In order to achieve the limit of 2°C, the Paris Agreement establishes a target of balancing greenhouse gas emissions associated with human activity and their removal from the atmosphere by the second half of this century (i.e., a 100 % reduction in net global emissions by 2050-2100).

- 4.4.2. The Paris Agreement also aims to increase the ability of nations to adapt to the adverse effects of climate change, thereby fostering climate resilience. It also provides for development with low magnitudes of greenhouse gas emissions, noting however the need to ensure that food production is not threatened by the movement toward increased adaptability and climate resilience.
- 4.4.3. The Paris Agreement recognises the need to make finance available consistent with the move toward low greenhouse gas emissions and climate resilient development, particularly for developing countries. It also recognises that in order to achieve the targets set out in the Paris Agreement, a new technology framework and an enhanced capacity building framework for developing countries and the most vulnerable countries is required.
- 4.4.4. It is noted that only elements of the Paris Agreement are legally binding; however, the Paris Agreement requires all parties to prepare and maintain nationally determined contributions that it intends to achieve and pursue mitigation measures at a domestic level with a view to achieving the targets of their established contributions. The Paris Agreement requires all parties to report regularly on their emissions and the implementation of mitigation associated with achieving their nationally determined contributions. This includes the need to review countries' commitments every five years.
- 4.4.5. In November 2021, COP26 concluded in Glasgow, with every Party (representing almost 200 countries) agreeing the Glasgow Climate Pact (see paragraphs 3.6.27-3.6.28 below). This global agreement will accelerate action on climate and seeks to keep alive the hope of limiting the rise in global temperature to 1.5°C. This includes commitments to move away from coal power, halt and reverse deforestation, reduce methane emissions and speed up the switch to electric vehicles.
- 4.4.6. In the UK, it was established in law in the Climate Change Act [28] that the UK must reduce GHG emissions in 2050 to at least 80% below the level they were in 1990. In 2019, the Government amended the Act to commit the UK to achieve net zero by 2050 i.e., where the greenhouse gases going into the atmosphere are balanced by the removal of such gases out of the atmosphere (the Climate Change Act 2008 (2050 Target Amendment) Order 2019.
- 4.4.7. The Climate Change Act requires the UK government to set carbon budgets to act as 'stepping stones' towards the 2050 emissions target. In the Sixth Carbon Budget, the government set a target for emissions to be cut by 78% by 2035 [29], which was enacted in April 2021.

SIXTH ASSESSMENT REPORT 'CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY' (2022) [24]

4.4.8. More recently, the IPCC have published the Sixth Assessment Report 'Climate Change 2022: Impacts, Adaptation and Vulnerability' (2022) which assesses the impacts of climate change at global and regional levels (IPCC, 2022). This reinforces the urgent need to respond to this global emergency finding that without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach. However, there is increasing evidence of climate action, and there are significant opportunities to reduce emissions by 2030. CCS is an example of such 'climate action' being taken. The report states that global temperatures are likely to breach the 1.5°C threshold during the 21st century, albeit this is more than likely to be a temporary overshoot. It therefore stresses the need to implement adaptation to climate change. This emphasises the urgency for using CCS whilst other projects and technologies progress.

SIXTH CARBON BUDGET [25]

- 4.4.9. The Climate Change Act requires the UK government to set carbon budgets to act as 'stepping stones' towards the 2050 emissions target. The Committee on Climate Change published the Sixth Carbon Budget: The UK's Path to Net Zero ('Path to Net Zero') in December 2020 and it was enacted by the Government in June 2021. It covers the period 2033 to 2037 and is the first budget to reflect the net zero target, setting a target for emissions to be cut by 78% by 2035 [26].
- 4.4.10. In the foreword, Path to Net Zero states:

'This is the most comprehensive advice we have every produced. It is a blueprint for a fully decarbonised UK. A rich depiction of the choices before us in reaching the goal of net-zero greenhouse gases by 2050 at the latest.

Our recommended pathway requires a 78% reduction in UK territorial emissions between 1990 and 2035. In effect, it brings forward the UK's previous 80% target by nearly 15 years. There is no clearer indication of the increased ambition implied by the Net Zero target than this. Our pathway meets the Paris Agreement stipulation of 'highest possible ambition'. It is challenging, but also hugely advantageous, creating new industrial opportunities and ensuring wider gains for the nation's health and for nature.'

- 4.4.11. The removal of carbon dioxide, through both nature based and engineered options including carbon capture and storage is a priority. In Box 24 (page 90) Path to Net Zero confirms that 'All of the pathways explored in our Sixth Carbon Budget advice see the use of carbon capture and storage (CCS) as a critical and cost-effective means of meeting the UK's 2050 Net Zero target.'.
- 4.4.12. The scenario presented in Box 24 (Page 90) reaches Net Zero by 2042, however states that the minimisation of CCS results in Net Zero not being achieved until 2050. Additionally, the scenario is only achievable if energy from waste plants still use CCS *'in order to decarbonise, as no other viable low-carbon alternatives are available'* (page 91) and concludes:

"… CCS is essential to achieving Net Zero, at lowest cost, in the UK. The importance of CCS globally further underscores the urgency of progressing CCS plans in the UK." (page 91)

NET ZERO STRATEGY AND THE CARBON BUDGET DELIVERY PLAN [27]

- 4.4.13. In 'Net Zero Strategy: Build Back Greener' (2021) the UK government makes clear its aim to be a leader in the new 'Green Industrial Revolution', recognising that acting early will drive down the costs of the latest clean technology, enabling consumers to reap the benefits sooner. 'By accelerating the deployment of cheap renewable power, and rolling out further energy efficiency measures, government decarbonisation policies mean that the average consumer energy bill in 2024 will likely be cheaper than it would otherwise have been.' [27] Government recognises that the exact technology and energy mix in 2050 cannot be known now, so the path to net zero will need to respond to the innovation and adoption of new technologies over time. However, reliance upon carbon capture to meet demand across sectors and to enable the UK economy to be low carbon is recognised. Further, that the need to respond is urgent, with the aim for carbon capture infrastructure to be in place by 2030 being central to government policy.
- 4.4.14. The Carbon Budget Delivery Plan [28] sets out how the policies in the Net Zero Strategy and other Government policies are projected (noting that these are not targets) to enable the Carbon Budgets to be met, including in particular how the introduction of Carbon Capture, including at EfW plants, will enable the Power and Industry sectors to deliver the required savings for Net Zero to be delivered by 2050. The plan documents that the Net Zero Strategy remains the right approach and emphasises the centrality of Carbon Capture to its delivery.

BRITISH ENERGY SECURITY STRATEGY [29]

- 4.4.15. The UK Government published the British Energy Security Strategy ('BESS') on 07 April 2022, in response to the rising global energy costs, pushed higher by the conflict in Ukraine, and the UK's dependence on imported oil and natural gas, which has ultimately resulted in an increase in the cost of living in the UK. The policy paper sets out how the UK Government is 'going to bring clean, affordable, secure power to the people for generations to come' and build a British energy system that is much more self-sufficient.'
- 4.4.16. Of most relevance to this DCO Application, the BESS explains that the UK Government is delivering on its '10 Point Plan' and that achievement on 'Point 8: Investing in Carbon Capture, Usage and Storage' so far includes the following:
 - committed £1 billion in public investment to decarbonise industrial clusters;
 - announced the first 2 clusters in Teesside, the Humber and Merseyside; and
 - launched phase 2 of the Industrial Energy Transformation Fund, allocating £60 million to decarbonisation technologies, with a further £100 million delivered in May and October this year (2022).
- 4.4.17. The BESS sets out the steps the UK Government will take to ensure total lower costs of energy. Of relevance to the Proposed Scheme, a key completed action is the

recent updates to the energy NPS 'to recognise these blueprints in the planning system, increasing certainty for the planning inspectorate, developers and other stakeholders, and speeding up delivery.'

4.4.18. Consistently, the UK Government makes clear the need for urgent deployment of low carbon energy infrastructure, including carbon capture. The BESS anticipates that 95% of British electricity generation could be low carbon by 2030, and that subject to the security of the supply, Britain will have decarbonised its electricity by 2035, ultimately reducing dependence on oil and gas from imported sources and providing long term positive impacts through the delivery of cleaner and cheaper power with lower associated energy bills, and the creation of *'thousands of high wage, high-skilled new jobs.'*

CARBON CAPTURE USAGE AND STORAGE VISION [30]

- 4.4.19. In December 2023 the Government issued a statement announcing a series of updates to demonstrate its commitment to CCUS and set out a long-term vision for the CCUS Sector (Carbon Capture, Usage and Storage A Vision to Establish a Competitive Market [30]).
- 4.4.20. The vision is to make the UK a global leader CCUS, creating a self-sustaining CCUS sector that supporting thousands of jobs and reducing emissions to ensure a better environment for future generations. The Government aim to achieve this through three phases:
 - Market creation: Getting to 20 to 30 Mtpa CO2 by 2030;
 - Market transition: The emergence of a commercial and competitive market; and
 - A self-sustaining CCUS market: Meeting net zero by 2050.
- 4.4.21. The Vision recognises the need for CCUS within the waste sector, stating that 'even with policies for greater waste prevention, reuse and increased recycling, there will still be a need to manage residual waste. CCUS is the only net zero compliant technology for residual waste management facilities.'
- 4.4.22. It is also noted that deploying CCUS at EfW facilities provides an opportunity to offset emissions from hard-to-abate sectors through the delivery of negative emissions.
- 4.4.23. The Vision also recognises that there will be a requirement for non-pipeline transport (NPT) for CO₂, stating that the government expects to see the UK deploying both pipeline and non-pipeline forms of transport. Regarding shipping, the Vision states that this method is capable of carrying significant volumes of CO₂ over long distances, but does require additional infrastructure.
- 4.4.24. The Vision states that non-pipeline transport '*could also help improve store resilience and transport future international CO*₂', and that the government is encouraged by the development of potential NPT projects.
- 4.4.25. The Vision draws on the four clusters that government is taking forward to develop CCUS within the UK. This includes the Viking CCS in the Humber which is a carbon

capture, transportation, and storage project that utilises shipping to transport LCO₂, which is the cluster with which the Applicant has signed a memorandum of understanding in relation to the carbon captured by the Proposed Scheme.

DRAFT STRATEGY AND POLICY STATEMENT FOR ENERGY POLICY IN GREAT BRITAIN [30]

- 4.4.26. In February 2024, DESNZ released the Draft Strategy and Policy Statement for Energy Policy in Great Britain (Draft Energy Policy 2024), presented to Parliament pursuant to section 135(8) of the Energy Act 2013. This is the first time this power has been used, which is a demonstration of the intent of government to deliver its strategic policies for energy supply.
- 4.4.27. Page 12 introduces the role of the NESO, the National Energy System Operator, 'a central body that is able to weigh up and advise on the impacts and trade-offs across energy sectors and plan and co-ordinate our energy system from a more strategic, whole system perspective.'
- 4.4.28. On page 7, Draft Energy Policy 2024 states that Government expects private sector investment of around £100 billion in the energy sector in the period to 2030, with the expectation that this will support up to 480,000 jobs in 2030.
- 4.4.29. Having set out the roles and responsibilities for Government and its regulators, Draft Energy Policy 2024 is focussed on three chapters; again, making clear government's priorities for energy supply:
 - Enabling Clean Energy and Net Zero Infrastructure;
 - Ensuring Energy Security and Protecting Consumers; and
 - Ensuring the Energy System is Fit for the Future.
- 4.4.30. Within the first of these chapters, Draft Energy Policy 2024 clearly states that 'As set out in the Net Zero Growth Plan, investment is the key to delivering our energy security and carbon targets, and seizing the economic benefits of the transition to net zero.' (page 18)
- 4.4.31. On page 22, Draft Energy Policy 2024 makes reference to CCUS, stating that:

'Carbon dioxide transport and storage networks will be the enabling infrastructure for carbon capture from a range of potential sources, including power plants, industrial facilities, low carbon hydrogen production, carbon capture from energy from waste, carbon capture from bioenergy and potentially direct air capture.

Supporting the development and deployment of CCUS in the UK is a government priority and as such government is committed to supporting the deployment of four CCUS clusters by 2030. The Hynet Cluster and the East Coast Cluster were announced as Track 1 Clusters in October 2021. In July 2023, government announced that the Acorn and Viking carbon dioxide transport and storage systems were being taken forward in the Track 2 process. CCUS can play a key role in meeting the UK's 2050 net zero target and supporting the low-carbon economic

transformation of our industrial regions, creating new high value jobs and levelling up the economy. The Climate Change Committee have described CCUS as a 'necessity, not an option' for the transition to net zero.

. . .

Users of the carbon dioxide transport and storage networks are expected to include users from across the energy sector, but also other sectors, in particular industrial facilities. Given this broader scope, the Energy Act 2023 provides for a CCUS Strategy and Policy Statement to be designated by the Secretary of State, which must take into account any strategy and policy statement designated under section 131 of the Energy Act 2013 in respect of energy policy. Government will be publishing a CCUS Vision Statement by the end of 2023 setting out its view on the future development of CCUS"

4.4.32. It is clear that government is committed to delivering carbon capture technology in achieving its goals for net zero, and expects private sector investment to deliver this infrastructure.

HOW THE PROPOSED SCHEME DELIVERS NATIONAL PRIORITIES

- 4.4.33. The national legislation, policy and strategy relevant to carbon capture that is summarised above is not all of the Government's support for such infrastructure, it is a selection of that which is most relevant to the Proposed Scheme and used to demonstrate the consistency, over time and messaging, of the Government's net zero objectives and the centrality of CCS to achieving them. That they remain relevant is demonstrated by the recent strengthening to the energy NPS which repeat the importance of energy security, net zero power and carbon capture, providing the key policy context for the Cory Decarbonisation Project.
- 4.4.34. The Proposed Scheme will capture at least 95% of CO₂ emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2. Assuming a nominal assumed throughput, this is equivalent to approximately 1.3Mt CO₂ per year. **Table 13-10** of **Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1)** demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline.
- 4.4.35. **Table 13-10** of **Chapter 13: Greenhouse Gases (Volume 1)** of the ES (Document **Reference 6.1)** demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline. As confirmed at paragraph 13.8.9 '*This is the difference between the emissions that would otherwise be released to the atmosphere without the Proposed Scheme operating (858,370 tCO₂e/yr) in combination with the aggregate emissions that would be removed with the Proposed Scheme operating (-762,232 tCO₂e/yr).'*

- 4.4.36. The Proposed Scheme delivers the carbon capture infrastructure sought by national strategies as necessary, urgently, to achieve the national, legal, target of net zero by 2050.
- 4.4.37. Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year of CO₂. The Proposed Scheme will not only enable the Applicant to meet net zero in their operations, but will also contribute toward this goal for other hard to abate industries that do not have this technology available to them.
- 4.4.38. **Table 13-12** of **Chapter 13: Greenhouse Gases** concludes that the Proposed Scheme would contribute to the achievement of 0.8% of the national target in the sixth Carbon Budget; and at paragraph 13.8.24 the chapter confirms that the payback period, 'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme' is less than 5 weeks.
- 4.4.39. The Applicant has its own aspiration to get to net zero by 2040 and to have carbon capture operational by 2030. The Proposed Scheme would materially contribute towards the UK Net Zero Strategy ambition to deploy '*at least 5 MtCO*₂/year of engineered [GHG] removals by 2030.'
- 4.4.40. The Proposed Scheme is demonstrated to make an important and relevant contribution to meeting the national legal target of achieving net zero by 2050, the Government's targets for CCS by 2030 and beyond, and providing many of the benefits recognised across national strategies for low carbon energy.

4.5. DEVELOPMENT PLAN POLICY

LONDON PLAN 2021 [10]

- 4.5.1. The Spatial Development Strategy for Greater London, the 'London Plan', was adopted in March 2021. It recognises the importance of climate change and delivering net zero development, but contains no policy specific to carbon capture projects.
- 4.5.2. Policy SI2 does present the policy priorities for minimising greenhouse gas emissions, requiring major development to be net zero carbon, including *'reducing greenhouse gas emissions in operation...'*. Paragraph 9.2.1 confirms that:

'The Mayor is committed to London becoming a zero-carbon city. This will require reduction of all greenhouse gases, of which carbon dioxide is the most prominent. London's homes and workplaces are responsible for producing approximately 78 per cent of its greenhouse gas emissions. If London is to achieve its objective of becoming a zero-carbon city by 2050, new development needs to meet the requirements of this policy. Development involving major refurbishment should also aim to meet this policy.'

- 4.5.3. Paragraph 9.3.8 recognises the need for increasing the amount of renewable energy and confirms support for '*innovative low- and zero- carbon technologies* ...'. At paragraph 9.8.14, the London Plan places a specific carbon target on energy from waste facilities, such as Riverside 1 and Riverside 2, which is met at both facilities. The Proposed Scheme has the potential to enable those facilities to be carbon net negative.
- 4.5.4. Policy GG6 confirms London's target to be '*a zero-carbon city by 2050*', recognising that this will take '*an integrated and smart approach*' with all sectors working together. CCS. It requires those involved in planning and development to support the move towards a low carbon circular economy, and contribute towards London becoming a zero carbon city by 2050.
- 4.5.5. The London Plan has an overarching aim for London to be zero-carbon city by 2050. Paragraph 9.2.1 confirms:

'The Mayor is committed to London becoming a zero-carbon city. This will require reduction of all greenhouse gases, of which carbon dioxide is the most prominent. 153 London's homes and workplaces are responsible for producing approximately 78 per cent of its greenhouse gas emissions. If London is to achieve its objective of becoming a zero-carbon city by 2050, new development needs to meet the requirements of this policy. ...'

4.5.6. Policy SI2 seeks to minimise greenhouse gas emissions, stating that all major development should be net zero-carbon.

'This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy: 1) be lean: use less energy and manage demand during operation 2) be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly 3) be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site 4) be seen: monitor, verify and report on energy performance.'

BEXLEY LOCAL PLAN 2023 [11]

4.5.7. Adopted in April 2023, the Bexley Local Plan is an up to date development plan. Its principles of sustainable development recognise that:

'Sustainable development is synonymous with good growth: ensure lasting places are created that work economically, socially, and environmentally in the long term to the lasting benefit of their residents and businesses.' (Principles of Sustainable Development, page 9)

4.5.8. The Bexley Local Plan makes clear its contribution to delivering climate change priorities and that this has been a long standing commitment, noting (at paragraph 7.5) that the Council signed up to the Nottingham Declaration in 2001. Policy DP14, provides explicit support for zero carbon projects:

'The Council will actively pursue the delivery of sustainable development by... supporting developments that achieve zero-carbon and demonstrate a commitment to drive down greenhouse gas emissions to net zero.'

OTHER LOCAL STRATEGIES

London Environment Strategy [32]

- 4.5.9. The London Environment Strategy ('LES') was published in May 2018, described as 'the most ambitious plan to reduce air pollution of any major global city, making sure the Greater London Authority and Transport for London lead by example.' (Mayor's foreword, page 4)
- 4.5.10. Chapter 6 of the LES addresses climate change, mitigation and energy, opening with the aim that:

'London will be a zero carbon city by 2050, with energy efficient buildings, clean transport and clean energy.' (page 202)

4.5.11. The introduction (page 202) to the chapter makes clear that:

'If the world continues emitting greenhouse gases (GHGs) at today's levels, average global temperatures could rise by up to five degrees Celisius by the end of this century. London, among other global cities, must play a leading role in helping to reduce these emissions.

The Mayor will re-establish London's position as a leader in tackling climate change by setting an ambition for London to become zero carbon by 2050. Making London zero carbon will require economy-wide decarbonisation. This will involve changes to the way in which Londoners travel, work and live, including how energy is sourced and generated. ...'

- 4.5.12. At page 216, the LES introduces the Mayor's five-year carbon budgets, prepared to create an emissions pathway to 2050. Page 218 describes them as an *'ambitious pathway to put London on track to achieving zero emissions by 2050.*' A 60% reduction is sought in the third budget period (2028-2032).
- 4.5.13. In Box 26 (page 220) the Mayor sets out five priorities to deliver energy for Londoners, which includes to:

'decarbonise London's energy supply by developing and delivering decentralised energy, renewable generation, especially solar, community energy programmes.'

4.5.14. Policy 6.1.4 (page 253) includes a commitment 'to support the delivery of zero carbon development', presenting the energy hierarchy contained within London Plan policy SI2.

Bexley Climate Change Statement and Action Plan 2022 to 2026 [33]

4.5.15. The London Borough of Bexley (LBB) signed up to the Nottingham Declaration in 2001 stating its commitment to tackling climate change. Following this, LBB published

a Climate Change Statement and Action Plan 2022 to 2026 [33] which includes the framework for policies within the Local Plan.

HOW THE PROPOSED SCHEME DELIVERS DEVELOPMENT PLAN POLICY AND LOCAL STRATEGIES

- 4.5.16. Development plan policy does not address the specifics of carbon capture, but does recognise the environmental, economic and social imperatives of responding positively to the climate crisis. Both the London Plan and Bexley Local Plan recognise the decarbonisation as an important element of sustainable development, and committing to deliver net zero in the city by 2050.
- 4.5.17. The Carbon Capture Facility, supported by the Proposed Jetty, is the infrastructure required to meet development plan policy aspirations. Presenting the potential for early deployment, the Cory Decarbonisation Project would contribute to achieving the Mayor's aspirations for net zero before 2050.
- 4.5.18. The Proposed Scheme in its entirety is demonstrated (through sections 5 to 9 of this Planning Statement) to meet all relevant development plan policy objectives. The **Project Benefits Report (Document Reference 5.4)** demonstrates the environmental, social and economic benefits of the Proposed Scheme, intended to respond to local priorities, to be realised as part of this project of national significance. The Proposed Scheme is underpinned by the **Design Principles and Design Code (Document Reference 5.7)** and incorporates strong mitigation proposals, primarily within the Mitigation and Enhancement Area and as set out in the **Outline LaBARDS (Document Reference 7.9)** and includes a commitment to deliver at least 10% BNG prior to this being a statutory requirement.

4.6. ALTERNATIVES

INTRODUCTION

- 4.6.1. NPS EN-1 (at paragraph 4.3.22) makes clear that a reasonable alternative is one '*that* can meet the objectives of the proposed development'.
- 4.6.2. The Applicant has considered the reasonable alternatives which could be considered to achieve the objectives for the Proposed Scheme. In relation to the built form of the Proposed Scheme, the considered alternatives are addressed in Chapter 3: Consideration of Alternatives of the ES (Document Reference 6.1). Those relevant to site location and layout, and directly responding to planning policy, are discussed in the Terrestrial Site Alternatives Report (TSAR (Document Reference 7.5), the Jetty Site Alternatives Report (JSAR) (Document Reference 7.6) and summarised below.
- 4.6.3. These documents set out the reasons for the Applicant's choices between alternatives, taking into account environmental, social and economic effects and including, where relevant, technical and commercial feasibility.

PROPOSED SCHEME DESIGN AND OPTIONEERING PRINCIPLES

- 4.6.4. The TSAR (Document Reference 7.5) presents the process for considering site alternatives in some detail, identifying project objectives for choosing a site location at section 2.2: a location near the Riverside Campus for efficient connection to Riverside 1 and Riverside 2 and the Proposed Jetty; sufficient site size to accommodate the infrastructure required; and a site that is deliverable in a timely manner.
- 4.6.5. From these objectives, Project Principles were developed to frame the emerging development proposals. These are explored further in the **Design Approach Document (Document Reference 5.6)** and comprise:
 - Realise the Riverside Campus;
 - Delivery of an efficient and safe operational layout;
 - Support understanding of carbon capture and storage;
 - Organised and coherent design;
 - Enhance biodiversity;
 - Minimise effects on Metropolitan Open Land (MOL) and improve access to open space and connectivity; and
 - Minimise project impacts.
- 4.6.6. A series of Optioneering Principles were developed to assess potential development zones that would meet these Project Principles flowing from the project objectives. These were based on legal and policy considerations and include seeking to minimise adverse impact to locally important biodiversity sites, protected species, and existing land uses including MOL, Accessible Open Land and PRoW, consideration of ease to connection to the Proposed Jetty and Riverside 1 and Riverside 2 and seeking to minimise engineering complexity and consequent cost.
- 4.6.7. Design Principles were used to validate the conclusions of the site alternatives analysis, as described in the Design Approach Document (Document Reference 5.6) and outlined in Figure 2 below.



Figure 2 Interaction of the Design Principles and Optioneering Principles

- 4.6.8. The Design Principles were also used to inform the identification of the preferred operational layout configuration. Supplemented with the Design Code they will guide future detailed design, and control delivery, ensuring good design underpins the Proposed Scheme. The **Design Principles and Design Code (Document Reference 5.7)** will be secured through a requirement of the DCO.
- 4.6.9. The approach for choosing the location of the Proposed Jetty is set out in the JSAR (Document Reference 4.6), and involved applying Optioneering Principles that sought to minimise impacts to marine ecology, flood risk, land use, navigation, recreational users of the River Thames and Thames Path, and ensuring that the Proposed Jetty could meet constructability and operational requirements.

4.7. MITIGATION HIERARCHY

4.7.1. Paragraphs 4.2.10 to 4.2.13 of EN-1 advise that applicants for CNP infrastructure must continue to show how their application meets the requirements in NPS EN-1, demonstrating how the mitigation hierarchy has been applied, seeking advice of the

appropriate Statutory Nature Conservation Bodies, and demonstrating that all residual impacts are those that cannot be avoided, reduced, or mitigated.

- 4.7.2. The Applicant has applied the mitigation hierarchy, not least as demonstrated throughout the **ES (Document Reference 6.1)** and in its site selection, which sought to maximise use of land within the SIL allocation and minimise the loss of land within designations such as MOL, Erith Marshes SINC and Crossness LNR. The Carbon Capture Facility requires a site area of some 8ha, and around 5.5ha of this will be within SIL. The Proposed Jetty has been located within the River Thames in a position that minimises effect on marine habitats.
- 4.7.3. Throughout the development of the Proposed Scheme advice has been sought from the appropriate Statutory Nature Conservation Bodies, as is reported in the **ES** (Document Reference 6.1).
- 4.7.4. The ES (Document Reference 6.1 6.4) which has been prepared in accordance with the EIA Regulations 2017 [7], assessing the likely significant effects of the Proposed Scheme and detailing the mitigation measures that will be implemented to mitigate. As can be seen by reference to Chapter 22: Summary of Effects (Volume 1) of the ES (Document Reference 6.1) and section 9 of this Planning Statement, there are very few residual, significant, adverse impacts; it is demonstrated that those which remain cannot be avoided, reduced or mitigated further. The full list of mitigation measures is within the Mitigation Schedule (Document Reference 7.8).
- 4.7.5. Part 4.7 of NPS EN-1 recognises the role of good design, including as a means by which policy objectives of the NPS can be met. The Proposed Scheme is informed by good design, the evolution of which is presented in the **Design Approach Document** (Document Reference 5.6) and is underpinned by the control framework provided through the Design Principles and Design Code (Document Reference 5.7).
- 4.7.6. Paragraph 4.2.14 confirms that the SoS must be satisfied that these requirements have been met, such that the presumptions relevant to CNP infrastructure apply. The Applicant believes this case has been robustly made in the submitted application for development consent.

4.8. CONCLUSION

- 4.8.1. The principle of development is the capture of carbon dioxide from Riverside 1 and 2, residual waste treatment facilities. The Proposed Scheme supports the government's ambitions to invest in technologies to deliver a fully decarbonised, reliable and low-cost power system by 2050 [34].
- 4.8.2. The Proposed Scheme will provide CNP infrastructure contributing to the government's carbon capture ambitions set out in NPS EN-1 and the BESS to achieve '20 to 30MT CCUS' by 2030, assisted through a £1 billion commitment to delivering four CCUS clusters by 2030. The Proposed Scheme will capture at least 95% of CO₂ emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2, which when operating at their consented throughput is equivalent to approximately

1.6Mt CO₂ per year. Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year of CO₂. As such, the Proposed Scheme will be part of a regional effort to enable the decarbonisation of emissions in London and the southeast of England.

- 4.8.3. Whilst the Proposed Scheme does not include CO₂ storage, it will produce LCO₂ that will require storage, most likely in the UK offshore area which has been recognised in the Marine Policy Statement as '*one of the most promising hub locations within Europe*' and will contribute to the growth of the CCS sector.
- 4.8.4. The Proposed Scheme will help the government meet the legally binding target in the Climate Change Act [28] as updated in 2019 to reduce GHG emissions to achieve net zero by 2050 and a 78% reduction by 2035 as established in the Sixth Carbon Budget [29].
- 4.8.5. The Proposed Scheme will contribute to the CCUS Vision, helping the UK become a global leader in CCUS. In addition to the benefits of carbon capture, the Proposed Scheme will also provide net zero compliant technology for Riverside 1 and Riverside 2 EfW facilities, and by delivering negative emissions, the Proposed Scheme provides an opportunity to offset emissions from hard-to-abate sectors.
- 4.8.6. Whilst there is no specific development plan policy for CCS, the London Plan commits to London becoming a zero-carbon city by 2050, the achievement of which is reflected in the Bexley Local Plan. The whole life emission for the Proposed Scheme (accounting for the construction and operation phases) represent and overall saving in GHG emissions of -85,223,660 tCO₂e relative to the future baseline (**Chapter 13** of the **ES (Document Reference 6.1)**).
- 4.8.7. The Proposed Scheme will make an important and relevant contribution to the commitments set by the Mayor of London.
- 4.8.8. The delivery of net zero is of national and international significance and indeed is of fundamental importance to the future of the UK economy and human survival, as recognised by the Paris Agreement, COP26, and the passing into law of the net zero target.
- 4.8.9. As the recent International Panel for Climate Change (IPCC) report indicates, accelerated action is required to adapt to climate change, at the same time as making rapid, deep cuts in greenhouse gas emissions. This is particularly the case in the context that a 'temporary overshoot' of the previous 1.50C 'target' for avoiding large scale climate change impacts is likely to occur sometime between 2030 and 2052.
- 4.8.10. The UK Government has recognised that the installation of new renewable electricity production can only go 'so far' to meet the net zero target and avoid major climate change impacts in the time available, which is further heightened in the context of the IPCC report. As such, a key part of achieving net zero and mitigating the future impacts of climate change, as recognised by the Government, is through the

introduction of carbon capture storage infrastructure, both to decarbonise existing industrial emitters, including energy providers; and to facilitate provision of negative emissions to offset industries that cannot decarbonise completely.

- 4.8.11. In developing the Proposed Scheme over the rest of this decade, the Applicant will also help the Government to drive forward its CCUS Vision, which seeks to have CCUS at scale by the 2030s, in which respect the Carbon Capture Facility will be 'ahead of the game'.
- 4.8.12. Additionally, the Applicant has demonstrated how the mitigation hierarchy has been applied, and all residual adverse effects identified in the Environmental Statement are those that cannot be avoided, reduced, or mitigated. Locally focussed environmental, social and economic benefits are set out in the Project Benefits Report (Document Reference 5.4) and the Proposed Scheme is underpinned by the Design Principles and Design Code (Document Reference 5.7) incorporating strong mitigation proposals, not least as presented in the Outline LaBARDS (Document Reference 7.9). The payback period for the Proposed Scheme, 'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme' is less than 5 weeks.
- 4.8.13. It is therefore considered that the principle of the Proposed Scheme is supported by national and local policy and delivers key national and development plan policy priorities.

5. METROPOLITAN OPEN LAND

5.1. INTRODUCTION

- 5.1.1. As a longstanding national, and local, policy designation, and one that is directly affected by the Proposed Scheme, the Applicant recognises the importance that proper consideration is given to the Proposed Scheme's interaction with Metropolitan Open Land (MOL). Consequently, this is the focus for this section of the Planning Statement.
- 5.1.2. It is set out in the following order:
 - Context provides a description of the land designated as MOL;
 - Policy Review outlines the national and local policy relevant to MOL and the consequent tests for the Proposed Scheme;
 - Policy Analysis considers the harm resulting from inappropriate development, any other harm, and how the Proposed Scheme aims to reduce impact through the mitigation hierarchy;
 - Very Special Circumstances presents the robust reasons why the limited harm is substantially outweighed by the benefits of the Proposed Scheme, particularly in light of the CNP status of the Proposed Scheme; and
 - Conclusion the physical characteristics of the Proposed Scheme has limited harm on the fundamental aim and relevant purpose of the MOL, and that the very special circumstances are demonstrated to substantially outweigh that limited harm.
- 5.1.3. The next section of this Planning Statement considers locally focussed impacts to open space and green infrastructure, designations that are embedded within the MOL designation in local plan policy.

5.2. CONTEXT

THE KEY AREAS AFFECTED BY THE PROPOSED SCHEME

- 5.2.1. Metropolitan Open Land lies within and adjacent to the Site Boundary. The MOL designation, as adopted in the Bexley Local Plan Policies Map, is shown on Figure 1 (Appendix D). The MOL designation within the London Plan is subtly different (slightly smaller) than that of the Bexley Local Plan, which is a more recently adopted development plan. Consequently, the MOL designation considered within this DCO Application is as adopted by LBB in the Bexley Local Plan.
- 5.2.2. The MOL identified in Bexley Local Plan policy SP8 and illustrated in the Policies Map [35] is not necessarily accessible to the public. For clarity, the Applicant has identified areas of land within the Site Boundary that are open in nature and that are accessible to the public (i.e. not fenced off), as 'Accessible Open Land' (and also as 'public open space' for the purposes of the PA 2008); and areas of land that are open in nature but

are not accessible to the public (i.e. fenced off) as Non-Accessible Open Land (and not public open space for the purposes of the PA 2008). These are defined in the **Glossary (Document Reference 1.7)** and for ease of reference shown on **Figure 3** (Appendix D) (which is a reproduction of **Figure 14-4: Accessible and Non-Accessible Open Land** of the **ES (Document Reference 6.2)**).

- 5.2.3. MOL within the Site Boundary incorporates areas of both Accessible Open Land and Non-Accessible Open Land.
- 5.2.4. The East Paddock and Stable Paddock are both located within the Site Boundary and both fall within the MOL designation, but both are considered to be Non-Accessible Open Land as they are fenced off, only accessible by the grazier. Both land parcels are proposed to be built upon by the Proposed Scheme, to accommodate the Carbon Capture Facility, and are consequently considered as a net loss of MOL designated land, albeit some of the Stable Paddock is proposed for buffer planting.
- 5.2.5. In addition, the Flue Gas Supply Ductwork will be required to carry flue gas from Riverside 2 to the Carbon Capture Facility. This is proposed to wrap around the western and southern boundary of Riverside 2, to the east of Sea Wall Field and along the northern boundary of West Paddock. For the purposes of this consideration of MOL, a worst case assumption is used that the Flue Gas Supply Ductwork will compromise a further 1ha of designated MOL. Detailed design will be used to minimise the impact of this element of the Proposed Scheme.
- 5.2.6. The rest of the MOL within the Site Boundary is proposed to be used as part of the Mitigation and Enhancement Area for the Proposed Scheme, to provide improved ecological, access and recreation outcomes for this land. With the exception of replacing an existing stable block and potential diversion of an existing access road (which are like for like replacements of existing features within the MOL) works within the Mitigation and Enhancement Area does not involve built development and is considered to be wholly compatible with MOL policy objectives.
- 5.2.7. Land immediately adjacent to the MOL is designated SIL in the Bexley Local Plan. Figure 1 (Appendix D) shows all of these elements.

DESCRIPTION OF MOL RELEVANT TO THE SITE

- 5.2.8. In September 2018, GiGL posted a report on its website that had been prepared for the CPRE, website 'Mapping London's Green Belt and Metropolitan Open Land' [36].
- 5.2.9. The report was prepared prior to adoption of both the extant London Plan and Bexley Local Plan. However, recognising that substantial change to this designation is rarely made, it is still considered relevant. On its website, GiGI reports key findings of the study, including that 'Almost 10% of Greater London (15,681 hectares) is designated as Metropolitan Open Land (MOL).' [37].
- 5.2.10. MOL within and adjacent to the Site Boundary crosses stretches south of the A2016 Picardy Manorway/Eastern Way, including Southmere Park and Crossway Park.

Within the Site Boundary the MOL includes land within Crossness LNR, the Southeast London Green Chain, and Erith Marshes SINC; land which is used for grazing.

- 5.2.11. The land designated as MOL within the Site Boundary is substantially flat with open views towards the commercial development along the River Thames. It consists of grassland with a network of ditches and open water. The Thames Marshes Corridor runs through the MOL from the south west of the Site to the north east, this Strategic Green Wildlife Corridor (as designated in the Bexley Local Plan), forms part of a network of green corridors across Bexley and connects the Thamesmead estate to the River Thames through the Erith Marshes SINC.
- 5.2.12. The area of land designated as MOL within the Site Boundary also includes Public Footpath FP2 which crosses the Site from the south east to the north west.
- 5.2.13. A photograph of the land designated as MOL and within the Site Boundary is illustrated below:



5.2.14. Chapter 8 of the GI Study (Part 2) includes and openness assessment of the current MOL designation. The Study concludes that the 'land to the north east where the Crossness Nature Reserve is located is also flat and open with views towards commercial development along the Thames possible across this land. This land which

accounts for most of the land within the boundaries of the within this section of MOL is considered to display Strong Openness.

5.3. POLICY REVIEW

5.3.1. MOL is designated under development plan policy, is afforded the same status of protection as Green Belt and should be considered in policy terms to be the same and used as part of policy analysis. As such, throughout this Planning Statement, where reference is made to 'Green Belt', this can be read to incorporate MOL.

NPS EN-1

- 5.3.2. Paragraph 5.11.2 confirms that the "fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and permanence."
- 5.3.3. Paragraph 5.11.20 confirms the "general presumption against inappropriate development' within Green Belts and that 'such development should not be approved except in very special circumstances."
- 5.3.4. Paragraph 5.11.36 advises that energy infrastructure projects may comprise inappropriate development, which is, "*by definition harmful to the Green Belt*." The NPS refers to the NPPF for the definition of 'inappropriate development.'
- 5.3.5. Paragraph 5.11.37 confirms that "very special circumstances are not defined in national planning policy as it is for the individual decision maker to assess each case on its merits and give circumstances their due weight. However, when considering any planning application affecting Green Belt land, the Secretary of State should ensure that substantial weight is given to any harm to the Green Belt when considering any application for such development, while taking account, in relation to renewable and linear infrastructure, of the extent to which its physical characteristics are such that it has limited or no impact on the fundamental purposes of Green Belt designation. Very special circumstances may include the wider environmental benefits associated with increased production of energy from renewables and other low carbon sources."

NPPF [19]

- 5.3.6. Much of the policy in relation to Green Belt has already been incorporated into NPS EN-1. However, paragraph 143 of the NPPF advises that the Green Belt serves five purposes, only the first of which is relevant to the Proposed Scheme:
 - 'to check the unrestricted sprawl of large built-up areas;
 - to prevent neighbouring towns merging into one another;
 - to assist in safeguarding the countryside from encroachment;
 - to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.'
- 5.3.7. Paragraph 154 confirms that local planning authorities should regard the construction of new buildings as 'inappropriate development', with limited exclusions. None of the exclusions apply to the Proposed Scheme.
- 5.3.8. At paragraph 155, the NPPF sets out other forms of development that are not inappropriate development in the Green Belt. The Proposed Scheme does not fall into any of the identified forms of development.
- 5.3.9. Paragraph 156 recognises that many elements of renewable energy projects will comprise inappropriate development, and that developers will need to demonstrate very special circumstances. *"Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources."*

DEVELOPMENT PLAN

The London Plan 2021 [10]

5.3.10. Policy G3 (and paragraph 8.3.2) confirms that MOL is afforded the same status and level of protection as Green Belt, and that:

'MOL should be protected from inappropriate development in accordance with national planning policy tests that apply to the Green Belt boroughs should work with partners to enhance the guality and range of uses of MOL.

- 5.3.11. Paragraph 8.3.1 describes MOL as strategic open land within the urban area that plays an important role in London's green infrastructure. '*MOL protects and enhances the open environment and improves Londoners' quality of life by providing localities which offer sporting and leisure use, heritage value, biodiversity, food growing, and health benefits through encouraging walking, running and other physical activity.*'
- 5.3.12. Proposals to enhance access to MOL, that are appropriate within the MOL, will be encouraged, including through '*improved public access for all, inclusive design, recreation facilities, habitat creation, landscaping improvement and flood storage.*' (paragraph 8.3.4)

Bexley Local Plan [11]

- 5.3.13. At paragraph 5.5.6, the Bexley Local Plan confirms that 'the primary function of Metropolitan Green Belt is to serve as a break between settlements. Metropolitan Open Land functions similarly, but as a break within a built-up area rather than at the edge.'
- 5.3.14. Policy SP8 requires future development to 'support the delivery of a high-quality, wellconnected and sustainable network of open spaces. In particular this will be achieved

by 'protecting Metropolitan Green Belt and Metropolitan Open Land from inappropriate development.'

5.3.15. Paragraph 5.65 confirms that 'MOL should be protected from inappropriate development in accordance with national planning policy tests that apply to green belts. Proposals to enhance access to MOL or to improve poorer quality areas in order to provide a wider range of benefits for residents that are appropriate within MOL will be encouraged. Examples include improved public access for all, inclusive design, recreation facilities, habitat creation, landscaping improvement and flood storage. The areas designated as MGB and MOL play a variety of important functions in Bexley. As well as providing open expanses, these protected designations have high levels of nature conservation, landscape, recreation, and historic value.'

THE POLICY TESTS

- 5.3.16. MOL is confirmed to be afforded the same status and level of protection as Green Belt.
- 5.3.17. Only the first of the purposes of Green Belts as set out by the NPPF is relevant, 'to check the unrestricted sprawl of large built-up areas.' Not least, this is the only purpose that aligns with LBB's primary function for MOL, which is to serve 'as a break within a built-up area rather than at the edge.' These both align with the fundamental purpose for Green Belt, 'to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and permanence.'
- 5.3.18. The Proposed Scheme does not satisfy any of the exclusions set out in the NPPF, and so is to be considered inappropriate development, which, by definition, is harmful to the MOL, and is not compliant with Policy SP8 of Bexley Local Plan and Policy G6 of the London Plan which aim to protect MOL from inappropriate development. Consequently, very special circumstances are to be established to justify development.
- 5.3.19. At paragraph 4.2.14, NPS EN-1 confirms that where the SoS is satisfied that an application for development consent meets the requirements of the NPS, applying the mitigation hierarchy and any other legal and regulatory requirements, *'the CNP presumptions set out below apply.'* As signposted at section 4.7 of this Planning Statement, the Applicant believes those requirements are met.
- 5.3.20. Those CNP presumptions are set out at NPS EN-1 paragraphs 4.2.16 and 4.2.17, and include the presumption that very special circumstances exist to justify the Proposed Scheme as inappropriate development.
- 5.3.21. The Proposed Scheme is confirmed to be CNP Infrastructure, which "is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances." (paragraph 4.2.16 of EN-1).

- 5.3.22. Consequently, the starting point for determination of CNP Infrastructure is that it will meet the very special circumstances required to justify development by the recognised need for new low carbon infrastructure, i.e. there is already a presumption of very special circumstances.
- 5.3.23. Whilst this approach, confirmed at paragraph 4.2.17 of NPS EN-1, is demonstrated to be correct for the Proposed Scheme, there are very special circumstances relevant to the Proposed Scheme, as described at section 5.5, which are robust and are present in their totality only through the opportunity presented by this development.

5.4. POLICY ANALYSIS

HARM BY INAPPROPRIATE DEVELOPMENT

Description of Harm

- 5.4.1. The Proposed Scheme will result in the net loss of, and compromise to, land designated as MOL. The greatest area of MOL to be directly affected by the Proposed Scheme will be 3.5ha. This comprises: 2.5ha of MOL within the East and Stable Paddocks, which will be lost to development; and approximately 1ha of land on which the Flue Gas Supply Ductwork would be constructed, and would consequently compromise the MOL. 3.5ha equates to 0.022% of all MOL across Greater London as measured by GiGI in 2018. This calculation does not include either replacing the stable block or potential diversion of the Thames Water Access Road as these would be like for like replacements of existing features within the MOL.
- 5.4.2. However, the Proposed Scheme will also maintain the primary aim and relevant function of the MOL, there will remain a '*break within the built-up area*'.
- 5.4.3. The land lying to the west and adjacent to the Carbon Capture Facility, south and west of Riverside 1 and 2, and east of the Crossness Sewage Treatment Works lies within the Site Boundary and is included within the Mitigation and Enhancement Area, which is proposed to be maintained as an extended local nature reserve. As such it will continue to perform a separating function between the built up area. A substantial, and definitive, area of openness between the proposed Carbon Capture Facility and the Crossness Sewage Treatment Works will be maintained.
- 5.4.4. The Proposed Scheme will not lead to '*urban sprawl*'. The **Work Plans (Document Reference 2.3)** explicitly constrain the spatial extent of the built element of the Proposed Scheme (the Carbon Capture Facility) predominantly to land allocated for SIL and only small area of MOL will be affected. Further, the **Design Principles and Design Code (Document Reference 5.7)** embed a fundamental framework for the detailed design of the Carbon Capture Facility that will lead to a single, compact and coherent development that will not spill out into the adjacent, open, area.
- 5.4.5. The area of MOL that is lost, the East and Stable Paddocks, are not Accessible Open Land. The same description applies to those areas of MOL that are compromised by the Flue Gas Supply Ductwork within the West Paddock and Sea Wall Field. Access

is restricted, such that unauthorised persons could not stand within those field parcels to enjoy open space. This limitation is not affected by the Proposed Scheme.

5.4.6. The harm by inappropriate development is consequently limited, and, as described next, is limited to the reasonable extent practicable.

Mitigation Hierarchy

- 5.4.7. NPS EN-1 (at paragraph 4.3.22) makes clear that a reasonable alternative is one '*that* can meet the objectives of the proposed development'. To deliver the objectives of the Proposed Scheme requires the built form of the Carbon Capture Facility to be located close to Riverside 1 and Riverside 2. The **TSAR (Document Reference 7.5)** explains (at section 2.2) any reasonable alternative in choosing the location for the Carbon Capture Facility needs to be aligned with the following objectives:
 - located in the vicinity of the Riverside Campus and the River Thames, for efficient connection to EfW facilities and the Proposed Jetty;
 - of sufficient size to accommodate the Carbon Capture Facility, including its Supporting Plant and Associated Infrastructure in order to capture and process the carbon created by both Riverside 1 and Riverside 2; and
 - deliverable in a timely manner.
- 5.4.8. Site options that cannot meet these objectives are not reasonable alternatives.
- 5.4.9. The **TSAR (Document Reference 7.5)** demonstrates that the availability of reasonable site alternatives for the Carbon Capture Facility are limited and that having considered a number of Development Zones and concluding that the South Zone is preferred to achieve the Project Objectives and Optioneering Principles, that in order to meet the objectives of the proposed development within the South Zone, impact to MOL cannot be avoided.
- 5.4.10. However, it is also correct that the site selected for the Carbon Capture Facility (South Zone 1) minimises the impact on MOL when compared to the other alternatives considered in the South Zone. The Carbon Capture Facility requires a site area of some 8ha and the area of land designated as MOL and lost to development is limited to 2.5ha of that area, or 31%.
- 5.4.11. The remainder of the Carbon Capture Facility uses land allocated in the development plan as SIL, all of which has received consent for economic development; with access and utilities placed within the public highway. Most of the land area required for the Carbon Capture Facility does not fall within the designated MOL.
- 5.4.12. There is insufficient land area within the allocated SIL land to support the entire delivery of the Carbon Capture Facility. Even if it were possible to accommodate the Carbon Capture Facility within this area, there would remain some level of harm to the MOL designation covering the Sea Wall Field, West Paddock and East Paddock. The Flue Gas Supply Ductwork, an essential piece of infrastructure, would remain necessary to transport the flue gas from the northern end of Riverside 2 to the Carbon

Capture Plant(s). Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1) demonstrates why the route wrapping around Riverside 2 is preferred and the potential to further mitigate impact through detailed design. However, if the Flue Gas Supply Ductwork was required to cross East Paddock to reach a carbon capture scheme located further south, the impact of it would be extended across this area of MOL There would still remain an impact on the openness of the MOL in East Paddock whether or not the Carbon Capture Facility is built in this location. Stable Paddock may not be lost in this scenario, but it is intended as an area of buffer planting for the Carbon Capture Facility in any event, a purpose that aligns with MOL objectives.

- 5.4.13. Further, locating the Carbon Capture Facility southward would leave no opportunity to improve access to this area of MOL from Norman Road, which forms a key part of the access and recreation proposals described in the **Design Approach Document** (Document Reference 5.6) and Outline LaBARDS (Document Reference 7.9). The parameters of the Works Plans (Document Reference 2.3) alongside the Design Principles and Design Code (Document Reference 5.7) for the Carbon Capture Facility includes the opportunity to allow for the establishment of a generous public access to the proposed extended local nature reserve at the southern end of Norman Road. The Proposed Scheme retains the potential to use land at the southern end of the Carbon Capture Facility for local benefit such as access improvements, parking, habitat and/or water attenuation purposes. As is recognised in development plan policy, proposals 'to enhance access to MOL or to improve poorer quality areas in order to provide a wider range of benefits for residents that are appropriate within MOL will be encouraged. Examples include improved public access for all, inclusive design, recreation facilities, habitat creation, landscaping improvement and flood storage.' (Bexley Local Plan, paragraph 5.65)
- 5.4.14. The performance of the MOL extending across the Mitigation and Enhancement Area, will be improved through the proposals set out in the **Outline LaBARDS (Document Reference 7.9)** including through an enhanced habitat to be enjoyed and improved way marking and access provision. Buffer planting on the edge of the Carbon Capture Facility is proposed to provide screening to operational equipment, minimising potential visual effects.
- 5.4.15. The mitigation hierarchy has been applied to good effect, avoiding Accessible Open Land and minimising harm so as to maintain the fundamental aim and function of the MOL.

Conclusion

5.4.16. The Proposed Scheme will result in the net loss of 2.5ha of MOL (Stable and East Paddock) and a maximum area of 1ha of compromised MOL (within Sea Wall and West Paddock).

- 5.4.17. However, this loss is minimised, openness is maintained through the retention of remaining open land and urban sprawl is prevented. Further, there is no impact on the Accessible Open Land within the MOL.
- 5.4.18. Quantitively, the Order Limits and the extent of the built form of the Carbon Capture Facility are constrained by the **Work Plans (Document Reference 2.3).** Qualitatively, the **Design Principles and Design Code (Document Reference 5.7)** and **Outline LaBARDS (Document Reference 7.9)** will ensure a single, compact, coherent and well-designed development.
- 5.4.19. The Mitigation and Enhancement Area is proposed to be maintained as an extended nature reserve, and with the measures set out within the Outline LaBARDS (Document Reference 7.9) to result in a beneficial impact to user experience of MOL.
- 5.4.20. The limited harm resulting from the loss in MOL would consequently be mitigated by a general improvement in the amenity experience of the MOL, enjoying a more consistent natural environment, recreational facilities and improved access recognising the proximity to the local community and improved connectivity through extended PRoW.
- 5.4.21. The remaining MOL will continue to perform a separating function between the builtup area through a substantial, and definitive, area of openness between the proposed Carbon Capture Facility and the Crossness Sewage Treatment Works. The physical characteristics of the Carbon Capture Facility are such that it has limited harm and that the primary aim and relevant function of the MOL will be maintained, there will remain a '*break within the built-up area*'.

OTHER HARM

Description of Harm

- 5.4.22. The other harms identified as relevant to the Proposed Scheme are in relation to:
 - Terrestrial Biodiversity;
 - Landscape and Visual; and
 - Amenity.
- 5.4.23. Each is discussed below.

Biodiversity

- 5.4.24. The effect of a development on biodiversity can be considered 'other harm' as it can result in impacts to habitats and species supported on a site.
- 5.4.25. Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1) explicitly considers habitat loss and fragmentation across the habitats contained within the MOL. The assessment concludes that there will be no significant effects to terrestrial biodiversity during construction of the Proposed Scheme following the implementation of mitigation measures to include habitat creation and enhancement

within the Carbon Capture Facility, the Mitigation and Enhancement Area and the BNG Opportunity Area, all of which are secured through the **Outline LaBARDS** (**Document Reference 7.9**). This approach includes making provision for water vole, such that they too would not suffer significant residual effect from construction of the Proposed Scheme. Implementation of measured within the **Outline CoCP** (**Document Reference 7.4**) is concluded to be appropriate to reduce other effects on terrestrial biodiversity to a not significant level during construction.

- 5.4.26. During operation of the Proposed Scheme, the chapter concludes that the Outline LaBARDS (Document Reference 7.9) will reduce most of the significant adverse effects to be insignificant. Consequently, the only potentially significant residual effect to terrestrial biodiversity is in relation to changes in air quality. These can be considered further, and sought to be managed, through detailed design and the measures set out in Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) which will be delivered through implementation of the Operational Environmental Management Plan, as secured by a requirement of the Draft DCO (Document Reference 3.1).
- 5.4.27. The direct loss of habitat resulting from the Carbon Capture Facility located in the MOL is comprehensively mitigated, delivering habitat creation and enhancement. A wide ranging and comprehensive approach to terrestrial biodiversity is proposed across the Mitigation and Enhancement Area and secured through the Outline LaBARDS (Document Reference 7.9). In addition, the Proposed Scheme includes a commitment to deliver at least 10% BNG prior to this becoming a statutory requirement for development of this type.
- 5.4.28. There remains some level of uncertainty about the long term effect of changes in air quality, with provision to address the potentially significant residual effects through detailed design. Consequently, it is demonstrated that the harm to biodiversity is limited.

Townscape and Visual

- 5.4.29. Landscape and visual effects of a development can be considered 'other harm' as it results in changes in landscape character and the nature of the visual environment.
- 5.4.30. Chapter 10: Townscape and Visual (Volume 1) of the ES (Document Reference 6.1) considers the effects on townscape character and visual amenity during both construction and operation phases, including an assessment of the views that are available to people who may be affected by the Proposed Scheme, including their perception and response to changes in these views, and visual amenity.
- 5.4.31. The assessment concludes significant adverse effects during construction and operation phases on townscape character and visual amenity from Accessible Open Land and PRoW within the Site Boundary, even at year 15. However, these significant effects are felt locally; beyond the Site Boundary, Chapter 10 reports adverse effects that are not significant.

- 5.4.32. In its undeveloped state, the Site is visually open, but the character is compromised by the presence of industrial and large scale logistics development, and infrastructure that adjoins the Site. The Carbon Capture Facility will alter the character of the Site with the introduction of further built development and infrastructure.
- 5.4.33. However, the proposed massing of carbon capture built development and infrastructure reduces in intensity of scale from north to south, focusing higher elements to the north associated with existing tall structures at Riverside 1 and 2 as described in the **Design Approach Document (Document Reference 5.6)**. The elements of the Carbon Capture Facility in the south of the Site will be lower, less dense and less industrial in character, and this will support a looser and more visually open development character that steps down to engage with the nearby local community of Belvedere, and also support the establishment of a generous physical and visual approach to the Mitigation and Enhancement Area and the proposed extended local nature reserve.
- 5.4.34. The Mitigation and Enhancement Area will remain visually open and characterised by an increased coherence of 'natural' landscape, supported through an extended management regime supporting grazing marsh habitat improvement described in the **Outline LaBARDS (Document Reference 7.9)**.
- 5.4.35. The visual extent and appreciation of additional built development will be apparent from the areas of Accessible Open Land, but will be reduced through sensitive buffer planting on the Carbon Capture Facility's western boundary which will mature over time. These effects are felt locally, and rapidly dissipate beyond the Site Boundary. In addition, what will remain visually apparent will be subject to design control through approved **Design Principles and Design Code (Document Reference 5.7)** such that the resultant harm is limited to the vicinity of the Site.

Amenity

- 5.4.36. The effect of a development on amenity can also be considered 'other harm' as it results in impact to user experience.
- 5.4.37. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the Proposed Scheme on the amenity of those using Accessible Open Land (including that within MOL). For the purpose of the assessment, amenity is considered as a combination of air quality and noise levels and visual amenity as experienced by users.
- 5.4.38. The assessment concludes significant adverse effects to users of FP2 and Accessible Open Land during the construction phase, with these reducing to be not significant during the operation phase. Chapter 14 recognises that construction of the Proposed Scheme may lead to a temporary loss in amenity as a result of increases in noise and air pollution, and changes in views within the MOL that may deter some users from the Accessible Open Land.

- 5.4.39. Whilst some MOL will be lost to the Carbon Capture Facility, the remainder of the MOL within the Site Boundary remains open, even that which is not accessible to the public. There is potential that user experience could be impacted by a reduction in birds using the habitats within the retained open land area, however the ecological impact on the habitats used by these bird populations is considered to be negligible. The improvements proposed for the Mitigation and Enhancement Area will also present opportunities for habitat creation and enhancement. Proposed planting will establish over time and support the integration of the Carbon Capture Facility into the local landscape (albeit there remains likely to be a significant, permanent, adverse effect on Townscape).
- 5.4.40. An inclusive design approach has been used, not least as explained in the **Design Approach Document (Document Reference 5.6)** to deliver an integrated solution across the Mitigation and Enhancement Area, which is designed to deliver user/visitor information and facilities (including the potential for an outside classroom), re-wetting of the soils through alterations to the ditch network, tree planting and pond/wetland creation. This land also provides opportunity for improved access (all weather access routes, gateways, bridges and boardwalks). Further information on the proposals is provided in the **Outline LaBARDS (Document Reference 7.9).**
- 5.4.41. Despite the changes in amenity resulting from the Proposed Scheme, the enhancements proposed for the Mitigation and Enhancement Area will deliver opportunities to improve the overall amenity and user experience of MOL, such that this harm too is limited.

Mitigation Hierarchy

- 5.4.42. The mitigation hierarchy for these other harms is essentially the same as for the harm by inappropriate development set out above, from paragraph 5.4.7.
- 5.4.43. Reasonable site alternatives for the Carbon Capture Facility are limited; it is not possible to avoid all impact on the MOL and meet the objectives of the Proposed Scheme.
- 5.4.44. The loss of MOL has been minimised, and the impact on MOL has been minimised through inclusive design through each the built form, proposed planting for screening and the Mitigation and Enhancement Area, which includes proposals that will bring ecological improvement, address townscape effects, and enhance amenity experience of the MOL in this area.
- 5.4.45. The residual harms are limited.

Conclusion

5.4.46. Impacts to biodiversity within MOL are limited due to the mitigation measures that will be implemented during construction and operation, albeit there remains potential for significant adverse effect due to changes in air quality as a result of the operation of the Proposed Scheme.

- 5.4.47. The Carbon Capture Facility will alter the character of the Site with the introduction of new built development and infrastructure, having townscape and visual impact on MOL. However, these effects are felt locally, and rapidly dissipate beyond the Site Boundary; what will remain visually apparent will be subject to design control through approved **Design Principles and Design Code (Document Reference 5.7).**
- 5.4.48. User amenity within Accessible Open Land will be affected during construction of the Proposed Scheme. However, this impact will be temporary, with long term enhancement provided through the operational lifetime of the Carbon Capture Facility.
- 5.4.49. The demonstrated limited harm would be set within the context of carefully considered environmental, access and recreation proposals to be delivered by the Proposed Scheme under the **Outline LaBARDS (Document Reference 7.9**).

5.5. VERY SPECIAL CIRCUMSTANCES

CONTEXT

- 5.5.1. Notwithstanding that there is limited impact on the fundamental aim and relevant purpose of the MOL designation, there are very special circumstances in relation to the Proposed Scheme that robustly outweigh the identified harm.
- 5.5.2. Case law requires that we recognise that if one element of a scheme is inappropriate development then the scheme as a whole should be considered as such. However, case law has also emphasised the decision-maker should assess the overall harm of a scheme against the overall benefits; i.e. there is not an obligation to demonstrate very special circumstances for each individual element of development (including that which is in and of itself inappropriate development).
- 5.5.3. Consequently, the very special circumstances made here are for the Proposed Scheme as a whole, notwithstanding that that much of the Proposed Scheme does not conflict with the MOL designation; the Proposed Jetty is located outside of it, whilst the Mitigation and Enhancement Area proposals align with the policy and will deliver local objectives.
- 5.5.4. The harm to policy results from the Carbon Capture Facility, and, more specifically, that element of the Carbon Capture Facility that is located within the MOL designation. The consideration of alternatives has demonstrated that it is not possible to avoid placing infrastructure (which is integral to meeting *'the objectives of the proposed development'* as being the Carbon Capture Facility itself and the connection to Riverside 2 to obtain the carbon to be captured) within the designated MOL.

THE VERY SPECIAL CIRCUMSTANCES

Carbon Capture

- 5.5.5. The Proposed Scheme will make a significant contribution to the global priority to address climate change by capturing carbon dioxide for permanent storage, helping to deliver the Governments ambition to capture 20 to 30Mtpa of CO₂ by 2030 [30].
- 5.5.6. The Proposed Scheme will capture at least 95% of CO₂ emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2; at a nominal assumed throughput, this is equivalent to approximately 1.3Mt CO₂ per year. Table 13-10 of Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline.
- 5.5.7. Further, the Chapter concludes that: between 2033 and 2037 there will be -7,886,104 of CO₂, which is a reduction of 0.81% for the UK sixth carbon budget; and from 2028 to 2032 there would be -3,095,422 of CO₂, a reduction of 17.2% for the London 2028 to 2032 carbon budget. The feedstock to Riverside 1 and Riverside 2 comprises approximately 50% biogenic content, such that the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year of CO₂.
- 5.5.8. The payback period, 'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme' is less than 5 weeks.
- 5.5.9. The Applicant has its own aspiration to get to net zero by 2040 and to have carbon capture operational by 2030. The Proposed Scheme would materially contribute towards the government's aspirations for early delivery of infrastructure, such as seen in the UK Net Zero Strategy ambition to deploy '*at least 5 MtCO*₂/year of engineered [GHG] *removals by 2030*.'
- 5.5.10. The Proposed Scheme is demonstrated to make an important and relevant contribution to meeting the national legal target of achieving net zero by 2050, with timely delivery, and providing many of the benefits recognised across national strategies for low carbon energy. Locally, the Proposed Scheme will contribute to the Mayor's aspirations for London to be a zero-carbon city by 2050.
- 5.5.11. The **Project Benefits Report (Document 5.4)** estimates, the likely benefits to wider society from the carbon savings alone would be £1.7 billion (Net Present Value, 2023 prices). In addition to these very substantive carbon benefits, the Proposed Scheme would contribute to the economy through investment, supply chain and employment impacts. As noted in 'CCUS Supply Chains: A Roadmap to Maximise the UK's Potential (Department for Business, Energy and Industrial Strategy, May 2021):

CCUS will be essential to that green economy, tackling climate change and meeting the UK's target to reach net zero emissions by 2050. It also has the potential to deliver a stronger, greener UK by levelling up our industrial heartlands, supporting

clean growth and providing new economic opportunities for UK-based companies across the world.'

Future proofing sustainable waste management

- 5.5.12. The location of Riverside 1 and 2 is identified in development plan policy as Strategic Waste Management Site. As explained in the **Project Benefits Report (Document Reference 5.4)** they are duly consented developments, and represent some 50% of the residual waste management capacity in London, providing essential and sustainable infrastructure for the capital and the south east of England.
- 5.5.13. Riverside 1 and Riverside 2 are EfW facilities that are recognised as the preferred treatment route for residual waste. They avoid residual waste being disposed of to landfill (the option of last resort) and supply partially renewable energy.
- 5.5.14. By capturing the fossil carbon (from plastic waste), the Carbon Capture Facility will achieve 'net zero', i.e. no new carbon will be released into the atmosphere. By also capturing the carbon from biogenic materials (paper, cardboard, and wood), the operations at Riverside will be carbon negative, because carbon that is part of the natural carbon cycle will also be permanently removed from the atmosphere.
- 5.5.15. Not only would the residual waste processed be decarbonised, but the energy and the byproducts recovered in the form of electricity, heat and aggregates for the construction sector would be decarbonised too, bringing the desired environmental, economic and societal benefits.
- 5.5.16. Not least of those benefits will be realised through incorporating the essential infrastructure necessary to deliver the Riverside Heat Network. Similar to the energy recovery technology within Riverside 1 and 2, the carbon capture process produces heat that is typically wasted. Instead, it will be captured and redirected to optimise the Riverside Heat Network. The Proposed Scheme has the potential to provide over 100MWth of additional heat which would benefit an even greater number of homes and businesses.
- 5.5.17. It is neither appropriate, nor necessary, to relocate these facilities. It is appropriate, and necessary, to locate the Proposed Scheme next to them, and so enable waste management undertaken for London and the south east to be taken to the next level.

Riverside location

- 5.5.18. The history of the Cory Group is underpinned by the River Thames.
- 5.5.19. Cory is the only waste management company in the UK to rely upon riparian waste management facilities, using barges to transport residual waste in and IBA out of Riverside. Using Middleton Jetty (a Safeguarded Wharf) removes 100,000 HGV movements from London's roads each year, delivering development plan policy to take vehicles off the public highway for environmental, economic and societal benefit.

- 5.5.20. Being located riverside means that the Proposed Scheme can also use shipping vessels to export the LCO₂ to its final storage location, building upon the established riparian location of Cory's business and continuing to provide environmental, economic and societal benefit.
- 5.5.21. This approach demonstrates non-pipeline transport options for carbon dioxide, leading to fewer vehicles on the public highway, reduced land take, and economic benefits as the Proposed Scheme can act as a catalyst to growth of the UK shipping sector. This is supported by the Carbon Capture, Usage and Storage Vision [30] which states that the government expect to see the UK deploying non-pipeline forms of transport for CO₂. They are also in additional to the environmental and societal benefits gained from shipping, including reduced vehicles on the public highway and reduced land take.
- 5.5.22. These benefits can only be realised with the Proposed Scheme developed as proposed, alongside the River Thames.

Sustainable infrastructure delivered through coherent design

- 5.5.23. Most of the Carbon Capture Facility will utilise land allocated as SIL. It is intended to be developed for industrial purposes. To date, the development proposals that have gained consent have been for generic B1/B2/B8 purposes and for data storage. These uses could be located anywhere and do not respond to the urgent need for low carbon energy infrastructure.
- 5.5.24. The Proposed Scheme provides the opportunity to develop the SIL for critical national priority infrastructure and to build out the allocated land as a single, comprehensively considered, development underpinned by the **Design Principles and Design Code** (Document Reference 5.7), and the associated benefits to be achieved across the Mitigation and Enhancement Area as set out in the Outline LaBARDS (Document Reference 7.9). Good design demonstrably underpins the Proposed Scheme, with delivery of the measures set out in these design documents secured through requirement of the Draft DCO (Document Reference 3.1).

5.6. CONCLUSION

- 5.6.1. Development of the Proposed Scheme will result in the net loss of, and compromise to, land designated as MOL; a maximum of 3.5ha of the Site total of 77ha (comprising 32ha marine and 45ha terrestrial). This loss equates to 0.022% of total MOL across Greater London.
- 5.6.2. In order to achieve the objectives of the Proposed Scheme, there is no reasonable option that avoids loss of MOL and all reasonable measures have been taken to minimise this impact. Through design development of the Proposed Scheme, openness across the MOL is maintained and urban sprawl is prevented, with no loss of Accessible Open Land. The resultant harm, from both inappropriate development and other harms, is demonstrated to be limited.

- 5.6.3. Responding to the NPS EN-1 test relevant to the MOL designation (paragraph 5.11.37) the physical characteristics of the Proposed Scheme are such that it has limited impact on the on the purpose of the MOL considered relevant, 'to check the unrestricted sprawl of large built-up areas'. Further, responding to the Bexley Local Plan, the Proposed Scheme will maintain the primary aim and relevant function of the MOL, there will remain a 'break within the built-up area'. A substantial, and definitive, area of openness between the proposed Carbon Capture Facility and the Crossness Sewage Treatment Works will be maintained.
- 5.6.4. As a project of national significance, the policy of NPS EN-1 has primacy in decision making. Paragraph 4.2.14 of NPS EN-1 confirms that where the SoS is satisfied that an application for development consent meets the requirements of the NPS, applying the mitigation hierarchy and any other legal and regulatory requirements, *'the CNP presumptions set out below apply*.' Not least as signposted at section 4.7 of this Planning Statement, and demonstrated through the consideration of harms in this section, the Applicant believes those requirements are met.
- 5.6.5. Consequently, the starting point for determination of the Proposed Scheme, as CNP Infrastructure, is that it will meet the very special circumstances required to justify development by the recognised need for new low carbon infrastructure, i.e. there is already a presumption of very special circumstances.
- 5.6.6. In any event, very special circumstances are demonstrated for the Proposed Scheme, which are robust and are present in their totality only through the opportunity presented by this development. In summary, these are:
 - the substantial capture of carbon dioxide for permanent storage, contributing a reduction of 0.81% for the UK sixth carbon budget and delivering this necessary infrastructure in a timely manner enabling early targets to be met;
 - societal economic benefit from the carbon savings alone in the region of £1.7 billion;
 - taking sustainable waste management of residual waste to the next level, and enabling consequent decarbonisation of the resultant energy supply and construction materials;
 - extending use of the River Thames, and consequently demonstrating the viability of NPT and providing a catalyst for the shipping sector in the UK; and
 - delivering critical national priority infrastructure at a location substantially allocated as SIL, as a single, comprehensively considered, development underpinned by the Design Principles and Design Code (Document Reference 5.7).
- 5.6.7. The London Plan and Bexley Local Plan support proposals to enhance MOL. This includes proposals to improve access for all, inclusive design, recreation facilities, and habitat creation. The Mitigation and Enhancement Area is being designed to deliver improvements such as user/visitor information facilities and amenity facilities, rewetting of the soils through alterations to the ditch network, and tree planting and pond/wetland creation. This land also provides opportunity for improved access (all

weather access routes, gateways, bridges and boardwalks). Further information is provided in the **Outline LaBARDS (Document Reference 7.9)** and **Design Approach Document (Document Reference 5.6).** Good design demonstrably underpins the Proposed Scheme, with delivery of the measures set out in these design documents secured through requirement of the **Draft DCO (Document Reference 3.1).**

5.6.8. The breadth and depth of the benefits to be realised through the Proposed Scheme are only available through this CNP Infrastructure and substantially outweigh the very limited harm to the designated MOL.

6. OPEN SPACE AND GREEN INFRASTRUCTURE

6.1. INTRODUCTION

- 6.1.1. Within both NPS EN-1 and the development plan, whilst open space and green infrastructure are recognised to have their own distinct attributes, they are generally considered together in policy. The same approach is used in this section of the Planning Statement.
- 6.1.2. As national and development plan policy designations that are directly affected by the Proposed Scheme, the Applicant recognises the importance that proper consideration is given to the Proposed Scheme's interaction with them. Consequently, open space and green infrastructure is the focus for this section of the Planning Statement.
- 6.1.3. It is set out in the following order:
 - Context provides a description of the land designated under open space and green infrastructure policy;
 - Policy Review outlines the national and local policy relevant to open space and green infrastructure and relevant tests for the Proposed Scheme;
 - Policy Analysis considers compliance of the Proposed Scheme with open space and green infrastructure focussed policy;
 - Decision Making Principles presents the robust benefits of the Proposed Scheme that substantially outweigh the limited loss of land with such features; and
 - Conclusion demonstrating that the Proposed Scheme will appropriately protect open space and make suitable provision for green infrastructure.
- 6.1.4. The previous section of this Planning Statement considers locally focussed impacts to the MOL designation, which substantially overlaps with the open space designation and green infrastructure provision within and surrounding the Proposed Scheme.

6.2. CONTEXT

- 6.2.1. NPS EN-1 provides definitions for both open space and green infrastructure in footnotes 247, 248 and 252 (on pages 149 and 150).
- 6.2.2. Footnote 247. 'Open space is defined in the Town and Country Planning Act 1990 as land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground. However, in applying the policies in this section, open space should be taken to mean all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity.'
- 6.2.3. Footnote 248. 'Green infrastructure is a network of multi-functional green and blue spaces and other natural features, both rural and urban, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.'

- 6.2.4. Footnote 252. 'Green infrastructure is a network of multi-functional green spaces, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities. Blue infrastructure relates to features which incorporate the water environment.'
- 6.2.5. These definitions have been used to identify the areas of open space and green infrastructure, including Public Rights of Way (PRoW) as relevant within and adjacent to the Site Boundary:
 - Erith Marshes Site of Importance for Nature Conservation ('SINC');
 - Crossness Local Nature Reserve ('LNR');
 - Southeast London Green Chain;
 - Thames Marshes Strategic Green Wildlife Corridor;
 - Urban Open Space; and
 - PRoW.
- 6.2.6. The River Thames lies within the Site Boundary, to the north. It is recognised that the River Thames has recreational value and is considered blue infrastructure. The impacts to recreational users of the River Thames have been assessed in Chapter 14: Population, Human Health and Land Use (Volume 1) of the ES (Document Reference 6.1).
- 6.2.7. Figure 2 (Appendix D) presents these designations.
- 6.2.8. As with MOL (considered above, from paragraph 5.2.2) open space and green infrastructure identified in Bexley Local Plan policy SP8 and illustrated in the Policies Map [35] is not necessarily accessible to the public. For clarity, the Applicant has identified areas of land within the Site Boundary that are open in nature and that are accessible to the public (i.e. not fenced off), as 'Accessible Open Land' (and also as 'public open space' for the purposes of the PA 2008); and areas of land that are open in nature but are not accessible to the public (i.e. fenced off) as Non-Accessible Open Land (and not public open space for the purposes of the PA 2008). These are defined in the **Glossary (Document Reference 1.7)** and for ease of reference shown on **Figure 3 (Appendix D)** (which is a reproduction of **Figure 14-4: Accessible and Non-Accessible Open Land** of the **ES (Document Reference 6.2)**).
- 6.2.9. This understanding of public open space or 'Special Category Land' informs the understanding of any mitigation that may be appropriate in the light of policy, whilst also defining what is actually used as open space notwithstanding the designations in place. Open space and green infrastructure within the Site Boundary incorporates areas of both Accessible Open Land and Non-Accessible Open Land.
- 6.2.10. Urban Open Space (also designated Erith Marshes SINC) lies within the Site Boundary, comprising a ditch running parallel with (to the east of) Norman Road extending up to the River Thames and incorporating an area of wetland habitat to the east of Riverside 1 (within the Applicant's ownership). It is not accessible land and will

not experience loss or impact that is contrary to development plan policy. Consequently, it is not considered further.

- 6.2.11. The Thames Marshes Strategic Green Wildlife Corridor runs through the Site, roughly in a northeast-south west alignment, forming part of a network of green corridors across Bexley and connects the Thamesmead Estate to the River Thames. Within the Site Boundary it is situated within the Erith Marshes SINC and consequently benefits from the policy protection of that designation. For the purpose of brevity within this Planning Statement and in light of its designation function being similar to that of the SINC and the LNR, the Thames Marshes Strategic Green Wildlife Corridor is not referenced further.
- 6.2.12. The East Paddock and Stable Paddock are both located within the Site Boundary, form part of the Crossness LNR and fall within the Erith Marshes SINC and Southeast London Green Chain. Both land parcels are proposed to be built upon by the Proposed Scheme, to accommodate the Carbon Capture Facility, albeit some of the Stable Paddock is proposed for buffer planting. Both land parcels are Non-Accessible Open Land, they are not accessible to the public.
- 6.2.13. In addition, the Flue Gas Supply Ductwork will be required to carry flue gas from Riverside 2 to the Carbon Capture Facility. This is proposed to wrap around the western and southern boundary of Riverside 2, to the east of Sea Wall Field and along the northern boundary of West Paddock. For consistency with consideration of MOL and the ES, particularly Chapter 8: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1) a worst case assumption is used that the Flue Gas Supply Ductwork will compromise a further 1ha of Erith Marshes SINC, Southeast London Green Chain and Crossness LNR. Detailed design will be used to minimise the impact of this element of the Proposed Scheme.
- 6.2.14. PRoW, within and adjacent to the Site Boundary, are described in the next section.
- 6.2.15. Land immediately adjacent to the Erith Marshes SINC and Southeast London Green Chain is designated SIL.

DESCRIPTION OF THE OPEN SPACE AND GREEN INFRASTRUCTURE PROVISION WITHIN THE SITE

- 6.2.16. The Crossness LNR and Erith Marshes SINC are designated not only for their significance for wildlife, but also for their value to people. Crossness LNR comprises some 25ha of land, comprising publicly accessible, Members only and restricted access areas. The restricted access area is used for bird watching, pond dipping, bat walks, butterfly walks, birdsong walks and wildflower walks [38].
- 6.2.17. The Southeast London Green Chain extends through the Site. It *"forms part of a virtually continuous arc of public and private open spaces, largely in recreational use, which extends through the London boroughs of Bexley, Bromley, Lewisham and Royal Greenwich"* [11].

- 6.2.18. The Bexley GI Study [39] classifies the open space including the Crossness LNR and Norman Road Field as 'higher quality/higher value', however it is recognised there are some areas with restricted access. The Study presents these 'higher quality/higher value' sites as the best open spaces within the Borough, offering the greatest value and quality for the surrounding communities, and states that future management should seek to maintain these spaces and ensure they continue to meet the requirements of the communities they serve. However, the Study also notes that natural and seminatural urban green space are considered to feel less open and secure and that it is therefore important to have a frequent flow of people within open spaces to offer self-surveillance.
- 6.2.19. Approximately 960m of the England Coast Path (FP3/NCN1) intersects the Site, as it follows the banks of the River Thames. This path is classed as a National Trail and extends from Woolwich in the west to Grain in Kent in the east.
- 6.2.20. The England Coast Path (FP3/NCN1) also provides a link to the Thames Path creating a continuous 'Source to Sea' National Trail along the length of the River Thames from the Cotswolds to the North Sea. The entire 'Source to Sea' trail is 374 km long following the south bank of the River Thames in London. Both routes are of national significance [40].
- 6.2.21. In addition, there are four PRoW located within the Site: FP1; FP2; FP3; and FP4. FP2 crosses the Site from the south east to the north west. There is one further PRoW within the wider area: FP242, located immediately adjacent to the Site Boundary (south) connecting directly to the England Coast Path (FP3/NCN1) and Crabtree Manorway North [41].
- 6.2.22. Photographs showing examples of the Site designated under the relevant open space and green infrastructure designations are provided below:



6.3. POLICY REVIEW

NPS EN-1

- 6.3.1. At paragraph 5.11.1, NPS EN-1 recognises that 'given the likely locations of energy infrastructure projects there may be particular effects on open space including green and blue infrastructure.' Paragraph 5.11.6 reiterates that the 'government's policy is to ensure there is adequate provision of high quality open space and sports and recreation facilities to meet the needs of local communities. Connecting people with open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living.'
- 6.3.2. The potential for green and blue infrastructure 'to provide positive environmental, social, health and economic benefits' is recognised at paragraph 5.11.7. Further, that 'well designed and managed green and blue infrastructure provides multiple benefits at a range of scales. It can contribute to biodiversity recovery, sequester carbon, absorb surface water, cleanse pollutants, absorb noise and reduce high temperatures.'
- 6.3.3. Applicants are advised to consult on their proposals to build on open space or recreational land with the local community and planning authority (making use of any up to date local authority assessment); and taking account of this consultation in considering new or improved provision. (NPS EN-1, paragraphs 5.11.9 to 5.11.11)
- 6.3.4. Paragraph 5.11.23 advises applicants to seek to minimise effects on these features, whilst recognising that '*in the case of most energy infrastructure there may be little that can be done to mitigate the direct effects of an energy project on the existing use of the proposed site (assuming that some of that use can still be retained post project construction.*'
- 6.3.5. Where green infrastructure is affected, NPS EN-1 advises (paragraph 5.11.24) the SoS to consider imposing requirements to ensure the functionality and connectivity of the green infrastructure network is maintained, including through improvements to PRoW.
- 6.3.6. Paragraph 5.11.32 makes clear that the SoS 'should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements or the Secretary of State determines that the benefits of the project (including need), outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.'

NPPF [19]

- 6.3.7. The NPPF [19] recognises that 'access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, and can deliver wider benefits for nature and support efforts to address climate change.' (paragraph 102)
- 6.3.8. Paragraph 103 advises that open space should not be built upon unless there is over provision, 'the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location', or the development is for alternative provision with substantial benefits.

DEVELOPMENT PLAN POLICY AND INFORMATION

London Plan [10]

- 6.3.9. Policy G1 of the London Plan seeks to protect and enhance green infrastructure, and states that '*Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.*'
- 6.3.10. Policy G4 of the London Plan states that 'development proposals should

1) not result in the loss of protected open space

2) where possible create areas of publicly accessible open space, particularly in areas of deficiency.'

- 6.3.11. The supporting text within paragraphs 8.4.3 and 8.4.4 encourage proposals to enhance public space, including improved public access, inclusive design, recreation facilities, habitat creation, landscaping improvement or Sustainable Drainage Systems (SuDS).
- 6.3.12. Policy G6 is concerned with biodiversity and access to nature. It requires that SINC should be protected, that where harm is unavoidable and where the benefits of a scheme outweigh the harm, a mitigation hierarchy should be applied to minimise that impact, and seeks to secure biodiversity net gain. Item E states that 'proposals which reduce deficiencies in access to nature should be considered positively.'

Bexley Local Plan [11]

- 6.3.13. Paragraph 5.49 advises that 'Open and green spaces are important for promoting health and wellbeing as well as offering space for nature. Safe and high-quality publicly accessible open space plays a vital role in improving a number of aspects of people's mental and physical health and wellbeing as well as various social and environmental indicators.'
- 6.3.14. Consequently, policy DP17 addresses publicly accessible open space, seeking to *'maximise access to existing publicly accessible open space'* not least through improved access and promoting *'publicly accessible open spaces as multi-functional spaces that cater for a range of activities, lifestyles, ages and needs';* but also through

the provision of '*enhanced access*' which should '*be inclusive and highly accessible to residents of the development and surrounding areas.*'

- 6.3.15. Paragraph 5.53 concludes that 'Opportunities to improve biodiversity within new open space or existing open space that is being made accessible should be pursued, especially where this can secure measurable net gains for biodiversity and enhance access to nature.'
- 6.3.16. Policy SP8 sets out the Council's commitment to creating a multifunctional network. Item 1 and relevant sub paragraphs is set out below.
- 6.3.17. 'Bexley's green infrastructure, including open spaces and waterways will be protected, enhanced, restored and promoted as valuable resources to provide a healthy integrated network for the benefit of nature, people and the economy. Future development must support the delivery of a high-quality, well-connected and sustainable network of open spaces. In particular, this will be achieved by:

d. resisting harmful development of gardens and other amenity green spaces;

f. working in partnership, seeking funding and supporting projects to promote the restoration and enhancement of open spaces, public realm and the waterway network within the borough;

g. agreeing proposals for creating or improving habitat, implementing priorities for the recovery of nature outlined in the relevant local nature recovery strategies, borough strategies or studies on open space, green and blue infrastructure, including where appropriate, rivers and waterways restoration;

i. protecting land that forms part of the Southeast London Green Chain as an important environmental, recreational and educational resource, including the Green Chain Walk, seeking to improve public access to and through the area, and promoting it as a recreational resource and visual amenity;

j. supporting the creation of new cycling and walking routes to connect publicly accessible open spaces to main destination points, such as Town Centres, public transport hubs, community facilities, and other publicly accessible open spaces;

k. ensuring all new developments deliver a net increase to green infrastructure;

I. seeking opportunities in new development, where appropriate, to provide new open space, play space and/or public realm, either through direct provision of new open space or improvement of existing open space through planning obligations;

n. protecting and enhancing the biodiversity, heritage and archaeological values of open spaces, including the Thames ...

q. protecting green wildlife and ecological corridors, seeking opportunities to increase connectivity between the network of green spaces and habitats to enhance biodiversity and promote accessibility wherever appropriate; and

- r. seeking opportunities to support the functions and drivers for green infrastructure...'
- 6.3.18. Paragraph 5.60 recognises green chains as important to London's open space network, recreation, and biodiversity. '*They consist of footpaths and the open spaces*

that they link, which are accessible to the public. The Southeast London Green Chain forms part of a virtually continuous arc of public and private open spaces, largely in recreational use, which extends through the London boroughs of Bexley, Bromley, Lewisham and Royal Greenwich.'

6.3.19. At paragraph 5.70, the Bexley Local Plan advises that:

'New developments have an important part to play in the protection and enhancement of Bexley's open spaces and waterways. This includes contributing towards open space provision, making a positive contribution to green infrastructure and the public realm, and enhancing biodiversity. Open spaces also have a significant positive impact on health and wellbeing.'

- 6.3.20. Consequently, at paragraph 5.73, the Council seeks enhanced provision for biodiversity in open spaces, which may be realised through partnership working and funding opportunities.
- 6.3.21. Policy SP9 is concerned with protecting and enhancing biodiversity and geological assets. There are no geological assets within the Site Boundary, but both the Erith Marshes SINC and Crossness LNR are covered by this policy.
- 6.3.22. Item 1,d. of policy SP9 seeks to protect, conserve, restore and enhance ecological networks, SINC, LNR, Strategic Green Wildlife Corridors and local wildlife corridors, 'thus securing measurable net gains for biodiversity, recognising and promoting those sites where ecological value has increased to a higher grade of nature conservation importance'.
- 6.3.23. The Erith Marshes SINC and Crossness LNR are therefore primarily protected for their biodiversity assets under policy SP9 of the Bexley Local Plan and policy G6 of the London Plan. A description of these designated sites, and the reason for their importance is presented within Chapter 7 Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1).
- 6.3.24. The Planning Statement recognises that the habitats protected by these policy designations contribute to the user's experience of Accessible Open Land within the Site Boundary.

Bexley Green Infrastructure Study [23]

- 6.3.25. The Bexley GI Study states 'green infrastructure is multifunctional in that it delivers a range of benefits to people (both physical and mental wellbeing), biodiversity, landscape, reducing local temperatures, climate change adaptation and mitigation, and alleviating flood risk. The benefits of GI can be felt at a local, regional and national scale.' (paragraph 2.4)
- 6.3.26. The Bexley GI Study recognises the areas of open space within the Site as natural and semi-natural urban green spaces, the majority freely accessible with some restricted access.

- 6.3.27. It confirms that access to nature is increasingly seen as a key component of living in an urban environment, and local SINC are therefore particularly important in or near areas otherwise deficient in nearby wildlife sites. (paragraph 1.39)
- 6.3.28. At paragraph 1.42, the Bexley GI Study advises 'strategic green wildlife corridors' have been identified with the intention of protecting connectivity between SINC, and 'the corridors allow for connectivity particularly from east to west as well as north to south in certain places, notably in the area around the route of the Green Chain Walk from Thamesmead to Lesnes Abbey. Sites adjoining, or close to the River Thames will generally benefit from enhanced connectivity.'
- 6.3.29. The Study states that the provision of green infrastructure in the borough should be 'informed by the need for habitats to become bigger, better and more joined up; whilst also providing more habitats.' (paragraph 1.45). Further that 'where new development is coming forward, the potential for ecological enhancement can be considered at multiple scales and incorporated into the master planning process in order to ensure all opportunities are identified.' (paragraph 1.46)
- 6.3.30. Appendix D of the Study provides an audit for the area of Erith Marshes SINC within the Site Boundary. The Appendix identifies that the benefits to be prioritised for future management or enhancement in this area are: access; informal recreation; natural habitats/biodiversity; character setting; amenity; and education interest.

SUMMARY

- 6.3.31. Open spaces and green infrastructure are recognised in NPS EN-1, the NPPF and development plan policy as valuable assets delivering a number of environmental, societal and health benefits. The designations that lie within the Site Boundary demonstrate that all these benefits are present.
- 6.3.32. Policy seeks to protect both open space and green infrastructure, and makes clear an expectation that mitigation will be required in response to development which affects provision of these assets. That mitigation may take the form of either improvement of existing open spaces/green infrastructure, or new provision.
- 6.3.33. Policy seeks to protect sites of nature conservation (including SINC and LNR) for their biodiversity value, but they are also recognised as important spaces for people, and policy encourages access to them. It is this access element of policy that is considered here; the effect on the biodiversity value is assessed in the ES at Chapter 8: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1) and in this Planning Statement at section 7.

6.4. POLICY ANALYSIS

ACCESSIBLE OPEN LAND AND GREEN INFRASTRUCTURE

Description

- 6.4.1. As with MOL (paragraph 5.4.1) the Proposed Scheme will result in the net loss of, and compromise to, land designated as open space and green infrastructure. The greatest area to be directly affected by the Proposed Scheme will be 3.5ha. This comprises: 2.5ha being the East and Stable Paddocks, which will be lost to development; and approximately 1ha of land on which the Flue Gas Supply Ductwork would be constructed, and would consequently compromise the Sea Wall Field and West Paddock, with the impact to be minimised through detailed design. Crucially, however, there will be no loss of Accessible Open Land resulting from the Proposed Scheme, i.e. land that is actually used as open space.
- 6.4.2. Recognising that enjoyment of open space and green infrastructure is informed by the habitat within those designations as well as the nature of the space, this section draws from ES chapters 7: Terrestrial Biodiversity, Chapter 9: Historic Environment, 10: Townscape and Visual, 14: Population, Health and Land Use and 21: Cumulative Effects in forming the planning judgement presented in this document.
- 6.4.3. Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1) explicitly considers habitat loss and fragmentation across the habitats contained within the Site Boundary. The assessment concludes that there will be no significant effects to terrestrial biodiversity during construction of the Proposed Scheme following the implementation of mitigation measures to include habitat creation and enhancement within the Carbon Capture Facility, the Mitigation and Enhancement Area and the BNG Opportunity Area, all of which are secured through the Outline LaBARDS (Document Reference 7.9). This approach includes making provision for water vole, such that they too would not suffer significant residual effect from construction of the Proposed Scheme. Implementation of measured within the Outline CoCP (Document Reference 7.4) is concluded to be appropriate to reduce other effects on terrestrial biodiversity to a not significant level during construction.
- 6.4.4. During operation of the Proposed Scheme, the chapter concludes that the Outline LaBARDS (Document Reference 7.9) will reduce most of the significant adverse effects to be insignificant. Consequently, the only potentially significant residual effect to terrestrial biodiversity is in relation to changes in air quality. These can be considered further, and sought to be managed, through detailed design and the measures set out in Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) which will be delivered through implementation of the Operational Environmental Management Plan, as secured by a requirement of the Draft DCO (Document Reference 3.1).
- 6.4.5. Chapter 9: Historic Environment (Volume 1) of the ES (Document Reference 6.1) concludes that there are no residual, significant, adverse effects as a result of the

Proposed Scheme, with uncertainty only found in relation to the Thames foreshore (marine environment).

- 6.4.6. Chapter 10: Townscape and Visual (Volume 1) of the ES (Document Reference 6.1) considers the effects on townscape character and visual amenity during both construction and operation phases, including an assessment of the views that are available to people who may be affected by the Proposed Scheme, including their perception and response to changes in these views, and visual amenity.
- 6.4.7. The assessment concludes significant adverse effects during construction and operation phases on townscape character and visual amenity from Accessible Open Land and PRoW within the Site Boundary, even at year 15. However, these significant effects are felt locally; beyond the Site Boundary, Chapter 10 reports adverse effects that are not significant.
- 6.4.8. In its undeveloped state, the Site is visually open, but the character is compromised by the presence of industrial and large scale logistics development, and infrastructure that adjoins the Site. The Carbon Capture Facility will alter the character of the Site with the introduction of further built development and infrastructure.
- 6.4.9. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the Proposed Scheme on the amenity of those using Accessible Open Land. For the purpose of the assessment, amenity is considered as a combination of air quality and noise levels and visual amenity as experienced by users.
- 6.4.10. The assessment concludes significant adverse effects to users of FP2 and Accessible Open Land during the construction phase, with these reducing to be not significant during the operation phase. Chapter 14 recognises that construction of the Proposed Scheme may lead to a temporary loss in amenity as a result of increases in noise and air pollution, and changes in views that may deter some users from the Accessible Open Land.
- 6.4.11. Except for those areas to be used for development of the Carbon Capture Facility, land designated for open space and green infrastructure within the Site Boundary remains open, even that which is not accessible to the public. There is potential that user experience could be impacted by a reduction in birds using the habitats within the retained open land area, however the ecological impact on the habitats used by these bird populations is considered to be negligible. The improvements proposed for the Mitigation and Enhancement Area will also present opportunities for habitat creation and enhancement. Proposed planting will establish over time and support the integration of the Carbon Capture Facility into the local landscape (albeit there remains likely to be a significant, permanent, adverse effect on Townscape).
- 6.4.12. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) also considers potential effects to walkers and cyclists using the PRoW, including through reference to Appendix 14-1: Public Rights of Way and Public Open Land Surveys Report (Document Reference 6.3.14).

- 6.4.13. FP2 is located within the Site and would need to be diverted during construction and permanently diverted as a result of the construction activities and for the operational requirements of the Carbon Capture Facility. Diversion routes would be localised and agreed with LBB.
- 6.4.14. The construction of the Access Trestle for the Proposed Jetty will cross over, in the air space, England Coast Path (FP3/NCN1). Wherever practicable the England Coast Path (FP3/NCN1) and FP4 will remain open, albeit specific construction activities for the Proposed Jetty may require limited closures to be managed in a priority order of: using banksman; or nighttime closure; or, where the above options are not practicable, a signed diversion route, of hard surface and suitable for all users, is to be provided. Construction sequencing will be such that FP4 is not closed during periods in which it is required to facilitate a diversion for the England Coast Path (FP3/NCN1).
- 6.4.15. Construction of the Proposed Scheme will lead to changes in amenity experienced by users of these walker and cyclist routes. For example, the construction works could lead to increased noise levels, dust generation and changes to views from walker and cyclist routes. The assessment concludes significant adverse effects to users of England Coast Path, NCN1, FP2, FP3 and FP4 during the construction phase, with these reducing to be not significant during the operation phase.
- 6.4.16. It is anticipated that once operational, the majority of PRoW within the Study Area will remain largely unaffected by the Proposed Scheme and all temporary construction diversions would be removed, although FP2 would have been permanently diverted (this would be a very localised diversion). There may be some long term permanent reductions in amenity due to changes in visual amenity and operational noise, but this is unlikely to deter users due to the existing industrial location of the Site.
- 6.4.17. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) identifies a Moderate Adverse (Significant) intra-project effect on Users of Accessible Open Land during both the construction and operation phases of the Proposed Scheme, advising that there is no further practicable mitigation that can be applied.
- 6.4.18. An inclusive design approach has been used, not least as explained in the **Design Approach Document (Document Reference 5.6).** The proposed massing of carbon capture built development and infrastructure reduces in intensity of scale from north to south, focusing higher elements to the north associated with existing tall structures at Riverside 1 and 2. The elements of the Carbon Capture Facility in the south of the Site will be lower, less dense and less industrial in character, and this will support a looser and more visually open development character that steps down to engage with the nearby local community of Belvedere, and also support the establishment of a generous physical and visual approach to the Mitigation and Enhancement Area and the proposed extended local nature reserve.
- 6.4.19. The Mitigation and Enhancement Area will remain visually open and characterised by an increased coherence of 'natural' landscape, supported through an extended

management regime supporting grazing marsh habitat improvement. The direct loss of habitat resulting from the Carbon Capture Facility located in the MOL is comprehensively mitigated, delivering habitat creation and enhancement. A wide ranging and comprehensive approach to terrestrial biodiversity is proposed across the Mitigation and Enhancement Area and secured through the **Outline LaBARDS** (**Document Reference 7.9**). In addition, the Proposed Scheme includes a commitment to deliver at least 10% BNG prior to this becoming a statutory requirement for development of this type.

- 6.4.20. An integrated solution across the Mitigation and Enhancement Area is proposed, which is designed to deliver user/visitor information and facilities (including the potential for an outside classroom), re-wetting of the soils through alterations to the ditch network, tree planting and pond/wetland creation. This land also provides opportunity for improved access (all weather access routes, gateways, bridges and boardwalks) and proposes two new public rights of way.
- 6.4.21. The **Design Approach Document (Document Reference 5.6)** and **Outline** LaBARDS (Document Reference 7.9) set out plans to improve and enhance signage and surfacing of all PRoW within the Site Boundary, removing overgrown vegetation as well as reviewing the removal of some obstacles such as gates. Raised walkways are also intended to be provided so that Crossness LNR remains accessible during wet periods. In addition, a new permissive paths and waymarked circular active routes route will be provided within the Norman Road Field land parcel and Crossness LNR, providing better access across the LNR as well as Southmere Park.
- 6.4.22. At paragraph 5.11.1, NPS EN-1 recognises that there may be particular effects from energy infrastructure projects on open space including green infrastructure, and reiterates government policy 'to ensure there is adequate provision of high quality open space and sports and recreational facilities to meet the needs of local communities.' The Proposed Scheme does have an effect on land within the Site Boundary designated for open space and green infrastructure. Critically, there is no loss of Accessible Open Land and the remains adequate provision of high quality open space and recreational facilities; these are proposed to be enhanced through the opportunities presented in the Proposed Scheme.
- 6.4.23. The Proposed Scheme responds positively to NPPF, London Plan and Bexley Local Plan objectives through avoiding loss of publicly accessible land, protecting the heritage and archaeological values of open spaces, promoting restoration and enhancement of open spaces, improving habitat and delivering objectives of the Crossness LNR Management Plan, and creating the opportunity for new cycling and walking routes. The functions and drivers for green infrastructure are maintained and enhanced through the proposed measures.
- 6.4.24. Further, proposals set out in the **Outline LaBARDS (Document Reference 7.9)** respond to the areas for improvement identified in Bexley Green Infrastructure Study.

In its response to statutory consultation on the Proposed Scheme, LBB commented (on page 7) that the 'proposed rights of way within the site are therefore welcomed as they work towards providing more choice of access to the river. This also supports Policy DP17 Publicly accessible open space, that requires new development to provide access to open space, particularly where there is a deficiency in access. The adjacent industrial area is identified as deficient in access to open space, therefore the new route 'Opportunity 2' is particularly important due to the potential positive effect it may have. In addition, any improvements to the existing Public Right of Way (PROW) 'Opportunity 4' are welcomed as this would improve the link to a residential area, allowing for alternative sustainable travel options for staff at the site.'

- 6.4.25. Figure 7 of the Bexley Local Plan presents areas of open space deficiency across the borough, which includes the Belvedere Industrial Area referenced in LBB's statutory consultation response.
- 6.4.26. It is concluded that, despite the changes in amenity resulting from the Proposed Scheme, the proposals across the Mitigation and Enhancement Area will deliver opportunities to improve the overall amenity and user experience of the Accessible Open Land, delivering NPS EN-1 and Bexley Local Plan policy priorities. They will enable access to this land across all seasons, encouraging active and healthy lifestyles, points of engagement and benefit for users, increasing the use of this land and consequently its benefit. Further, they will tie in with opportunities beyond the Site Boundary, such that the potential for these resources to provide positive environmental, social, health and economic benefits is delivered.

Mitigation Hierarchy

- 6.4.27. Application of the mitigation hierarchy as set out at section 5 above, similarly applies to consideration of open space and green infrastructure.
- 6.4.28. NPS EN-1 (at paragraph 4.3.22) makes clear that a reasonable alternative is one 'that can meet the objectives of the proposed development'. To deliver the objectives of the Proposed Scheme requires the built form of the Carbon Capture Facility to be located close to Riverside 1 and Riverside 2. The TSAR (Document Reference 7.5) explains (at section 2.2) any reasonable alternative in choosing the location for the Carbon Capture Facility needs to be aligned with the following objectives:
 - located in the vicinity of the Riverside Campus and the River Thames, for efficient connection to EfW facilities and the Proposed Jetty;
 - of sufficient size to accommodate the Carbon Capture Facility, including its Supporting Plant and Associated Infrastructure in order to capture and process the carbon created by both Riverside 1 and Riverside 2; and
 - deliverable in a timely manner.
- 6.4.29. Site options that cannot meet these objectives are not reasonable alternatives.

- 6.4.30. The **TSAR (Document Reference 7.5)** demonstrates that the availability of reasonable site alternatives for the Carbon Capture Facility are limited and that having considered a number of Development Zones and concluding that the South Zone is preferred to achieve the Project Objectives and Optioneering Principles, and that in order to meet the objectives of the proposed development within the South Zone, impact to land designated as open space/green infrastructure cannot be avoided.
- 6.4.31. However, it is also correct that the site selected for the Carbon Capture Facility (South Zone 1) minimises the impact on open space/green infrastructure designations when compared to the other alternatives considered. The Carbon Capture Facility requires a site area of some 8ha and the area of land designated as MOL and lost to development is limited to 2.5ha of that area, or 31%.
- 6.4.32. The remainder of the Carbon Capture Facility uses land allocated in the development plan as SIL, all of which has received consent for economic development; with access and utilities placed within the public highway. Most of the land area required for the Carbon Capture Facility does not fall within the open space or green infrastructure designations.
- There is insufficient land area within the allocated SIL land to support the entire 6.4.33. delivery of the Carbon Capture Facility. Even if it were possible to accommodate the Carbon Capture Facility within this area, there would remain some level of harm to the open space/green infrastructure designation covering the Sea Wall Field, West Paddock and East Paddock. The Flue Gas Supply Ductwork, an essential piece of infrastructure, would remain necessary to transport the flue gas from the northern end of Riverside 2 to the Carbon Capture Plant(s). Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1) demonstrates why the route wrapping around Riverside 2 is preferred and the potential to further mitigate impact through detailed design. However, if the Flue Gas Supply Ductwork was required to cross East Paddock to reach a carbon capture scheme located further south, the impact of it would be extended across this area of open space/green infrastructure designation. There would still remain an impact on these designations in East Paddock whether or not the Carbon Capture Facility is built in this location. Stable Paddock may not be lost in this scenario, but it is intended as an area of buffer planting for the Carbon Capture Facility in any event, a purpose that aligns with open space and green infrastructure objectives. In any event, and as previously noted, none of these areas are Accessible Open Land and so are not used as public open space.
- 6.4.34. Further, locating the Carbon Capture Facility southward would leave no opportunity to improve access to the Accessible Open Land from Norman Road, which forms a key part of the access and recreation proposals described in the **Design Approach Document (Document Reference 5.6)** and **Outline LaBARDS (Document Reference 7.9)**. The parameters of the **Works Plans (Document Reference 2.3)** alongside the **Design Principles and Design Code (Document Reference 5.7)** for

the Carbon Capture Facility includes the opportunity to allow for the establishment of a generous public access to the proposed extended local nature reserve at the southern end of Norman Road. The Proposed Scheme retains the potential to use land at the southern end of the Carbon Capture Facility for local benefit such as access improvements, parking, habitat and/or water attenuation purposes.

- 6.4.35. These access improvements are important to address a locally identified deficiency, they will provide a safe and high quality entrance to an enhanced area of Accessible Open Land, provision publicly accessible open space and offering space for nature, all as sought by Bexley Local Plan policy DP17.
- 6.4.36. The mitigation hierarchy has been applied to good effect, avoiding Accessible Open Land and minimising harm so as to maintain the function of land designated within the Site Boundary as open space or green infrastructure.

CONCLUSION

- 6.4.37. The Proposed Scheme will result in the net loss of the Stable and East Paddock of the Crossness LNR and compromise Sea Wall Field and West Paddock to some extent; all these land parcels also fall within the Erith Marshes SINC and Southeast London Green Chain. However, none of this land is Accessible Open Land.
- 6.4.38. Impacts to biodiversity are limited due to the mitigation measures that will be implemented during construction and operation, albeit there remains potential for significant adverse effect due to changes in air quality as a result of the operation of the Proposed Scheme. Impacts to the historic environment are not significant.
- 6.4.39. The Carbon Capture Facility will alter the character of the Site with the introduction of new built development and infrastructure, having townscape and visual impact. However, these effects are felt locally, and rapidly dissipate beyond the Site Boundary; what will remain visually apparent will be subject to design control through approved **Design Principles and Design Code (Document Reference 5.7).**
- 6.4.40. User amenity within Accessible Open Land will be affected during construction of the Proposed Scheme. However, this impact will be temporary, with long term enhancement provided through the operational lifetime of the Carbon Capture Facility.
- 6.4.41. The demonstrated limited harm would be set within the context of carefully considered environmental, access and recreation proposals to be delivered by the Proposed Scheme under the **Outline LaBARDS (Document Reference 7.9**).
- 6.4.42. Policy G4 of the London Plan states that development proposals should not result in the loss of protected open space, and where possible create areas of publicly accessible open space. Additionally, Policy SP8 of the Bexley Local Plan aims to resist harmful development of amenity green spaces, and seeks enhancement of open space within new developments. Bexley Local Plan policy DP17 focusses attention to publicly accessible open spaces and these are protected in the long term by the Proposed Scheme.

- 6.4.43. The mitigation hierarchy has been applied to good effect, avoiding Accessible Open Land and minimising harm so as to maintain the function of land designated within the Site Boundary as open space or green infrastructure.
- 6.4.44. It is concluded that, despite the changes in amenity resulting from the Proposed Scheme, the proposals across the Mitigation and Enhancement Area will deliver opportunities to improve the overall amenity and user experience of the Accessible Open Land, delivering NPS EN-1 and Bexley Local Plan policy priorities. Whilst designated 'open space', only Non-Accessible parts of the designated land is directly impacted by the Proposed Scheme. They will enable access to this Land across all seasons, encouraging active and healthy lifestyles, points of engagement and benefit for users, increasing the use of this land and consequently its benefit. Further, they will tie in with opportunities beyond the Site Boundary, such that the potential for these resources to provide positive environmental, social, health and economic benefits is delivered.
- 6.4.45. The measures of the Proposed Scheme are secured through the Works Plans (Document Reference 2.3), Design Principles and Design Code (Document Reference 5.7) and the Outline LaBARDS (Document Reference 7.9).

GRAZIERS

Description

- 6.4.46. The East Paddock and Stable Paddock (that forms part of the Crossness LNR) and Norman Road Field (all located within the Site) have been leased under grazing rights to two separate graziers. All of the Crossness LNR and Norman Road Field is available for grazing throughout the year, however horse numbers and occupancy of the field parcels varies throughout the year.
- 6.4.47. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document 6.1) has considered the effect on graziers during both the construction and operation phases of the Proposed Development.
- 6.4.48. During construction, the horses would need to be relocated either within the Site, with safety and security measures in place, or outside the Site Boundary. The Applicant will reach an agreement with the graziers on an appropriate temporary location arrangement for the horses during the construction phase, as required.
- 6.4.49. Both the East Paddock and Stable Paddock would be permanently lost to the Proposed Scheme, this resource would no longer be available for use for grazing. However, the grazier will be able to use the remainder of the Crossness LNR that is current access and the stable block would be relocated. The worst case assumption is used that the Flue Gas Supply Ductwork will compromise a further 1ha of land used for grazing. However, the Flue Gas Supply Ductwork should have a negligible effect on horse grazing as the rest of the land adjacent to the ductwork would still be able to be utilised.

- 6.4.50. The Thames Water Access Road is currently used by grazier to gain access to the Crossness LNR and the Stable Paddock. This route may be diverted to optimise site layout of the Proposed Scheme; with any replacement access road designed to be suitable for its current type and level of usage.
- 6.4.51. Norman Road Field is included within the Site Boundary for mitigation purposes and not built development. It consequently would not be permanently lost and will be available to the grazier during the operation phase. Appropriate access will be maintained for the graziers.
- 6.4.52. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document 6.1) concludes residual effects that are not significant.
- 6.4.53. Neither NPS EN-1 nor development plan policy presents a framework for grazing as a land use, albeit it is a use that would fall within the framework of Bexley Local Plan pocliy SP8.
- 6.4.54. It is recognised that there would be a net loss of land available for one grazier as result of the Proposed Scheme and that the proposed habitat and amenity improvements cannot replace this loss. However, it is considered to be a limited harm to a private interest as the Stable and East Paddocks are not Accessible Open Land. Further, there will remain land for grazing, it is not wholly lost. The proposed improvements to grassland habitat should improve grass quality and availability, particularly within the Norman Road Field land parcel, which provide some benefit for the graziers.

Mitigation Hierarchy

- 6.4.55. The mitigation hierarchy for these other harms is essentially the same as for the harm by inappropriate development set out above, from paragraph 6.4.27.
- 6.4.56. Reasonable site alternatives for the Carbon Capture Facility are limited; it is not possible to avoid all impact on the land available to graziers and meet the objectives of the Proposed Scheme.
- 6.4.57. The loss of such land has been minimised, and the impact minimised through reprovision of the stable and habitat creation and improvement.
- 6.4.58. The residual harms are limited in spatial extent and to a private party. During the long term, there will remain grazing land available to both graziers.

CONCLUSION

- 6.4.59. The Proposed Scheme will result in the net loss of the Stable and East Paddock of the Crossness LNR and a negligible level of compromise to Sea Wall Field and West Paddock. All these land parcels are used for grazing, though not necessarily all year.
- 6.4.60. The loss of grazing land is minimised and affects one private interest. There is no material impact to the general public, grazing is maintained in the long term and replacement stabling is proposed. The improved grassland habitat should enhance

grass quality and availability into the future. The mitigation hierarchy has been applied to good effect such that it is concluded that there is no material policy conflict.

6.5. DECISION MAKING FACTORS

6.5.1. Paragraph 5.11.32 of NPS EN-1 states:

'The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements or the Secretary of State determines that the benefits of the project (including need), outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.'

- 6.5.2. The net loss of land designated as open space is recognised, however, there is no loss of Accessible Open Land.
- 6.5.3. The loss of East and Stable Paddocks (Non-Accessible Open Land) will be a direct loss to one grazier. However, there will be grazing land remaining for both graziers, with the potential for the grass to be improved, and reprovision of the stable block is proposed. This is, consequently, a limited loss.
- 6.5.4. In any event, there exists important and relevant benefits of the Proposed Scheme that outweigh the limited loss of the Non-Accessible Open Land. These exist without the positive proposals made by the Applicant to create new and improved features of open space and green infrastructure.
- 6.5.5. The need for the Proposed Scheme is set out in global priorities, national legislation and demonstrated through NPS EN-1. There is such a strong need for decarbonisation of our society that the Proposed Scheme is recognised as part of the critical national priority infrastructure necessary to ensure a secure, reliable and affordable low carbon energy system in the UK.
- 6.5.6. The overriding benefit of the Proposed Scheme is the capacity to capture at least 95% of the Carbon Dioxide emitted from each of Riverside 1 and Riverside 2, and to do so in a timely manner. Assuming a nominal assumed throughput, this is equivalent to approximately 1.3Mt CO₂ per year. Table 13-10 of Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline.
- 6.5.7. Further, the Chapter concludes that: between 2033 and 2037 there will be -7,886,104 of CO₂, which is a reduction of 0.81% for the UK sixth carbon budget; and from 2028 to 2032 there would be -3,095,422 of CO₂, a reduction of 17.2% for the London 2028 to 2032 carbon budget. The feedstock to Riverside 1 and Riverside 2 comprises

approximately 50% biogenic content, such that the Carbon Capture Facility would result in net-negative CO_2 emissions of approximately 0.6Mt per year of CO_2 .

- 6.5.8. The payback period, 'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme' is less than 5 weeks.
- 6.5.9. The Applicant has its own aspiration to get to net zero by 2040 and to have carbon capture operational by 2030. The Proposed Scheme would materially contribute towards the government's aspirations for early delivery of infrastructure, such as seen in the UK Net Zero Strategy ambition to deploy '*at least 5 MtCO*₂/year of engineered [GHG] *removals by 2030*.'
- 6.5.10. The Proposed Scheme is demonstrated to make an important and relevant contribution to meeting the national legal target of achieving net zero by 2050, with timely delivery, and providing many of the benefits recognised across national strategies for low carbon energy. Locally, the Proposed Scheme will contribute to the Mayor's aspirations for London to be a zero-carbon city by 2050.
- 6.5.11. Riverside 1 and Riverside 2 are located on land allocated as Strategic Waste Management Site and provide a sustainable treatment route for residual waste. As explained in the **Project Benefits Report (Document Reference 5.4)** they are duly consented developments, and they represent some 50% of the residual waste management capacity in London, providing essential infrastructure for the capital and the south east of England.
- 6.5.12. As confirmed in section 9 of this Planning Statement and the **Project Benefits Report (Document Reference 5.4),** the Proposed Facility will not only decarbonise waste management, but also the energy and recovered byproducts, bringing desired environmental, economic and societal benefits.
- 6.5.13. The Carbon Capture Facility is critical national priority infrastructure that needs to be located close to Riverside 1 and Riverside 2 to deliver the objectives of the Proposed Scheme. There is no pipeline option to take the captured carbon dioxide from the Proposed Scheme to its permanent storage location, road, rail or jettyless transfer are not viable options for LCO₂ export (per Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1); consequently, it needs to be located close to the River Thames and the Proposed Jetty.
- 6.5.14. The benefit of this approach is that the Proposed Scheme demonstrates the viability of NPT options for carbon dioxide, making carbon capture more attractive to other CO₂ emitters who do not have access to pipelines. Proof of concept is necessary to drive forward carbon capture at scale. Furthermore, the Proposed Scheme can act as a catalyst for growth to the UK shipping sector, opening up new markets. These benefits are not quantified, but they are nonetheless relevant and important in determining the Proposed Scheme. They are also additional to the environmental and societal benefits gained from shipping, including reduced vehicles on the public highway and reduced land take.
- 6.5.15. The single, coherent and high standard of design promoted through the Proposed Scheme is an element of mitigation, but it is also a benefit and represents good design as prescribed in NPS EN1.
- 6.5.16. Most of the Carbon Capture Facility will be developed on land allocated as SIL; it is intended to be developed for industrial/commercial/economic purposes. To date, the development proposals that have gained consent at this location could be placed and do not respond to the urgent need for low carbon energy infrastructure.
- 6.5.17. Consultation with the local community, and the local planning authority, has been undertaken from an early stage. The responses (provided in the **Consultation Report (Document Reference 5.1)** have been taken into account in developing the Proposed Scheme. Whilst it has not been possible to avoid using the East and Stable Paddocks for built form, design has been progressed to minimise impact on open space and green infrastructure, including PRoW, within, and in the vicinity of, the Site.
- 6.5.18. During construction the total net additional employment created is estimated to be 1,166.4 per annum, and during operation the total net additional employment created is estimated to be 34.4 jobs per annum (as detailed in Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1). It will also deliver a diversity of employment opportunities both on and offsite, and throughout the supply chain. As described in the Project Benefits Report (Document Reference 5.4), employment opportunities within the Cory Group are well-considered, providing meaningful training and career development.
- 6.5.19. The Proposed Scheme represents substantial investment in the local and national economy, including in innovative technology and emerging sectors. The Proposed Scheme will provide approximately £95,214,107 in GVA to the Greater London economy during construction and £1,556,591 GVA to the Greater London economy during operation. The Proposed Scheme will provide an additional £24,001,304 GVA to the wider economy during construction and an additional £503,324 GVA to the wider economy during operation (as detailed in Chapter 15: Socio-economics (Volume 1) of the ES Document Reference 6.1). The Project Benefits Report (Document Reference 5.4) estimates, the likely benefits to wider society from the carbon savings alone would be £1.7 billion (Net Present Value, 2023 prices). As noted in 'CCUS Supply Chains: A Roadmap to Maximise the UK's Potential (Department for Business, Energy and Industrial Strategy, May 2021):

'CCUS will be essential to that green economy, tackling climate change and meeting the UK's target to reach net zero emissions by 2050. It also has the potential to deliver a stronger, greener UK by levelling up our industrial heartlands, supporting clean growth and providing new economic opportunities for UK-based companies across the world.'

6.5.20. The Proposed Scheme provides the opportunity to develop the SIL for critical national priority infrastructure and to build out the allocated land as a single, comprehensively considered, development underpinned by the Design Principles and Design Code

(Document Reference 5.7), and the associated benefits to be achieved across the Mitigation and Enhancement Area as set out in the Outline LaBARDS (Document Reference 7.9). Good design demonstrably underpins the Proposed Scheme, with delivery of the measures set out in these design documents secured through requirement of the Draft DCO (Document Reference 3.1).

6.5.21. Demonstrably, the benefits of the Proposed Scheme (including need), outweigh the limited loss of open space that is in any event Non-Accessible Open Land, and includes proposals to provide replacement and improved facilities.

6.6. CONCLUSION

- 6.6.1. The Proposed Scheme will result in the net loss of, and compromise to, land designated as open space and green infrastructure. The greatest area to be directly affected by the Proposed Scheme will be 3.5ha. This comprises: 2.5ha being the East and Stable Paddocks, which will be lost to development; and approximately 1ha of land on which the Flue Gas Supply Ductwork would be constructed, and would consequently compromise the Sea Wall Field and West Paddock, with the impact to be minimised through detailed design.
- 6.6.2. Policy G4 of the London Plan states that development proposals should not result in the loss of protected open space, and where possible create areas of publicly accessible open space. Additionally, Policy SP8 of the Bexley Local Plan aims to resist harmful development of amenity green spaces, and seeks enhancement of open space within new developments. Bexley Local Plan policy DP17 focusses attention to publicly accessible open spaces and these are protected in the long term by the Proposed Scheme.
- 6.6.3. There is no loss of Accessible Open Land, but use of the East and Stable Paddocks for grazing is lost.
- 6.6.4. In order to achieve the objectives of the Proposed Scheme, there is no reasonable option that avoids this loss and all reasonable measures have been taken to minimise the consequent impact.
- 6.6.5. Through design development of the Proposed Scheme, enhanced biodiversity and improved access is delivered, key factors of open space and green infrastructure policy. The functionality and connectivity of green infrastructure is maintained in the vicinity of the Proposed Scheme and improvements are proposed to the PRoW network. Consequently, impact to users of Accessible Open Land, including the PRoW, has been minimised.
- 6.6.6. The loss of grazing land is minimised and affects one private interest. There is no material impact to the general public, grazing is maintained in the long term and replacement stabling is proposed. Improved grassland habitat should enhance grass quality and availability into the future. The planning judgement made here is that this loss is limited and does not result in material conflict with planning policy.

- 6.6.7. NPS EN-1 recognises that energy infrastructure project are likely to have particular effects on open space and green infrastructure. Here they are outweighed by the demonstrated need, and important and relevant benefits of the Proposed Scheme, comprising (in summary):
 - the substantial capture of carbon dioxide for permanent storage, contributing a reduction of 0.81% for the UK sixth carbon budget and delivering this necessary infrastructure in a timely manner enabling early targets to be met;
 - societal economic benefit from the carbon savings alone in the region of £1.7 billion;
 - taking sustainable waste management of residual waste to the next level, and enabling consequent decarbonisation of the resultant energy supply and construction materials;
 - extending use of the River Thames, and consequently demonstrating the viability of NPT and providing a catalyst for the shipping sector in the UK;
 - local investment including employment opportunities with meaningful training and career development; and
 - delivering critical national priority infrastructure at a location substantially allocated as SIL, as a single, comprehensively considered, development underpinned by the Design Principles and Design Code (Document Reference 5.7)
- 6.6.8. The improvements proposed to the Mitigation and Enhancement Area (and the associated LNR designation extension) respond to key elements of open space/green infrastructure policy, including the enhancements sought in policies DP17 and SP8 of the Bexley Local Plan.
- 6.6.9. Aligning with the priorities identified in the Bexley Green Infrastructure Study, the measures presented in the **Outline LaBARDS (Document Reference 7.9)** will enable access to the Accessible Open Land across all seasons, encouraging active and healthy lifestyles, points of engagement and benefit for users, increasing the use of this land for the general public and consequently its benefit. Further, they will tie in with opportunities beyond the Site Boundary, such that the potential for these resources to provide positive environmental, social, health and economic benefits is delivered.
- 6.6.10. The breadth and depth of the benefits to be realised through the Proposed Scheme, further discussed in the **Project Benefits Report (Document Reference 5.4)** are only available through this CNP Infrastructure and substantially outweigh the limited loss.

7. MARINE AND TERRESTRIAL BIODIVERSITY

7.1. INTRODUCTION

- 7.1.1. The Site covers an area of some 77ha, comprising 32ha of marine habitat and 45ha terrestrial, much of which is currently, and will remain, undeveloped with built form. Recognising the interaction of marine and terrestrial biodiversity with key elements of the Proposed Scheme, these topics have also been chosen to be addressed discretely, within this section of the Planning Statement.
- 7.1.2. It is set out in the following order:
 - Policy Review;
 - Habitat Regulations;
 - Sites of Special Scientific Interest;
 - Marine Conservation Zones;
 - Regional and Local Sites;
 - Ancient Woodland, ancient trees, veteran trees and other irreplaceable habitats;
 - Protection and enhancement of habitats and species;
 - Cumulative Effects; and
 - Conclusion.
- 7.1.3. The full baseline of terrestrial and marine biodiversity features within the Site is presented within Chapter 7: Terrestrial Biodiversity and Chapter 8: Marine Biodiversity of the ES (Document Reference 6.1). Reference is made to these chapters, and other relevant documents to inform the planning judgement made in this document.

7.2. POLICY REVIEW

- 7.2.1. The relevant policies for biodiversity are:
 - Part 5.4 of EN-1 [3];
 - Policies SE-MPA-1, SE-MPA-2, SE-MPA-3 and SE-MPA-4 (marine protected areas), SE-BIO-1, SE-BIO-2, SE-BIO-3 (biodiversity), SE-INNS-1 and SE-INNS-2 (Invasive non-native species), and SE-DIST-1 (disturbance) of the South East Inshore Marine Plan [5];
 - Paragraphs 180 and 185 188 of the NPPF [19];
 - Policies GG2 (Making the best use of land, GG3 (Creating a healthy city), G1 (Green Infrastructure) G6 (biodiversity and access to nature), G7 (trees and woodlands), G9 (geodiversity), SI14 (Waterways strategic role), and SI17 (Protecting and enhancing London's waterways) of the London Plan 2021 [10]; and

- Policies SP8 (Green infrastructure including designated Green Belt), SP9 (protecting and enhancing biodiversity and geological assets), DP19 (The River Thames and the Thames Policy Area), DP20 (biodiversity and geodiversity in developments), and DP21 (Greening of development sites) of the Bexley Local Plan [11].
- 7.2.2. These policies set out the biodiversity and geological sites protected by legislation, and how applicants should consider impacts to these sites within their application.
- 7.2.3. Paragraph 5.4.17 of EN-1 requires applicants to ensure that the ES sets out 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, including irreplaceable habitats. Chapter 7: Terrestrial Biodiversity, Chapter 8: Marine Biodiversity, Chapter 10: Townscape and Visual and (Arboriculture) of the ES (Document Reference 6.1), and Information to Inform a HRA (Appendix 7- 3 of the ES (Document Reference 6.3) together contain the relevant information and assessments undertaken for the Proposed Scheme.
- 7.2.4. Paragraph 5.4.19 of EN-1 states that applicant should demonstrate how the project has taken advantage of opportunities to conserve and enhance biodiversity, and geological conservation interests. The relevant national and local policies also promote biodiversity enhancement measures in new developments.
- 7.2.5. In response, the Proposed Scheme includes measures across the Mitigation and Enhancement Area (located within the Site Boundary) informed by assessment reported in the **ES (document Reference 6.1-6.4)** to provide habitat mitigation, compensation and enhancement. A Biodiversity Net Gain (BNG) Opportunity Area is also proposed on land at the former Thamesmead, with measures intended to provide compensation for ecological losses resulting from the construction of the Proposed Scheme. These measures, and those to address open space/green infrastructure and access priorities are set out in the **Outline LaBARDS (Document Reference 7.9)**.
- 7.2.6. The Proposed Jetty is located in the marine environment, within the River Thames. Marine biodiversity mitigation measures include fish refuge enhancements such as the inclusion of ropes on the piles of the Proposed Jetty to increase habitat complexity and mimic natural conditions.
- 7.2.7. Its location was determined through a focussed optioneering exercise, including consideration of impacts to marine ecology, explained in the JSAR (Document Reference 7.6). Additionally, an optioneering exercise to determine the Proposed Jetty type and arrangements was undertaken and is detailed in Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1).
- Paragraph 5.4.22 of EN-1 and policy SE-DIST-1 of the South East Inshore Marine
 Plan require consideration of the movement of mobile/migratory species, and their
 potential to interact with infrastructure, and consider transboundary effects. Chapter
 7: Terrestrial Biodiversity and Chapter 8: Marine Biodiversity (Volume 1) of the

ES (Document Reference 6.1) considers impacts to birds, fish and marine and terrestrial mammals, this is discussed further below. The Applicant considers that transboundary impacts will not occur due to the localised physical nature of the works; and given that any emissions are unlikely to travel to any other EEA state from the Site. The Planning Inspectorate agreed with this approach as part of the **Scoping Opinion** [6].

7.2.9. Paragraph 5.4.23 of EN-1 requires vessels used by the project to follow existing regulations and guidelines to manage ballast water. Additionally, policies SE-INNS-1 and SE-INNS-2 of the South East Inshore Marine Plan state that proposals should minimise the risk of introducing, transporting, or spreading invasive non-native species. The Thames is subject to control and management of ballast water as stipulated by the MMO which all vessels will adhere to. This has been considered in the assessment of effects to INNS in Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1)

7.3. HABITAT REGULATIONS

- 7.3.1. Habitats Sites are statutory designated sites of importance to nature conservation that are protected by the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation 'Competent Authorities' must assess Plans and Projects for their potential to cause 'Likely Significant Effects' (LSE) on Habitats Sites in accordance with the National Planning Policy Framework (NPPF, 2021). The assessment process is commonly referred to as Habitats Regulations Assessment (HRA).
- 7.3.2. At paragraph 5.4.25, NPS EN-1 advises applicants to seek the advise of the appropriate statutory nature conservation body and provide the SoS with such information as they may require to determine whether an HRA Appropriate Assessment is required. The Applicant has sought the advise of the appropriate statutory nature conservation body as set out in **Chapter 7: Terrestrial Biodiversity** and **Chapter 8: Marine Biodiversity** of the **ES (Document Reference 6.1)**.
- 7.3.3. A Habitats Regulations Assessment ('HRA') has been undertaken, this is provided in **Information to Inform a HRA (Appendix 7-3)** of the **ES (Document Reference 6.3)**.
- 7.3.4. There is one internationally designated terrestrial biodiversity site (Epping Forest SAC) within 15km of the Site Boundary (shown on Figure 7-2: Internationally Important Statutory Designated Sites (Volume 2) of ES (Document Reference 6.2)).
- 7.3.5. One Likely Significant Effect (LSE) was identified at the screening stage that could potentially affect the Epping Forest SAC. This was changes in air quality during the operation phase of the Proposed Scheme. A Stage 2 Appropriate Assessment was undertaken to provide the required information for the competent authority to make an informed decision on the Proposed Scheme.

7.3.6. This concludes that none of the four Qualifying Features of Epping Forest SAC receive an adverse effect on their integrity as a result of the Proposed Scheme alone or in combination with other plans and projects, as air quality changes across the five pollutants modelled would be <1.0% (rounded to 1dp), a changed classed as 'negligible'. Therefore, no adverse effects on integrity have been identified on Epping Forest SAC, and no further HRA stages are required.

7.4. SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)

- 7.4.1. There are five statutory nature conservation sites designated as SSSI within 10km of the Site Boundary (shown on Figure 7-3: Nationally Important Statutory Designated Sites (ES Volume 2) (Document Reference 6.2):
 - Inner Thames Marshes SSSI;
 - Ingrebourne Marshes SSSI;
 - Oxleas Woodlands SSSI;
 - Ruxley Gravel Pits SSSI; and
 - West Thurrock Lagoon and Marshes SSSI.
- 7.4.2. Impacts of the Proposed Scheme during construction and operation on the above SSSI have been considered in Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1).
- 7.4.3. The assessment concludes a Negligible (not significant) effect to SSSI during both construction and operation.

7.5. MARINE CONSERVATION ZONES (MCZ)

- 7.5.1. Paragraphs 4.2.18 to 4.2.22 of NPS EN-1 detail how the SoS should consider applications for CNP infrastructure which will have any MCZ residual impacts.
- 7.5.2. Paragraph 4.2.20 of EN-1 states 'if during an MCZ assessment, CNP Infrastructure has residual impacts which significantly risk hindering the achievement of the stated conservation objectives for the MCZ, the Secretary of State will consider making a derogation under section 126(7) of the Marine and Coastal Access Act 2009.'
- 7.5.3. The Medway Estuary MCZ (Zone 1 & 2 Boundary) is located 25km downstream and southeast of the Site Boundary. Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the likely significant effects of the Proposed Scheme on the Medway Estuary MCZ.
- 7.5.4. Chapter 8, and the **Mitigation Schedule (Document Reference 7.8)** details the embedded avoidance, mitigation and compensation measures that will be in place during construction and operation of the Proposed Scheme, and details how these measures will be secured.
- 7.5.5. When considering the impact of the Proposed Scheme with the mitigation measures applied, the assessment concludes that during construction there will be a Minor

Adverse (not significant) effect on the Medway Estuary MCZ in relation to changes in water quality and release of contaminants and a Negligible (not significant) effect on the Medway Estuary MCZ in relation to habitat loss or disturbance, noise and vibration, lighting, change in suspended sediment levels and subsequent sediment deposition, increase wave wash and spread of INNS.

- 7.5.6. When considering the impact of the Proposed Scheme with the mitigation measures applied, the assessment concludes that during operation there will be a Negligible (not significant) effect on the Medway Estuary MCZ in relation to habitat loss or disturbance, changes in water quality and release of contaminants, noise and vibration, lighting, changes in suspended sediment concentrations and subsequent sediment deposition, increase wave wash, and spread of INNS.
- 7.5.7. Given the results of the assessment within **Chapter 8: Marine Biodiversity (Volume** 1) of **ES (Document Reference 6.1)**, it is considered that the Proposed Scheme will not have a residual impact which significantly risks hindering the achievement of the stated conservation objectives for the Medway Estuary MCZ, and therefore the SoS is not required to make a derogation under section 126(7) of the Marine and Coastal Access Act 2009)

7.6. REGIONAL AND LOCAL SITES

- 7.6.1. There are three statutory nature conservation sites designated as LNR within 2km of the Site Boundary. These are:
 - Crossness LNR;
 - Rainham Marshes LNR; and
 - Lesnes Abbey Woods LNR.
- 7.6.2. Three non-statutory designated sites are partially located within the Site. These are:
 - Erith Marshes MSINC;
 - Belvedere Dykes SINC; and
 - River Thames and Tidal Tributaries MSINC.
- 7.6.3. A further 18 non-statutory designated sites are situated within 2km of the Site Boundary, the closest of which are Lower River Beam and Ford Works Ditches SINC and Dagenham Breach and the Lower Beam River in Dagenham SINC, which both lie approximately 500m to the north of the Site Boundary.
- 7.6.4. As confirmed at paragraph 17.6.17 of Chapter 17: Ground Conditions and Soils Volume 1) of the ES (Document Reference 6.1) there are no RIGS located within the Study Area for the Proposed Scheme.
- 7.6.5. Chapters 7 and 8 of the ES (Volume 1) (Document References 6.1) and the Mitigation Schedule (Document Reference 7.8) detail the embedded and additional avoidance, mitigation and compensation measures that will be in place to minimise impacts to regional and local sites during construction and operation of the Proposed

Scheme, and details how these measures will be secured. This includes the measures in the **Outline CoCP (Document Reference 7.4)**, the provision for habitat creation and enhancement in the **Outline LaBARDS (Document Reference 7.9)** and operational management measures to be implemented through the the Operational EMP, as secured by a requirement of the **Draft DCO (Document Reference 3.1)**.

- 7.6.6. As a result of the Carbon Capture Facility, there is recognised loss of, and compromise to, areas of Crossness LNR and Erith Marshes SINC. Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document 6.1) concludes that in respect of the Crossness LNR, Erith Marshes MSINC, Belvedere Dykes SINC, and River Thames and Tidal Tributaries MSINC, following implementation of the mitigation measures:
 - the residual effect during the construction phase is anticipated to be Minor Adverse (not significant) for noise and vibration and changes to air quality;
 - the residual effect during the construction phase is anticipated to be Negligible (not significant) for lighting and habitat loss and fragmentation;
 - the residual effect during the operation phase is anticipated to be Negligible (not significant) for noise and vibration, lighting and shading;
 - the residual effect is anticipated to be potentially up to Moderate Adverse (significant) in respect of air quality impacts during the operational phase.
- 7.6.7. Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document 6.1) concludes no significant residual impacts.
- 7.6.8. Paragraph 5.4.52 of NPS EN-1 requires the SoS to give 'due consideration to regional or local designations. However, given the need for new nationally significant infrastructure, these designations should not be used in themselves to refuse development consent.'
- 7.6.9. The Mitigation and Enhancement Area will deliver both the creation and enhancement of habitats and includes extending the LNR designation to encompass Norman Road Field. This would deliver an expanded Crossness LNR under a single management plan, providing wider amenity and biodiversity benefits across a larger land area. As set out in the **Outline LaBARDS (Document Reference 7.9)** the Mitigation and Enhancement Area will include:
 - improvement in Flood Plain Grazing Marsh habitat from Poor condition to Moderate condition secured through improved ground wetting delivered via proposed drainage proposals associated with improved existing ditches and new ditches;
 - establishment of new ditch and reedbed habitat;
 - establishment of new neutral grassland habitat;
 - establishment of ditch and reedbed replacement habitat for water voles, secured pursuant to licensing;

- establishment of supporting habitat for protected and notable species including bats: foraging and commuting habitat; breeding birds: nesting habitat; wintering birds: foraging habitat; and habitat for reptiles and invertebrates;
- increasing biodiversity of existing deciduous woodland habitat through management;
- management of ditches and water courses to improve aquatic planting species diversity; and
- control of America Mink through survey and trapping to support water vole populations.
- 7.6.10. The residual significant effects potentially resulting from changes to air quality can be considered further, and sought to be managed, through detailed design and the measures set out in Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) which will be delivered through implementation of the Operational Environmental Management Plan, as secured by a requirement of the Draft DCO (Document Reference 3.1).
- 7.6.11. The approach presented within the Proposed Scheme delivers development plan policy, particularly London Plan policy G6, C which applies a mitigation hierarchy to minimise development impacts on a SINC where such harm is unavoidable, and Bexley Local Plan policy SP9,1.d which focusses on '*protecting, conserving, restoring, and enhancing ecological networks, Sites of Importance for Nature Conservation (SINC), Local Nature Reserves, Strategic Green Wildlife Corridors and local wildlife corridors, thus securing measurable net gains for biodiversity, recognising and promoting those sites where ecological value has increased to a higher grade of nature conservation importance*'.
- 7.6.12. As has been demonstrated through the **TSAR (Document Reference 7.5)** there '*are no reasonable, less damaging, alternative solutions, locations or sites.*' (Bexley Local Plan policy DP20,2.a.) Demonstrating compliance with policy DP20, the Proposed Scheme implements a strict approach to the mitigation hierarchy, delivering measurable long term gain for biodiversity (including 1% BNG) that has been incorporated into an overarching design, not least including increased access and improved interpretation.
- 7.6.13. It is concluded that the (potential) residual adverse impact to regional and local sites from changes to air quality would not constitute ground for refusal of the DCO.

7.7. ANCIENT WOODLAND, ANCIENT TREES, VETERAN TREES AND OTHER IRREPLACEABLE HABITATS

7.7.1. Paragraph 5.4.32 of NPS EN-1 states that 'Applicants should include measures to mitigate fully the direct and indirect effects of development on ancient woodland, ancient and veteran trees or other irreplaceable habitats during both construction and operational phase.'

- 7.7.2. Paragraph 186 of the NPPF states that development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and ancient or veteran trees should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists. Policy G7 of the London Plan 2021 and policy DP20 of the Bexley Local Plan also support the protection of irreplaceable habitats, including ancient woodland and ancient or veteran trees.
- 7.7.3. Appendix 10-3: Arboriculture Assessment (Volume 1) of the ES (Document Reference 6.3) identifies all trees which may be affected by the Proposed Scheme, assesses the impact of the Proposed Scheme upon those trees and recommends necessary protection measures to ensure the health of retained trees.
- 7.7.4. The assessment confirms no record of Tree Preservation Order, conservation areas, ancient/veteran trees, traditional orchards nor ancient woodland within the arboricultural Study Area (extent of the Site plus up to a further 15m). The Proposed Scheme would result in the removal of 12 low quality trees and one very low quality tree. All other arboricultural features can be retained and protected. Principles for tree protection are set out in an outline Aboriculture Method Statement within the assessment.
- 7.7.5. The Proposed Scheme includes a landscape design, details of which are reported in the **Outline LaBARDS (Document Reference 7.9).** This also describes the long-term management and maintenance measures for works across the Mitigation and Enhancement Area.
- 7.7.6. These measures achieve development plan priorities such as London Plan policy G7, which seeks to retain existing trees of value and achieve suitable replacement planting.
- 7.7.7. It is concluded that the Proposed Scheme is in compliance with these policies.

7.8. PROTECTION AND ENHANCEMENT OF HABITATS AND SPECIES

- 7.8.1. Chapter 7: Terrestrial Biodiversity and Chapter 8: Marine Biodiversity of the ES (Document Reference 6.1) report the likely significant effects of the Proposed Scheme on habitats and species during the construction and operation phases.
- 7.8.2. The following habitats and species are considered in the assessments:
 - Habitats:
 - Deciduous woodland (lowland mixed deciduous woodland);
 - Coastal and floodplain grazing marsh;
 - Intertidal mudflats;
 - Reedbed;
 - Open mosaic habitat;
 - Coastal saltmarsh;

- Other Terrestrial Habitats (modified grassland, other neutral grassland, artificial unvegetated unsealed surface, and mixed scrub);
- Standing water;
- River habitat;
- Intertidal mudflat habitat and their associated benthic communities;
- Intertidal saltmarsh habitat and associated benthic communities; and
- Subtidal mudflat habitat and their associated benthic communities.
- Species:
 - Bats;
 - Breeding birds;
 - Notable plants and invasive species;
 - Reptiles;
 - Terrestrial invertebrates;
 - Water vole;
 - Wintering birds;
 - Freshwater fish (including European eel);
 - Aquatic macroinvertebrates;
 - Macrophytes;
 - Marine plants and macroalgae;
 - Fish;
 - Plankton; and
 - Marine mammals (including grey seals, harbour seals and harbour porpoises).
- 7.8.3. Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1) identifies a residual Minor Adverse (not significant) effect to marine habitats and associated intertidal and subtidal communities, and fish due to changes in water quality and release of contaminants during the construction phase. All other effects on marine biodiversity are concluded as Negligible (not significant).
- 7.8.4. During the construction phase, **Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1)** identifies a residual Minor Adverse effect on breeding birds and wintering birds due to noise and vibration, and a residual Minor Adverse (not significant) effect to deciduous woodland HPI, coastal and floodplain grazing marsh HPI, intertidal mudflats HPI, open mosaic habitat HPI, reedbed HPI, coastal saltmarsh HPI, river habitat, notable plants and invasive species, freshwater fish (including European eel), due to changes in air quality.
- 7.8.5. Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference
 6.1) identifies a Moderate Adverse (significant) effect to water voles during construction due to habit loss and fragmentation, and lighting prior to mitigation.

Additional mitigation is therefore proposed for water voles, including proposals for habitat creation and enhancement, including creation of new ditch habitat targeted at water voles pursuant to a licence, and capture and captive breeding of water voles during works and establishment of new ditch habitat, with release of water voles upon completion of construction and readiness of new habitat pursuant to a licence, and control of lighting during construction. The residual impact to water voles during construction is therefore concluded to be Negligible (not significant) for habit loss and fragmentation, and lighting.

- 7.8.6. A Moderate Adverse (significant) impact to water voles due to shading during operation has also been identified prior to mitigation, however the specific mitigation measures for water voles as above will reduce this to a residual impact of Negligible (not significant).
- 7.8.7. All other effects on terrestrial biodiversity during the construction phase are concluded as Negligible (not significant).
- 7.8.8. During operation of the Proposed Scheme, **Chapter 7: Terrestrial Biodiversity** (Volume 1) of the ES (Document Reference 6.1) identifies a potentially up to Moderate Adverse (significant) effect to deciduous woodland HPI, coastal and floodplain grazing marsh HPI, intertidal mudflats HPI, open mosaic habitat HPI, reedbed HPI, coastal saltmarsh HPI, river habitat, notable plants and invasive species, freshwater fish (including European eel), due to changes in air quality. All other effects on terrestrial biodiversity during the operation phase are concluded as Negligible (not significant).
- 7.8.9. The approach presented within the Proposed Scheme delivers development plan policy, not least London Plan policy G6, D '*Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process' and Bexley Local Plan policy SP9,1.f which focusses on 'protecting and enhancing the natural environment, seeking biodiversity enhancements, net gains for biodiversity and improved access to nature'.*
- 7.8.10. Also demonstrating compliance with policy DP20, the Proposed Scheme implements a strict approach to the mitigation hierarchy, delivering measurable long term gain for biodiversity (including 10% BNG) that has been incorporated into an overarching design, not least including increased access and improved interpretation.
- 7.8.11. It is concluded that policy in regard to the protection and enhancement of habitats and species is met.

CUMULATIVE EFFECTS

7.8.12. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on habitats and species or designated sites as a result of incombination effects with other plans and projects.

7.8.13. Bexley Local Plan policy SP9,1.g seeks to enable 'environmental education opportunities at the borough's schools, and investigating opportunities to involve the wider community in biodiversity or geodiversity restoration and enhancement through projects'. The Project Benefits Report (Document Reference 5.4) presents Cory's engagement with its wider community, including through connections with schools and colleges and sponsorship of local events such as the Bexley EcoFest. One of the proposals considered in the Outline LaBARDS is provision of an outdoor classroom. A coherent approach across the Proposed Scheme is demonstrated, that comprehensively considers elements of design and delivery so as to achieve important infrastructure within a sensitive environment.

7.9. MITIGATION HIERARCHY

- 7.9.1. At paragraph 5.4.35, NPS EN-1 advises that '*Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development.*' In particular this should include:
 - confining works during construction;
 - timing construction works to limit disturbance;
 - where practicable restore habitats following construction;
 - take opportunities to enhance existing habitats rather than replace them; and
 - incorporate required mitigation as a result of legal protection of habitats or species.
- 7.9.2. The **TSAR (Document Reference 7.5)** and **JSAR (Document Reference 7.6)** demonstrate that the availability of reasonable site alternatives for the Carbon Capture Facility and Proposed Jetty is limited. Having considered a number of options the **TSAR (Document Reference 7.5)** concludes that South Zone 1 is preferred for the Carbon Capture Facility, and the **JSAR (Document Reference 7.6)** identifies a preferred location for the Proposed Jetty, immediately east of Middleton Jetty. **Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1)** concludes that rail or jettyless transfer are not viable options for LCO₂ export. Consequently, it is concluded that it is not reasonably possible to avoid any impact on terrestrial and marine biodiversity and meet the objectives of the Proposed Scheme.
- 7.9.3. Mitigation measures to reduce impact to terrestrial and marine biodiversity have been embedded in the design of the Proposed Scheme, these measures include:
 - A minimised construction footprint has been identified to reduce/avoid potential habitat loss wherever practicable. This includes the Proposed Jetty and capital dredge footprint.
 - Construction and operational design has been optimised to reduce effects of shading, e.g. by compressing the footprint of the Proposed Scheme and micrositing of the Above Ground Pipelines.

- Fish refuge enhancements such as the inclusion of ropes on the piles of the Proposed Jetty to increase habitat complexity and mimic natural conditions.
- Consolidation of structures within the Carbon Capture Facility has been undertaken which seeks to create space within the Mitigation and Enhancement Area for retention of habitats or new habitats as secured through the Design Principles (Design Code) (Document Reference 5.7) and the Outline LaBARDS (Document Reference 7.9).
- 7.9.4. In addition to the above, a full CoCP(s) will be developed in substantial accordance with the **Outline CoCP (Document Reference 7.4)**, as secured by a requirement of the **Draft DCO (Document Reference 3.1)**, and an Operational EMP will be prepared prior to the Proposed Scheme commencing operation, such plan to be in accordance with the measures set out in the **Mitigation Schedule (Document Reference 7.8)**.
- 7.9.5. A full list of embedded design, mitigation and enhancement measures identified to reduce the potential impact to terrestrial and marine biodiversity are detailed in full in **Chapter 7: Terrestrial Biodiversity** and **Chapter 8: Marine Biodiversity** of the **ES** (Document Reference 6.1).
- 7.9.6. Where impacts on habitats and species cannot be avoided or mitigated through adherence to standard best practice measures, and this would otherwise result in a potential significant adverse effect, compensation measures will be implemented. These are described in full in **Chapter 7: Terrestrial Biodiversity** and **Chapter 8: Marine Biodiversity** of the **ES (Document Reference 6.1).**
- 7.9.7. Creation of new habitat to replace those potentially lost to the Proposed Scheme, alongside improvement of existing areas of habitat, will occur within the Mitigation and Enhancement Area located in the south and west of the Site, and within the BNG Opportunity Area located on land at the former Thamesmead Golf Course. Details of habitat creation and enhancement in the **Outline LaBARDS (Document Reference 7.9)**. A final LaBARDS will be developed in substantial accordance with the outline plan, as secured by DCO Requirement.
- 7.9.8. Paragraph 5.4.36 of EN-1 requires applicants to produce and implement a Biodiversity Management Strategy as part of the proposals, this is presented in the **Outline LaBARDS (Document Reference 7.9).**
- 7.9.9. Demonstrably the mitigation hierarchy has been applied, and with good effect to achieve an ES conclusion of just one, potential, significant residual effect on terrestrial biodiversity, that is set within a coherent design concept and robust delivery strategy of at least 10% BNG across the terrestrial and marine habitats.

7.10. CONCLUSION

7.10.1. The above, in addition to the assessments undertaken in **Chapter 7: Terrestrial Biodiversity, Chapter 8: Marine Biodiversity, Chapter 10: Townscape and Visual and (Arboriculture)** of the **ES (Document Reference 6.1)**, and **Information to** inform the HRA (Appendix 7-3 of the ES (Document Reference 6.3)), and in consideration of the Project Benefits Report (Document reference 5.4), set out the basis by which the Proposed Scheme meets the requirements of NPS EN-1 part 5.4 and relevant national and local policy.

7.10.2. The Applicant therefore considers the Proposed Scheme accords with: NPS EN-1, particularly Part 5.4; policies SE-MPA-1, SE-MPA-2, SE-MPA-3 and SE-MPA-4, SE-BIO-1, SE-BIO-2, SE-BIO-3, SE-INNS-1 and SE-INNS-2, and SE-DIST-1 of the South East Inshore Marine Plan [19]; the NPPF, paragraphs 180 and 185 – 188; the London Plan policies GG2, GG3, G1, G6, G7, G9, SI14, SI17; and policies SP8, SP9, DP19, DP20, and DP21 of the Bexley Local Plan.

8. OTHER PLANNING CONSIDERATIONS

8.1. INTRODUCTION

- 8.1.1. This section considers the Proposed Scheme against relevant planning policy on a topic basis, focussing on those matters that have not already been addressed in section 4 to 7.
- 8.1.2. It first addresses matters relevant to the determination of the DCO Application, including the Environmental Statement, the approach to parameters, consideration of alternatives and stakeholder engagement. It then considers the remaining generic impacts of the Proposed Scheme, following the order of topic as presented in Part 5 of NPS EN-1.
- 8.1.3. Consideration of the remaining generic impacts is informed by conclusions of the **ES** (Document Reference 6.1 to 6.4) and other relevant submitted application document. This Planning Statement provides a summary for each relevant topic, with a detailed assessment of the Proposed Scheme against national and development plan policy provided within the Policy Accordance Tracker (Document Reference 5.3).

8.2. MATTERS RELEVANT TO DETERMINATION

THE ENVIRONMENTAL STATEMENT (DOCUMENT REFERENCE 6.1 – 6.4)

- 8.2.1. The **ES** (Document Reference 6.1 6.4) was informed by an EIA Scoping Report [5] which identified the environmental topics where there is potential for significant impacts. The EIA Scoping Report [5] was issued to PINS on 18 April 2023 and was consulted upon with the relevant parties. An EIA Scoping Opinion [6] was received from PINS, on behalf of the SoS, on 26 May 2023. Appendix 4-2: EIA Scoping Opinion Responses of ES Volume 3 (Document Reference 6.3) demonstrates that the ES is based on the PINS EIA Scoping Opinion [6].
- 8.2.2. In accordance with NPS EN-1, the submitted ES assesses the likely significant effects of the Proposed Scheme, and states how effects are being avoided and mitigated taking account of the mitigation hierarchy to first try to avoid, then prevent and then reduce likely significant adverse effects on the environment and, if possible, offset likely significant adverse effects on the environment. The **Mitigation Schedule** (**Document Reference 7.8**) submitted with the DCO Application sets out the proposed mitigation measures in detail.
- 8.2.3. An in-combination climate change impact assessment has been included within Appendix 12-1: In-combination Climate Change Impacts Assessment of the ES (Document Reference 6.3) to consider the extent to which climate change may alter the effects that have been identified through the assessment for each topic. This has been carried out in line with IEMA Guidance [40].

- 8.2.4. The ES distinguishes between the construction and operation phases of the Proposed Scheme, and also assesses the intra and inter-project cumulative effects in Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1).
- 8.2.5. It is demonstrated that an environmental impact assessment has been undertaken in accordance with the EIA Regulations 2017 [4], and that the supporting ES submitted with the DCO Application meets the requirements set out in Part 4.1 of EN-1. Further, it is confirmed that an EIA Scoping Report was submitted to PINS prior to the submission of the DCO Application, and that the **ES (Document 6.1 to 6.4)** has been based on the PINS Scoping Opinion received in response (Appendix 4-2 of ES Volume 3 Document Reference 6.3).

THE PARAMETERS FOR DEVELOPMENT

- 8.2.6. Paragraph 4.3.11 of NPS EN-1 notes that it may not be possible at the time of the application for all aspects of the proposal to have been settled in precise detail, and the DCO application should explain which elements are yet to be finalised, and the reasons why.
- 8.2.7. At the time of submission the following design details have yet to be finalised:
 - LCO2 Buffer Storage within the Site a range of storage tank heights are being considered with a view to reduce visual impact. The selection of the exact storage vessels will be part of the Carbon Capture Technology Vendor selection within the detailed design of the Proposed Scheme.
 - Cooling Option two options have been identified as the most suitable for the Carbon Capture Facility, hybrid cooling towers or dry cooling towers.
 - Construction Programme construction of the Carbon Capture Facility could be achieved through either a two-phase construction (60 months), or single phase construction (36 months), with the decision to be made as part of detailed design.
 - Belvedere Power Station Jetty (disused) two options are being considered, either demolition or retention of the Belvedere Power Station Jetty (disused) with potential removal of obstructive non-structural elements and associated modifications to the design of the Access Trestle.
- 8.2.8. In addition, whilst a robust biodiversity and mitigation proposal is presented within the **Outline LaBARDS (Document Reference 7.9)**, there are matters of detail that will require finalisation prior to the Proposed Scheme being implemented.
- 8.2.9. This approach enables flexibility to be maintained, which is critical given the advancement of carbon capture technology, but within a framework of identified controls. The Applicant requires sufficient flexibility in the application to permit the design of the carbon capture project to be progressed by the Carbon Capture Technology Vendor (specialist delivery partner) when selected, while providing sufficient specificity to adequately inform the **ES (Document Reference 6.1 to 6.4)** and provide LBB and stakeholders with sufficient project certainty.

- 8.2.10. Carbon capture technology applied post-combustion to EfW facilities is in its early development stages, with only a few projects of scale currently under construction across the world. The Applicant has defined the parameters within which the DCO application should be considered based on a technical design that establishes the nature of the processes and scale and nature of infrastructure required to deliver the project.
- 8.2.11. Flexibility for the existing Belvedere Jetty Power Station Jetty (disused) is retained in the DCO application as a variety of environmental benefits could be provided in either scenarios, and there is little difference in adverse impacts such as to require its removal. Similarly, it is demonstrated that good outcomes for environmental and amenity priorities can be achieved through the submitted proposals, with details to be worked up alongside detailed design for the built infrastructure.
- 8.2.12. The **Design Approach Document (Document Reference 5.6)** presents further justification for the level of flexibility within the Proposed Scheme.
- 8.2.13. At paragraph 4.3.12, NPS EN-1 requires the ES to set out, to the best of the Applicant's knowledge, what the maximum extent of the proposed development may be. Chapter 2: Site and Project Description (Volume 1) of the ES (Document Reference 6.1), contains an explanation of the works and presents the parameters for certain components, buildings and areas for which the final dimensions cannot be determined at this stage these are secured by a Requirement of the Draft DCO (Document Reference 3.1).
- 8.2.14. Consequently, the ES assesses the worst case scenario in terms of environmental effects and the maximum design parameters. The level of flexibility is controlled by the Draft DCO (Document Reference 3.1) in requiring that the works packages in Schedule 1 (which describes the Proposed Scheme authorised by the DCO) can only be constructed within the corresponding areas of the Works Plans (Document Reference 2.3). It also includes a requirement for the approval of the detailed design of the Proposed Scheme, requiring such detailed design to align with the Design Principles and Design Code (Document Reference 5.7) and the maximum parameters included in the Draft DCO (Document Reference 3.1).
- 8.2.15. Further, in accordance with NPS EN-1, Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) takes account of the potential cumulative effects of the Proposed Scheme in combination with other relevant, known, proposed or consented schemes, as well as the combined effects resulting from the interrelationship of the various environmental effects caused by the Proposed Scheme. The effects of the Proposed Scheme are summarised in ES Chapter 22: Summary of Effects (Volume 1) of the ES (Document Reference 6.1).
- 8.2.16. It is considered that the parameters for the Proposed Scheme are clear, justified and have been used appropriate to set the framework for any development that may be authorised through the DCO Application.

ALTERNATIVES

8.2.17. Paragraphs 4.3.22 – 4.3.29 of NPS EN-1 presents the decision-making framework in relation to alternative proposals. Paragraph 4.3.22 of EN-1 states that given the level and urgency of need for new energy infrastructure, the SoS should be guided by the following principles:

'the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and

only alternatives that can meet the objectives of the proposed development need to be considered.'

- 8.2.18. The Applicant has considered the reasonable alternatives that could be considered to reasonably achieve the objectives for the Proposed Scheme, which are presented within the **Design Approach Document (Document Reference 5.6)**, **Chapter 3: Consideration of Alternatives (Volume 1) of the ES (Document Reference 6.1)**, the **TSAR (Document Reference 7.5)**, and the **JSAR (Document Reference 7.6**). These documents set out the main reasons for the Applicant's choices between alternatives, taking into account environmental, social and economic effects and including, where relevant, technical and commercial feasibility.
- 8.2.19. The following alternatives have been considered for the Proposed Scheme:
 - Do nothing scenario;
 - Alternative sites (considered in full in the TSAR (Document Reference 7.5) and JSAR (Document Reference 7.6);
 - Alternative layouts (considered in full in the DAD (Document Reference 5.6));
 - Alternative technologies;
 - Alternative water supply and discharge;
 - Alternative operational transport routes;
 - Alternative construction compound areas;
 - Approaches to mitigation and enhancement proposals.
- 8.2.20. This is in accordance with the above policy contained within EN-1, as well as regulation 14(2)(d) of the EIA Regulations 2017 [4], which states that an ES should include:

"A description of the reasonable alternatives studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment".

8.2.21. In addition, the **Project Benefits Report (Document Reference 5.4)** recognises that unabated energy from waste helps to reduce carbon emissions from residual waste (compared to the alternative processing option, landfill). The future of energy recovery, operated with carbon capture, is fundamental in terms of waste management making its full contribution to achieving the UK's net zero target, not

least through delivering the negative emissions essential to balance the hard to abate industries. There is no other alternative to CCS to achieve deep decarbonisation for residual waste management through energy recovery.

8.2.22. Alternatives have been comprehensively considered, not least seeking to test design and deliver optimal outcomes. A proportionate approach to each topic has been implemented to consider all alternatives relevant to the Proposed Scheme. Policy and legislative expectations in terms of alternatives are considered to have been met.

DEVELOPMENT CONSENT

8.2.23. With regard to requirements, paragraph 4.1.16 of NPS EN-1 states:

'The Secretary of State should only impose requirements in relation to a development consent that are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects.'

- 8.2.24. Under paragraph 4.1.18 of EN-1, the SoS may also take into account any development consent obligations under section 106 of the Town and Country Planning Act 1990 (as amended by section 174 of the PA 2008) that an applicant agrees with local authorities. Any 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.'
- 8.2.25. The Applicant has proposed a number of requirements within Schedule 2 of the **Draft DCO (Document Reference 3.1)** in respect to the detailed design of the Proposed Scheme, as well as its construction, operation and decommissioning, in order to appropriately mitigate and manage potential adverse effects from the Proposed Scheme.
- 8.2.26. The proposed requirements are considered to be necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects in accordance with NPS EN-1 paragraph 4.1.16. The ES (Document References 6.1 6.4) and other documents submitted with the application (including this Planning Statement), provide the justification and necessity for the proposed requirements. The requirements are drafted to provide the relevant controls ensuring that Proposed Scheme is constructed and operates in accordance with the measures proposed to ensure that impacts arising from the development do not give rise to effects any worse than those set out in the ES (Document References 6.1 6.4).
- 8.2.27. In addition, heads of terms for a development consent obligation with LBB are included in the Heads of Terms for a section 106 Agreement (Document Reference 7.1) in order to secure the delivery of the off-site elements of the Outline LaBARDS (Document Reference 7.9), including BNG.

EARLY ENGAGEMENT

- 8.2.28. At paragraph 4.1.19, EN-1 explains the benefits of early engagement with key stakeholders, and strongly encourages this takes place to ensure that only applications which are fully prepared and comprehensive are accepted for examination, enabling them to be properly assessed by the Examining Authority. Paragraph 4.1.20 of EN-1 states that this is particularly so in the case of HRA matters.
- 8.2.29. The Applicant has undertaken early engagement with all key stakeholders, including LBB and relevant landowners. Early discussion with Natural England and the Environment Agency regarding the HRA, has been undertaken with the former agreeing with the conclusions of the Stage 1 documentation for the HRA.
- 8.2.30. All engagement in relation to the Proposed Scheme is set out in the Consultation Report (Document Reference 5.1) and the respective chapters of the ES (Document Reference 6.1). The Applicant is undertaking, and remains committed to, continued engagement with stakeholders.

8.3. AIR QUALITY AND EMISSIONS

- 8.3.1. The relevant policies for air quality and emissions are:
 - Part 5.2 of EN-1 [10]
 - Policy SE-AIR-1 (Air quality and emissions) of the South East Inshore Marine Plan [16]
 - Paragraphs 174, 185, 186, 188, and 192 of the NPPF [18]
 - Policies SI 1 (Improving air quality) and GG3 (creating a healthy city) of the London Plan 2021 [7]
 - Indicators for policies SP8 and SP10 of the Bexley Local Plan seek improvements to air quality at monitoring stations and demonstration that development meet air quality neutral standard for emissions.
- 8.3.2. Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) contains the air quality assessment undertaken for the Proposed Scheme, which satisfies the information requirements of Part 5.2 of EN-1, Policy SE-AIR-1 of the South East Inshore Marine Plan, and the latest research on amine degradation as required by paragraph 4.9.16 of NPS EN-1. It also addresses relevant national and development plan policies.
- 8.3.3. In accordance with NPS EN-1 paragraph 5.2.9, the assessment includes identification of potential impacts on air quality as a result of the Proposed Scheme, details the design, mitigation and enhancement measures that have been identified, reports the assessment of the significant effects of the Proposed Scheme and details the monitoring that should be carried out for the Proposed Scheme. It also sets out the air quality baseline and relative changes in concentrations as a result of the Proposed Scheme with

primary mitigation in place. As per paragraph 5.2.10 of EN-1 the assessment considers the Environment Targets (Fine Particulate Matter) (England) Regulations 2022 [30], and associated Defra guidance.

CONSTRUCTION EFFECTS

- 8.3.4. The air quality assessment considers the following effects of the Proposed Scheme during the construction phase:
 - impacts from dust, PM10 and PM2.5;
 - emissions of NO2, PM10 and PM2.5 from operational NRMM;
 - road traffic emissions of NO2, PM10 and PM2.5; and
 - marine vessel emissions of NO2, particulate matter (PM10 and PM2.5) and SO2.
- 8.3.5. Mitigation measures for construction dust impacts are included within the **Outline CoCP (Document Reference 7.4)** for the Proposed Scheme, this includes measures taken from IAQM dust guidance [31].
- 8.3.6. The assessment concludes that with the mitigation measures in place a Negligible (not significant) effect to air quality during construction is anticipated.

OPERATION EFFECTS

- 8.3.7. The air quality assessment considers the following effects of the Proposed Scheme during operation:
 - changes to emissions of AQS pollutants and other pollutants arising from the Riverside Campus as a result of the Carbon Capture Facility;
 - emissions of NO2, PM10 and PM2.5 from new backup power generators (Ancillary Infrastructure);
 - marine vessel emissions of NO2 particulate matter (PM10 and PM2.5) and SO2;
 - the totality of relevant air quality effects from both terrestrial and marine based activities; and
 - Human Health Risk Assessment.
- 8.3.8. Embedded design, mitigation and enhancement measures for air quality at the operational phase of the Proposed Scheme include:
 - finalised height and diameter parameters will be developed as part of detailed design to ensure that disposition does not cause significant effects which the Applicant will be required to demonstrate to the Environment Agency in order to obtain an Environmental Permit
 - minimum offset distance between the Absorber Stack(s) and Riverside 1 and Riverside 2 housing units of 100m;
 - flue gas from the new Absorber Stack(s) to be continuously monitored via a Continuous Emissions Monitoring System (CEMS);

- the CO₂ transport vessels will meet IMO Tier III requirements for NOx emissions; and
- exhaust gases post carbon capture are a minimum of 80 degrees Celsius, pursuant to the Environment Permit.
- 8.3.9. Concentration limits for pollutants introduced by the carbon capture process will be set in the Environmental Permit for the Carbon Capture Facility to be granted, and regulated, by the Environment Agency. NPS EN-1 section 4.12 confirms that the Secretary of State can assume this will be properly applied and enforced.
- 8.3.10. The air quality assessment concludes that with mitigation measures in place there will be a Slight Adverse (not significant) effect on human health due to changes to emissions of pollutants. All other air quality impacts through the operation phase are anticipated to be Negligible (not significant).
- 8.3.11. Chapter 7: Terrestrial Biodiversity (Volume 1) of the ES (Document Reference 6.1), provides an assessment of impacts to terrestrial biodiversity from dust and changes to air quality. The assessment concludes that there would be a residual potentially up to Moderate Adverse (significant) impact to Crossness LNR, Erith Marshes MSINC, Belvedere Dykes SINC, River Thames and Tidal Tributaries MSINC, 18 further SINC outside of the Site, deciduous woodland HPI, coastal and floodplain grazing marsh HPI, intertidal mudflats HPI, reedbed HPI, coastal saltmarsh HPI, river habitat (River Thames), notable plants and invasive species due to changes in air quality during the operation phase.
- 8.3.12. These can be considered further, and sought to be managed, through detailed design and the measures set out in Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) which will be delivered through implementation of the Operational Environmental Management Plan, as secured by a requirement of the Draft DCO (Document Reference 3.1). Mitigation measures to reduce the impact to air quality are set out in the Mitigation Schedule (Document Reference 7.8).

CUMULATIVE EFFECTS

8.3.13. The intra-project effects assessment undertaken in **Chapter 21: Cumulative Effects** (Volume 1) of the ES (Document Reference 6.1) concludes Moderate Adverse (Significant) effects on users of Accessible Open Land from the interaction of Chapter 5: Air Quality, Chapter 10: Townscape and Visual and Chapter 14: Population, Health and Land Use in the operation phase. No additional practicable mitigation measures have been identified to mitigate this effect as all practicable mitigation measures have been considered in the respective chapters. No significant effects are reported with regards to inter-project effects.

AIR QUALITY LIMITS

8.3.14. Paragraph 5.2.12 of EN-1 states that if a proposed development will lead to a breach of any relevant statutory air quality limits, objectives or targets, or affect the ability of a

non-compliant area to achieve compliance within the timescales set out, the applicant should secure appropriate mitigation measures to ensure no breaches are occurred. Additionally, paragraph 192 of the NPPF states that planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutant.

8.3.15. As detailed above, statutory air quality limits, objectives and targets have been considered in the air quality assessment, and no breaches will occur.

AIR QUALITY NEUTRAL

- 8.3.16. Policy SI 1 of the London Plan 2021 requires development proposals to be Air Quality Neutral. The current methodology for achieving a standard of Air Quality Neutral is based on a series of benchmarks for emissions of NOX and PM10 from buildings (e.g. energy provision) and transport. There are no applicable benchmarks for an industrial development such as the Proposed Scheme, therefore, an Air Quality Neutral Assessment is not required.
- 8.3.17. Notwithstanding this, the principal source of emissions from the Proposed Scheme are combustion gases from the incineration of waste. The Proposed Scheme will not change the emissions of NO_X and PM₁₀ from Riverside 1 and Riverside 2 and is therefore inherently Air Quality Neutral.

AIR QUALITY POSITIVE STATEMENT

- 8.3.18. Policy SI 1 of the London Plan 2021 requires an Air Quality Positive Statement to be submitted with applications to demonstrate how a proposal has considered ways to maximise benefits to local air quality, and detail measures that will be put In place to reduce exposure to pollution.
- 8.3.19. An Air Quality Positive Statement for the Proposed Scheme has been prepared, at Appendix 5-4: Air Quality Positive Statement of the ES (Document Reference 6.3). The Statement details the implementation and monitoring plan for measures to inform air quality positive design. These measures will be secured through requirements in the Draft DCO (Document Reference 3.1) or the Environmental Permit for the Proposed Scheme.

EUTROPHICATION

8.3.20. Paragraph 5.2.4 of EN-1 sets out how impacts to air quality can result in eutrophication which can damage biodiversity including aquatic ecosystems. An assessment of deposition of airborne nitrogen to the Crossness LNR is included within Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1), and effects on marine biodiversity as a result of changes to air quality is considered within Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1).

SENSITIVE RECEPTORS

- 8.3.21. NPS EN-1 paragraph 5.2.7 states that projects near sensitive receptor sites for air quality should only be proposed in exceptional circumstances, if no viable alternate site is available. The full list of sensitive receptors considered in the air quality assessment is within section 5.5, Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1), with no significant adverse effects anticipated within the air quality assessment. Within Chapter 7: Terrestrial Biodiversity (Volume 1) (Document Reference 6.1) there remains some level of uncertainty about the long term effect of changes in air quality to terrestrial biodiversity, with provision to address the potentially significant residual effects through detailed design and the secured mitigation measures.
- 8.3.22. The effects identified above are not anticipated to change as a result of climate change impacts.

CONCLUSION

- 8.3.23. The assessment of likely significant effect on air quality arising from the Proposed Scheme within Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1), has been undertaken in line with Part 5.2 of NPS EN-1 and the relevant national and local policies.
- 8.3.24. There remains some level of uncertainty about the long term effect of changes in air quality to terrestrial biodiversity, with provision to address the potentially significant residual effects through detailed design. Mitigation measures to reduce the impact to air quality are set out in the **Mitigation Schedule (Document Reference 7.8)**.
- 8.3.25. Further, there is potential for a significant residual effect on users of Accessible Open Land within the intra-project effects of air quality, townscape and visual and population, health and land use effects on this local receptor.
- 8.3.26. When assessed against the relevant policies, the Applicant considers the Proposed Scheme is acceptable with regard to air quality effects during all phases of development. The Proposed Scheme therefore accords with Part 5.2 of EN-1, policy SE-AIR-1 of the South East Inshore Marine Plan; paragraphs 174, 185, 186, 188, and 192 of the NPPF; policies SI 1 and GG3 of the London Plan 2021; and Policies SP8 and SP10 of the Bexley Local Plan.

8.4. **GREENHOUSE GAS EMISSIONS**

- 8.4.1. The relevant policies for greenhouse gas emissions are:
 - Part 5.3 of EN-1 [10]
 - Policy SE-AIR-1 (Air quality and emissions) of the South East Inshore Marine Plan [16]
 - Paragraph 124, 157, 159, and 163 of the NPPF [18]
 - Policy SI 2 (Minimising greenhouse gas emissions) of the London Plan 2021 [7]

- Policies SP14 (mitigating and adapting to climate change) and DP30 (mitigating climate change) of the Bexley Local Plan [8]
- 8.4.2. Part 5.3 of EN-1 requires applicants to undertake a GHG assessment as part of their ES, this should include:
 - Whole life GHG assessment showing construction, operational and decommissioning GHG impacts, including impacts from change of land use.
 - An explanation of the steps that have been taken to drive down the climate change impacts at each of those stages.
 - Measurement of embodied GHG impact from the construction stage.
 - How reduction in energy demand and consumption during operation has been prioritised in comparison with other measures.
 - How operational emissions have been reduced as much as possible through the application of best available techniques for that type of technology.
 - Calculation of operational energy consumption and associated carbon emissions.
 - Whether and how any residual GHG emissions will be (voluntarily) offset or removed using a recognised framework.
 - Where there are residual emissions, the level of emissions and the impact of those on national and international efforts to limit climate change, both alone and where relevant in combination with other developments at a regional or national level, or sector level, if sectoral targets are developed.
- 8.4.3. Policy SE-AIR-1 of the South East Inshore Marine Plan also requires proposals to assess their direct and indirect impacts upon emissions of greenhouse gases.

ENVIRONMENTAL STATEMENT

- 8.4.4. **Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1),** reports the outcome of the assessment of likely significant environmental effects arising from the Proposed Scheme on climate, specifically greenhouse gases (GHG), and has been produced in accordance with the above requirements.
- 8.4.5. Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) concludes that with the identified mitigation measures, a Minor Adverse (not significant) residual effect on GHG emissions is anticipated during the construction phase. The mitigation measures outlined below demonstrate that the Applicant has taken, and will continue to take, all reasonable steps to reduce GHG emissions in those stages.
- 8.4.6. The outcome of the assessment for the operation phase suggests that it will result in a substantial decrease in GHG emissions compared to the baseline scenario. The technology to be used for the Proposed Scheme has an estimated minimum capture rate of 95% of CO₂, equating to 847,875 and 803,905 tCO₂ respectively per annum for Riverside 1 and Riverside 2, a total of 1,651,780 tCO₂ (of which approximately 49%

would be from fossil sources and 51% would be from biogenic sources).' (paragraph 13.8.14)

- 8.4.7. Allowing for residual emissions from Riverside 1 and Riverside 2 and emissions associated with operation of the Proposed Scheme, the 'net operational emissions savings estimated during the 50 year operation phase are 1,620,603 tCO₂e/yr. This represents the overall change in emissions that are attributable to the Proposed Scheme during the operation phase, accounting for the capture and sequestration of CO₂ from both fossil and biogenic sources.' (paragraph 13.8.5)
- 8.4.8. Table 13-11 of Chapter 13 shows the whole life emissions for the Proposed Scheme (accounting for construction and operation phases) representing an overall saving in GHG emissions of -85,223,660 tCO2e relative to the future baseline. Paragraphs 13.8.22 and 23 conclude (respectively) that the Proposed Scheme would contribute to a reduction of 0.81% for the UK sixth carbon budget and 17% for the London 2028 to 2032 carbon budget.
- 8.4.9. **Paragraph 13.8.24** estimates a carbon payback period (*'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme'*) of 0.1 years, or just under five weeks.
- 8.4.10. Due to the scale of these captured emissions, there is concluded to be a significant direct, permanent, long term, Beneficial effect.
- 8.4.11. The impact of GHG emissions, in terms of their contribution to climate change, is global and cumulative in nature, with every tonne contributing to impacts on natural and human systems. As such it is the cumulative effect of all GHG-emitting human activities that cause climate change. Consequently, the assessment of GHG due to the Proposed Scheme implicitly considers cumulative effects in relation to GHG emissions, and it has been scoped out of the cumulative assessment within the ES.

GHG REDUCTION STRATEGY

- 8.4.12. Paragraphs 5.3.5 to 5.3.7 of EN-1 set out that GHG assessments should be used to drive down GHG emissions at every stage of a development, and that applicants should look for opportunities to embed nature-based or technological solutions to mitigate or offset the emissions of construction and decommissioning, using a GHG Reduction Strategy to set out the steps taken to minimise and offset emissions. Additionally, paragraph 159 of the NPPF requires new development to be planned for in ways that can help reduce greenhouse gas emissions.
- 8.4.13. As further explained in the **Project Benefits Report (Document 5.4)**, the Cory Group is proactively seeking to reduce its GHG emissions through its sustainability strategy. The Applicant has already implemented GHG emissions across its operational assets; the Proposed Scheme, installing carbon capture technology to its residual waste treatment facilities, is the next step in its corporate GHG reduction strategy.

- 8.4.14. The GHG Reduction Strategy for the Proposed Scheme has included implementing the following steps to minimise emissions through design evolution:
 - detailed design optimisation to reflect the PAS 2080:202325 carbon reduction hierarchy;
 - reducing the requirement for construction materials (designing out material redundancy), where practicable;
 - substituting construction elements for lower-carbon alternatives where practicable;
 - considering the specification of materials and products with reduced embodied GHG emissions including through material substitution, recycled or secondary content and from renewable sources;
 - considering the sustainability credentials of material suppliers and construction contractor(s) and, where practicable, to take into account their policies and commitments to reduction of GHG emissions, including embodied emission in materials;
 - designing, specifying and constructing the Proposed Scheme with a view to maximising the operational lifespan and minimising the need for maintenance and refurbishment (and all associated emissions);
 - designing, specifying and constructing the Proposed Scheme with a view to maximising the potential for re-use and recycling of materials/elements at the endof-life stage; and
 - considering opportunities to minimise operational energy use, including the specification of efficient plant and ancillary infrastructure.
- 8.4.15. Moving forward, the GHG Reduction Strategy relevant to the Proposed Scheme will seek to minimise and offset emissions during the construction phase, as set out in the **Outline CoCP (Document Reference 7.4)** (and which is secured by the DCO Requirement for full CoCP(s) to be developed in substantial accordance with the outline:
 - Contractor(s) will be expected to ensure optimal performance of plant and equipment through correct and efficient operation, maintenance, and servicing of vehicle fleet to minimise emissions. Options will be considered for using efficient low emission plant, equipment and vehicles where possible (i.e. those using electricity or lower carbon fuels).
 - The Proposed Scheme will be designed to minimise material consumption and waste generation, as far as reasonably practicable.
 - Depending on design specification requirements the Proposed Scheme will consider options to specify construction materials with lower embodied carbon (e.g. using steel with a higher than average recycled content or considering material alternatives).
 - Transportation of materials will be optimised to minimise GHG emissions, including sourcing construction materials from local suppliers, making use of local

waste management facilities where practicable and ensuring the construction programme considers requirements for onsite storage of materials and waste.

- The Proposed Scheme will take into account the potential carbon emissions within the design of the onsite Mitigation and Enhancement Area and offsite BNG Opportunity Area, including opportunities to maintain natural habitats where possible and minimise impacts during construction.
- Construction waste will be recycled or reused where practicable to avoid disposal to landfill, including the reuse of excavated arisings on the Proposed Scheme, where suitable. Further measures on material reuse and recycling are outlined in the OCoCP (Document Reference 7.4), which will result in reductions in construction waste emissions and also embodied GHG emissions from materials where re-use of the material can be favoured onsite.
- Potential measures to further reduce GHG emissions through the ongoing design of the Proposed Scheme and to be secured through requirement of any DCO granted could include:
 - Detailed design optimisation to reflect the PAS 2080:2023 [43] carbon reduction hierarchy, covering:
 - avoid: align the outcomes of the Proposed Scheme and/or programme of work with the net zero transition at the system level and evaluate the basic need at the asset and/or network level;
 - switch: assess alternative solutions and then adopt one that reduces whole life emissions through alternative scope, design approach, materials, technologies for operational carbon reduction, among others, while satisfying the whole life performance requirements; and
 - improve: identify and adopt solutions and techniques that improve the use of resources and design life of an asset/network, including applying circular economy principles to assess materials/products in terms of their potential for reuse or recycling after end of life.
 - reducing the requirement for construction materials (designing out material redundancy) where practicable;
 - substituting construction elements for lower-carbon alternatives where practicable;
 - considering the specification of materials and products with reduced embodied GHG emissions including through material substitution, recycled or secondary content and from renewable sources;
 - considering the sustainability credentials of material suppliers and construction Contractor(s) and, where practicable, taking into account their policies and commitments to reduction of GHG emissions, including embodied emission in materials;

- designing, specifying and constructing the Proposed Scheme with a view to maximising the operational lifespan and minimising the need for maintenance and refurbishment (and all associated emissions);
- designing, specifying and constructing the Proposed Scheme with a view to maximising the potential for re-use and recycling of materials/elements at the end-of-life stage; and
- considering opportunities to minimise operational energy use, including the specification of efficient plant and ancillary infrastructure.
- Use of efficient construction processes, such as design for manufacture and assembly.
- Development and implementation of a full Site Waste Management Plan (SWMP) in accordance with the Outline SWMP (Document Reference 7.10);
- Development and implementation of a Materials Management Plan (MMP).
- Specification of materials and products with reduced embodied GHG emissions including through material substitution, recycled or secondary content and from renewable sources.
- Recovery and re-use/recycling of site arisings (ideally, onsite).
- Selection and engagement of materials suppliers and construction Contractor(s) taking into account their proximity to the Proposed Scheme, as well as policies and commitments to reduction of GHG emissions, including embodied emission in materials.
- 8.4.16. The Proposed Scheme will capture at least 95% of CO₂ emissions from Riverside 1 and 95% of CO₂ emissions from Riverside 2; at a nominal assumed throughput, this is equivalent to approximately 1.3Mt CO₂ per year. Table 13-10 of Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) demonstrates that based on the fully consented throughput of Riverside 1 and Riverside 2, the Proposed Scheme would result in net operational emissions savings of 1,620,603 tCO₂e, annually, relative to future baseline. This is an important and relevant reduction of GHG emissions.
- 8.4.17. At the operation phase, the inherent purpose of the Proposed Scheme is to capture carbon dioxide generated by Riverside 1 and Riverside 2 for permanent storage, which will reduce GHG emissions being released to the atmosphere and aid decarbonisation of electricity supplied to the national grid. The feedstock to Riverside 1 and Riverside 2 comprises approximately 50% biogenic content, such that the Carbon Capture Facility would result in net-negative CO₂ emissions of approximately 0.6Mt per year of CO₂; savings that can help to offset hard to abate industries.
- 8.4.18. The GHG Reduction Strategy is supplemented by the measures set out below (drawn from Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1)) to be implemented during the operation phase:

- To minimise energy consumption, the design of the Proposed Scheme will include selection of high energy efficiency capture technology, high efficiency electric motors and the use of variable frequency drives for pumps.
- To maximise operational efficiency, the Proposed Scheme will incorporate a Back Pressure Turbine and Generator to maximise the extraction of energy within the steam and make it suitable for use in the Solvent Regeneration System.
- Onsite regeneration of solvent will maximise reuse of this material and reduce embodied emissions associated with procuring fresh solvents for use in the process.
- The carbon capture process produces heat, which is typically wasted. The Proposed Scheme will incorporate a Heat Recovery and Heat Transfer System so that this energy can be redirected into a district heating network, such as the Riverside Heat Network (currently under development).
- A Heat Transfer Station will be installed as the interface between the Proposed Scheme and the Riverside Heat Network, which will reduce dependence on alternative fossil fuel sources for generating heat and the associated GHG emissions.
- The design of the Proposed Scheme will be undertaken with a view to maximising the lifespan of operational components, minimising the need for maintenance and refurbishment (thus reducing the frequency of release of associated GHG emissions).
- Process emissions arising from operation of the Proposed Scheme will be managed and regulated under an Environmental Permit which will be applied for from the Environment Agency.
- Embedded mitigation measures for operation include maximising efficiencies in the use of materials for the Proposed Scheme.

CONCLUSION

- 8.4.19. Paragraphs 5.3.8 of EN-1 advise that the SoS must be satisfied that the applicant has as far as possible assessed the GHG emissions of all stages of the development. This section of the Planning Statement demonstrates how GHG emissions have been considered, from being the catalyst for the Proposed Scheme and comprehensively throughout the ES.
- 8.4.20. It is also demonstrated that all reasonable steps to reduce the GHG emissions of the construction and decommissioning stage of the Proposed Scheme have been taken (NPS EN-1 paragraphs 5.3.9 and 5.3.10), accepting that there are likely to be some residual emissions from construction and decommissioning of energy infrastructure.
- 8.4.21. Policy SI 2 of the London Plan 2021 requires major developments to be net-zero carbon, and Policy SP14 of the Bexley Local Plan supports developments that achieve zero-carbon and demonstrate a commitment to drive down greenhouse gas emissions to net zero.

- 8.4.22. Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) demonstrates that no significant adverse effects are identified at the construction phase, and that the Proposed Scheme, throughout its lifecycle, will result in a net reduction in emissions contributing in a meaningful way toward meeting the UK's net zero ambition.
- 8.4.23. Design has been used, from an early stage, to help reduce GHG emissions of the Proposed Scheme, not just through aesthetic features (such as external materials) but also through functional priorities seeking to minimise energy and water consumption. The GHG Reduction Strategy set out above incorporates those key features.
- 8.4.24. The Proposed Scheme is therefore considered to accord with the above paragraphs of Part 5.3 of EN-1, policy SE-AIR-1 of the South East Inshore Marine Plan, paragraphs 124, 157, 159, and 163 of the NPPF, policy SI 2 of the London Plan 2021, and policies SP14 and DP30 of the Bexley Local Plan.

8.5. CIVIL AND MILITARY AVIATION AND DEFENCE INTERESTS

- 8.5.1. The relevant policies for civil and military aviation and defence interests are:
 - Part 5.5 of EN-1 [10].
 - Policy SE-DEF-1 (Defence) of the South East Inshore Marine Plan [16].
- 8.5.2. No civil and military aviation and defence interests are expected to be affected by the Proposed Scheme.
- 8.5.3. The National Air Transport System ('NATS'), Ministry of Defence ('MoD') and Civil Aviation Authority ('CAA') have been consulted on the Proposed Scheme as documented in the **Consultation Report (Document Reference 5.1).** These statutory consultees were consulted in line with paragraph 5.5.39 of EN-1.

CONCLUSION

8.5.4. The Proposed Scheme is considered to accord with Part 5.5 of EN-1 and Policy SE-DEF-1 of the South East Inshore Marine Plan.

8.6. DUST, ODOUR, ARTIFICIAL LIGHT, SMOKE, STEAM AND INSECT INFESTATION

- 8.6.1. The relevant policies for dust, odour, artificial light, smoke, steam and insect infestation are:
 - Parts 4.15 and 5.7 of EN-1 [3].
 - Paragraphs 191 and 193 of the NPPF [19].
 - Policies DP13 (Agent of Change) and DP14 (Noise) of the London Plan 2021 [10].
 - Policies DP11 (achieving high-quality design) DP25 and DP26 (waste management in new development) of the Bexley Local Plan [11].

ENVIRONMENTAL STATEMENT

- 8.6.2. Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) contains the air quality assessment undertaken for the Proposed Scheme, and Appendix 5-1: Construction Phase Assessment of Volume 3 of the ES (Document Reference 6.3) provides details of the construction dust assessment approach and associated findings.
- 8.6.3. Potential dust impacts during construction would be managed appropriately through the implementation of measures set out in the final CoCP, which includes developing and implementing a Dust Management Plan (DMP). A requirement in Schedule 2 of the **Draft DCO (Document Reference 3.1)** secures the preparation and implementation of the CoCP. The CoCP will set out a series of measures, based on best-practice guidance, to control the environmental effects of construction of the Proposed Scheme. This would include, for example, measures aimed at controlling dust, as well as noise and light impacts amongst other matters. Effect from dust from the Proposed Scheme during the construction phase are considered to be Negligible (not significant).
- 8.6.4. The proposed lighting strategy for the Proposed Scheme is set out in the **Outline** Lighting Strategy (Document Reference 7.3). Chapter 10: Townscape and Visual Amenity (Volume 1) of the ES (Document Reference 6.1) includes an assessment of artificial lighting effects on townscape character.
- 8.6.5. The proposed lighting design for the Proposed Scheme is not considered likely to produce further significant adverse effects. This is due to the existing high levels of light spill and proposed levels which are within the permitted values defined by the Environmental Zone E4 in which the Proposed Scheme sits. Light pollution in the form of direct glare and sky glow from the various surrounding sources has impacted the darkness of the night sky for the townscape. The assessment concludes that during operation there would be a Slight-Moderate adverse (not significant) effect on the townscape character at night time during construction.
- 8.6.6. It is not anticipated that there would be any effects on visual amenity from smoke. There are currently two options being considered for cooling within the Carbon Capture Facility, dry closed circuit cooling towers, or wet-dry (hybrid) cooling. As described in **Chapter 3: Consideration of Alternatives (Volume 1) of the ES** (Document Reference 6.1) both options negate steam plume visibility.
- 8.6.7. In addition to the above, **Chapter 21: Cumulative Effects (Volume 1) of the ES** (**Document Reference 6.1)** does not identify any likely significant intra-project, or inter-project effects on dust, lighting or smoke.
- 8.6.8. It is not anticipated that there would be any effects associated with odour, or insect and vermin infestation as a result of the Proposed Scheme.
- 8.6.9. In addition, the **Design Approach Document (Document Reference 5.6)** presents design evolution through the development of the Proposed Scheme, including

progressing a compact and efficient operational layout that will contribute to minimising such effects. This approach responds to the Bexley Local Plan policy relevant to this matter.

STATUTORY NUISANCE STATEMENT

- 8.6.10. A **Statutory Nuisance Statement (Document Reference 5.9)** is submitted within this application for development consent.
- 8.6.11. It concludes that the only matter addressed by the ES (Document Reference 6.1) which has been assessed as likely to be significant for the Proposed Scheme and which may have a bearing on the Environmental Protection Act 1990 is visual amenity. However, it is demonstrated in Section 3 of this Statement that the Proposed Scheme would have no significant visual nuisance effects following the implementation of the mitigation measures.
- 8.6.12. Other potential nuisance aspects have been considered in Section 4 and through the application of appropriate mitigation no statutory nuisance effects are considered likely to occur.
- 8.6.13. The operation of the Proposed Scheme would be regulated by the Environment Agency through an Environmental Permit.
- 8.6.14. The Draft DCO (Document Reference 3.1) that accompanies the DCO Application contains a provision in article 42 that would provide a defence, subject to certain criteria, to proceedings in respect of statutory nuisance falling within section 79(1) of the Environmental Protection Act 1990.

AGENT OF CHANGE

- 8.6.15. The agent of change principle was introduced in the NPPF and has since been incorporated into the London Plan and Bexley Local Plan. Whilst NPS EN-1 does not use the 'agent of change' terminology, at paragraph 5.11.8 it does advise the ES to '*identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing.*'
- 8.6.16. The principle seeks to ensure that new development can be integrated effectively with existing businesses or 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 a result of development permitted after they were established.' (NPPF, paragraph 193) It was established to prevent a situation, for example of a new dwelling house causing a music venue to be closed on account of nuisance. The London Plan, at paragraph 3.13.2 states 'The Agent of Change principle places the responsibility for mitigating the impact of noise and other nuisances firmly on the new development.'
- 8.6.17. Taking a wide interpretation of the definition of community facilities, the impact of the Proposed Scheme on MOL, open space and green infrastructure, including PRoW, is

considered above, in sections 5 and 6 of this Planning Statement. The planning judgement concludes that there is no loss of Accessible Open Land, that there is limited loss to a private interest and that the benefits of the Proposed Scheme outweigh the limited harm.

- 8.6.18. Whilst the Proposed Scheme is not an extension to the EfW facilities Riverside 1 and Riverside 2; it is promoted to be in support of that infrastructure. Bexley Local Plan policy DP25 recognises that SIL are appropriate locations for such infrastructure, with consideration to be given to adjacent businesses.
- 8.6.19. Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1) considers the impact of the potential loss of Munster Joinery, as a result of the Proposed Scheme, concluding not significant effects. Despite not being able to make progress to date, the Applicant remains committed to working with Munster Joinery to agree a relocation package such that the business operations need not be lost.
- 8.6.20. Otherwise, there is no evidence to suggest that the Proposed Scheme would place unacceptable nuisance on any other business or community facility.

CONCLUSION

- 8.6.21. Relevant chapters of the **ES (Document Reference 6.1 to 6.4)** assess the impact of the Proposed Scheme on matters of common nuisance, in accordance with the requirements of Parts 4.15 and 5.7 of EN-1. There are no significant adverse residual impacts concluded through those studies.
- 8.6.22. Seeking to achieve a high quality of design has underpinned evolution of the Proposed Scheme, with **Design Principles and Design Code (Document Reference 5.7)** proposed to ensure control through the detailed design and implementation phases.
- 8.6.23. The Statutory Nuisance Statement demonstrates appropriate consideration has been given to possible sources of nuisance and how they can be controlled to an acceptable degree.
- 8.6.24. The agent of change principle has been considered, widely and specifically, and is concluded not to be invoked to an unacceptable degree.
- 8.6.25. The Proposed Scheme is therefore considered to accord with Part 4.15 and 5.7 of EN-1, paragraphs 191 and 193 of the NPPF, policies DP13 and DP14 of the London Plan, and policies DP11, DP25 and DP26 of the Bexley Local Plan.

8.7. FLOOD RISK

- 8.7.1. The relevant policies for flood risk are:
 - Part 5.8 of EN-1 [3].
 - Policies SE-CC-1 and SE-CC-2 (Climate change) of the South East Inshore Marine Plan [5].
- Paragraphs 164 175 of the NPPF [19].
- Policy SI 12 (Flood risk management) of the London Plan 2021 [10].
- Policies DP18 (Waterfront development and development including, or close to, flood defences), DP19 (The River Thames and the Thames Policy Area), and DP32 (Flood risk management) of the Bexley Local Plan [11].
- 8.7.2. The Environment Agency Flood Map for Planning [43] shows the flood risk associated with the Site. The map indicates that the Site is located within Flood Zone 3, within the undefended tidal flood extent of the 1 in 200-year event (0.5% Annual Probability of Exceedance event APE), excluding the presence of flood defences. The Flood Zones are shown in Figure 2-2: Environment Constraints Plan Flood Zones of the ES Volume 2 (Document Reference 6.2). However, there are Flood Defence Owner maintained flood defences located along the River Thames, parts of which are within the Site. These currently provide the site with a reduction in local flood risk. A Flood Risk Assessments (FRA) (Appendix 11-2 of the ES Volume 3 Document Reference 6.3) has therefore been undertaken for the Proposed Scheme in compliance with Part 5.8 and relevant national and local policies.

- 8.7.3. Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1), and the associated FRA, at Appendix 11-2 of the ES (Document Reference 6.3), assess potential significant effects on the following:
- 8.7.4. Construction and Operational Phase Flood Risk:
 - Breach of the River Thames flood defences;
 - Flooding from Marsh Dykes;
 - Loss of watercourse channel;
 - Flood risk associated with the Proposed Jetty;
 - Surface water flooding;
 - Groundwater;
 - Artificial sources; and
 - Flood risk to people.
- 8.7.5. The assessments include consideration of climate change allowance through use of the Environment Agency's TE2100 in-channel levels, which are used within the Environment Agency's River Thames Breach Assessment. The Marsh Dykes Model23 provided to the Applicant by the Environment Agency is a integrated fluvial, pluvial and sewer model. The model scenario used to inform this FRA for the Proposed Scheme includes the 'Upper end' emissions scenario that comprises a 70% peak fluvial flow uplift (upper end) and a 40% rainfall peak rainfall uplift (upper end). The climate change allowances included in this model therefore exceed those that would be required for the Proposed Scheme.

- 8.7.6. Mitigation measures to reduce flood risk during the construction phase are listed in **the Outline CoCP (Document Reference 7.4)**, this includes no works being carried out within the Site Boundary when there is a risk of breach of the River Thames flood defences, a Method Statement will be developed by the Contractor(s) detailing the procedures for securing the Site and plant equipment for a flood event, and storage for rainfall will be provided through the temporary drainage strategy (to be set out in a surface water management plan alongside the final CEMP).
- 8.7.7. Mitigation measures to reduce flood risk during the operation phase are listed in the **FRA Appendix 11-2** of the **ES (Document Reference 6.3).** These include providing floodplain storage, and measures to ensure the Proposed Scheme (equipment, plant and operatives) is safe from flooding associated with the breach of the River Thames Flood Defences. Compliance with the FRA is secured by DCO Requirement.
- 8.7.8. The Proposed Scheme includes an **Outline Drainage Strategy (Document Reference 7.2)**. The surface water drainage system will manage surface water runoff generated by the Proposed Scheme and will be designed to attenuate flows to the greenfield runoff rate. The surface water drainage system will also replace the function of minor watercourses/ditches that are located within the development footprint of the Carbon Capture Facility development platform and that will be infilled as part of the Proposed Scheme.
- 8.7.9. The FRA demonstrates that both the Sequential Test and Exception Test are passed as the Proposed Scheme is classified as Essential Infrastructure under the NPPF [18].
- 8.7.10. The Proposed Scheme passes the Exception Test because it provides sustainability benefits through carbon capture and storage which provides a sustainable approach to the production of energy, which is less harmful to the environment. Additionally, the FRA demonstrates that the Scheme will remain safe throughout its design life and that flood risk will not be increased elsewhere.
- 8.7.11. Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1) concludes no significant residual effects during either the construction or operation phases.
- 8.7.12. In respect of cumulative impact, **Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1)** concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on flood risk as a result of in-combination effects with other plans and projects.
- 8.7.13. The **Design Approach Document (Document Reference 5.6)** and the **Outline LaBARDS (Document Reference 7.9)** indicate how sustainable treatment of water resources within the Site Boundary has been designed to achieve wider benefits.

CONCLUSION

- 8.7.14. Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1), and the associated FRA (Appendix 11-2 of the ES Volume 3 Document Reference 6.3) present a comprehensive assessment of flood risk to conclude no residual significant adverse effects. The Proposed Development incorporates sustainable drainage solutions, is appropriately flood resistant and resilient (including to climate change) and does not increase flood risk elsewhere, now and in the future. The Proposed Scheme will provide appropriate refuge should there be a flood event.
- 8.7.15. The design of the Proposed Scheme has sought to optimise water resources on site, minimising its use and integrating its management with biodiversity and amenity benefits.
- 8.7.16. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.8 of EN-1, policies SE-CC-1 and SE-CC-2 of the South East Inshore Marine Plan, paragraphs 164 175 of the NPPF, Policy SI 12 of the London Plan 2021, and policies DP18, DP19 and DP32 of the Bexley Local Plan.

8.8. HISTORIC ENVIRONMENT

- 8.8.1. The relevant policies for historic environment are:
 - Part 5.9 of EN-1 [3].
 - Policy SE-HER-1 (Heritage Assets) of the South East Inshore Marine Plan [5].
 - Paragraphs 195 214 of the NPPF [19].
 - Policy HC 1 (Heritage conservation and growth) of the London Plan 2021 [10].
 - Policies SP6 (managing Bexley's heritage assets), and DP14 (development affecting a heritage asset) of the Bexley Local Plan [11].

- 8.8.2. Part 5.9 of EN-1 requires applicants to assess any likely significant heritage impacts in the ES, including above, at, and below ground assets. Chapter 9: Historic Environment (Volume 1) of the ES (Document Reference 6.1) provide assessment of the likely significant effects of the Proposed Scheme on the historic environment, including the following effects:
 - Construction Phase:
 - Potential physical effects on unknown buried heritage assets within the Site (archaeological remains), including potential submerged remains within the Thames foreshore (marine) and palaeoenvironmental remains.
 - Demolition of non-designated above ground heritage assets within the Site during the construction phase (i.e., the Belvedere Power Station Jetty (disused), if removed as part of the Proposed Scheme). There are no designated above ground heritage assets present within the Site.

- Operation Phase:
 - Potential indirect effects on unknown buried heritage assets within the Site (archaeological remains), including potential submerged remains within the Thames foreshore (marine), due to operational activities within the Thames channel and foreshore.
 - Potential permanent effects on designated above-ground heritage assets located beyond the Site Boundary and within the Study Area (up to 1km from the Site Boundary) through changes to setting and how the significance of assets are understood and appreciated.
- 8.8.3. The Site does not contain any statutorily designated (protected) heritage assets, such as scheduled monuments, listed buildings or registered parks and gardens. The Site does not lie within a conservation area. No locally listed buildings are situated within the Site Boundary. The sensitive receptors considered in the assessment are listed below:
 - Designated above ground heritage assets within 1km of the Site Boundary;
 - Locally listed above ground heritage assets within 500m of the Site Boundary;
 - Non-designated above ground heritage assets within the Site; and
 - Previously unrecorded non-designated below-ground heritage assets (archaeological remains) within the Site (including within the marine/intertidal zone).
- 8.8.4. There is one above ground heritage asset within the Site. This is the Belvedere Power Station Jetty (disused), which is a non-designated heritage asset. This asset is not locally listed. On a worst-case basis, the Proposed Scheme would result in the total demolition of the jetty resulting in a total loss of heritage significance. Should the Belvedere Power Station Jetty (disused) be demolished, a Historic England Level 2 Historic Building Recording will be undertaken prior to demolition. Level 2 recording comprises a descriptive record where the structure will be seen, described, and photographed. It will include a drawn record, photography and a written record. This will ensure that an accurate record of the Belvedere Power Station Jetty (disused) is archived with the Greater London Historic Environment Record and Archaeology Data Service for future research and understanding of heritage significance. The work will be carried out in accordance with Historic England's 2016 Guidance note 'Understanding Historic Buildings: a guide to good recording practice' [32].
- 8.8.5. With this in place, the assessment concludes that a residual Minor Adverse (not significant) effect on the Belvedere Power Station Jetty (disused) is anticipated if demolished as part of the Proposed Scheme.
- 8.8.6. Following a programme of archaeological surveys and mitigation in the form of an updated geoarchaeological deposit model, surveys of the foreshore/intertidal zone and any additional surveys or mitigation required by GLAAS, the anticipated residual effect on Potential Prehistoric and Roman Remains (including submerged remains)

during the construction of the Proposed Scheme is Minor Adverse (not significant). The surveys and mitigation would need to be presented in an overarching Archaeological Mitigation Strategy document and individual Written Schemes of Investigation setting out the scope and methodology for the work. This is secured by DCO Requirement.

- 8.8.7. No other significant effects on the historic environment during both construction and operation are anticipated. The environmental effect on potential submerged remains is uncertain at the time of writing, however, any adverse effects would be mitigated by design adjustments to preserve in situ, where feasible and warranted, or targeted excavation/watching brief to achieve preservation by record.
- 8.8.8. In respect of cumulative impact, **Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1)** concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on the historic environment as a result of incombination effects with other plans and projects.
- 8.8.9. The **Design Approach Document (Document Reference 5.6)** focusses mainly on the terrestrial elements of the Proposed Scheme and provides some design information, design principles and design code guidance for the marine elements comprising the Proposed Jetty and works to the Belvedere Power Station Jetty (disused).

CONCLUSION WITH REGARDS TO HISTORIC ENVIRONMENT

- 8.8.10. The above, in addition to the assessment undertaken in **Chapter 9: Historic Environment (Volume 1) of the ES (Document Reference 6.1)** set out the basis by which the Proposed Scheme and associated historic environment assessment meet the requirements of Part 5.9 EN-1 and relevant national and local policies.
- 8.8.11. The **Design Approach Document (Document Reference 5.6)** identifies that the existing Belvedere Power Station Jetty (disused) can be retained for cultural heritage interest reasons illustrating the historic importance of the river for industry, with, minor works to support bird nesting habitat. Such an approach would align with policy SE-HER-1 of the South East Inshore Marine Plan. It also demonstrates that in the design evolution of the Proposed Scheme, consideration has been given to: sustaining an existing heritage asset and putting it to a viable use; the positive contribution that heritage assets can make; and the desirability of making a positive contribution to local character and distinctiveness, not least as sought through paragraph 203 of the NPPF.
- 8.8.12. The planning judgement made here is that the Proposed Scheme would result in less than substantial harm to heritage assets, that as demonstrated in section 9 of this Planning Statement, substantial public benefit accrues from the Proposed Scheme, and that a viable use is being considered for the Belvedere Power Station Jetty (disused).

8.8.13. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.9 of EN-1, policy SE-HER-1 (Heritage Assets) of the South East Inshore Marine Plan, paragraphs 195 - 214 of the NPPF, policy HC 1 (Heritage conservation and growth) of the London Plan 2021, and policies SP6 and DP14 of the Bexley Local Plan.

8.9. TOWNSCAPE AND VISUAL

- 8.9.1. The relevant policies for landscape and visual assessment are:
 - Part 5.10 of EN-1 [3]
 - Policy SE-SCP-1 (Seascape and landscape) of the South East Inshore Marine Plan [5]
 - Paragraphs 114, 135, 136, 160, 176, 180, 181, 182, and 183 of the NPPF [19]
 - Policies D1 (London's form, character and capacity for growth), D3 (Optimising site capacity through the design-led approach), D4 (Delivering good design), DP9 (Tall buildings), HC3 (Strategic and Local Views) and HC4 (London View Management Framework) of the London Plan 2021 [10]
 - Policies SP1 (Achieving sustainable development), SP5 (Placemaking through good design), DP9 (Development within town centres), DP11 (Achieving highquality design), DP12 (tall buildings and building heights), DP13 (Protecting local views) and DP18 (Waterfront development and development including, or close to, flood defences) of the Bexley Local Plan [11]

- 8.9.2. Part 5.10 of EN-1 requires applicants to carry out a landscape and visual impact assessment in the ES. Chapter 10: Townscape and Visual (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the likely significant effects of the Proposed Scheme on the townscape character and visual impact (TVIA) during construction and operation, including effects on townscape character, locally designated views, and visual amenity.
- 8.9.3. At the time of writing, construction works for Riverside 2 are being undertaken. By the time the Proposed Scheme is being constructed, Riverside 2 would be operational in the future baseline and appear in views throughout the townscape. The assessment including Riverside 2 is presented within Chapter 10 of the ES. For each receptor, the assessment considers the likely impact of the introduction of the Proposed Scheme against the future baseline (existing baseline including an operational Riverside 2).
- 8.9.4. Paragraph 5.10.19 of EN-1 advises applicants to consider landscape and visual matters in the early stages of siting and design. Additionally, policy SE-SCP-1 of the South East Inshore Marine Plan and paragraph 135 of the NPPF require that developments are sympathetic to local character, including the surrounding built environment, and landscape and seascape setting.

- 8.9.5. Policy DP13 of the Bexley Local Plan sets out the criteria with which developments must comply with when there is potential to impact a Local Protected View. The local protected views relevant to the Proposed Scheme are the Thames River Valley Panorama which represented by viewpoint 6, and the Canary Wharf Cluster 1 which is represented by viewpoint 7 within Chapter 10: Townscape and Visual (Volume 1) of the ES (Document Reference 6.1).
- 8.9.6. The TVIA concludes that during construction the Proposed Scheme will have Moderate-Large Adverse (significant) effect on the character and vegetation cover within the Site, and a Slight-Moderate Adverse (not significant) effect on the local townscape character (within 2km of the Site Boundary), this is due to construction activities taking place on the site, notably cranes, vegetation loss, and plant and machinery, and changes to specific features within the Site such as ground reprofiling and land cover.
- 8.9.7. The operation phase of the Proposed Scheme will have unavoidable impact on the landscape fabric within the Site, however, the Proposed Scheme will be seen in the context of the existing industrial environment and the introduction of the Proposed Scheme would be seen as an intensification of this use. Additionally, the local townscape character will likely experience some changes as a result of new buildings and structures. The TVIA concludes that during operation the Proposed Scheme will have a Moderate-large Adverse (significant) (year1) and Moderate Adverse (significant) (year 15) effect on the character and vegetation cover within the Site during operation, and a Slight-Moderate Adverse (not significant) (year 1) and Slight-Moderate Adverse (not significant) (year 15) effect on the local townscape character (within 2km of the Site Boundary) during operation.
- 8.9.8. The visual assessment within the TVIA is concerned with the views that are available to people who may be affected by the Proposed Scheme, including their perception and response to changes in these views, and visual amenity. The TVIA concludes that in the context of townscape and visual amenity, there will be significant negative effects on the change in character and visual amenity from Accessible Open Land and for users of PRoW within and in the vicinity of the Site (FP1/FP2/FP4) during both construction and operation of the Proposed Scheme. A Moderate Adverse (significant) effect is anticipated on these receptors during construction. During the operation phase, whilst the proposed planting will establish over time and help to reduce the effect, a Moderate-Large Adverse (significant) effect on the change in character and visual amenity from Accessible Open Land is predicted for year 15 (this is Moderate Adverse for users of PRoW).
- 8.9.9. The intra-project effects assessment undertaken in **Chapter 21: Cumulative Effects** (Volume 1) of the ES (Document Reference 6.1) concludes Moderate Adverse (Significant) effects on users of Accessible Open Land in both construction and operation phases. No additional practicable mitigation measures have been identified to mitigate this effect as all practicable mitigation measures have been considered in the respective chapters (Chapter 5: Air Quality, Chapter 10: Townscape and Visual

and Chapter 14: Population, Health and Land Use). No inter-project TVIA significant effects are predicted to arise.

DESIGN APPROACH DOCUMENT ETC

- 8.9.10. Whilst good design has been a driver for the development from an early stage, the design of the Proposed Scheme is ongoing and will be continue to be developed seeking to deliver an optimised layout and massing in the final operational masterplan. The approach to design, addressing its role through form, function and engagement, is set out in the **Design Approach Document (Document Reference 5.6)**.
- 8.9.11. Design, mitigation and enhancement measures underpinning the Proposed Scheme are presented in the **Outline LaBARDS (Document Reference 7.9)** and **Design Principles and Design Codes (Document Reference 5.7).** They include:
 - Improve the local public footpath connections to deliver a recreation route linking Thamesmead to the Crossness LNR including local enhancements for wayfinding and information.
 - Provide a visually attractive environment that secures a sense of belonging and personal security that is of consistent quality in terms of open space, natural habitat access, landscape design and architectural quality.
 - Provide planted boundaries appropriate to local character around the operation site to support the natural character of the Crossness LNR and an organised interface with Norman Road.
 - Control the visual appearance of the operational area in views from adjoining areas to deliver a coherent appearance.
 - Organise built form and material selection to deliver a visually coherent design and to reduce impact.
 - Building massing and structure height should step down from high in the north to low in the south, reflecting the transition from the industrial river corridor to local community.
 - Lower-level development to the south should be more fractured allowing some intervisibility between buildings responding to the interface with the community
 - Creation of landscape buffer along the boundaries of the Site to minimise the effects on visual amenity. In particular a substantial landscape buffer along the western Site Boundary is proposed to minimise the effects on visual amenity of users of Crossness LNR and local PRoW, and to respond positively to local policy.
 - Locating the permanent diversion of FP2 into the landscape buffer along the western Site Boundary to minimise the impact on visual amenity of users of this PRoW.
 - Consideration of the lighting design to avoid excessive lighting levels and to reduce adverse effects on the surrounding environment. The Outline Lighting Strategy (Document Reference 7.3) outlines design commitments for lighting,

compliance with which is secured through a requirement within the Draft DCO (Document Reference 3.1).

- Considering future role of the Belvedere Power Station Jetty (disused).
- 8.9.12. The Applicant is also considering offsite improvements in the local area, including potentially in the areas shown in **Figure 7-7: Proposed Habitat Creation and Enhancements** of the **ES (Document Reference 6.2)**, which if brought forward would aim to achieve enhanced access and townscape outcomes in the area, in addition to ecological benefits.
- 8.9.13. A series of design commitments (Design Codes) to ensure a good design outcome is achieved are set out in Design Principles and Design Codes (Document Reference 5.7), which are secured via the DCO Requirement in the draft DCO (Document Reference 3.1).

CONCLUSION

8.9.14. Paragraph 5.10.13 of EN-1 recognises that energy infrastructure is likely to have visual effects for receptors around proposed sites, and paragraph 5.10.35 of EN-1 confirms:

'The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.'

- 8.9.15. The Townscape and Visual Assessment has concluded that the Proposed Scheme could have significant adverse effects on the landscape, however these impacts are limited and specific to the position of the Proposed Scheme in its townscape and direct views of it, which can only be experienced locally, and will be viewed in the context of the future baseline. The intra-project effects of this townscape and visual with residual effects in air quality and population, health and land use results in a significant adverse effect on users of Accessible Open Land.
- 8.9.16. The planning judgement made here is that, despite the changes resulting from the Proposed Scheme, the overall effect is not damaging to townscape and visual amenity; and that the totality of the Proposed Scheme will bring opportunities to improve the overall amenity and user experience of the Accessible Open Land, delivering NPS EN-1 and Bexley Local Plan policy priorities. Good design will be achieved through the detailed design process and implementation of the Proposed Scheme as secured through the Works Plans (Document Reference 2.3), Design Principles and Design Code (Document Reference 5.7) and the Outline LaBARDS (Document Reference 7.9).
- 8.9.17. Further, section 9 of this Planning Statement and the **Project Benefits Report** (Document Reference 5.4) present the substantial benefits to be realised from the Proposed Scheme that outweigh this limited harm and the project should be judged accordingly.

8.9.18. The Applicant concludes that the Proposed Scheme does not conflict with the Part 5.10 of EN-1, policy SE-SCP-1 of the South East Inshore Marine Plan, paragraphs 114, 135, 136, 160, 176, 180, 181, 182, and 183 of the NPPF, policies D1, D3, D4, D9, HC3 and HC4 of the London Plan, and policies SP1, SP5, DP11, DP12, DP13, and DP18 of the Bexley Local Plan.

8.10. **LAND USE**

- 8.10.1. The relevant policies for land use are:
 - Part 5.11 of EN-1 [3]
 - Policies SE-SE-CO-1 (Co-existence), SE-PS-1 (Ports, Harbours and Shipping), SE-ACC-1 (Access), SE-TR-1 (Tourism and Recreation), SE-SOC-1 (Social Benefits), and SE-MPA-3 (marine protected areas).
 - Paragraphs 96-79, 119-120, 174-185, 189-194 and 210-216 of the NPPF [19]
 - Policies GG1 (building strong and inclusive communities), GG3 (creating a healthy city), G7 (trees and woodlands), G9 (Geodiversity), SD1 (opportunity areas), SI 9 (safeguarded waste sites), and SI17 (Protecting and enhancing London's waterways) of the London Plan 2021 [10]
 - Policies DP15 (Providing and Protecting Social and Community Infratructure), DP28 (contaminated land and development and storage of hazardous substances), DP7 (appropriate uses within designated industrial areas), SP1 (achieving sustainable development), SP3 (employment growth, innovation and enterprise), SP7 (Social and community service facilities), SP12 (sustainable waste management), SP11 (safeguarding land for transport schemes), SP15 (social and community infrastructure), DP19 (the River Thames and the Thames policy area) and DP28 (contaminated land) of the Bexley Local Plan [11]
- 8.10.2. There are no playing fields within or adjacent to the Site Boundary, and the Site does not include a Mineral Safeguarding Area or Best and Most Versatile Land.

RECREATION

- 8.10.3. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) reports the assessment of the likely significant effects of the Proposed Scheme on population, health and land use during construction and operation, including effects on walkers and cyclists, terrestrial businesses, terrestrial recreation and recreational users of the River Thames.
- 8.10.4. The Site is situated within MOL, Erith Marshes SINC, the Crossness LNR, Southeast London Green Chain, and other green infrastructure designations including PRoW. The effects on these land uses/designations is addressed at sections 5 and 6 of this Planning Statement and is not considered further here.
- 8.10.5. The Access Trestle for the Proposed Jetty will span over the Thames Path. The Thames path will be retained, however overhead construction activities will be undertaken across the Thames Path. Within the Site Boundary the Thames Path

forms part of the England Coast Path (FP3/NCN1). Potential effects to users of the England Coast Path (FP3/NCN1) have been assessed in **Chapter 14: Population**, **Health and Land Use (Volume 1) of the ES (Document Reference 6.1)**. There will be ongoing engagement with users, and clear signage on planned disruption during construction of the Proposed Scheme. This is proposed to be managed through a priority order (as set out at **paragraph 2.4.68, Chapter 2: Site and Proposed Scheme Description)** to provide a flexible and proportionate approach. With mitigation measures (as set out in the **Outline CoCP (Document Reference 7.4)**) a Moderate Adverse (Significant) effect on the England Coast Path (FP3/NCN1) during construction has been identified. This effect is temporary, and limited to the construction period.

- 8.10.6. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) also reports Moderate Adverse effects on walkers and cyclists using the England Coast Path and NCN1 during construction.
- 8.10.7. There are no significant adverse effects on recreational users of the River Thames during either construction or operation phases.

GROUND CONDITIONS

- 8.10.8. Paragraphs 5.11.14 5.11.18 of EN-1 and policy DP28 of the Bexley Local Plan require applicants to take account of existing ground conditions, ensuring that the risk posed by land commination and instability is considered. Applicants are also encouraged to implement a Soil Management Plan, and opportunities for remediation, to minimise potential land contamination.
- 8.10.9. Chapter 17: Ground Conditions and Soils (Volume 1) of the ES (Document Reference 6.1) reports the assessment of the likely significant effects of the Proposed Scheme on ground conditions and soils during construction and operation. Ground investigation would be undertaken prior to the construction phase as set out in the Draft DCO (Document Reference 3.1). If the ground investigation identifies contaminant linkages a Remediation Strategy would be produced that would specify protective measures during construction.
- 8.10.10. The assessment does not report any significant effects on ground conditions and soils as a result of the Proposed Scheme. As such, a Soil Management Plan is not required.

TREES AND WOODLANDS

- 8.10.11. Paragraph 5.11.27 of EN-1, policy G7 of the London Plan 2021 require applicants to assess impacts on, and loss of, all trees and woodlands within the site boundary.
- 8.10.12. Appendix 10-3: Arboriculture Assessment of the ES (Document Reference 6.3) identifies all trees which may be affected by the Proposed Scheme, assesses the impact of the Proposed Scheme upon those trees and recommended necessary protection measures to ensure the health of retained trees.

- 8.10.13. The assessment confirms no record of TPO, conservation areas, ancient/veteran trees, traditional orchards nor ancient woodland within the arboricultural Study Area (extent of the Site plus up to a further 15m). The Proposed Scheme would result in the removal of 12 low quality trees and one very low quality tree. All other arboricultural features can be retained and protected. Principles for tree protection are set out in an outline Aboriculture Method Statement within the assessment.
- 8.10.14. The Proposed Scheme includes a landscape design, details of which are reported in the **Outline LaBARDS (Document Reference 7.9),** including long-term management and maintenance measures for the landscaping.

BEXLEY RIVERSIDE OPPORTUNITY AREA AND BELVEDERE INDUSTRIAL AREA SIL

- 8.10.15. The Bexley Riverside Opportunity Area (Policy SD1 of the London Plan 2021) has been identified in the London Plan since 2004 with the potential provision for 6,000 new homes and 19,000 new jobs by 2041. Much of the Site, particularly the Carbon Capture Facility is located within the Belvedere Industrial Area, identified in the Bexley Local Plan (policies SP1, SP3 and DP7).
- 8.10.16. The Belvedere Industrial Area hosts businesses predominantly associated with manufacturing and logistics. Larger units include Iron Mountain Records Storage Facility, Asda Belvedere Distribution Centre, Amazon UK DBR1 and Lidl Warehouse/Belvedere Regional Distribution Centre.
- 8.10.17. Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme will create employment opportunities with an anticipated total net additional 874.8 jobs in Greater London during the construction phase per annum, and during the operation phase a total net additional 25.8 jobs in Greater London), and contribute to the economy as it is anticipated to generate £95,214,10 in GVA to the Greater London economy during the operation phase, and £1,556,591 GVA to the Greater London economy during the operational phase.
- 8.10.18. The Proposed Scheme therefore aligns with Policy SD1 of the London Plan 2021 and Policies SP1, SP3 and DP7 of the Bexley Local Plan by focusing development in these areas and providing jobs within the industrial sector.

BUSINESSES

- 8.10.19. Businesses located within the Site are Riverside 1, Riverside 2 (at the time of writing, Riverside 2 is under construction, due to be operational by 2026), and Munster Joinery. Munster Joinery is located on the western side of Norman Road, the main access to the Proposed Scheme.
- 8.10.20. There are 12 other businesses located within 100m of the Site Boundary:
 - Iron Mountain Records Storage Facility adjacent (east);
 - Asda Belvedere Distribution Centre adjacent (east);

- Lidl Warehouse/Belvedere Regional Distribution Centre adjacent (southeast);
- Ctr Group approximately 70m south;
- Howdens Joinery– approximately 70m south;
- Tap'in 3PL Ltd approximately 95m south;
- The Morgan Pub and Restaurant approximately 20m south;
- Travelodge London Belvedere approximately 30m south;
- Snap Fitness approximately 70m east;
- HS Carlsteel Engineering Ltd approximately 95m south;
- Starbucks Coffee Drive Thru approximately 90m southeast;
- Freshasia Foods Ltd. approximately 100m south; and
- Intersped Logistics (UK) Limited approximately 90m south.
- 8.10.21. The location of these is shown on **Figure 14-3: Terrestrial Businesses** of the **ES** (Document Reference 6.2).
- 8.10.22. The premises currently occupied by Munster Joinery, which is located within the Site Boundary, would be demolished, and the site used as a Temporary Construction Compound for the landside elements of the Proposed Scheme and then developed as part of the Carbon Capture Facility.
- 8.10.23. The Applicant has sought to reach an agreement with Munster Joinery on a relocation site; albeit this has not been reached at the time of writing. The assessment within **Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1)** concludes that there would be a residual Major Adverse (Significant) effect on Munster Joinery.
- 8.10.24. The Applicant is seeking to use compulsory acquisition powers to acquire the Site on which Munter Joiner Limited is located. Justification for why compulsory acquisition powers are sought is outlined in the **Statement of Reasons (Document Reference 4.1).**
- 8.10.25. There is potential for those businesses located within the 100m of the Site Boundary to be adversely affected by increased construction traffic movements on Yarnton Way, Eastern Way (southern end immediately north of A2016) and Norman Road. However, these businesses are located within an existing industrial area where movements of light and heavy goods vehicles are common. Munster Joinery and Riverside 1 are the only operational businesses located directly off Norman Road. As Munster Joinery, located within the Site boundary, is intended to be demolished as part of the Proposed Scheme it consequently would not require access during construction of the Proposed Scheme.
- 8.10.26. Two businesses (Asda Belvedere Distribution Centre and Iron Mountain Record Storage Facility) are located along a side road off Norman Road. The easternmost temporary construction compound will also be accessible from this side road. As set out in the **Framework Construction Traffic Management Plan (Document**

Reference 7.7), the Travel Plan Coordinator would be responsible for ensuring coordination with adjacent developments and businesses to minimise traffic disruption. Further engagement with these local businesses will be undertaken, and signage to advertise that businesses are open and operating as normal will be in place during construction of the Proposed Scheme. It's therefore considered that there will be a Minor Adverse (not significant) effect on Asda Belvedere Distribution Centre, Iron Mountain Record Storage Facility and Lidl Belvedere Regional Distribution Centre, and a Negligible (not significant) effect on the other businesses within 100m of the Site Boundary.

8.10.27. With the exception of Munster Joiner, there is no evidence to suggest that businesses within the Site or in the vicinity of the Site Boundary would be affected in a manner contrary to policy.

SAFEGUARDED WASTE SITES AND RIVERSIDE RESOURCE RECOVERY ENERGY FROM WASTE FACILITY STRATEGIC WASTE MANAGEMENT SITE

- 8.10.28. The only safeguarded waste sites and safeguarded wharf affected by the Proposed Scheme are those operated by the Applicant, Riverside 1 and Riverside 2 (under construction) and Middleton Jetty.
- 8.10.29. The majority of waste delivered to Riverside 1 is transported via barge shipment along the River Thames, and future waste will continue be delivered to Riverside 2 in this way. Incinerator bottom ash is, and continue to be with Riverside 2, taken to the Port of Tilbury via the River Thames.
- 8.10.30. The Proposed Scheme is promoted in order to capture carbon dioxide emissions from these facilities and to enable it to be efficiently transported, via the River Thames, to a place of permanent storage.
- 8.10.31. Operation of the Carbon Capture Facility and the Proposed Jetty will have no impact on the waste throughput (and associated traffic and vessel movements) of Riverside 1 and Riverside 2. The Proposed Jetty is promoted in order to ensure there is no detrimental impact on efficient operations, which rely heavily upon river transport, to Riverside 1 and Riverside 2 (when operational).
- 8.10.32. The Proposed Scheme therefore aligns with Policy SI 9 of the London Plan and Policy SP12 of the LBB Local Plan.
- 8.10.33. Additionally, the Proposed Scheme will result in the decarbonisation of Riverside 1 and Riverside 2. This will enable the sustainable waste management processes undertaken at the site to be moved onto the next level, optimising development of the site and bringing long term benefits for London and the South East.

SAFEGUARDED WHARF

- 8.10.34. Middleton Jetty lies within the Site Boundary and is a Safeguarded Wharf per policy SP11 of the Bexley Local Plan. The Belvedere Power Station Jetty (disused) is not safeguarded. The policy indicates that the Council will support development proposals that complement and do not frustrate delivery, operation or retention of existing and future transport infrastructure.
- 8.10.35. The Proposed Scheme will not impact upon the Middelton Jetty's ability to continue to operate to serve Riverside 1 and Riverside 2.
- 8.10.36. For construction of the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) transport will primarily be via the River Thames, where possible. Once the Proposed Scheme is operational the Proposed Jetty will provide the riverside access point to be used for the export of LCO₂. Up to five marine vessels will call at the Proposed Jetty each week to collect and transport LCO₂ to meet the annual throughput.
- 8.10.37. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) provides an assessment of the likely significant effects of the Proposed Scheme on businesses that rely upon access to the River Thames. There is ongoing engagement with these businesses, and a Passage Plan will be developed to mitigate any potential effects. A Preliminary Navigational Risk Assessment (pNRA) has been undertaken for the Proposed Scheme (Appendix 19-1 of the ES Document Reference 6.3). The pNRA identifies risk control measures for the construction and operation of the Proposed Scheme, and monitoring measures will be in place for both the construction and operational phases, these measures are set out in Chapter 19: Marine Navigation (Volume 1) of the ES (Document Reference 6.1). With mitigation measures, the assessment within Chapter 14 identifies no anticipated significant effects to businesses that rely upon access to and from the River Thames.
- 8.10.38. The Proposed Scheme is considered to comply with relevant policy.

THE RIVER THAMES AND THE THAMES POLICY AREA

- 8.10.39. The Site is located within the LBB River Thames Policy Area, policy DP19 of the Bexley Local Plan. Development within the policy area should:
 - investigate the potential for full or part realigned flood defences;
 - follow the strategies for water management set out in the Thames Estuary 2100 Plan [45];
 - enhance the relationship between the development site and the Thames; and
 - contribute to the completion of the Thames Path.
- 8.10.40. Flood defences and the water environment have been considered in Chapter 11:
 Water Environment and Flood Risk (Volume 1) of the ES (Document Reference
 6.1), and the associated FRA at Appendix 11-2 of the ES (Document Reference

6.3). The Proposed Jetty would not jeopardise the ability for the TE2100 programme for improvements to the flood defences to come forward in the future.

- 8.10.41. Policy DP19 requires proposals in the Thames Policy Area to consider impacts to the ecology of the River Thames and seek ecological enhancements and improve access to nature.
- 8.10.42. Impacts of the Proposed Scheme to the marine biodiversity have been considered within Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1). The Proposed Scheme will deliver improvements in respect of intertidal habitat in the River Thames. Further details are within the Biodiversity Net Gain (BNG) Report (Appendix 7.1: BNG Report (Terrestrial and Marine) of the ES (Document Reference 6.3).
- 8.10.43. The Proposed Scheme is considered to comply with relevant policy.

CUMULATIVE EFFECTS

8.10.44. The intra-project effects assessment undertaken in **Chapter 21: Cumulative Effects** (Volume 1) of the ES (Document Reference 6.1) concludes Moderate Adverse (Significant) effects on users of Accessible Open Land in both construction and operation phases. No additional practicable mitigation measures have been identified to mitigate this effect as all practicable mitigation measures have been considered in the respective chapters (Chapter 5: Air Quality, Chapter 10: Townscape and Visual and Chapter 14: Population, Health and Land Use).

CONCLUSION

- 8.10.45. The effects on land use have been considered widely throughout this Planning Statement, with the planning judgement concluding an acceptable level of effect.
- 8.10.46. There are no significant adverse effects on terrestrial businesses or on businesses that rely upon the River Thames during either construction or operation phases, with the exception of Munster Joinery.
- 8.10.47. The effect on Munster Joinery is considered above, and at section 8.6 of this Planning Statement which concludes that the Applicant remains committed to working with Munster Joinery to agree a relocation package such that the business operations need not be lost. The Applicant continues to seek agreement with Munster Joinery on a relocation site.
- 8.10.48. The Proposed Scheme in its entirety comprises built form (on land and in the River Thames) and an extensive package of mitigation and enhancement measures. It extends across 77ha, predominantly using locations suitable for the intended development. About one third of the Carbon Capture Facility is proposed on land that currently benefits from protective designations and is not intended, in development plan policy, to be built upon. However, this Planning Statement has already set out a planning judgement that the effect of this conflict with policy is limited and substantially outweighed by the benefits of the Proposed Scheme.

- 8.10.49. Otherwise, there is no evidence to suggest that the Proposed Scheme would place unacceptable impact on any other relevant land use.
- 8.10.50. The Proposed Scheme is considered not to be in conflict with the policies relevant to this matter.

8.11. NOISE AND VIBRATION

- 8.11.1. The relevant policies for noise and vibration are:
 - Part 5.12 of EN-1 [3].
 - Policies SE-UWN-1 and SE-UWN-2 (underwater noise) of the South East Inshore Marine Plan [5].
 - Paragraphs 180, 191, and 193 of the NPPF [19].
 - Policy D14 (noise) of the London Plan 2021 [10].
 - Policy DP11 (high quality design) of the Bexley Local Plan [11].

- 8.11.2. Part 5.12 of EN-1 requires the applicant to undertake a noise assessment, this should include the following:
 - a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal characteristics, if the noise is impulsive, whether the noise contains particular high or low frequency content or any temporal characteristics of the noise;
 - identification of noise sensitive receptors and noise sensitive areas that may be affected;
 - the characteristics of the existing noise environment;
 - a prediction of how the noise environment will change;
 - in the shorter term, such as during the construction period
 - in the longer term, during the operating life of the infrastructure
 - at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year
 - an assessment of the effect of predicted changes in the noise environment on any noise-sensitive receptors, including an assessment of any likely impact on health and quality of life / well-being where appropriate, particularly among those disadvantaged by other factors who are often disproportionately affected by noisesensitive areas;
 - if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise; and
 - all reasonable steps taken to mitigate and minimise potential adverse effects on health and quality of life.

- 8.11.3. Chapter 6: Noise and Vibration (Volume 1) of the ES (Document Reference 6.1), reports the outcome of the assessment of likely significant environmental effects arising from the Proposed Scheme on noise and vibration, and has been produced in accordance with the above requirements.
- 8.11.4. The assessment identifies a Moderate Adverse (significant) effect on Clydesale Way and Travelodge London Belvedere hotel due to construction noise is anticipated during the daytime during the substructure and superstructure works. The duration of any construction works within 180m of the receptors is limited to less than 10 or more days or nights in any 15 consecutive days or nights or a total number of days not exceeding 40 in any six consecutive months which is included in the Outline CoCP (Document Reference 7.4) and secured by a requirement of the Draft DCO (Document Reference 3.1). With this mitigation in place the assessment concludes a residual Moderate (not significant) effect as the impact of construction noise is moderate given the predicted noise levels at the receptor, however, given the duration will be limited the effect is not significant,
- 8.11.5. During operation of the Proposed Scheme, the assessment has identified a residual Minor Adverse (not significant) effect on the Travelodge London Belvedere hotel and Clydesdale Way during night time. A Noise Mitigation Plan will be prepared and appended as part of the Operational EMP, secured through a requirement of the Draft DCO (Document Reference 3.1) prior to the operation of the Proposed Scheme to detail the final mitigation measures to demonstrate that only negligible to minor impacts would arise, which are not significant. This action also promotes compliance with paragraph 5.12.12 of NPS EN-1.
- 8.11.6. Given the Air Source Heat Pump fans of the Proposed Scheme are the greatest source of noise at Clydesdale Way and the Travelodge London Belvedere, additional mitigation measures have been proposed to minimise the predicted impact, these are incorporated in the Mitigation Schedule (Document Reference 7.8) and Operational EMP, secured through a requirement of the Draft DCO (Document Reference 3.1)
- 8.11.7. Paragraph 5.12.8 of EN-1 requires the noise and vibration impacts of ancillary activities to be considered in the noise assessment. Construction road traffic noise has been assessed within Chapter 6, and the assessment concludes that with construction vehicles on the surrounding road network, the increase in noise levels is likely to have a negligible (not significant) effect.
- 8.11.8. No other significant effects of the Proposed Scheme on noise and vibration during construction or operation have been identified.

PROTECTED SPECIES AND WILDLIFE

8.11.9. At paragraph 5.12.10, NPS EN-1 advise applicants to consult the relevant bodies regarding the assessment of noise on protected species or other wildlife, and also consider the seasonality of potentially affected species. Paragraph 5.12.11 advises

that developments in the marine environment should consider impacts from noise and vibration at the individual project level and in-combination with other marine activities.

8.11.10. Chapter 7: Terrestrial Biodiversity and Chapter 8: Marine Biodiversity of the ES (Document Reference 6.1) consider the effects of noise and vibration on habitats and species. The assessments conclude, following application of mitigation measures, a residual Minor Adverse (not significant) effect on Crossness LNR, Erith Marshes MSINC, Belvedere Dykes SINC, River Thames and Tidal Tributaries MSINC and wintering birds due to noise and vibration at the construction and operation phases of the Proposed Scheme, a Minor Adverse (not significant) effect on breeding birds due to noise and vibration at the construction phase, and a Negligible (not significant) effect on other ecological receptors due to noise and vibration at the construction and operation phases of the Proposed Scheme.

HEALTH

- 8.11.11. Paragraph 5.12.17 of EN-1 states that the SoS 'should not grant development consent unless they are satisfied that the proposals will meet the following aims, through the effective management and control of noise:
 - avoid significant adverse impacts on health and quality of life from noise
 - mitigate and minimise other adverse impacts on health and quality of life from noise
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise'.
- 8.11.12. Paragraph 191 of the NPPF and policy DP14 of the London Plan 2021 state that new developments should ensure noise does not give rise to significant adverse impacts on health and the quality of life.
- 8.11.13. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) assesses effects on human health, mental health and wellbeing of the local population from the Proposed Scheme. The assessment considers the result of the noise assessment of the Proposed Scheme. It is concluded that the Proposed Scheme will have a residual Negligible (not significant) effect on human health, mental health and wellbeing of the local population.

UNDERWATER NOISE

- 8.11.14. Policies 5.12.4 of NPS EN-1 and SE-UWN-6 and SE-UWN-2 require applications for proposals that result in the generation of impulsive or non-impulsive noise to demonstrate that any adverse impacts from noise on highlight mobile species, marine line, and human enjoyment of marine areas have been mitigated so they are no longer significant.
- 8.11.15. Underwater noise and vibration effects have been considered within the ES, the detailed assessment is presented in **Appendix 6-4: Underwater Noise Assessment** of Volume 3 of the ES (Document Reference 6.3), with the resultant impacts on

marine species presented in Chapter 8: Marine Biodiversity (Volume 1) of the ES (Document Reference 6.1) which concludes that no likely significant effects are expected to arise.

CUMULATIVE EFFECTS

8.11.16. In respect of cumulative impact, **Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1)** concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on noise and vibration as a result of incombination effects with other plans and projects.

CONCLUSION

- 8.11.17. Effects of noise and vibration of the Proposed Scheme have been assessed in Chapter 6: Noise and Vibration, Chapter 7: Terrestrial Biodiversity, Chapter 8: Marine Biodiversity, and Chapter 15: Population, Health and Land Use of the ES (Document Reference 6.1).
- 8.11.18. The assessment widely concludes no significant adverse effect and are considered to meet the requirements of part 5.12 of EN-1 and relevant national and local policies. In particular, it is noted that the mitigation measures put in place are reasonable steps to have taken to mitigate and minimise potential adverse effects on health and quality of life.
- 8.11.19. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.12 of EN-1, policies SE-UWN-1 and SE-UWN-2 of the South East Inshore Marine Plan, paragraphs 180, 191, and 193 of the NPPF, policy D14 of the London Plan 2021, and policy DP11 of the Bexley Local Plan.

8.12. SOCIO-ECONOMICS

- 8.12.1. The relevant policies for socio-economics are:
 - Part 5.13 of EN-1 [3].
 - Policies SE-EMP-1 (employment), and SE-INF-1 (Infrastructure), and SE-CO-1 (co-existence) of the South East Inshore Marine Plan [5].
 - Paragraphs 85 87 of the NPPF [19].
 - Policies GG5 (growing a good economy), SD1 (Opportunity Area), E5 (Strategic Industrial Locations (SIL), SI12 (minimising greenhouse gas emissions), E8 (Sector growth opportunities and clusters, and E11 (skills and opportunities for all) of the London Plan 2021 [10].
 - Policy SP3 (employment growth, innovation and enterprise) of the Bexley Local Plan [11].

ENVIRONMENTAL STATEMENT

8.12.2. Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1) reports the outcome of the assessment of likely significant environmental effects

arising from the Proposed Scheme on socio economics, in accordance with Part 5.13 of EN-1 and relevant national and local policies.

- 8.12.3. Paragraph 5.13.3 of EN-1 strongly encourages applicants to engage with relevant local authorities to gain a better understanding of local or regional issues and opportunities. The Applicant undertook early engagement with key stakeholders to gather relevant information to inform the socio-economic assessment, details of this engagement is set out in the **Consultation Report (Document Reference 5.1)** and **Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1).**
- 8.12.4. Paragraph 5.13.5 states:

'Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.

- 8.12.5. Section 15.6 of Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1) describes the existing socio-economic conditions of the Site and surrounding area. Sections 4 9 of this Planning Statement and the Policy Accordance Tracker (Document Reference 5.3) assess the compliance of the Proposed Scheme with local planning policies.
- 8.12.6. Paragraph 5.13.4 of EN-1 provides details of what the socio-economic assessment may include, this is summarised below:
 - the creation of jobs and training opportunities;
 - the contribution to the development of low-carbon industries at the local and regional level as well as nationally;
 - the provision of additional local services and improvements to local infrastructure;
 - indirect beneficial impacts for the region hosting the infrastructure;
 - effects to tourism;
 - impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure; and
 - cumulative effects.
- 8.12.7. Whilst some of the above effects have been scoped out of the socio-economic assessment, a summary of each has been provided below.

CREATION OF JOBS AND TRAINING OPPORTUNITIES

8.12.8. Employment generation (direct, indirect and induced) as a result of the construction and operation of the Proposed Scheme has been assessed in the socio-economic assessment. The Applicant would recruit locally, wherever practicable, and enable access to training and career development. Additionally a Skills and Employment Plan will be prepared prior to the Proposed Scheme commencing operation and secured by DCO Requirement per the **Draft DCO (Document Reference 3.1)**.

- 8.12.9. The processes used to recruit and manage staff to work at the Proposed Scheme would be demonstrably fair and offer equal opportunities to all.
- 8.12.10. The assessment concludes that during construction the total net additional employment created within Greater London as a result of the Proposed Scheme is estimated to be 874.8 employees per annum, whilst 291.6 jobs will be created outside of Greater London, resulting in a total net employment generation of 1,166.4 jobs on average per annum during the construction period. Additionally, the operation of the Proposed Scheme would result in the creation of 34.4 net additional jobs, of which 25.8 are estimated to be taken up by residents of Greater London, and 8.6 by residents outside Greater London.
- 8.12.11. This also aligns with the relevant national and local policies referenced above which aim to increase employment, providing opportunities for all, and grow the economy.

CONTRIBUTION TO LOW-CARBON-INDUSTRIES

8.12.12. The Carbon Capture Facility will be one of the largest carbon capture projects in the UK, and will contribute to low-carbon industries by providing direct, indirect, and induced employment opportunities across the low-carbon industry.

ADDITIONAL LOCAL SERVICES AND IMPROVEMENTS TO LOCAL INFRASTRUCTURE AND CHANGING INFLUX OF WORKERS.

- 8.12.13. As detailed in the Scoping Report [5] the level of facilities in the vicinity of the application site, good transport linkages and workforce to be utilised, it is not anticipated that there would be a significant increase in demand for accommodation or social infrastructure such as community and recreational resources from construction workers relocating close to the Proposed Scheme.
- 8.12.14. It is therefore considered that an Accommodation Strategy, per paragraph 5.13.7 of EN-1, is not required for the Proposed Scheme.

INDIRECT BENEFICIAL IMPACTS FOR THE REGION HOSTING THE INFRASTRUCTURE

- 8.12.15. There are opportunities for local (LBB) and regional (Greater London) economic benefits arising from the construction phase. By applying an average benchmark of £108,841 GVA per construction employee in Greater London, it is anticipated that the estimated 874.8 net construction jobs generated by the Proposed Scheme represent an additional £95,214,107 in GVA to the Greater London economy
- 8.12.16. By applying the average benchmark of £82,309 GVA per construction employee outside of Greater London to the estimated 291.6 net construction job generation from the Proposed Scheme, it is estimated that there would be an additional £24,001,304 GVA to the wider economy.
- 8.12.17. When considering the net operation employment generation, it is anticipated that the Proposed Scheme would represent an additional £1,556,591 GVA to the Greater

London economy. This is calculated by applying an average benchmark of £60,333 GVA per operational employee in Greater London to the estimated 25.8 net operational jobs generated by the Proposed Scheme. When applying the average benchmark of £58,526 GVA per operational employee outside of Greater London, it is anticipated that the 8.6 net operational jobs would lead to an additional £503,324 to the wider economy. This calculation is based on a scenario where Munster Joinery Limited was relocated within an area that would support existing business operations.

TOURISM

- 8.12.18. Chapter 14: Population, Health and Land Use (Volume 1) of the ES (Document Reference 6.1) sets out the effects of the Proposed Scheme on terrestrial and marine businesses, users of Public Rights of Way, recreational users of the River Thames and terrestrial recreation. The assessment considers the England Coast Path, NCN1, FP1, FP2, FP3, FP4 and FP242, recreational activities along the River Thames and terrestrial recreation (such as Crossness LNR) as tourist receptors.
- 8.12.19. It has been identified that the Proposed Scheme will have a residual Moderate Adverse (Significant) effect on Accessible Open Land during construction as parts of these areas would be closed to the public in phases during the construction phase. These temporary restrictions would cease upon completion of construction. During construction there is there is potential for disruption to access, loss of amenity and permanent change to these areas as the location of development closer to the bird watching areas of the Crossness LNR that would remain undeveloped and open during construction will give a backdrop of industrial machinery. This may deter some bird populations and reduce overall levels of tranquillity and enjoyment of the site. Additionally, increased construction traffic and HGV movements could restrict parking along Norman Road which could limit access for users (particularly those with reduced mobility) of the Crossness LNR.
- 8.12.20. Where possible, works will be screened to minimise adverse effects on the amenity value and enjoyment of these areas and clear signage and directions for any alternative routes and appropriate alternative diversions would be provided and diversions clearly publicised to maintain access.
- 8.12.21. During operation of the Proposed Scheme a Negligible (not significant) effect on Accessible Open Land is anticipated. This is due to the improvements proposed as part of the Mitigation and Enhancement Area which are detailed in the Outline LaBARDS (Document Reference 7.9) and Design Approach Document (Document Reference 5.6).
- 8.12.22. As previously discussed, during the construction phase there will be a Moderate Adverse (Significant) effect on the England Coast Path, NCN1, FP2, FP3 and FP4, a Minor Adverse (not significant) effect on FP1, and FP242. It is anticipated that once operational, the majority of PRoW within the Study Area will remain largely unaffected by the Proposed Scheme and all temporary construction diversions would be removed, although FP2 would have been permanently diverted (this would be a very

localised diversion). There may be some long term permanent reductions in amenity due to changes in visual amenity and operational noise, but this is unlikely to deter users due to the existing industrial location of the Site.

- 8.12.23. The **Design Approach Document (Document Reference 5.6)** and **Outline** LaBARDS (Document Reference 7.9) set out plans to improve and enhance signage and surfacing of all PRoW within the Site Boundary, removing overgrown vegetation as well as reviewing the removal of some obstacles such as gates. Raised walkways are also intended to be provided so that Crossness LNR remains accessible during wet periods. This is likely to result in beneficial effects for users of the PRoWs.
- 8.12.24. In addition, a new permissive paths and waymarked circular active routes route will be provided within the Norman Road Field land parcel and Crossness LNR, providing better access across the LNR as well as Southmere Park.
- 8.12.25. The assessment concludes that during the operation of the Proposed Scheme there will be a Minor Beneficial (not significant) effect to permissive paths and way marked circular active routes, and a Negligible (not significant) effect to the England Coast Path, NCN1 and FP242, and a Minor Adverse (not significant) effect on FP1, FP2, FP3, and FP4.
- 8.12.26. The construction of the Proposed Scheme would not significantly decrease the enjoyment of recreational activities along and within the river due to the industrial location of the Proposed Scheme. Additionally, given that this section of the River Thames is already heavily used by large vessels and the operation of the Proposed Scheme would not substantially increase levels of marine traffic, effects on recreational users and recreational facilities located on the River Thames are likely to be limited during operation of the Proposed Scheme. Therefore no significant effects on recreational users of the Thames are anticipated.

CUMULATIVE EFFECTS

8.12.27. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme is not predicted to result in any significant effects on socio-economic receptors as a result of in-combination effects with other plans and projects.

CONCLUSION

8.12.28. Chapter 15: Socio-economics (Volume 1) of the ES (Document Reference 6.1) demonstrates that no significant adverse effects are identified at the construction or operation phases of the Proposed Scheme, and a minor beneficial effect to employment generation and GVA generation during the construction phase is anticipated.

- 8.12.29. Alongside the **Chapter 14: Population, Health and Land Use** of the **ES (Document Reference 6.1)** it is concluded that the requirements of part 5.13 EN-1 and the relevant national and local policies are met.
- 8.12.30. The Applicant recognises that the positive outcome of Chapter 15 will be affected by the ability to relocated Munster Joinery. The effect on Munster Joinery is considered elsewhere in this Planning Statement and concludes that the Applicant remains committed to working with Munster Joinery to agree a relocation package such that the business operations need not be lost and may be able to continue at a potentially at a better location.
- 8.12.31. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.13 of EN-1, policies SE-EMP-1, SE-INF1 and SE-CO-1 of the South East Inshore Marine Plan, paragraphs 85 87 of the NPPF, policies GG5, SD1, E5, E8, and E11 of the London Plan, and policy SP3 of the Bexley Local Plan.

8.13. TRAFFIC AND TRANSPORT

- 8.13.1. The relevant policies for traffic and transport are:
 - Part 5.14 of EN-1 [3]
 - Paragraphs 108 117 of the NPPF [19]
 - Policies T1 (strategic approach to transport), T2 (healthy streets), T3 (transport capacity, connectivity and safeguarding), T4 (assessing and mitigating transport impacts, T5 (cycling), T6 (car parking), and T7 (deliveries, servicing and construction) of the London Plan 2021 [10]
 - Policies SP10 (Bexley's transport network), DP19 (The River Thames and the Thames Policy Area), DP22 (sustainable transport), SP23 (parking management), DP24 (impact of new developments on the transport network) of the Bexley Local Plan [11]

- 8.13.2. Part 5.14 of EN-1, paragraph 117 of the NPPF, policy T4 of the London Plan 2021 and policy SP10 of the Bexley Local Plan require applicants to include a transport assessment if a project is likely to have significant transport implications.
- 8.13.3. Chapter 18: Landside Transport (Volume 1) of the ES (Document Reference 6.1) and Appendix 18-1: Transport Assessment of Volume 3 of the ES (Document Reference 6.3) provide an assessment of the likely significant effects of the Proposed Scheme on landside transport, including the following effects:
 - Construction Phase:
 - pedestrian/cyclist severance;
 - pedestrian/cyclist delay;
 - pedestrian/cyclist amenity;

- fear and intimidation;
- public transport network
- driver delay; and
- accidents and safety.
- Operation Phase:
 - pedestrian/cyclist severance;
 - pedestrian/cyclist delay;
 - pedestrian/cyclist amenity;
 - fear and intimidation;
 - public transport network; and
 - hazardous loads.
- 8.13.4. The assessment concludes all effects will be Negligible (not significant) during the construction and operation of the Proposed Scheme.
- 8.13.5. The Framework Construction Traffic Management Plan (Framework CTMP) (Document Reference 7.7) sets out potential measures to mitigate construction effects, including the development of a Construction Workforce Travel Plan (CWTP). A Full CTMP will be developed once Contractor(s) have been appointed, this will be produced in accordance with local highways authority guidance and Construction Logistics Planning (CLP) Guidance [34].
- 8.13.6. Paragraph 5.14.6 of EN-1 requires applicants to consult with National Highways and Highways Authorities on the transport assessment and proposed mitigation. National Highways, London Borough of Bexley, Royal Borough of Greenwich, Dartford Borough Council, Kent County Council, and Transport for London have been consulted on the Proposed Scheme, including transport matters as set out in Chapter 18: Landside Transport (Volume 1) of the ES (Document Reference 6.1) and the Consultation Report (Document Reference 5.1).
- 8.13.7. Paragraph 5.14.7 of EN-1, paragraph 117 of the NPPF, policy T4 of the London Plan 2021 and policy SP10 of the Bexley local plan require applicants to prepare a travel plan and provide details of proposed measures to improve access by active, public and shared transport. The Proposed Scheme is not anticipated to attract a significant number of movements (by all modes) in the operation phase. The Proposed Scheme will be incorporated within an update to the existing Workplace Travel Plan (WTP) for Riverside 1 and (once operational) Riverside 2. A WTP represents a long term travel management strategy, detailing specific measures, designed to encourage staff and visitors to travel by more sustainable and active transport options.
- 8.13.8. Paragraph 5.14.12 of EN-1 states that 'all stages of the project should support and encourage a modal shift of freight from road to more environmentally sustainable alternatives', including maritime and inland waterways.

- 8.13.9. The planned outputs of LCO₂ from the Proposed Scheme are anticipated to be transported via the Proposed Jetty, where practicable, and not via the surrounding road network. Up to five marine vessels will call at the Proposed Jetty each week to collect and transport LCO₂ to meet the annual throughput. For construction of the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) transport will primarily be via the River Thames.
- 8.13.10. Whilst noting that the transport assessment is itself inherently cumulative, **Chapter** 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on landside transport as a result of in-combination effects with other plans and projects.

CONCLUSION

8.13.11. Paragraph 5.14.21 of EN-1 states:

'The Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.'

- 8.13.12. The assessments within **Chapter 18: Landside Transport** and **Chapter 21: Cumulative Effects** of the **ES (Document Reference 6.1)** provide evidence that the Proposed Scheme would not have an unacceptable impact on highway safety, or severe cumulative impacts on the road network. The Site has existing good public transport linkages as detailed in the landside transport assessment, and the Proposed Scheme will make use of the existing waterway network. The Proposed Scheme will be incorporated within an update to the existing WTP for Riverside 1 and (once operational) Riverside 2 which will detail specific measures, designed to encourage staff and visitors to travel by more sustainable and active transport options.
- 8.13.13. Statutory consultation response question why the River Thames could not be used for all construction phase traffic. Section 2.4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) of the ES (Document Reference 6.1) confirms that it is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). Construction transport for the Proposed Jetty is anticipated to be primarily via the River Thames. However, the Proposed Jetty would not have the required capacity to accommodate the construction of all the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in construction materials.
- 8.13.14. In any event, **Chapter 18: Landside Transport (Volume 1) of the ES (Document Reference 6.1)** has assumed that all construction transport will be road-based and concludes no significant adverse effect.

- 8.13.15. The above, in addition to the assessment undertaken in **Chapter 18: Landside Transport (Volume 1) of the ES (Document Reference 6.1)** set out the basis by which the Proposed Scheme and associated transport assessment meet the requirements of part 5.14 of EN-1 and relevant national and local planning policy.
- 8.13.16. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.14 of EN-1, paragraphs 108 117 of the NPPF, policies T1, T2, T3, T4, T5, T6, and T7 of the London Plan 2021, and policies SP10, DP19, DP22, SP23, DP24 of the Bexley Local Plan.

8.14. **RESOURCE AND WASTE MANAGEMENT**

- 8.14.1. The relevant policies for resource and waste management are:
 - Part 5.15 of EN-1 [3]
 - Policies SE-ML-1 and SE-ML-2 (marine litter) and SE-DD-1, SE-DD-2 and SE-DD-3 (dredging and dispersal) of the South East Inshore Marine Plan [5]
 - Policy SI 7 (reducing waste and supporting the circular economy) of the London Plan 2021 [10]
 - Policies SP12 (sustainable waste management), and DP26 (waste management in new development) of the Bexley Local Plan [11]

- 8.14.2. Chapter 16: Materials and Waste (Volume 1) of the ES (Document Reference 6.1) reports the outcome of the assessment of likely significant environmental effects arising from the Proposed Scheme on materials and waste, in accordance with Part 5.15 of EN-1, and the relevant national and local policies.
- 8.14.3. The assessment considers the following potential significant effects:
 - Construction Phase:
 - Consumption of material resources associated with the construction of the Proposed Scheme; and
 - Disposal and recovery (including reuse and recycling) of waste associated with the construction of the Proposed Scheme.
 - Operation Phase:
 - Consumption of material resources associated with the Proposed Scheme during operation, including amine-based solvents; and
 - Disposal and recovery (including reuse and recycling) of waste associated with the Proposed Scheme during operation.
- 8.14.4. The full details of mitigation measures proposed during the construction and operation of the Proposed Scheme, and how they will be secured, are set out in Chapter 16 and the **Mitigation Schedule (Document Reference 7.8)**. The environmental mitigation

required during construction has been recorded in the **Outline CoCP (Document Reference 7.4)**, submitted as part of the application for development consent.

- 8.14.5. An **Outline Site Waste Management Plan (SWMP) (Document Reference 7.10)** has been prepared as part of the application for development consent and a Materials Management Plan (MMP) will be prepared prior to construction commencing (postconsent). These documents will drive performance in the highest tiers of the waste hierarchy, thereby maximising recovery, reuse and recycling. Additionally, during operation, mitigation will include the use of existing onsite waste prevention, minimisation and management processes and procedures to drive good practice behaviour and contracts, to maximise action in the highest tiers of the Waste Hierarchy and adherence to the proximity principle.
- 8.14.6. The assessment in Chapter 16: Materials and Waste (Volume 1) of the ES (Document Reference 6.1) concludes that there will be a Slight Adverse (not significant) effect to the consumption of material resources and disposal and recovery of waste during the construction phase, and a slight adverse (not significant) effect to the consumption of material resources and neutral or slight adverse (not significant) effect to the disposal and recovery of waste during the operation phase of the Proposed Scheme.
- 8.14.7. Paragraph 5.15.11 of EN-1 states:

'If the applicant's assessment includes dredged material, the assessment should also include other uses of such material before disposal to sea, for example through reuse in the construction process.'

- 8.14.8. Additionally, policy SE-DD-3 of the South East Marine Plan states that proposals for the disposal of dredged material must demonstrate that they have been assessed against the waste hierarchy.
- 8.14.9. Dredged arisings will be managed in accordance with relevant legislation and will be disposed of offsite (via vessel to a licenced offshore disposal site, only if dredged arisings are deemed suitable for this disposal method and conform with the permits for disposal sites) as it is unlikely that the dredged arising will be suitable for reuse on the Proposed Scheme. If contaminated, the removal of the dredged arisings will be undertaken by an appropriately licenced waste carrier.
- 8.14.10. The Proposed Scheme is not an EfW generating station; it is promoted to capture carbon dioxide from the flue gas produced during the combustion of residual waste at Riverside 1 and Riverside 2 (when operational). The quantities of waste received by Riverside 1 and Riverside 2 (when operational) will not change as a consequence of the Proposed Scheme.
- 8.14.11. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on materials and waste as a result of in-combination effects with other plans and projects.

- 8.14.12. Paragraph 5.15.15 of EN-1 states the SoS should be satisfied that:
 - any such waste will be properly managed, both on-site and off-site.
 - the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area.
 - adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent for recovery or disposal, except where that is the best overall environmental outcome.'
- 8.14.13. The assessments within Chapter 16: Materials and Waste (Volume 1) and Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) and the measures set out in the Outline SWMP (Document Reference 7.10) and Outline CoCP (Document Reference 7.4) provide evidence that the Proposed Scheme waste during the construction and operation of the Proposed Scheme will be properly managed, site arising will not have an adverse effect on the capacity of existing waste management facilities, and adequate steps have been taken to minimise waste arising, and the waste hierarchy will be followed to minimise the volume of waste sent for recovery or disposal.

CONCLUSION WITH REGARDS TO PART RESOURCE AND WASTE MANAGEMENT

- 8.14.14. The above, in addition to the assessment undertaken in **Chapter 16: Materials and Waste (Volume 1) of the ES (Document Reference 6.1)** set out the basis by which the Proposed Scheme and associated materials and waste assessment meet the requirements of Part 5.15 EN-1 and relevant national and local policies.
- 8.14.15. The Applicant therefore considers the Proposed Scheme accords with the relevant paragraphs of Part 5.15 of EN-1, policies SE-ML-1 and SE-ML-2, SE-DD-1, SE-DD-2 and SE-DD-3 of the South East Inshore Marine Plan, policy SI 7 of the London Plan 2021, and policies SP12 and DP26 of the Bexley Local Plan.

8.15. WATER QUALITY AND RESOURCES

- 8.15.1. The relevant policies for water quality and resources are:
 - Part 5.16 of EN-1 [3].
 - Policies SE-CC-1 (climate change), and SE-CC-2) (climate change) SE-WQ-1 (water quality) of the South East Inshore Marine Plan [5].
 - Paragraphs 165-175, and 180 of the NPPF.
 - Policies SI 5 (water infrastructure), SI12 (Flood risk management), SI13 (sustainable drainage) and SI 14 (Waterways – strategic role) of the London Plan 2021 [10].

- Policies SP13 (protecting and enhancing water supply and wastewater infrastructure), DP18 (Waterfront development and development including, or close to flood defences), DP19 (The River Thames and the Thames Policy Area), DP29 (water quality, supply and treatment), DP32 (Flood risk management), and DP33 (Sustainable drainage systems), of the Bexley Local Plan [11].
- 8.15.2. Part 5.16 of EN-1 requires applicants to undertake an assessment of impacts to water quality, water resources and physical characteristics of the water environment, considering the impact of climate change. Additionally, policy SI 5 of the London Plan 2021, policy SE-WQ-1 of the South East Inshore Marine Plan, and policies SP13 and DP29 of the Bexley Local Plan promote the protection and enhancement of the water environment.

- 8.15.3. Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1) reports the assessment of the likely significant effects of the Proposed Scheme on the water environment during construction and operation.
- 8.15.4. The full list of mitigation measures proposed to minimise impact to the water environment during construction and operation, and details of how these will be secured, is provided within the assessment, its supporting appendices and the **Mitigation Schedule (Document Reference 7.8**).
- 8.15.5. Mitigation required during construction has been recorded in an OCoCP (Document Reference 7.4). The OCoCP makes reference to the Guidance for Pollution Prevention for businesses, contains construction method statements and work instructions for onsite staff that will inform them of the way that they should work to reduce the risk of polluting the surrounding environment, details procedures such as sediment and pollution management to prevent potential deterioration of the WFD status of surface water and groundwater features, and describes the procedures in the event of an environmental emergency such as a fuel or chemical spillage.
- 8.15.6. The Proposed Scheme design will include appropriate drainage systems and attenuation, this is detailed in the **Outline Drainage Strategy (Document Reference 7.2).** This aligns with policy SI 13 of the London Plan 2021 which requires drainage to be designed and implemented in ways that promote multiple benefits including increased water use efficiency, improved water quality, and enhanced biodiversity, urban greening, amenity and recreation. Operational mitigation measures are also set out in the **FRA at Appendix 11-2** of the **ES (Document Reference 6.3),** the **Outline EPRP (Document Reference 7.11)**, and will be contained within the operational EMP secured by DCO Requirement.
- 8.15.7. Any wastewater generated by the Proposed Scheme will be treated at the Wastewater Treatment Plant proposed as part of the Proposed Scheme, this aligns with policy DP29 of the Bexley Local Plan which requires development to provide on-site treatment or a connection to the sewerage system.

- 8.15.8. The assessment within Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES (Document Reference 6.1) concludes that with the implementation of mitigation measures, there would be no significant effects on the water environment during construction or operation of the Proposed Scheme.
- 8.15.9. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) concludes that the Proposed Scheme is not predicted to result in any significant adverse effects on the water environment as a result of in-combination effects with other plans and projects.

CONCLUSION

- 8.15.10. The above, in addition to the assessment undertaken in **Chapter 11: Water Environment and Flood Risk (Volume 1) of the ES Volume 1 (Document Reference 6.1)** set out the basis by which the Proposed Scheme and associated water environment assessment meet the requirements of Part 5.16 EN-1 and relevant national and local policies.
- 8.15.11. The Proposed Scheme has demonstrated measures to prevent the Proposed Scheme from contributing to unacceptable impacts to water through both seeking to minimise demand and implementing appropriate pollution control measures.
- 8.15.12. The Applicant considers the Proposed Scheme accords with the relevant paragraphs of Part 5.16 of EN-1, policies SE-CC-1, SE-CC-2, and SE-WQ-1 of the South East Inshore Marine Plan, the NPPF paragraphs 165-175 and 180, policies SI 5, SI 12, SI13, and SI 14 of the London Plan 2021, and policies SP13, DP18, DP19, DP29, DP32 and DP33 of the Bexley Local Plan.

9. WEIGHING IMPACTS AND BENEFITS

9.1. INTRODUCTION

9.1.1. This section weighs up the potential likely benefits and impacts of the Proposed Development for the SoS to consider in determining this application in accordance with the relevant NPS and as directed by section 104(7) of the PA 2008.

9.1.2. At paragraph 4.1.5, NPS EN-1 advises:

'In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:

- its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits; and
- its potential adverse impacts, including environmental, and including any longterm and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts, following the mitigation hierarchy.'
- 9.1.3. Within this context, paragraph 4.1.6 directs the SoS to take into account environmental, social and economic benefits and adverse impacts at national, regional and local level.
- 9.1.4. At paragraph 4.1.7, NPS EN-1 advises that where applicants are required to mitigate a particular impact as far as possible, but the SoS considers that there remains residual adverse effects, the SoS 'should weigh those residual effects against the benefits of the proposed development. For projects which qualify as CNP infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.'
- 9.1.5. This section of the Planning Statement presents the identified adverse impacts and whether these are felt at local, regional or national level. It then weighs these impacts against the demonstrated benefits and considers the potential for any of the identified risk factors. It takes these outcomes from both the ES (Document Reference 6.1 6.4) and the analysis presented in this Planning Statement.

9.2. ADVERSE IMPACTS OF THE PROPOSED SCHEME

INTRODUCTION

9.2.1. The Proposed Scheme would give rise to a small number of adverse impacts that have been identified through the **ES (Document Reference 6.1 – 6.4)** and this Planning Statement.

Environmental Statement

- 9.2.2. Chapter 22: Summary of Effects (Volume 1) of the ES (Document Reference 6.1) provides a full summary of all outcomes identified through the Environmental Impact Assessment. There are some 237 judgements made of residual impacts across the ES; 17 of which are concluded to be significant adverse.
- 9.2.3. This section focusses on the residual adverse impacts that are identified to be significant in the ES. These are found in relation to:
 - Terrestrial Biodiversity (Chapter 7);
 - Townscape and Visual (Chapter 10)
 - Population, Health and Land Use (Chapter 14); and
 - Cumulative Effects (Chapter 21).

Terrestrial Biodiversity

- 9.2.4. **Chapter 7: Terrestrial Biodiversity (Volume 1)** of the **ES (Document Reference 6.1)** reports a potentially up to Moderate Adverse (significant) effect on Crossness LNR, Erith Marshes MSINC, Belvedere Dykes SINC, River Thames and Tidal Tributaries MSINC, 18 further SINCs outside of the Site, deciduous woodland HPI, coastal and floodplain grazing marsh HPI, intertidal mudflats HPI, reedbed HPI, coastal saltmarsh HPI, river habitat (River Thames), notable plants and invasive species due to changes in air quality during the operation phase.
- 9.2.5. These can be considered further, and sought to be managed, through detailed design and the measures set out in Chapter 5: Air Quality (Volume 1) of the ES (Document Reference 6.1) which will be delivered through implementation of the Operational Environmental Management Plan, as secured by a requirement of the Draft DCO (Document Reference 3.1).
- 9.2.6. The direct loss of habitat resulting from the Carbon Capture Facility located in the MOL is comprehensively mitigated, delivering habitat creation and enhancement. A wide ranging and comprehensive approach to terrestrial biodiversity is proposed across the Mitigation and Enhancement Area and secured through the Outline LaBARDS (Document Reference 7.9). In addition, the Proposed Scheme includes a commitment to deliver at least 10% BNG prior to this becoming a statutory requirement for development of this type.
- 9.2.7. There remains some level of uncertainty about the long term effect of changes in air quality, with provision to address the potentially significant residual effects through

detailed design. Consequently, it is demonstrated that the harm to biodiversity is limited.

Townscape and Visual

- 9.2.8. Chapter 10: Townscape and Visual (Volume 1) of the ES (Document Reference 6.1) reports the following significant effects:
 - Construction:
 - Moderate-Large Adverse effect on Site Character due to change of character and vegetation cover within the Site. This effect is anticipated to be direct, temporary, medium term for the duration of construction. The visual environment will alter due to visible proposed construction activity including plant, cranes, machinery, and earthworks, however these will be seen in the context of the existing industrial environment.
 - Moderate Adverse effect on change in character and visual amenity of users of Accessible Open Land due to change in character and visual amenity. This effect is anticipated to be direct, temporary, medium term for the duration of construction.
 - Moderate Adverse effect on users of PRoW (FP1/FP2/FP4) due to change in visual amenity. This effect is anticipated to be direct, temporary, medium term for the duration of construction.
 - Operation:
 - Moderate-Large Adverse (year 1) and Moderate Adverse (year 15) effect on Site Character due to change in site character and vegetation cover during operation. Ground re-profiling for protection against flooding and removal of vegetation cover would remain following construction and the physical character of the Site would materially change with the introduction of Carbon Capture and Plant. Embedded mitigation including screen planting would establish over time.
 - Large Adverse (year 1) and Moderate-Large Adverse (year 15) effect on the change in character and visual amenity of users Accessible Open Land due to change in character and visual amenity during operation. The views of the Proposed Scheme would likely have some impact on the visual amenity of the Accessible Open Land, however, they would be experienced in the context of the industrial nature of the townscape with several other developments of a similar nature and scale, including Riverside 1 and Riverside 2.
 - Moderate Adverse (year 1) and Moderate Adverse (year 15) effect on users of PRoW (FP1/FP2/FP4) due to change in visual amenity. The experience of users of PRoW within and in the vicinity of the Site Boundary would likely to be impacted by the introduction of the new built form including the Carbon Capture Plant. Proposed planting would establish over time, which would likely partly screen views from the users of the PRoW.

- 9.2.9. The Townscape and Visual Assessment has concluded that the Proposed Scheme could have significant adverse effects on the landscape, however these impacts are limited and specific to the position of the Proposed Scheme in its townscape and direct views of it, which can only be experienced locally, and will be viewed in the context of the future baseline. The intra-project effects of townscape and visual with residual effects in air quality and population, health and land use result in a significant adverse effect on users of Accessible Open Land.
- 9.2.10. The planning judgement made here is that, despite the changes resulting from the Proposed Scheme, the overall effect is not damaging to townscape and visual amenity. Good design will be achieved through the detailed design process and implementation of the Proposed Scheme as secured through the **Works Plans** (Document Reference 2.3), Design Principles and Design Code (Document Reference 5.7) and the Outline LaBARDS (Document Reference 7.9).

Population, Health and Land Use

- 9.2.11. Chapter 14: Population Health and Land Use (Volume 1) of the ES (Document Reference 6.1) reports the following likely significant effects:
 - Construction:
 - Major Adverse effect to Munster Joinery, which is to be demolished as part of the Proposed Scheme. The Applicant has sought to reach an agreement with Munster Joinery (UK) Limited on a relocation site. However, an agreement between the Applicant and Munster Joinery (UK) Limited has not been reached at the time of writing
 - Moderate Adverse effect to users of England Coast Path, NCN1, FP2, FP3 and FP4 during. The construction of the Proposed Scheme will lead to changes in amenity experienced by users of these walker and cyclist routes, for example increased noise levels, dust generation and changes to views. This effect is anticipated to be direct, temporary, medium term for the duration of construction.
 - Moderate Adverse effect to users of Accessible Open Land. It is anticipated that the construction works would be phased with some temporary restrictions to the Accessible Open Land meaning that some (but not all) parts of it may be closed off during the construction phase. These temporary restrictions would cease upon completion of construction.
- 9.2.12. There are no Significant effects during the operation phase of the Proposed Scheme for this topic. All significant effects for Population, Health and Land Use are consequently temporary.
- 9.2.13. Generally, the adverse impacts will be felt at the local level, they are specific to the location of the Proposed Scheme and direct experiences of it.
- 9.2.14. The Applicant continues to seek agreement with Munster Joinery on a relocation site. This would enable the operations currently undertaken at that premises to continue, and potentially at a better location.
- 9.2.15. The Applicant will continue to engage with graziers and their licensors to identify suitable arrangements for horses during the construction phase and the Proposed Scheme provides for the relocation of existing stable blocks.
- 9.2.16. Where possible and work stage permitting, those areas of Crossness LNR, Erith Marshes SINC and Southeast London Green Chain that fall within, or close to, the Site that are currently accessible to the public should remain so during construction. Where possible, works will be screened to minimise adverse effects on the amenity value and enjoyment of these areas.
- 9.2.17. The design will ensure that routes used by walkers and cyclists (including PRoW, long distance walking routes and NCN routes) will, where practicable, remain open and accessible to users during construction. Where this is not practicable, suitable temporary diversions will be identified
- 9.2.18. Clear signage and directions for any alternative routes and appropriate alternative diversions would be provided and diversions clearly publicised to maintain access.

Cumulative Effects

- 9.2.19. Chapter 21: Cumulative Effects (Volume 1) of the ES (Document Reference 6.1) reports that the majority of the intra-project effects are determined to be not significant as the effects on the Common Receptors are limited, localised, and temporary, and there is a low magnification between effects.
- 9.2.20. However, it does report significant effect on Users of Accessible Open Land during both the construction and operation phases on account of the following interacting topics, recognising that all practicable mitigation has been offered:
 - Construction:
 - Chapter 10: Townscape and Visual; and
 - Chapter 14: Population, Health and Land Use.
 - Operation:
 - Chapter 5: Air Quality;
 - Chapter 10: Townscape and Visual; and
 - Chapter 14: Population, Health and Land Use.
- 9.2.21. The of the intra-project effects are felt by users of the Accessible Open Land, which is considered at sections 5 and 6 of this Planning Statement. The planning judgement made is that, despite the changes resulting from the Proposed Scheme, the overall effect is local, limited, not damaging to townscape and visual amenity. The totality of the Proposed Scheme will bring opportunities to improve the overall amenity and user experience of the Accessible Open Land, delivering NPS EN-1 and Bexley Local Plan

policy priorities. Good design will be achieved through the detailed design process and implementation of the Proposed Scheme as secured through the **Works Plans** (Document Reference 2.3), Design Principles and Design Code (Document Reference 5.7) and the Outline LaBARDS (Document Reference 7.9).

PLANNING STATEMENT

- 9.2.22. The key areas of conflict with planning policy are in relation to:
 - Metropolitan Open Land; and
 - Open Spaces and Green Infrastructure.

Metropolitan Open Land

- 9.2.23. Development of the Proposed Scheme will result in the net loss of, and compromise to, land designated as MOL; a maximum of 3.5ha of the Site total of 77ha (comprising 32ha marine and 45ha terrestrial). This loss equates to 0.022% of total MOL across Greater London. There is no loss of Accessible Open Land.
- 9.2.24. MOL is a designation applied across London and within the London Plan, at the regional level. However, it is set locally and the Proposed Scheme has been assessed against the MOL boundary adopted in the Bexley Local Plan. The user's experience of MOL will be felt locally, as they visit the vicinity of the location.
- 9.2.25. As discussed at section 5 of this Planning Statement, the physical characteristics of the Proposed Scheme are demonstrated to be such that it has limited impact. The primary aim and relevant function of the MOL will be maintained, there will remain a *'break within the built-up area'*. A substantial, and definitive, area of openness between the proposed Carbon Capture Facility and the Crossness Sewage Treatment Works will be maintained. Very special circumstances are demonstrated to outweigh this limited harm.

Open Space and Green Infrastructure

- 9.2.26. As explained at section 6 of this Planning Statement, development of the Proposed Scheme will result in the net loss of, and compromise to, land designated for open space and green infrastructure features, again; a maximum of 3.5ha. Again, there is no loss of Accessible Open Land.
- 9.2.27. Assessment of this planning policy relies substantially upon the effects identified through the **ES (Document Reference 6.1 6.4)** consequently, there is a risk of double counting the adverse impact in the weighting exercise.
- 9.2.28. Policies relevant to open space and green infrastructure are used across London, and feature in the London Plan, at the regional level. Further, the Erith Marshes SINC is designated as of Metropolitan importance and the Southeast London Green Chain extends widely beyond the Site Boundary, as do the identified PROW. Consequently, there is potential for users of the Accessible Open Land and green infrastructure features to be dissuaded from visiting this area, which would be a regional impact.

However, this should be ameliorated through the habitat and access improvements that are proposed within the **Outline LaBARDS (Document Reference 7.9)**.

CONCLUSION

- 9.2.29. The adverse impacts can be summarised as limited in spatial scope, and generally applying at the local level.
- 9.2.30. Further, none of the significant residual adverse impacts identified here fall within the categories of posing an unacceptable risk or interference as set out at paragraph 4.1.7 of NPS EN-1.

9.3. BENEFITS OF THE PROPOSED SCHEME

INTRODUCTION

9.3.1. The Proposed Scheme would give rise to a number of beneficial effects that have been identified through the **ES (Document Reference 6-1 – 6.4)** and this Planning Statement.

ENVIRONMENTAL STATEMENT

- 9.3.2. Chapter 22: Summary of Effects (Volume 1) of the ES (Document Reference 6.1) provides a full summary of all outcomes identified through the Environmental Impact Assessment. There are some 237 judgements made of residual impacts across the ES; 1 of which is concluded to be Significant Beneficial, another 3 of Minor Beneficial.
- 9.3.3. This section focusses on the residual beneficial effects that are identified to be significant in the ES. These are in relation to:
 - Greenhouse Gases (Chapter 13);

GREENHOUSE GASES

- 9.3.4. The ES reports a Beneficial effect on Global Atmosphere at the operation phase.
- 9.3.5. Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) concludes that allowing for residual emissions from Riverside 1 and Riverside 2 and emissions associated with operation of the Proposed Scheme, the 'net operational emissions savings estimated during the 50 year operation phase are 1,620,603 tCO2e/yr. This represents the overall change in emissions that are attributable to the Proposed Scheme during the operation phase, accounting for the capture and sequestration of CO2 from both fossil and biogenic sources.'
- 9.3.6. The whole life emissions for the Proposed Scheme (accounting for the construction and operation phases) are concluded to represent an overall saving in GHG emissions of -85,223,660 tCO₂e relative to the future baseline. This will make an important and relevant contribution to meeting the national legal target of achieving net zero by 2050, the Government's targets for CCS by 2030 and beyond, and

providing many of the benefits recognised across national strategies for low carbon energy.

9.3.7. Paragraphs 13.8.22 and 13.8.23 of **Chapter 13: Greenhouse Gases** state:

'With respect to UK Carbon Budgets (summarised in Table 13-12):

- GHG emissions from the construction phase will fall within part of the UK fourth (2023 to 2027) carbon budget but there would be no emissions from the operation phase during this period. This assessment has determined that emissions from the Proposed Scheme would equate to 0.002% of the UK fourth carbon budget.
- As the construction phase extends to 2030 further GHG emissions from construction activities will fall within the UK fifth (2028 to 2032) carbon budget, along with net savings in GHG emissions from the start of operational activities during this period. The assessment has established that on balance there will be a net reduction in GHG emissions from the Proposed Scheme during this period, which would contribute to a reduction of 0.18% for the UK fifth carbon budget.
- During the UK sixth (2033 to 2037) carbon budget there will be no GHG emissions from construction activities and there will continue to be net savings in GHG emissions from operational activities. The net reduction in GHG emissions from the Proposed Scheme during this period would contribute to a reduction of 0.81% for the UK sixth carbon budget.

With respect to London Carbon Budgets (summarised in Table 1313):

- GHG emissions from the construction phase will fall within part of the London 2023 to 2027 carbon budget but there would be no emissions from the operation phase during this period. This assessment has determined that emissions from the Proposed Scheme would equate to 0.18% of the London 2023 to 2027 carbon budget.
- GHG emissions from the construction phase will also extend partially into the London 2028 to 2032 carbon budget, and there will also be net savings in GHG emissions from the start of operational activities during this period. The assessment has established that on balance there will be a net reduction in GHG emissions from the Proposed Scheme during this period, which would contribute to a reduction of 17.2% for the London 2028 to 2032 carbon budget.
- 9.3.8. At **paragraph 13.8.24, Chapter 13: Greenhouse Gases** estimates a carbon payback period (*'the time it would take for carbon emissions calculated for the construction and operation phases to be offset by the savings in carbon emissions from the Proposed Scheme'*) of 0.1 years, or just under five weeks.
- 9.3.9. No significant effects are concluded during the construction phase of the Proposed Scheme for this topic.
- 9.3.10. The significant Beneficial effect will be felt at the global level, but also regionally and locally.

PLANNING STATEMENT

- 9.3.11. The benefits of the Proposed Scheme are made in response to the consideration of impacts on open space and green infrastructure (section 6) and consideration of the generic impacts (section 8). Further detail is also given in the **Project Benefits Report (Document Reference 5.4)**.
- 9.3.12. They are, in short:
 - Meeting the need recognised by Government policy for critical national priority infrastructure, being low carbon infrastructure.
 - The capacity to capture at least 95% of the Carbon Dioxide emitted from Riverside 1 and Riverside 2, and to do so in a timely manner. The Proposed Scheme will make a significant contribution to the global priority to address climate change by capturing carbon dioxide for permanent storage. As stated in Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1) between 2033 and 2037 there will be -7,886,104 of CO2 which is a reduction of 0.81% for the UK sixth carbon budget, and from 2028 to 2032 there would be -3,095,422 of CO2, which is a reduction of 17.2% for the London 2028 to 2032 carbon budget. Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO2 emissions of approximately 0.6Mt per year of CO2. With the potential to be operational as early as 2030, the Proposed Scheme will make an important and relevant contribution to achieving early milestones on the way to net zero by 2050 and contribute to the Mayor's aspirations for London to be a zero-carbon city by 2050.
 - The ability to decarbonise not only essential waste management infrastructure serving London and the south east of England, but also the energy and recovered byproducts, bringing desired environmental, economic and societal benefits. Not least of which is the opportunity to optimise the Riverside Heat Network.
 - The single, coherent and high standard of design. Most of the Carbon Capture Facility will use land allocated as SIL; it is intended to be develop for industrial purposes. To date, the development proposals that have gained consent on that land could be located anywhere and do not respond to the urgent need for low carbon energy infrastructure.
 - Delivering 10% BNG with the Mitigation and Enhancement Area (on-site) and the Biodiversity Net Gain Opportunity Area (off-site). Details shown in the Outline LaBARDS (Document Reference 7.9).
 - Deliver a diversity of employment opportunities both on and offsite, and throughout the supply chain. During construction the total net additional employment created is estimated to be 1,166.4 per annum, and during operation the total net additional employment created is estimated to be 34.4 jobs per annum.

- Support the local and national economy. The Proposed Scheme will provide approximately £95,214,107 in GVA to the Greater London economy during construction and £1,556,591 GVA to the Greater London economy during operation. The Proposed Scheme will provide an additional £24,001,304 GVA to the wider economy during construction and an additional £503,324 GVA to the wider economy during operation.
- The ability to demonstrate the viability non-pipeline transport options for carbon dioxide, making carbon capture more attractive to other CO₂ emitters who do not have access to pipelines.
- 9.3.13. The capture of carbon dioxide is the fundamental aim of the Proposed Scheme and is recognised as a significant beneficial effect in the ES (Document Reference 6.1 6.4) consequently, there is a risk of double counting this beneficial effect in the weighting exercise. Regardless, the benefit will be felt at the global level, but also regionally and locally.
- 9.3.14. Both projects of national significance individually, the residual waste treated at Riverside 1 and Riverside 2 (when operational) is currently sourced primarily from within London, but also the south east of England, their effect is predominantly felt at a regional level, though Riverside 1 provides a local service to LBB. The consequent decarbonisation of energy supply will be felt locally, though the electricity going into the grid across London and potentially with delivery of the district heat network, which would be optimised with the Proposed Scheme. The IBA is processed at Port of Tilbury and used nation wide; however it represents a small proportion of all construction aggregate and so is assumed to have a local level beneficial effect.
- 9.3.15. The Applicant has a demonstrated its ability to deliver high quality, strategic infrastructure projects underpinned by good design. The Proposed Scheme is no different and is underpinned by the **Design Principles and Design Code (Document Reference 5.7)**.
- 9.3.16. The improved user experience of the Mitigation and Enhancement Area (and the wider Crossness LNR) will be felt at the local level. This is specific to the location of the Proposed Scheme and direct experiences of it, during operation, which can only be felt locally.
- 9.3.17. Delivering BNG is a national priority, though measured on a site specific scale and delivered at the local level. The Proposed Scheme has focussed on delivering BNG close to the Site, seeking to ensure that consequent benefits are felt locally. The benefits of BNG are considered relevant at the regional level as delivering BNG can contribute towards climate change, and help contribute to improved linkages between green and blue infrastructure networks.
- 9.3.18. The generation of construction and operation phase jobs is felt at both the local and regional level. The **Project Benefits Report (Document Reference 5.4)** describes how these employment opportunities will be of a good standard and sought after.

9.3.19. The ability to demonstrate the viability of non-pipeline transport options for carbon dioxide, making carbon capture more attractive to other CO₂ emitters who do not have access to pipelines is a benefit at the national level. Furthermore, the Proposed Scheme can act as a catalyst for growth to the UK shipping sector, opening up a whole new market. These benefits are not quantified, but they are nonetheless relevant and important in determining the Proposed Scheme and again, would be felt at the national level.

CONCLUSION

9.3.20. The beneficial effects can be summarised as: extensive generally long lasting, and apply at all levels, from local to global.

9.4. CONCLUSION AND RESIDUAL RISKS

- 9.4.1. It is clear that the Proposed Scheme is not without likely, significant, adverse impacts. There are 17 such effects identified in the ES, out of some 237 judgements made. This is not surprising of a project of national significance. It is also an outcome to be expected from an assessment process that has veered on the side of caution, assuming reasonable worst case factors that will naturally lead to conservative outcomes. These significant adverse impacts are limited and generally apply at the local level.
- 9.4.2. In number terms there is only one likely significant beneficial effect concluded in the ES, which has global significance and is long lasting. The majority (some 60%) of outcomes of the ES are negligible or neutral.
- 9.4.3. There are just two key areas of planning policy with which the Proposed Scheme does not fully comply: MOL; and open space and green infrastructure. These are shown to be not material outcomes in planning terms as very special circumstances are demonstrated, as are overall benefits that substantially outweigh the harm.
- 9.4.4. Across the EIA and planning considerations, the beneficial effects can be summarised as: extensive; generally long lasting, if not permanent, felt throughout the operation phase; and widely apply at all levels, from local to global.
- 9.4.5. Consequently, it is clear that the benefits of the Proposed Scheme, which include meeting the need for energy infrastructure, integrated design principles, environmental enhancements, job creation and economic catalysts provide long-term or wider benefits that outweigh the potential for adverse impacts.
- 9.4.6. It is demonstrated that these adverse impacts arise having applied the mitigation hierarchy, they are the residual impacts that cannot be avoided and are difficult to further reduce. Further, none of the residual adverse impacts identified either in this section of the Planning Statement, or otherwise in the ES (Document Reference 6.1 6.4) fall within the categories of posing an unacceptable risk or interference as set out at paragraph 4.1.7 of NPS EN-1. Chapter 20: Major Accidents and Disasters

(Volume 1) of the ES (Document Reference 6.1) confirms that all risks of the Proposed Scheme achieve ALARP (as low as reasonably practicable).

- 9.4.7. The benefits of the Proposed Scheme are born from the need for it, which is established in global priorities, national legislation, demonstrated through NPS EN-1 and called for in development plan policy. There is such a strong need for the decarbonisation of our society that the Proposed Scheme is recognised as part of the critical national priority infrastructure necessary to ensure a secure, reliable and affordable low carbon energy system in the UK.
- 9.4.8. The timely consenting, and delivery, of the Proposed Scheme will enable net zero targets to be met and consequently avoid *'unacceptable risk to the achievement of net zero.'*
- 9.4.9. In conclusion therefore, it is clear that the benefits of the Proposed Scheme far outweigh its adverse impacts.

10. PLANNING BALANCE

10.1. THE CONSENTING FRAMEWORK

PLANNING ACT 2008

- 10.1.1. The Proposed Scheme falls to be determined under Section 104 of the PA 2008 [1]. Section 3 of this Planning Statement sets out the consenting framework relevant to the Proposed Scheme, recognising that section 104(2) of the PA 2008 requires the SoS to have regard to the following:
 - any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement");
 - the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;
 - any local impact report (within the meaning given by section 60(3)) submitted to the before the deadline specified in a notice under section 60(2);
 - any matters prescribed in relation to development of the description to which the application relates; and
 - any other matters which the SoS thinks are both important and relevant to SoS decision.
- 10.1.2. The relevant national policy statement to the Proposed Scheme is NPS EN-1. The relevant marine policy document is the Marine Policy Statement and the South East Inshore Marine Plan. Both these documents and the Infrastructure Planning (Decisions) Regulations 2010 have been addressed comprehensively throughout this Planning Statement and within the submitted application.
- 10.1.3. The local impact report is yet to be submitted.
- 10.1.4. All matters that are considered by the Applicant at submission to be prescribed or important and relevant for the SoS's decision-making of the Proposed Scheme have been addressed in the submitted application and within this Planning Statement. A complete application has been made.
- 10.1.5. 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 (7) applies.*' Subsections 4 to 7 are concerned with:
 - (4) the UK being in breach of any international obligation;
 - (5) the SoS being in breach of any duty placed on them, by or under any enactment;
 - (6) a decision that would be unlawful by virtue of any enactment; and
 - (7) that the adverse impact of the proposed development would outweigh its benefits',
- 10.1.6. The Proposed Development does not contravene any legal tests set out under section 104 (4), (5), (6), or (7) of the PA 2008 and is in conformity with NPS EN-1.

- 10.1.7. The Proposed Scheme would not result in the UK being in breach of its international obligations. Instead, it would contribute to meeting the legislated climate change targets as the Proposed Scheme is a carbon capture facility, this is discussed further in section 4 of this Planning Statement.
- 10.1.8. The substantial benefits of the Proposed Scheme are demonstrated (not least within this Planning Statement) to outweigh the limited adverse effects, such the SoS can be confident that any positive determination of the DCO Application would not be in breach of subsection 7.

NPS EN-1

- 10.1.9. At paragraph 1.3.10, NPS EN-1 is clear that it 'will be primary policy for Secretary of State decision making on projects in the field of energy for which a direction has been given under section 35.'
- 10.1.10. Paragraph 1.1.4 confirms that given the level and urgency of need for low carbon energy infrastructure, the SoS will start with a presumption in favour of granting consent, *'unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused.'*
- 10.1.11. NPS EN-1 confirms (paragraphs 3.2.6 to 3.2.8) that the need for the low carbon energy infrastructure sought through the NPS is demonstrated, that it should be given substantial weight, and that the contribution made by any one project does not need to be considered:

'The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.

In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS.'

- 10.1.12. The SoS can consider other matters "important and relevant" in their decision making; however, paragraph 4.1.15 confirms that where there is any conflict, the NPS prevails for the purposes of decision making given the national significance of infrastructure.
- 10.1.13. Paragraph 4.2.15 makes clear that, in the case of developments that do not have effect under either the Habitats Regulations or on Marine Conservation Zones, residual impacts which remain after the mitigation hierarchy has been applied 'are unlikely to outweigh the urgent need for this type of infrastructure. ...in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts.'

10.1.14. This Planning Statement finds that the Proposed Scheme, with two limited exceptions, is in general conformity with the relevant NPS and marine policy documents and has not identified any reasons which indicate that the consent should be refused.

IMPORTANT AND RELEVANT CONSIDERATIONS

- 10.1.15. Furthermore, in respect of important and relevant considerations, it is noted that:
 - The Proposed Scheme is both consistent with, and supports the delivery of, Government energy and climate change policy.
 - The Proposed Scheme is consistent with both the London Plan and Bexley Local Plan as set out below:
 - The Proposed Scheme is an acceptable use within the Belvedere Industrial Area SIL and Bexley Riverside Opportunity Area (Policies E5 and SD1 of the London Plan and Policies SP1, SP3, and DP7 of the Bexley Local Plan), it will focus development in this area and provide jobs within the industrial sector.
 - The operation of the Proposed Scheme will have no impact on the waste throughput (and associated traffic and vessel movements) of Riverside 1 and Riverside 2 (Safeguarded/Strategic Waste Sites under Policy SI 9 of the London Plan and Policy SP12 of the LBB Local Plan).
 - The Proposed Scheme will not impact upon the Middelton Jetty's ability to continue to operate to serve Riverside 1 and Riverside 2 (Safeguarded Wharf Policy SI 15 of the London Plan and Policy SP11 of the Bexley Local Plan).
 - The Proposed Scheme will deliver improvements in respect of intertidal habitat in the River Thames and will not jeopardise the ability for the TE2100 programme for improvements to the flood defences to come forward in the future. Any impacts to the Thames Path will be during construction only and will be mitigated via measures set out in the **Outline CoCP (Document Reference 7.4)** in accordance with Policy DP19 of the Bexley Local Plan (River Thames Policy Area).
 - The physical characteristics of the Proposed Scheme are demonstrated to be such that it has limited impact on the fundamental purposes of the MOL designation, and very special circumstances are demonstrated to outweigh this limited harm per Policy G3 of the London Plan and SP8 Bexley Local Plan.
 - Whilst there is potential for users of the Accessible Open Land and green infrastructure features to be dissuaded from visiting this area, this should be ameliorated through the habitat and access improvements that are proposed within the **Outline LaBARDS (Document Reference 7.9)**, aligning with Policy SP8 of the Bexley Local Plan.
- 10.1.16. The Proposed Scheme supports the Mayor of London's commitment to London becoming a zero-carbon city by 2050 set out in the London Plan and the London Environment Strategy.

10.2. BENEFITS

- 10.2.1. Part 4.9 of NPS EN-1 provides specific context to carbon capture and storage, recognising the post-combustion technologies that comprise the Proposed Scheme. Paragraph 4.9.5 confirms that the 'government has made its ambitions for CCS clear committing to providing funding to support the establishment of CCS in at least four industrial clusters by 2030'
- 10.2.2. The benefits of the Proposed Scheme are demonstrated throughout this Planning Statement and particularly at sections 4 and 9. They are, in short:
 - The capacity to capture at least 95% of the Carbon Dioxide emitted from Riverside • 1 and Riverside 2, and to do so in a timely manner. The Proposed Scheme will make a significant contribution to the global priority to address climate change by capturing carbon dioxide for permanent storage contributing to the Government's ambition to capture 20 to 30Mtpa of CO₂ by 2030 [29]. As stated in Chapter 13: Greenhouse Gases (Volume 1) of the ES (Document Reference 6.1). between 2033 and 2037 there will be -7,886,104 of CO2 which is a reduction of 0.81% for the UK sixth carbon budget, and from 2028 to 2032 there would be -3,095,422 of CO2, which is a reduction of 17.2% for the London 2028 to 2032 carbon budget. Furthermore, with the feedstock to Riverside 1 and Riverside 2 comprising approximately 50% biogenic content, the Carbon Capture Facility would result in net-negative CO2 emissions of approximately 0.6Mt per year of CO2. With the potential to be operational as early as 2030, the Proposed Scheme will make an important and relevant contribution to achieving early milestones on the way to net zero by 2050. Contributing to the Mayor's aspirations for London to be a zerocarbon city by 2050.
 - The ability to decarbonise not only essential waste management infrastructure serving London and the south east of England, but also the energy and recovered byproducts, bringing desired environmental, economic and societal benefits. Not least of which is the opportunity to optimise the Riverside Heat Network.
 - The delivery of a single, coherent and high standard of design to accord with NPS EN-1 and delivering on local open space and green infrastructure policy ambition in the context of the Proposed Scheme. Most of the Carbon Capture Facility will use land allocated as SIL; it is intended to be develop for industrial purposes. To date, the development proposals on that land that have gained consent could be located anywhere and do not respond to the urgent need for low carbon energy infrastructure.
 - Delivery of an improved, and expanded, Crossness LNR and 10% BNG with the Mitigation and Enhancement Area (on-site) and the Biodiversity Net Gain Opportunity Area (off-site). Details shown in the Outline LaBARDS (Document Reference 7.9).
 - Deliver a diversity of employment opportunities both on and offsite, and throughout the supply chain. During construction the total net additional

employment created is estimated to be 1,166.4 per annum, and during operation the total net additional employment created is estimated to be 34.4 jobs per annum.

- Support the local and national economy. The Proposed Scheme will provide approximately £95,214,107 in GVA to the Greater London economy during construction and £1,556,591 GVA to the Greater London economy during operation. The Proposed Scheme will provide an additional £24,001,304 GVA to the wider economy during construction and an additional £503,324 GVA to the wider economy during operation.
- The ability to demonstrate the viability non-pipeline transport options for carbon dioxide, making carbon capture more attractive to other CO2 emitters who do not have access to pipelines.
- 10.2.3. The Proposed Scheme is the capture of carbon dioxide from Riverside 1 and 2, residual waste treatment facilities, fully supporting the government's ambitions to invest in technologies to deliver a fully decarbonised, reliable and low-cost power system by 2050 [26]. The use of this technology is encouraged by the Government, as set out in Part 3.5 of EN-1.
- 10.2.4. The Proposed Scheme supports the UK's urgent need for carbon reduction infrastructure and will result in an overall reduction in GHG emissions. It will support the UK Government's CCS Vision and commitment to achieve net zero by 2050 and will deliver infrastructure that the Committee on Climate Change has identified as a 'necessity' to achieving net zero and decarbonisation of the energy sector.
- 10.2.5. Through this Planning Statement, the Applicant has demonstrated compliance of the Proposed Scheme with the specific technical considerations of NPS EN-1, as well as the relevant policies of the Marine Policy Statement, the South East Inshore Marine Plan, the NPPF, and the development plan (London Plan and the Bexley Local Plan).
- 10.2.6. The Proposed Scheme will enable the delivery of wider social, environmental and economic benefits as discussed in the **Project Benefits Report (Document Reference 5.4)**.
- 10.2.7. Preparing the Proposed Scheme to be ready for submission has involved iteration and evolution in the design with the aim to minimise environmental, economic and social impacts. The Terrestrial Site Alternatives Report (Document Reference 7.5) and Jetty Site Alternatives Report (Document Reference 7.6) has sought to balance the objectives of the development with development plan policy and community receptors. The Design Approach Document (DAD) (Document Reference 5.6) demonstrates the evolution of design over time, seeking to minimise impact and optimise benefits through both the built form and treatment of the surrounding environment. The wealth of alternatives considered across the Proposed Scheme are presented at Chapter 3: Consideration of Alternatives of the ES (Document Reference 6.1).

10.3. OTHER EFFECTS AND MITIGATION

- 10.3.1. The Proposed Scheme has identified and acknowledged the potential adverse impacts which may arise because of project delivery. Section 9 of this Planning Statement demonstrates that the residual significant adverse effects are limited, and generally apply at the local level. They arise having applied the mitigation hierarchy; they are the residual impacts that cannot be avoided. Following the application of the Proposed Scheme's mitigation measures, these residual effects are difficult to further reduce. None of the residual adverse impacts fall within the categories of posing an unacceptable risk or interference as set out at paragraph 4.1.7 of NPS EN-1 and Chapter 20: Major Accidents and Disasters confirms that all risks of the Proposed Scheme ALARP (as low as reasonably practicable).
- 10.3.2. In relation to planning policy, the Proposed Scheme will result in the loss of 2.5ha of land designated as MOL, Erith Marshes SINC, Southeast London Green Chain and Crossness LNR (all features of open space and green infrastructure) and compromise up to 1ha of these designations. However, it does not result in the loss of Accessible Open Land.
- 10.3.3. The Proposed Scheme will bring material global, national and local level benefits by way of its contribution to the decarbonisation of emissions in London and southeast England and is defined in NPS EN-1 as CNP infrastructure. It is therefore considered that the SoS can be satisfied that the identified important and relevant benefits outweigh the limited harm to MOL and open space/green infrastructure features.
- 10.3.4. Consequently, the loss of, and compromise to, these features should not be considered a reason for refusal.
- 10.3.5. Embedded mitigation has been proposed and consolidated through the ES and the design of the project informed by NPS EN- 1 in relation to delivery of good design. The DCO Application is an early adopter of the Design Approach Document, considered to set a good precedent for the design process of future projects.
- 10.3.6. The mitigation, including that which is embedded and represents part of the Proposed Scheme, is set out within the Mitigation Schedule (Document Reference 7.8). The ES quantifies the significance of impact both with and without additional mitigation, leaving few residual significant, adverse impacts.
- 10.3.7. The Draft DCO (Document Reference 3.1) includes all appropriate requirements that would control and support the delivery of detailed design for the Proposed Scheme and its construction, operation, maintenance and future decommissioning. The effective delivery of national infrastructure projects needs flexibility in execution, but with control over detail that is also provided through those requirements and the Design Principles and Design Code (Document Reference 5.7).

10.4. CONCLUSION

10.4.1. Paragraph 2.2.1 of NPS EN-1 confirms that:

'In June 2019, the UK became the first major economy to legislate for a 2050 net zero Greenhouse Gases ('GHG') emissions target through the Climate Change Act 2008 (2050 Target Amendment) Order 2019. In December 2020, the UK communicated its Nationally Determined Contributions to reduce GHG emissions by at least 68 per cent from 1990 levels by 2030.23 In April 2021, the government legislated for the sixth carbon budget (CB6), which requires the UK to reduce GHG emissions by 78 per cent by 2035 compared to 1990 levels.'

- 10.4.2. Paragraph 2.3.3 subsequently sets out the Government's objectives to ensure the UK energy supply always remains secure, reliable, affordable and consistent with meeting the net zero 2050 target, and it recognises that a step change in the decarbonisation of our energy system is required.
- 10.4.3. The Proposed Scheme is submitted in response to that call for a step change, and will make a material contribution to the decarbonisation of energy supply.
- 10.4.4. The Applicant considers that the material benefits associated with the Proposed Scheme outweigh the limited harm. The Applicant considers that the Proposed Scheme is acceptable in planning terms and that a DCO should therefore be made.

11. **REFERENCES**

- ^[1] HM Government, "Planning Act 2008," 2008. [Online]. Available: https://www.legislation.gov.uk/ukpga/2008/29/contents.
- ^[2] HM Government, "The Infrastructure Planning (Decisions) Regulations 2010," 2010. [Online]. Available: https://www.legislation.gov.uk/ukdsi/2010/9780111490266/contents.
- ^[3] HM Government, "Overarching National Policy Statement for energy (EN-1) (from early 2024)," 2023. [Online]. Available: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1.
- ^[4] HM Government, "UK Marine Policy Statement," 2020. [Online]. Available: https://assets.publishing.service.gov.uk/media/5a795700ed915d042206795b/pb3654-marine-policy-statement-110316.pdf.
- ^[5] HM Government, "South East Marine Plan," 2021. [Online]. Available: https://www.gov.uk/government/publications/the-south-east-marine-plan-documents.
- ^[6] Secretary of State for Business, Energy and Industrial Strategy, "Direction by the Decretary of State Under Section 35 of The Planning Act 2008 Relating to the Cory Decarbonisation Project," 2022. [Online]. Available: https://www.gov.uk/government/publications/cory-decarbonisationproject-section-35-.
- ^[7] HM Government, "The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017," [Online]. Available: https://www.legislation.gov.uk/uksi/2017/572/contents/made.
- ^[8] Cory Environmental Holdings Limited, "Cory Decarbonisation Project Environmental Impact Assessment Scoping Report," 2023. [Online]. Available: https://infrastructure.planninginspectorate.gov.uk/wpcontent/ipc/uploads/projects/EN010128/EN010128-000021-EN010128%20-%20Scoping%20Report.pdf.
- [9] Planning Inspectorate, "Scoping Opinion Proposed Cory Decarbonisation Project," 2023. [Online]. Available: https://infrastructure.planninginspectorate.gov.uk/wpcontent/ipc/uploads/projects/EN010128/EN010128-000026-EN010128%20-%20Scoping%20Opinion.pdf.
- ^[10] Mayor of London, "The London Plan," 2021. [Online]. Available: https://www.london.gov.uk/programmes-strategies/planning/london-plan/new-london-plan/londonplan-2021.

- ^[11] London Borough of Bexley, "Development Plan," 2023. [Online]. Available: https://www.bexley.gov.uk/services/planning-and-building-control/planning-policy-andguidance/development-plan.
- ^[12] Planning Inspectorate, "Viking CCS Pipeline," 2023. [Online]. Available: https://nationalinfrastructure-consenting.planninginspectorate.gov.uk/projects/EN070008.
- ^[13] H. Government, "Planning and Compulsory Purchase Act 2004," 2004.
- ^[14] HM Government, "National Policy Statement for natural gas electricity generating infrastructure (EN-2) (from early 2024)," 2023. [Online]. Available: https://www.gov.uk/government/publications/national-policy-statement-for-natural-gas-electricitygenerating-infrastructure-en-2.
- ^[15] HM Government, "National Policy Statement for renewable energy infrastructure (EN-3) (from early 2024)," 2023. [Online]. Available: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3.
- ^[16] HM Government, "National Policy Statement for natural gas supply infrastructure and gas and oil pipelines (EN-4) (from early 2024)," 2023. [Online]. Available: https://www.gov.uk/government/publications/national-policy-statement-for-natural-gas-supplyinfrastructure-and-gas-and-oil-pipelines-en-4.
- ^[17] HM Government, "National Policy Statement for electricity networks infrastructure (EN-5) (from early 2024)," 2023. [Online]. Available: https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5.
- ^[18] HM Government, "National Policy Statement for Nuclear Power Generation (EN-6)," 2011. [Online]. Available: https://www.gov.uk/government/publications/national-policy-statements-forenergy-infrastructure.
- ^[19] Department for Levelling Up, Housing and Communities, "National Planning Policy Framework," 2023. [Online]. Available: https://www.gov.uk/government/publications/national-planning-policy-framework--2.
- ^[20] HM Government, "Marine and Coastal Access Act 2009," [Online]. Available: https://www.legislation.gov.uk/ukpga/2009/23/contents.
- ^[21] HM Government, "Town and Country Planning Act 1990," [Online]. Available: https://www.legislation.gov.uk/ukpga/1990/8/contents.
- ^[22] HM Government, "Planning Practic Guidance," 2023. [Online]. Available: https://www.gov.uk/government/collections/planning-practice-guidance.
- ^[23] United Nations, "Paris Agreement," 2015.

- ^[24] IPCC, "Climate Change 2022: Impacts, Adaptation and Vulnerability," 2022.
- ^[25] Committee on Climate Change, "The Sixth Carbon Budget: The UK's path to Net Zero," 2020.
- ^[26] HM Government, "Net Zero Strategy: Build Bank Greener," 2021b.
- ^[27] HM Government, "Carbon Budget Delivery Plan," 2023. [Online]. Available: https://www.gov.uk/government/publications/carbon-budget-delivery-plan.
- ^[28] HM Government, "British energy security strategy," 2022. [Online]. Available: https://assets.publishing.service.gov.uk/media/626112c0e90e07168e3fdba3/british-energysecurity-strategy-web-accessible.pdf.
- ^[29] HM Government, "Carbon Capture, Usage and Storage A Vision to Establish a Competetive Market," [Online]. Available: https://assets.publishing.service.gov.uk/media/6594718a579941000d35a7bf/carbon-captureusage-and-storage-vision-to-establish-a-competitive-market.pdf.
- ^[30] HM Government, "Draft Strategy and Policy Statement for Energy Policy in Great Britain," 2024. [Online]. Available: https://assets.publishing.service.gov.uk/media/65d4b31738fef9001ab5b0ae/draft-strategy-policystatement-energy.pdf.
- ^[31] Mayor of London, "London Environment Strategy," 2018. [Online]. Available: https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf.
- ^[32] London Borough of Bexley, "Climate Change Statement and Action Plan 2022 to 2026," [Online]. Available: https://www.bexley.gov.uk/about-the-council/strategies-plans-and-policies/climatechange-statement-and-action-plan-2022/our-action-plan.
- ^[33] HM Government, "Civil Nuclear: Roadmap to 2050," 2024. [Online]. Available: https://assets.publishing.service.gov.uk/media/65c0e7cac43191000d1a457d/6.8610_DESNZ_Civil _Nuclear_Roadmap_report_Final_Web.pdf.
- ^[34] London Borough of Bexley, "Bexley Local Plan Policies Map," 2023. [Online]. Available: https://bexleycouncil.maps.arcgis.com/apps/instant/sidebar/index.html?appid=47d8febb1093429f9 64cf6500d0c691e.
- ^[35] Council for the Protection of Rural England, [Online]. Available:
- ^[36] Greenspace Information for Greater London, "Mapping London's Green Belt and Metropolitan Open Land," 2018. [Online]. Available:

- ^[37] Thames Water, "Crossness Nature Reserve," 2022. [Online]. Available:
- ^[38] London Borough of Bexley, "Bexley Green Infrastructure Study (Part 2)," 2020. [Online]. Available: https://www.bexley.gov.uk/sites/default/files/2021-10/Green-infrastructure-study-april-2020-part-2.pdf.
- ^[39] London Borough of Bexley, "Bexley Green Infrastructure Study," 2020. [Online]. Available: https://www.bexley.gov.uk/services/planning-and-building-control/planning-policy-andguidance/local-plan-technical-reports.
- ^[40] IEMA, "EIA Guide to Climate Change Resilience and Adaptation," 2020. [Online]. Available:
- ^[41] HM Government, "he Environmental Targets (Fine Particulate Matter) (England) Regulations 2022," [Online]. Available: https://www.legislation.gov.uk/ukdsi/2022/9780348242959.
- ^[42] Environmental Protection UK and Institute of Air Quality Management, "Land Use Planning & Development Control: Planning for Air Quality," 2017. [Online]. Available:
- ^[43] HM Government, "Environment Agency Flood Map for Planning," [Online]. Available: https://floodmap-for-planning.service.gov.uk/.
- [44] Historic England, "Understanding Historic Buildings, A Guide to Good Recording Practice," 2016. [Online]. Available: https://historicengland.org.uk/images-books/publications/understandinghistoric-buildings/heag099-understanding-historic-buildings/.
- [45] Department for Environment, Food and Rural Affairs and Environment Agency, "Thames Estuary 2100 (TW2100)," 2023. [Online]. Available: https://www.gov.uk/government/collections/thamesestuary-2100-te2100.
- [46] Construction Logistics and Community Safety, "Construction Logistics Planning (CLP) Guidance," 2021. [Online]. Available: https://content.tfl.gov.uk/clp-guidance-clocs.pdf.
- ^[47] United Nations, "Paris Agreement," 2015

Planning Inspectorate Reference: EN010128 Planning Statement Application Document Number: 5.2



SECTION 35 DIRECTION NOTICE 6 OCTOBER 2022

DIRECTION BY THE SECRETARY OF STATE UNDER SECTION 35 OF THE PLANNING ACT 2008 RELATING TO THE CORY DECARBONISATION PROJECT

By letter to the Secretary of State received on 12 September 2022, Cory Environmental Holdings Limited ("Cory") formally requested that the Secretary of State exercise the power vested in him under section 35(1) of the Planning Act 2008 to direct that the Cory Decarbonisation Project set out in the Direction request ("the Proposed Project") be treated as development for which development consent under the Planning Act 2008 is required.

The Secretary of State is satisfied that:

- The Proposed Project is in the field of energy and development and will be wholly within England;
- The Proposed Project does not currently fall within the existing definition of a "nationally significant infrastructure project" and therefore it is appropriate to consider use of the power in section 35(1) of the Planning Act 2008; and
- Cory's request constitutes a "qualifying request" in accordance with section 35ZA(11) of the Planning Act 2008.

In coming to this conclusion, the Secretary of State notes that the Proposed Project relates to the construction of post combustion carbon capture, storage and transfer equipment; and the construction of hydrogen facilities and thus sits within one of qualifying infrastructure fields listed in section 35(2)(a)(i) – energy - of the Planning Act.

The Secretary of State notes that the Proposed Project encompasses the following elements:

A Carbon Capture and Storage Project:

- Carbon Capture Equipment including:
 - Heat Exchange Plant and associated cooling facilities;
 - Chemical Regenerator Plant;
 - Chemical Absorber Plant; and
 - Carbon Processing and Conditioning Plant;
- Carbon storage facilities; and

A Hydrogen Project:

- Hydrogen production facilities including:
 - Electrolyser;
 - Transformer Rectifiers;
 - o Water Treatment Plant; and
 - Hydrogen Drying and Compression Plant.

as set out together under the "The Proposed Projects of National Significance" in Annex 1 of the letter from Cory dated 12 September 2022 (together "the PNS developments")

 the delivery of "associated development" (within the meaning of section 115(1)(b) of the Planning Act including, but not limited to, jetty facilities, dredging, hydrogen storage facilities, temporary working sites, temporary and permanent utilities and highway diversions and environmental mitigation ("the associated development to the PNS developments"); and

• ancillary matters ("the ancillary development to the PNS developments")

all as detailed in Cory's letter to the Secretary of State received on 12 September 2022.

Having considered the details of Cory's proposals as set out in their letter of 12 September 2022 the Secretary of State is of the view that the proposed Project is nationally significant, for the reasons set out in the Annex below.

The Secretary of State considers that, if the details of the PNS developments change, before submitting any application to The Planning Inspectorate, Cory may wish to seek confirmation from the Secretary of State that the Project and development that is the subject of the proposed application is the same as that for which the Direction is hereby given.

The Secretary of State has taken the decision within the conditions as required by sections 35A(2) and (5) of the Planning Act 2008, and issues this Direction accordingly under sections 35(1) and 35ZA of the Planning Act 2008.

THE SECRETARY OF STATE DIRECTS that the PNS developments are to be treated as development for which development consent is required.

The Secretary of State further directs in accordance with sections 35ZA(3)(b) and (5) of the Planning Act 2008 that an application for a consent or authorisation mentioned in section 33(1) or (2) of the Planning Act 2008 or similar to that described in the Request to the Secretary of State for Business, Energy and Industrial Strategy for a Direction under Section 35 of the Planning Act 2008 made by Cory on 12 September 2022 for the Proposed Project is to be treated as a proposed application for which development consent is required.

This Direction is given without prejudice to the Secretary of State's consideration of any application for development consent which is made in relation to the proposed Development.

Signed by



pp Gareth Leigh Head of Energy Infrastructure Planning Delivery For and on behalf of the Secretary of State for Business, Energy and Industrial Strategy

6 October 2022

ANNEX

REASONS FOR THE DECISION TO ISSUE THE DIRECTION

The Secretary of State is of the opinion that the Direction should be issued because:

- Both the carbon capture and storage and hydrogen elements of the Proposed Project will play an important role in enabling an energy system that meets the UK's commitment to reduce carbon emissions and the Government's objectives to create a secure, reliable and affordable energy supply for consumers.
- The carbon capture element of the Proposed Project would provide and support the decarbonisation of energy from waste derived CO₂ emissions in the UK, delivering over a million tonnes of CO₂ savings per annum, and supporting the achievement of a fully de-carbonised district heating network that crosses local authority areas. The Secretary of State does not consider that, in this case, the carbon capture element of the Proposed Project constitutes an extension of the generating station.
- The hydrogen element of the Proposed Project would provide and support the production of viable hydrogen facilities that would enable the provision of regular hydrogen supply to heavy goods vehicles and vessels as both forms of transport seek to decarbonise, and will make an important contribution to the overall 5GW target set out in the Hydrogen Strategy.
- By progressing the development through the Planning Act 2008 development consent process, it would provide the certainty of a single, unified consenting process and fixed timescales.

Planning Inspectorate Reference: EN010128 Planning Statement Application Document Number: 5.2

Appendix B

SECTION 35 DIRECTION NOTICE 28 FEBRUARY 2024



By email only: Richard.griffiths@pinsentmasons.com

Richard Griffiths Partner, Pinsent Masons

28 February 2024

Dear Mr Griffiths,

CORY DECARBONISATION PROJECT

DIRECTION MADE BY THE SECRETARY OF STATE IN RELATION TO THE CORY DECARBONISATION PROJECT UNDER SECTION 35 OF THE PLANNING ACT 2008 ON 6 OCTOBER 2022

- 1. Thank you for your letter of 12 December 2023 on behalf of Cory Environmental Holdings Limited ("Cory"), related to the direction made by the Secretary of State in relation to the Cory Decarbonisation Project under section 35 of the Planning Act 2008 on 6 October 2022 ("the Section 35 Direction").
- 2. The Section 35 Direction noted that the Proposed Project encompasses the following "Proposed Projects of National Significance", together "the PNS developments":
 - A Carbon Capture and Storage Project: Carbon Capture Equipment including: Heat Exchange Plant and associated cooling facilities; Chemical Regenerator Plant; Chemical Absorber Plant; and Carbon Processing and Conditioning Plant; Carbon storage facilities; and
 - A Hydrogen Project: Hydrogen production facilities including: Electrolyser; Transformer Rectifiers; Water Treatment Plant; and Hydrogen Drying and Compression Plant.
- 3. The Section 35 Direction confirmed the Secretary of State's view that the Proposed Project is nationally significant, for the reasons set out in the Annex to the Direction, and the Secretary of State decided to issue the Section 35 Direction.
- 4. The 12 December 2023 letter confirmed that Cory has made the decision not to pursue the Hydrogen Project element of the Proposed Project in the immediate future and that it will not form part of the forthcoming application for development consent. Cory now intends to submit an application for development consent that will cover the Carbon Capture and Storage Project (as detailed above) only.

- 5. Your letter also requested confirmation from the Secretary of State that the Proposed Carbon Capture and Storage Project is still within the ambit of the Section 35 Direction if the proposed development consent application is only for this project.
- 6. It is noted that the following reasoning was provided in the Annex to the Section 35 Direction:

Both the carbon capture and storage and hydrogen elements of the Proposed Project will play an important role in enabling an energy system that meets the UK's commitment to reduce carbon emissions and the Government's objectives to create a secure, reliable and affordable energy supply for consumers.

The carbon capture element of the Proposed Project would provide and support the decarbonisation of energy from waste derived CO2 emissions in the UK, delivering over a million tonnes of CO2 savings per annum, and supporting the achievement of a fully de-carbonised district heating network that crosses local authority areas. The Secretary of State does not consider that, in this case, the carbon capture element of the Proposed Project constitutes an extension of the generating station.

- 7. The Secretary of State notes that the Section 35 Direction was granted on the basis that each individual project met the nationally significant threshold i.e. the Carbon Capture and Storage Project was nationally significant, independent of the Hydrogen Project, and vice-versa.
- 8. The Secretary of State is satisfied that the reasoning set out in the Section 35 Direction and its Annex continues to apply to the Carbon Capture and Storage Project, even if the Hydrogen Project is not brought forward as part of the development consent application.

Yours sincerely,



John Wheadon Head of Energy Infrastructure Planning Delivery Energy Infrastructure Planning Delivery Department for Energy Security and Net Zero

Planning Inspectorate Reference: EN010128 Planning Statement Application Document Number: 5.2

Appendix C

PLANNING HISTORY

CORY

Planning Reference	Address	Proposal	Decision
09/00612/FUL	RRRL Energy from Waste Facility Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Waste Generating station approved under reference 07/11615/FUL to remove condition 45 which requires on site provision of a tow truck at all times during the operation of the development.	Friday 3 Ju Permission
21/01744/ALA	Riverside Energy From Waste Facility Norman Road Belvedere Kent DA17 6JN	Consultation on the Application to vary consent granted under Section 36 of The Electricity Act 1989 - the original consent being for the construction and operation of a resource recovery plant	17 Decemb Permission Electricity A
07/11615/FUL	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Proposals for Energy from Waste Generating Station without complying with Condition 40 of permission GDBC/003/00001C-06 to allow Norman Road improvements to run parallel with the construction of the building.	Friday 16 N Permission
07/11615/FULMIN	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Minor amendment to: Proposals for Energy from Waste Generating Station without complying with Condition 49 of permission GDBC/003/00001C-06 to allow Norman Road improvements to run in parallel with the construction of the building.	Monday 11 Permission
07/11615/FUL01	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Condition 40 (Travel Plan) pursuant permission reference 07/11615/FUL dated 11 th January 2008 for the proposed Energy from Waste Generating Station.	Tuesday 12 Details App
16/02167/FUL/01	Riverside Energy From Waste Facility Norman Road Belvedere, Kent, DA17 6JN	Details of condition 37 (low emission strategy) pursuant to planning permission ref. 16/02167/FUL for the proposal under Section 73 of the Town and Country Planning Act 1990 regarding the Energy from Waste facility approved under the reference 99/02388/CIRC24 dated 13/3/2015 to amend Condition 27 to allow up to 195,000 tonnes of waste to be delivered to the development by road in any calendar year and continued operation of the plant without compliance with conditions 10 and 30 to	Friday 6 De

uly 2023

- Granted without Conditions
- ber 2021
- n Granted (via Section 36 of The Act 1989)
- November 2007
- Granted with Conditions
- June 2012
- Granted without Conditions
- 2 May 2009
- proved
- ecember 2019



		allow the delivery of waste by river and road on 24/7 basis.	
16/02167/FUL	River Energy From Waste Faciltiy Norman Road, Belvedere, Kent, DA17 6JN	Proposals under Section 73 of the Town and Country Planning Act 1990 regarding the Energy from Waste facility approved under reference 99/02388/CIRC dated 13/3/2015 to amend Condition 27 to allow up to 195,000 tonnes of waste to be delivered to the development by road in any calendar year and continued operation of the plant without compliance with conditions 10 and 30 to allow the delivery of waste by river and road on 24/7 basis.	Wednesday
11/01387/FUL	RRRL Energy from Waste Facility Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Proposals under Section 73 of the Town and Country Planning Act 1990 regarding the Energy from Waste facility approved under reference 07/11615/FUL to allow movement of materials, waste and residual material following incineration between the jetty and the plant and the ash container storage area shall only take place between the hours of 6am-9pm Mondays to Saturdays except in any emergency of followi8ng a jetty outage and on Sundays between the hours of 7am-7pm.	Friday 14 C
99/02388/CIRC18	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a Scheme of Noise Control Measures Pursuant to the Section 106 Agreement/Unilateral Undertaking of the Department of Trade and Industry consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the construction and operation of an Energy from Waste Power Station.	Tuesday 6 Application
99/02388/CIRC17	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Dust Control Scheme pursuant to Condition 12 of the Department of Trade and Industry consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the construction and operation of an Energy from Waste Power Station	Thursday 7 Approved
99/02388/CIRC07	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of hard and soft landscaping and ecological habitat creation pursuant to Conditions 30, 31, 34, 35 and 33/36 of the Department of Trade and Industry Consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the Construction	Tuesday 25 Approved

y 4 October 2017

October 2011

Granted with Conditions

May 2008

Withdrawn by Bexley

February 2008

5 September 2007



		and operation of an Energy from Waste Power Station.	
99/02388/CIRC22	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of HGV Monitoring pursuant to Condition 43 of the Department of Trade and Industry consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the construction and operation of an Energy from Waste Power Station.	Wednesday Approved
99/02388/CIRC19	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a Foul Water Drainage scheme pursuant to Condition 24 of the Department of Trade and Industry consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the construction and operation of an Energy from Waste Power Station.	Thursday 8 Approved
99/02338/CIRC15	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Works to Flood Defences pursuant to Condition 27 of the Department of Trade and Industry consent (Section 36 of the Electricity Act 1989) dated 15 th June 2006 for the construction and operation of an Energy from Waste Power Station.	Wednesday Details App
16/02167/FUL02	Riverside Energy From Waste facility, Norman Road, Belvedere, Kent, DA17 6JN	Details of condition 31 (combined heat and power feasibility) pursuant to planning permission 16/02167/FUL for the proposal under section 73 of the Town and Country Planning Act 1990 regarding the Energy from Waste facility approved under reference 99/o2399/CIRC24 dated 13/3/2015 to amend Condition 27 to allow up to 195,000 tonnes of waste to be delivered to the development by road in any calendar year and the continued operation of the plant without compliance with conditions 10 and 30 to allow the delivery of waste by river and road on a 24/7 basis.	Thursday 2 Approved
16/02167/FUL03	Riverside Energy From Waste facility, Norman Road, Belvedere, Kent, DA17 6JN	A scheme for the provision for the necessary plant and pipework, to allow up to 195,000 tonnes of waste to be delivered to the development by road.	Thursday 2 Approved
99/02388/CIRC13	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Works to Footpath No. 3 pursuant Section 106 Agreement	Friday 31 D

y 31 August 2011

May 2008

y 14 November

proved

27 January 2022

27 January 2022

December 2010

Withdrawn by Bexley



99/02388/CIRC01	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Noise Monitoring Scheme pursuant to Condition 43 of the Department of Trade and Industry.	Wednesday Approved
99/02388/CIRC24	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Application to the Secretary of State to allow an increase the maximum throughput of the facility from 670,000 tonnes per annum (t.p.a.) to 785,000 t.p.a. of waste and the option of river borne waste to be transported to the facility from the Port of Tilbury in addition to the existing network of riparian waste transfer stations in Greater London.	Monday 1 E Observatior
99/0233/CIRC23	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of HGV monitoring pursuant to Condition 43 of the Department of Trade and Industry.	Friday 30 D
			Approved
99/02388/CIRC	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Application to the Secretary of State for the construction and operation of a resource recovery plant of nominally rated output of 72MW gross.	Thursday 1
			by Secretar
99/02388/CIRC03	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of InterTidal Foreshore Report pursuant to Condition 29 of the Department of trade and Industry.	Tuesday 3 、 Details App
99/023/99/CIRC16	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a Scheme of Lighting pursuant to Condition 26 of the Department of Trade and Industry Consent.	Thursday 7
99/02388/CIRC20	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a Breeding Bird Survey pursuant to Condition 32 of the Department of Trade and Industry.	Thursday 2
99/02388/CIRC11	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of scheme of Surface water drainage pursuant to Condition 21 of the Department of Trade and Industry.	Tuesday 9 (
99/02388/CIRC04	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Flood Defence Survey pursuant to Condition 28 of the Department of Trade and Industry.	Thursday 5 Approved
		1	1

/ 21 March 2007

December 2014

ons Sent

December 2011

15 June 2006

ry of State

July 2007

proved

February 2008

proved

24 July 2008

October 2007

July 2007



99/0388/CIRC08	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Remediation Method Statement pursuant to Condition 25 of the Department of Trade and Industry.	Thursday 5
			Details App
99/02388/CIRC12	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a scheme of Archaeological Investigations pursuant to Condition 49 of the Department of Trade and Industry.	Wednesday Approved
99/02388/CIRC10	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a scheme of Surface Wate Source Protection pursuant to Condition 22 of the Department of Trade and Industry.	Tuesday 9 o
99/02388/CIRC05	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Jetty Structure, materials, and design pursuant to Condition 8 of the Department of Trade and Industry.	Thursday 1 Approved
99/02388/CIRC21	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a Travel Plan pursuant to Condition 39 of the Department of Trade and Industry.	Wednesday
			Approved
99/02388/CIRC02	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Lorry Parking Areas pursuant to Condition 51 of the Department of Trade and Industry.	Thursday 2
			Approved
99/02388/CIRC14	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Architectural Details pursuant to Condition 48 of the Department of Trade and Industry.	Tuesday 25
			Details App
99/02388/CIRC09	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of a scheme of works for the disposal of foul drainage pursuant to Condition 24 of the Department of Trade and Industry.	Friday 4 Jai Approved
99/02388/CIRC06	Land Adj River Thames Norman Road Belvedere, Kent, DA17 6JN	Details of Works to connect Isis Reach Footpath/Cycleway to Footpath No.4 to Section 106 Agreement.	Friday 31 D Application
96/00860/FUL	Land Part of Former Borax Site, Norman Road, Belvedere, Kent	Development of marine aggregate facility including the importation of aggregates by sea for processing and distribution by road and the manufacture of	Wednesday

5 July 2007 proved / 20 June 2007 October 2007 16 August 2007 / 21 August 2011 26 April 2007 5 September 2007 proved anuary 2008 December 2010 withdrawn by Bexley / 30 April 1997



		read mixed concrete together with associated offices and buildings.	Application
90/00928/FUL	Land Part of Former Borax Site, Norman Road, Belvedere, Kent	Development of marine aggregate facility including the importation of aggregates by sea for processing and distribution by road and the manufacture of read mixed concrete with associated offices and buildings.	Wednesday Granted sul
18/01743/SCREEN	Riverside Energy From Water Waste Facility, Norman Riad, Belvedere, Kent, DA17 6JN	Statutory consultation on a proposed application for development consent Section 42 Planning Act 2008.	Wednesday Observatior
88/00124/FUL	Borax Limited, Norman Road, Belvedere Road, Kent	Erection of Workshop and Installation of portable office and store and change of use to storage of portable office and store building.	Thursday 6 Permission
89/02295/OUT	Borax Works, Norman Road, Belvedere, Kent	Outline application: Re-development of site for industrial purposes.	Tuesday 16 Application
87/01888/FUL	Borax Consolidation Limited, Norman Road, Belvedere, Kent	Construction of Milling Shed and Milled Ore Silo.	Tuesday 26 Granted wit
14/02357/LDCP	Riverside Energy From Waste Facility, Norman Road, Belvedere, Kent, DA17 6JY	Certificate of Lawfulness (proposed) for the modification of a section of external cladding on the eastern elevation of the main facility building.	Tuesday 3 I Certificate c
99/02838/OUT02	Former Belvedere Power Station Site, Norman Road, Belvedere, Kent, DA17 6JN	Approval of reserved matters for siting, design and external appearance pursuant to Condition 1 on outline planning approval reference 99/02838/OUT for a distribution warehousing development.	Friday 5 Oc Application
99/02838/OUT	Former Belvedere Power Station Site, Norman Road, Belvedere, Kent, DA17 6JN	Outline application for an additional distribution warehousing development (Class B8).	Wednesday
			Permission

withdrawn by Bexley

y 15 May 1991

ubject to Section 106 Agreement

/ 8 August 2018

ons Sent

October 1998

Granted with Conditions

October 1990

withdrawn by Applicant

3 January 1988

ith Conditions

March 2015

of Lawfulness Granted

ctober 2001

withdrawn by Applicant

/ 25 April 2001

Granted with Conditions



02/01770/ADV	Former Belvedere Power Station Site, Norman Road, Belvedere, Kent, DA17 6JN	One non-illuminated wall mounted sign.	Friday 19 Ji
			Permission
99/02838/OUT03M	Former Belvedere Power Station Site, Norman Road, Belvedere, Kent, DA17 6JN	Approval of reserved matters for additional floorspace to form an extension to existing warehouse pursuant to condition 1 on outline planning consent reference 99/02838/OUT for a distribution warehousing development.	Wednesday Approved
09/01708/FUL	Iron Mountain Isis Reach, Norman Road, Belvedere, Kent, DA17 6JN	Installation of two emergency power failure standby diesel generators to existing facility within the service yard.	Tuesday 9 I Permission
19/00345/PRIOR	Iron Mountain Isis Reach, Norman Road, Belvedere, Kent, DA17 6JN	Prior notification for the installation of Solar PV system on pitched roof.	Wednesday
			GPDO Part
99/02838/OUT01	Former Belvedere Power Station, Norman Road, Belvedere, Kent, DA17 6JN	Approval of reserved matters for siting, design and external appearance (excluding landscaping) pursuant to condition 1 on outline planning approval reference 99/02838/OUT for a distribution warehouse development.	Friday 25 M
06/01303/FUL	Marshes South of A2016 Eastern Way London	Provision of two viewing areas with associated paths.	Friday 26 M Permission
05/02909/FULM	Crossness Sewage Treatment Works, Belvedere Road, London, SE2 9AQ	Extension to the existing wader scrape, renovation of the existing viewing platform and paths and installation of a wind pump.	Wednesday Permission
01/01681/FUL	Land Part of Former Borax Site, Norman Road, Belvedere, Kent	Use as temporary recycling centre for importing, transferring, depositing, crushing, processing and sorting of concrete, soil, rubble and similar materials including materials from public utility excavation and demolitions, siting of concrete crusher.	Wednesday Application

July 2002

Granted with conditions

/ 30 March 2005

February 2010

Granted with Conditions

y 15 May 2019

3 Prior Approval not required

*l*ay 2001

/lay 2006

Granted with Conditions

y 7 December 2005

Granted with Conditions

4 December 2005

Withdrawn by Bexley



08/03256/FULM	Land Adj River Thames, Northern Road, Belvedere, Kent, DA17 6JN	Widening of Norman Road, Realignment of existing ditch and ecological enhancements.	Monday 12
			Permission
21/03470/FUL	Riverside Energy from Waste Facility, Norman Road, Belvedere, Kent, DA17 6JN	Realignment of Ditch 9.	Thursday 2
			Permission
21/03470/FUL01	Riverside Energy from Waste Facility, Norman Road, Belvedere, Kent, DA17 6JN	Details of Condition4 (management and monitoring plans) pursuant to planning permission 21/03470/FUL for the realignment of Ditch 9	Thursday 1 Approved
20/03208/FUL	Riverside Energy From Waste Facility Norman Road Belvedere Kent DA17 6JN	Installation, operation and maintenance of a battery energy storage system on land at Riverside Resource Recovery Facility, Norman Road, Belvedere. Riverside Energy From Waste Facility Norman Road Belvedere Kent DA17 6JN	Tuesday 24 Permission
20/03209/FUL	Riverside Energy From Waste Facility Norman Road Belvedere Kent DA17 6JN	Installation, operation and maintenance of private wire connection and associated electrical infrastructure on land at and immediately adjoining, Riverside Resource Recovery Facility, Norman Road, Belvedere.	Wednesday Permission
EN010093 /	Riverside Campus	The Riverside Energy Park Order 2020	Approved 9
19/00998/ALA		Riverside Energy Park (Correction) Order 2021	Approved 1
		Riverside Energy Park (Amendment) Order 2023	Approved 1
10/00255/FUL	Land To The Western Side Of (west Of The ASDA Distribution Centre) Norman Road Belvedere Kent	Demolition of existing building and erection of a stable building	14 April 201
			Permission
15/02926/OUTM	Land Part Of Borax Works Norman Road Belvedere Kent	Outline application for the construction of a data centre (Use Class B8), sub-stations, formation of	11 July 201
		new access, car parking and landscaping.	Permission
15/02926/OUTM02	Land Part Of Borax Works Norman Road Belvedere Kent	Details of reserved matters being details of layout, design, scale, appearance, hard and soft landscaping including boundary fencing details and pursuant to conditions 5, 6, 7, 8, 10, 11, 14, 15 (in part - pre-construction assessment), 17, 24, 25 and 27 for the construction of two, four storey Data	10 July 201 Approved

2 May 2008

Granted with Conditions

27 January 2022

- Granted with Conditions
- 12 January 2023

August 2021

Granted with Conditions

/ 01 September 2021

Granted with Conditions

) April 2020

10 March 2021

17 February 2023

10

Granted with Conditions

16

Granted with Conditions

19



		Centre Buildings (Use Class B8) sub-stations, formation of new access, car parking and associated works pursuant to planning permission 15/02926/OUTM	
11/00778/FUL	Former Electricity Generating Station Norman Road Belvedere Kent	Provision of 3m high boundary fencing with new vehicular access points and alterations to existing vehicular access	13 August 2 Permission
13/00918/FULM	Former Electricity Generating Station Norman Road Belvedere Kent	Erection of building comprising 3 industrial units for mixed-use within Class B1 (business), Class B2 (general industrial) and B8 (storage/distribution), within associated ancillary works	28 August 2 Granted sub
84/01218/FUL	2 Johnstone Cottages, Norman Road, Belvedere, Kent	Formation of two-self contained units of accommodation.	Friday 5 Oc Permission
11/00083/GPDOPD	Land Adj River Thames, Norman Road, Belvedere, Kent, DA17 6JN	Notice of permitted development comprising the construction of a new 11kv micro substation.	Wednesday Permitted D
07/08166/FULM	Land West of Electricity Generating Station, Norman Road, Belvedere, Kent	Creation of a seasonal wetland on 0.47 hectare of the site and the remaining 0.84 hectare converted to a species rich neutral grassland.	Friday 12 O Permission
08/01834/FUL	Land of West Electricity Generating Station, Norman Road, Belvedere, Kent	5 metre buffer zone alongside the new seasonal wetland under reference 07/08166/FULM	Thursday 20 Permission
10/00796/GPDOPD	Overhead Tower Line Between Waldrist Way and Norman Road, Belvedere, Kent	Notice of permitted development for dismantling the 132kV overhead lines and towers	Monday 14 Permitted D
17/00029/OUTM12	Land At Burts Wharf Crabtree Manorway	Planning permission for the outline planning application for the demolition of the existing buildings and erection of new buildings for flexible light industrial (B1c), general industrial (B2), warehouse and distribution (B8) with ancillary offices and Bus depot (sui generis) to create maximum level floor space, provision of car parking,	Friday 30 So

2012

Granted with Permissions

2014

bject to Section 106 Agreement

tober 1984

Granted with Conditions

9 February 2011

Development

ctober 2007

Granted with Conditions

20 March 2008

Granted with Conditions

June 2010

Development

September 2022


		plant, service areas, hard and soft landscaping and provision of vehicular and pedestrian access.	
17/00029/OUTM05	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 6 (estate roads), 7 (materials and finishes), 18 (EV charging points), 21 (cycle storage), 24 (inclusive design features), 34 (external lighting) and 35 (security measures) pursuant to outline planning permission ref. 17/00029/OUTM05	Tuesday 15 Approved
17/00029/OUTM02	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Application for approval of reserved matters being access, appearance, landscaping, layout and scale following outline application ref. 17/00029/OUTM	Wednesday Approved
17/00029/OUTM11	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 8C (investigation assessment) pursuant to planning permission for the outline planning application for the demolition of the existing buildings and erection of new buildings.	Wednesday Approved
17/00029/OUT03	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 13 (planting and vegetation control plan). 28 (landscape management plan), 39 (vegetated buffer strips), 40 (water vole management) and 41 (ditch management) pursuant to outline planning permission ref. 17/00029/OUTM	Wednesday Approved
17/00029/OUTM08	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 27 (pars a-c) (land contamination) pursuant to outline planning permission ref. 17/00029/OUTM	Wednesday Approved
17/00029/OUTM06	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 31 (BREEAM) and 32 (Energy Assessment) pursuant to outline planning permission ref. 17/00029/OUTM	Tuesday 13 Approved
17/00029/OUTM	Burts Wharf Crabtree, Manorway, North Belvedere, Kent	Outline planning application for the demolition of the existing buildings and erection of new buildings for flexible light industrial (B1c), general industrial (B2), warehouse and distribution (B8) with ancillary offices and Bus depot (sui generis) to create maximum level floor space, provision of car parking, plant, service areas, hard and soft landscaping and provision of vehicular and pedestrian access.	Thursday 7 Granted su

5 December 2020

y 23 December 2020

y 20 July 2022

y 23 December 2020

y 4 November 2020

3 October 2020

February 2019

ubject to Section 106 Agreement

CORY

17/00029/OUTM01	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of condition 8 (geo/archaeological evaluation) and 11 (thames tidal flood defence plan) pursuant to planning permission 17/00029/OUTM	Friday 24 Ju Approved
19/00029/OUTM09	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 14 (thames tidal defence structure) and 38 (water supply infrastructure) pursuant to outline planning ref. 17/00029/OUTM	Wednesday Approved
17/00029/OUTM04	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of conditions 9 (surface water management strategy), 10 (rainwater recycling), 16 (sustainable drainage and 37 (evacuation plan) pursuant to outline planning permission ref. 17/00029/OUTM	Wednesday Details Grar
17/00029/OUTM07	Land At Burts Wharf Crabtree Manorway, North Belvedere, Kent	Details of condition 12 (needed calculations), 17 (piling risk assessment) and 25 (construction methodology statement) pursuant to outline planning permission ref. 17/00029/OUTM	Wednesday Approved
18/00366/PRIORD	Burts Wharf Crabtree, Manorway, North Belvedere, Kent	Prior Notification of proposed demolition of all buildings on the site	Wednesday GPDO Part
17/00029/OUTM02	Land Burts Wharf Crabtree, Manorway, North Belvedere, Kent	Application for a minor material amendment for the provision of multi-storey car park and footbridge link to parent permission 17/00029/OUTM02. The parent permission being for a Application for approval of reserved matters being access, appearance, landscaping, layout and scale following the outline application ref. 17/00029/OUTM	Application
22/00939/FUL	ASDA CDC Norman Road. Belvedere, Kent, DA17 6JY	Storage of Liquefied Natural Gas and Associated Works. (Submitted Jointly with 22/01006/HAZ)	Friday 21 O Permission
22/01006/HAZ	ASDA CDC, Norman Road, Belvedere, Kent, DA17 6JY	Hazardous Substances Consent Application for the Storage of Liquefied Natural Gas and Associated works.	Friday 21 O Permission
19/00037/FUL	ASDA Distribution Centre, Norman Road, Belvedere, Kent, DA17 6JN	Application for a minor material amendment for non- compliance to the pre and post construction assessment to parent permission 18/01759	Monday 4 M

uly 2020

/ 21 January 2021

/ 11 November 2020

nted

⁷ 16 December 2020

[,] 14 March 2018

3 Prior Approval Not Required

with case offer

October 2022

Granted with Conditions

ctober 2022

Granted with Conditions

March 2019



			Permission
18/01759/FUL	ASDA Distribution Centre, Norman Road, Belvedere, Kent, DA17 6JN	Erection of a prefabricated vehicle maintenance unit.	Friday 14 S
			Permission
18/01759/FUL01	ASDA Distribution Centre, Norman Road, Belvedere, Kent, DA17 6JN	Details of condition 3 (hard and soft landscaping) pursuant to planning permission ref. 18/01759/FUL	Thursday 1
			Approved
21/02799/SCREEN	Crossness Sewage Treatment Works, Bazalgette Way, London, SE2 9AQ	Proposed resilience and upgrade works at Crossness STW comprising repair and maintenance works, construction of new pumping stations, new pipework, new sludge thickening building and buffer tanks.	Thursday 1 Observatio
19/01648/HAZ	Crossness Sewage Treatment Works, Bazalgette Way, London, SE2 9AQ	Hazardous substance consent application for storage and use of hazardous substances.	With Case
17/02290/FUL	Crossness Sewage Treatment Works Bazalgette Way London SE2 9AQ	Permanent retention of existing portacabin previously approved for a limited period under planning reference 13/02081/FUL and two unauthorised storage containers, used collectively for storage and welfare purposes in connection with the ongoing management & maintenance of the Crossness Nature Reserve	Tuesday 16
91/01318/OUT	Crossness Sewage Treatment Works Belvedere Road Abbey Wood London SE2 9AN	Outline application: Construction of a sewage sludge incinerator using the fluidised bed process with dewatering, ash collection and gas cleaning facilities.	21 January Granted su
05/02780/OUTMMIN01	Norman Park Between Yarnton Way and Picardy Manorway, Belvedere, Kent	Application for non-material amendement to: improve the specification of lighting near the western footpath and development car park.	Tuesday 12 Permission
23/00565/FUL	Lidl Belvedere Fresh 1 Burts Wharf Crabtree Manorway North Belvedere Kent DA17 6LJ	Formation of two temporary staff car parks and associated works.	Friday 12 N
			Permission

Granted with Conditions

September 2018

Granted with Conditions

13 December 2018

8 November 2021

ons Sent

Officer

6 January 2018

Granted with Conditions

/ 1994

ubject to Section 106 Agreement

2 October 2021

Granted without Conditions

May 2023

Granted with Conditions

CORY

22/02568/FULM	Jablite Anderson Way Belvedere Kent DA17 6GB	Change of use from existing general industrial (B2 and B8) use to a Waste Management Facility, with two weighbridges (Sui Generis).	With Case
22/01113/FULM	Infinity House Anderson Way Belvedere Kent DA17 6GB	Demolition of existing buildings and erection of seven industrial units/offices with the provision of access, landscaping and associated works.	Monday 15 Application
21/01798/FULM	Infinity House Anderson Way Belvedere Kent DA17 6GB	Demolition of existing buildings and redevelopment of the site to provide two storey deck storage for operational vehicles, associated parking, guard hut, welfare block, landscaping, and associated infrastructure.	Thursday 1 Application
19/00432/FUL	1 Alchemy Way Belvedere Bexley DA17 6FR	Various external alterations including the closing off existing exits and cladding over openings to match existing and formation of new entrance opening. New perimeter and vehicles barriers and CCTV.	Monday 5 A
19/01598/FULMIN	1 Alchemy Way Belvedere Bexley DA17 6FR	Reducing 2 gates to 1, installing a removable cable restraint system and installing a turnstile in lieu of bollards and installing a turnstile in lieu of the gate at the east side of the entrance.	Friday 15 M Approved
19/01598/FUL	1 Alchemy Way Belvedere Bexley DA17 6FR	Alterations of two existing vehicle entrances and provision of 2.4metre high boundary fencing with associated works.	Wednesday Permission
21/03790/FULM01	Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Site access arrangements and new access roads pursuant to planning permission 21/03790/FULM	Wednesday Approved
21/03790/FULM	Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Demolition of the existing building and the erection of a new regional distribution centre with ancillary offices, a multi-storey car park, footbridge links, substations, access, HGV parking, landscaping and associated works.	Thursday 8 Granted su
21/03790/FULM03	Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Thames Tidal flood defences pursuant to planning permission 21/03790/FULM	Wednesday Approved

Officer

5 August 2022

Withdrawn by Applicant

14 October 2021

withdrawn by Applicant

August 2019

Granted with Conditions

May 2020

y 28 August 2019

Granted with Conditions

y 8 February 2023

December 2022

ubject to Section 106 Agreement

y 22 March 2023



Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Materials and finishes pursuant to planning permission 21/03790/FULM	Wednesday
		Approved
Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Electric vehicle recharging points pursuant to planning permission 21/03790/FULM	Wednesday
		Approved
Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Demolition/construction methodology and Construction environment management plan pursuant to planning permission 21/03790/FULM	With case o
Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	River Thames Tidal Flood Defence Structure and flood defences pursuant to planning permission 21/03790/FULM	Thursday 23
	Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BS	Lidl UK Gmbh Fishers Way Belvedere Kent DA17 6BSMaterials and finishes pursuant to planning permission 21/03790/FULMLidl UK Gmbh Fishers Way Belvedere Kent DA17 6BSElectric vehicle recharging points pursuant to planning permission 21/03790/FULMLidl UK Gmbh Fishers Way Belvedere Kent DA17 6BSDemolition/construction methodology and Construction environment management plan pursuant to planning permission 21/03790/FULMLidl UK Gmbh Fishers Way Belvedere Kent DA17 6BSDemolition/construction methodology and Construction environment management plan pursuant to planning permission 21/03790/FULMLidl UK Gmbh Fishers Way Belvedere Kent DA17 6BSRiver Thames Tidal Flood Defence Structure and

/ 22 February 2023

/ 15 March 2023

officer

23 March 2023

Planning Inspectorate Reference: EN010128 Planning Statement Application Document Number: 5.2

Appendix D

FIGURES











DECARBONISATION

10 Dominion Street Floor 5 Moorgate, London EC2M 2EF Contact Tel: 020 7417 5200 Email: enquiries@corygroup.co.uk **corygroup.co.uk**