



ENVIRONMENTAL STATEMENT: 6.1 CHAPTER 10: TOWNSCAPE AND VISUAL

DECARBONISATION

Cory Decarbonisation Project

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10. TOWNSCAPE AND VISUAL

10.1. INTRODUCTION

10.1.1. This chapter reports the assessment of the likely significant effects of the Proposed Scheme on townscape character and visual impact (TVIA) during construction and operation and describes:

- relevant policy, legislation and guidance;
- consultation undertaken to date;
- the methodology for assessment;
- potential effects of the construction phase; and
- potential effects of the operation phase.

10.1.2. This chapter assesses the impact on townscape as opposed to landscape due to the predominantly urban nature of the Site and Study Area. The definition of townscape used as the basis of this chapter is that described in GLVIA3¹ as: “*the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces*”.

10.1.3. An Arboricultural Impact Assessment (AIA) considers the impacts of the Proposed Scheme on arboricultural features and forms a technical appendix to this chapter (**Appendix 10-3: Arboricultural Impact Assessment (Volume 3)**). The approach to undertaking the AIA remains as outlined in the EIA Scoping Report². For information purposes, a tree removals and protection plan is included in **Figure 10-1: Tree Removals and Protection Plan (Volume 2)**.

10.2. POLICY, LEGISLATION, AND GUIDANCE

10.2.1. The policy, legislation, and guidance relevant to the assessment of TVIA for the Proposed Scheme is detailed in **Table 10-1**.

Table 10-1: Townscape and Visual Impact Summary of Key Policy, Legislation, and Guidance

Policy, Legislation or Guidance	Description
Policy	
Overarching National Policy Statement for Energy EN-1 2024³	This Overarching National Policy Statement for Energy (EN-1) is part of a suite of NPS designated by the Secretary of State for DESNZ in January 2024.

Policy, Legislation or Guidance	Description
	<p>The following paragraphs relating to the assessment, mitigation and decision making process are of relevance for this topic:</p> <p>Paragraph 4.7.2 states that <i>“Applying “good design” to energy projects should produce sustainable infrastructure sensitive to place, including impacts on heritage, efficient in the use of natural resources, including land-use, and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible...”</i></p> <p>Paragraph 4.7.7 states <i>“Applicants must demonstrate in their application documents how the design process was 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.”</i></p> <p>Paragraph 5.10.2 states that <i>“Among the features which are common to a number of different thermal combustion technologies, cooling towers and exhaust stacks and their plumes have the most obvious impact on landscape and visual amenity. Visual impacts may be not just the physical structures but also visible steam plumes from cooling towers.”</i></p> <p>Paragraph 5.10.36 states that <i>“In reaching a judgment, the Secretary of State should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable.”</i></p> <p>Paragraphs 5.10.13 to 5.10.15 state that <i>“All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. Coastal areas are particularly vulnerable to visual intrusion because of the potential</i></p>

Policy, Legislation or Guidance	Description
	<p><i>high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast”</i></p> <p>Paragraph 5.10.27 states that “<i>adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site and wider setting. The careful consideration of colours and materials will support the delivery of a well-designed scheme, as will sympathetic landscaping and management of its immediate surroundings.</i>”</p>
<p>National Planning Policy Framework (NPPF) 2023⁴</p>	<p>The NPPF sets out the Government’s planning policies for England and how these should be applied. The NPPF provides guidance for planning authorities and developers on the conservation and assessment of landscape/townscape character and visual amenity in paragraphs 114, 135, 136, 160, 176, 180, 181, 182, and 183.</p>
<p>The London Plan 2021⁵</p>	<p>The Spatial Development Strategy for Greater London setting out a framework for how London will develop over the next 20-25 years and the Mayor’s vision for Good Growth.</p> <p>The following policies relate to the protection and enhancement of townscape character and visual amenity:</p> <ul style="list-style-type: none"> ● Policy D1: London’s form, character and capacity for growth; ● Policy D3: Optimising site capacity through the design-led approach; ● Policy D4: Delivering good design; ● Policy D9: Tall buildings; ● Policy HC3: Strategic and Local Views; and ● Policy HC4: London View Management Framework.
<p>The Bexley Local Plan 2023⁶</p>	<p>The Local Plan, adopted on 26 April 2023, positively plans for sustainable development across the Borough. It is essential to the delivery of the Council’s other key plans and strategies, including the Bexley Plan, the</p>

Policy, Legislation or Guidance	Description
	<p>Growth Strategy and the Connected Communities Strategy.</p> <p>The following policies relate to the protection and enhancement of townscape character and visual amenity:</p> <ul style="list-style-type: none"> ● SP1: Achieving sustainable development – the spatial strategy; ● SP5: Placemaking through good design; ● DP9: Development within town centres; ● DP11: Achieving high-quality design; ● DP12: Tall buildings and building heights; ● DP13: Protecting local views; and ● DP18: Waterfront development and development including, or close to, flood defences.
<p>London Environment Strategy 2018⁷</p>	<p>The London Environment Strategy seeks to ensure that London will become a “<i>zero carbon city by 2050</i>” by setting out policies and proposals in seven policy areas to address environmental challenges, including the transition to a low carbon circular economy. The Mayor wants to ensure “<i>London’s businesses and workers are supported to be able to compete effectively in, and benefit from, this growing global market</i>”.</p>
<p>Bexley Local Character Study 2021⁸</p>	<p>The Local Character Study defines spatial qualities and Natural Landscape Areas within the borough, qualities that should be protected and enhanced through planning policy and new development.</p>
<p>Crossness Conservation Area Appraisal and Management Plan 2009⁹</p>	<p>The Management Plan defines and records the special architectural and historic interest of the Crossness Conservation Area and identifies opportunities for enhancement. It identifies the extent, qualities, and management processes for the Crossness Conservation Area.</p>

Policy, Legislation or Guidance	Description
Erith Road Conservation Area Appraisal and Management Plan 2008¹⁰	The document defines and records the special architectural and historic interest of the Erith Road Conservation Area and identifies opportunities for enhancement.
Woolwich Road Conservation Area Appraisal and Management Plan 2008¹¹	The document defines and records the special architectural and historic interest of the Woolwich Road Conservation Area and identifies opportunities for enhancement.
Locally Significant Views within London Borough of Bexley 2021¹²	The document identifies locally designated views within the Borough. The “views are worth considering as part of the design process when they possess architectural, townscape, landscape, or environmental quality”.
London View Management Framework 2012¹³	The document identifies views designated by the London Plan to be considered in the determination of planning applications.
South East Inshore Marine Plan 2021¹⁴	<p>The South East Inshore Marine Plan area stretches from Felixstowe in Suffolk to west of Dover in Kent and incorporates the River Thames. It will help to enhance and protect the marine environment and achieve sustainable economic growth while respecting local communities both within and adjacent to the marine plan area. The following policy covers seascape and landscape:</p> <p>Policy SE-SCP-1 states that “<i>the aim of the policy is to manage significant adverse impacts on the seascape and landscape of the south east marine plan area</i>”.</p> <p>An assessment of seascape is not required as the Site is located within the Thames Estuary which is not considered to be a coastal landscape.</p>
Legislation	
European Landscape Convention (ELC) 2000¹⁵	European Union treaty signed by the UK to include planning, protection and management of landscape within policy.

Policy, Legislation or Guidance	Description
Guidance	
National Planning Practice Guidance (2021)¹⁶	Explains the processes and tools that can be used through the planning system in England. This includes guidance on healthy and safe communities. It promotes good design that incorporates security as an intrinsic part of a development to achieve places that are safe and attractive, which function well, and which do not need subsequent work to achieve or improve resilience.
Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) 2013¹	Sets out industry guidelines for undertaking a landscape/ townscape and visual impact assessments.
Townscape Character Assessment Technical Information Note 05/2017 2018¹⁷	Provides advice on how to identify and assess townscape character.
Visual Representation of Development Proposals Technical Guidance Note 06/2019 2019¹⁸	Provides advice on how to capture and represent visual amenity through representative viewpoints and how the viewpoints should be presented.

10.3. CONSULTATION AND ENGAGEMENT

- 10.3.1. **Table 10-2** provides a summary of the consultation and engagement undertaken in support of the preparation of this assessment.
- 10.3.2. **Table 10-4** provides a summary of comments provided as part of the statutory consultation process and the Applicant’s response.
- 10.3.3. **Appendix 4-2: Scoping Opinion Responses (Volume 3)** provides a summary of the Planning Inspectorate and consultee comments on the EIA Scoping Opinion¹⁹ and the Applicant’s responses.

Table 10-2: Townscape and Visual Consultation and Engagement Summary

Date and Method of Consultation	Consultee	Summary of Key Topics discussed and Key Outcomes
31st January 2023, Email	London Borough of Bexley	Preliminary Zone of Theoretical Visibility (ZTV) along with suggestion for 10 no. viewpoint locations issued for comment and recommendations on Study Area and selected viewpoints; and any sensitivities in relation to townscape or visual receptors which needed consideration.
3rd February 2023, Email	London Borough of Bexley	LBB confirmed that viewpoints are acceptable at this stage. The viewing platform at Lesnes Abbey was suggested as an additional viewpoint, along with Frank's Park and locally designated views, which were added as viewpoints.
21st November 2023, Email	London Borough of Bexley	Zone of Theoretical Visibility (ZTV) along with suggestion for viewpoint locations reissued for comment and recommendations on Study Area and selected viewpoints; and any sensitivities in relation to townscape or visual receptors which needed consideration. A response was not received as of February 2024.

Table 10-3: Summary of the Statutory Consultation Comments in relation to Townscape and Visual

Statutory Consultee Comment	Response
London Borough of Bexley	
<p><i>“Paragraph 2.2.28 notes that there may be a requirement for another column for distillation, however this is subject to design development. There are several other proposed columns and towers that would be up to 55m in height shown in Table 2-1 of the PIER. As this is a Strategic Industrial Location, the Local Plan Policy DP12 Tall Buildings and building heights states that buildings should not normally be more than 25m high, which is generally equivalent to 8 storeys. The applicant should demonstrate how the points within Policy DP12 and D9 Tall Buildings in the London Plan have been met.”</i></p>	<p>Bexley Local Plan policy DP12 has informed the assessment undertaken in this chapter. The Planning Statement (Document Reference 5.2) and Policy Accordance Tracker (Document Reference 5.3) demonstrate how the Proposed Scheme complies with relevant planning policies and where it does not comply with relevant planning policies, including building height limits in the Bexley Local Plan 2023⁶ (DP9 and DP12), the Planning Statement and Policy Accordance Tracker (Document Reference 5.3) explain how this is operationally necessary to the Proposed Scheme.</p>
<p><i>“The proposal will present a significant step change in landscape and built character. The Townscape and Visual chapter of the PIER describes the potential visual effects of the development. This is challenging to assess without images of the selected views.”</i></p>	<p>Appendix 10-1: Visual Assessment Photographs (Volume 3) and Appendix 10-4: Photomontages (Volume 3) provide images of the selected viewpoints. Appendix 10-4: Photomontages (Volume 3) illustrate the Proposed Scheme from each viewpoint, with the inclusion of mitigation.</p>
<p><i>“Townscape Visual Impact Assessments (TVIA) should reflect the parameters of the final scheme which is to be submitted, when this is confirmed. Outcomes relating to effects are likely to be premature in the absence of assessment against the scheme which is to be submitted to the Planning Inspectorate.”</i></p>	<p>The assessment presented in Section 10.7 of this chapter reflects the design of the Proposed Scheme that is the subject of this DCO application. The parameters of the design of the Proposed Scheme that have been assessed are described in Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1) and</p>

Statutory Consultee Comment	Response
	controlled by a requirement of the Draft DCO (Document Reference 3.1) .
<p><i>“In terms of the 'next steps' outlined within the Chapter 10, the further work to involve a Winter walkover is welcomed. This will assist with the assessment of potential impacts for both the TVIA and the heritage considerations of the impact upon the setting of neighbouring designated heritage assets.”</i></p>	<p>A winter walkover was carried out on 29th November 2023, and the results from this have informed the baseline for the assessment presented in this chapter. Appendix 10-1: Visual Assessment Photographs (Volume 3) provides images of the selected viewpoints during winter months.</p>
<p><i>“As is currently the case, the applicants should continue to liaise with the Local Planning Authority regarding viewpoints for the TVIA, particularly where the Winter walkover, or the confirmed parameters may highlight additional locations which may require further consideration.”</i></p>	<p>The Zone of Theoretical Visibility (ZTV) along with suggestion for viewpoint locations was reissued to LBB on 21st November 2023 for comment and recommendations on Study Area and selected viewpoints; and any sensitivities in relation to townscape or visual receptors which needed consideration. Further information is provided in Table 10-2 of this chapter.</p>
<p><i>“The retention and reuse of the existing jetty, whether for industrial, heritage or biodiversity purposes, would be welcomed. Its retention would be beneficial as it may minimise waste and align with circular economy principles. The retention of locally significant structures can also contribute towards placemaking.”</i></p>	<p>The position regarding the Belvedere Power Station Jetty (disused) is described in Section 10.4 of this chapter. The Applicant will make a decision regarding whether this will be demolished as part of the construction of the Proposed Scheme or retained at the detailed design stage. Further information is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1).</p>
<p><i>“It's not clear at this stage what the layout of the structures will be on site as the application is addressing the general site location rather than the layout. As the applicant is aware, part of the proposal falls</i></p>	<p>The indicative layout of the Proposed Scheme is presented on the Works Plans (Document Reference 2.3) and further description is provided in Chapter 2: Site and Proposed Scheme Description</p>

Statutory Consultee Comment	Response
<p><i>on protected habitats and Metropolitan Open Land (MOL). MOL should be protected from inappropriate development in accordance with national planning policy tests that apply to green belts - please refer to other consultees' comments on these matters as this may influence the location of the facility."</i></p>	<p>(Volume 1). The Planning Statement (Document Reference 5.2) demonstrates how the Proposed Scheme complies with relevant planning policies, and where it does not comply with relevant planning policies it explains how the benefits of the Proposed Scheme outweigh any adverse impacts. This chapter considers the Areas of Accessible Open Land and Non-Accessible Open Land within the Study Area (see Paragraph 10.5.31 below for a description of Accessible Open Land and Non-Accessible Open Land) some of which include land that is designated as MOL.</p>
<p><i>"The proposal is within the Thames Policy Area and Policy DP18 Waterfront development and development including, or close to, flood defences in the Local Plan applies. 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."</i></p>	<p>Improvements in access in the Mitigation and Enhancement Area and in the BNG Opportunity Area are referenced in the Outline LaBARDS (Document Reference 7.9) would include provision of improved access, interpretation, and activation on PRoW within open areas.</p>
<p><i>"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."</i></p>	<p>Access improvements referenced in the Outline LaBARDS (Document Reference 7.9) would include provision of improved access, interpretation, and activation on PRoW within accessible open spaces.</p>

Statutory Consultee Comment	Response
<p><i>“The absorber column stacks are indicated on the Zone of Theoretical Visibility (ZTV) map as up to 113m high. Paragraph 2.1.11 in the PIER states that this will be comparable to the height of the stacks for Riverside 1 & 2. The ZTV demonstrates how wide a radius would be able to see the stacks, including Conservation Areas in Erith and Locally Protected Views. The applicant should refer to Policy DP13 ‘Protecting local views’ in the Local Plan for the criteria development must meet if it has the potential to affect local views.”</i></p>	<p>Policy DP13 ‘Protected local views’ is referenced in the assessment of effects on views, presented in Section 10.7 of this chapter. The Planning Statement (Document Reference 5.2) demonstrates how the Proposed Scheme complies with relevant planning policies. Where the Proposed Scheme does not comply with relevant planning policies, including Policy DP13, the Planning Statement explains how the benefits of the project outweigh any adverse impacts.</p>
<p><i>“Paragraph 2.1.11 of the PIER also states that one column is required for each carbon capture plant, therefore if there is one combined facility then only one will be required. Given the potential effect of the visibility of these columns, one combined facility may therefore be preferable from an urban design perspective.”</i></p>	<p>The assessment presented in Section 10.7 of this chapter is based on two Absorber Columns(s) and Stack(s), as this is considered to be the worst case scenario. The decision as to whether there will be one or two Absorber Column(s) and Stack(s) will be made at the detailed design stage.</p>
<p>Thames Water</p>	
<p><i>“Visual impacts – the reduced nature reserve will see significant visual impacts due to the Proposed Scheme (90m stacks and large vertical/spherical storage tanks for liquified carbon). This would have a detrimental effect on the nature reserve visitor experience and has the potential to reduce visitor numbers.”</i></p>	<p>This chapter considers likely significant effects on user experience of Accessible Open Land, including Crossness LNR. The 113m Absorber Column(s) and Stack(s) are considered as the worst case scenario in the flexibility retained in Chapter 2: Site and Proposed Scheme Description (Volume 1).</p>

10.4. ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

10.4.1. The TVIA of the Proposed Scheme has been undertaken in line with the legislation, policy and guidance described in **Section 10.2**.

POTENTIAL SIGNIFICANT EFFECTS

10.4.2. As set out in the EIA Scoping Report² and PEIR²⁰, the following components are considered likely to be subject to significant effects and therefore have been considered further in this assessment:

- Construction Phase:
 - townscape character (including night-time townscape character);
 - locally designated views;
 - visual amenity; and
 - existing arboricultural features (presented in the AIA (**Appendix 10-3: Arboricultural Impact Assessment (Volume 3)**) and not considered further within this chapter).
- Operation Phase:
 - townscape character (including night-time townscape character);
 - locally designated views; and
 - visual amenity.

MATTERS SCOPED OUT

10.4.3. The following components are considered unlikely to be subject to significant effects and therefore have not been considered further in this assessment:

- Construction Phase:
 - National Character Areas (NCA);
 - London View Management Framework (LVMF) views; and
 - Residential Visual Amenity Assessment.
- Operation Phase:
 - NCA;
 - LVMF views;
 - existing arboricultural features; and
 - Residential Visual Amenity Assessment.

BASELINE DATA COLLECTION

Desk Study

- 10.4.4. Information has been gathered primarily from site walkovers (July 2023 and November 2023), supported by desk study and engagement with relevant consultees (set out in **Section 10.3**).
- 10.4.5. The key sources of desk information on baseline TVIA conditions have been:
- identifying natural and built features such as landform, vegetation, settlement patterns and hydrology in relation to the Proposed Scheme using Ordnance Survey (OS) mapping;
 - studying aerial photography and online photographic resources;
 - review of relevant national, regional and local planning policy documents; and
 - review of relevant published landscape character assessments.

Walkover

- 10.4.6. A detailed site walkover was carried out on 20th July 2023 during the summer season and on 29th November 2023 during the winter season. The walkovers were designed to collect data for the assessment of effects on townscape character, visual amenity, and locally designated views during summer and winter months. The following tasks were undertaken as part of the walkovers:
- recording the baseline townscape and its character;
 - checking and ground truthing the visual receptors;
 - identifying effects on both the townscape character and on visual amenity;
 - consideration of potential design and mitigation measures; and
 - site photography.
- 10.4.7. A further night-time site walkover and baseline photography was carried out on 26th February 2024 to record the baseline night-time character environment.
- 10.4.8. Photography was undertaken following the Landscape Institute Guidelines for Visual Representation Technical Guidance Note 06/19¹⁸, with a full frame single-lens reflex (SLR) digital camera with a 50mm focal length lens, mounted on a tripod with a levelled panoramic head.

ASSESSMENT METHODOLOGY

- 10.4.9. A full methodology for this assessment is set out in **Appendix 10-2: TVIA Methodology (Volume 3)**. In summary, the TVIA methodology identifies the value and susceptibility (vulnerability) of the identified receptors to assess their sensitivity to the Proposed Scheme. The likely magnitude of impact (change) experienced by these receptors is then considered and combined with the receptor's sensitivity to identify the significance of effect for the Proposed Scheme. The assessment presented within

this chapter considers potential impacts from the construction and operation of the Proposed Scheme alongside Riverside 1 and Riverside 2.

10.4.10. The key assessment stages include:

- Establishment of the baseline conditions: the townscape character and visual context of the receiving environment and its quality, value and sensitivity to change.
- Contributions to the iterative process of design and mitigation based on understanding the nature, form and features of the Proposed Scheme.
- Consideration of the magnitude of impact likely to result from the Proposed Scheme, both from construction (temporary features) and operation (permanent features) of the Proposed Scheme, on visual amenity and the townscape resource.
- An evaluation of the significance of townscape and visual effects arising temporarily during construction and permanently during operation, considering the sensitivity of resources and the magnitude of impact.
- An appraisal of likely impact on night-time character from the proposed lighting, including navigational lighting on top of the Absorber Column(s) and Stack(s).

10.4.11. 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. As such, for each receptor, the assessment considers the likely impact of the introduction of the Proposed Scheme against that position (existing baseline including an operational Riverside 2). Where it is anticipated the magnitude of impact would differ in the absence of Riverside 2, a separate assessment is included for the receptor to consider the impact the Proposed Scheme would have without Riverside 2.

10.4.12. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, two options for the construction programme of the Proposed Scheme are being considered: Option 1 and Option 2. The estimated construction period is approximately 60 months (five years) for Option 1 and approximately 42 months (three and a half years) for Option 2. In order to provide a proportionate and robust TVIA, only Option 1 has been considered as this presents the worst case scenario for this topic. This is because construction effects would continue for a longer period of time.

10.4.13. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, two options for the design of the Carbon Capture Facility are being considered. One option is for individual lines to be connected to the exhaust stacks for Riverside 1 and Riverside 2, with two individual Stack(s) for the Carbon Capture Facility. A second option is for the two lines from Riverside 1 and Riverside 2 to be combined into a single Stack at the Carbon Capture Facility. The assessment presented in this chapter is based on two Stack(s), as this is considered to be the worst case scenario.

- 10.4.14. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, the choice between demolition or retention of the Belvedere Power Station Jetty (disused) is being considered. Demolition of the Belvedere Power Station Jetty (disused) is considered the worst case scenario. Whilst the removal of the Belvedere Power Station Jetty (disused) would likely have a beneficial effect on users of the adjacent Public Rights of Way (PRoW), opening up views of the river, this would be limited once the Proposed Jetty is built and the demolition activities would have adverse visual effects on the users of the PRoW during the construction phase. The retention of the Belvedere Power Station Jetty (disused) (with modifications), whether for industrial, heritage or biodiversity purposes would result in beneficial effects as the Belvedere Power Station Jetty (disused) contributes towards placemaking. Retaining it will involve some disruption to the PRoW whilst modifications are undertaken, however, it would also minimise waste and align with circular economy principles. This assessment therefore considers the effect of the demolition of the Belvedere Power Station Jetty (disused) only, as this represents the worst case scenario.
- 10.4.15. The proposed new ground level, as described in **Chapter 2: Site and Proposed Scheme Description (Volume 1)** is accounted for in the parameters of assessment described in **Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1)**, therefore topographical changes are assessed inherently throughout **Section 10.7**.

SIGNIFICANCE CRITERIA

Townscape

- 10.4.16. For effects on the townscape, the assessment of significance is determined by considering the magnitude of impact arising from the Proposed Scheme on each of the features and elements that make up the character of the resource, bearing in mind the value of the townscape (and/or of specific features and elements) and the ability of the townscape to accommodate change of the type proposed (i.e. its sensitivity).
- 10.4.17. Townscape sensitivity depends on the character of the receiving townscape, the nature of the Proposed Scheme and the nature of change. Broad criteria and example scenarios, informed by GLVIA3¹ are set out in **Table 10-4**.
- 10.4.18. It should be noted that the levels are indicative, and arbitrary divisions of a continuum. In the assessment, professional judgement is used to determine the overall level.

Table 10-4: Townscape Sensitivity

Classification	Criteria
High	<p>Townscape characteristics or features with little or no capacity to absorb the type of change proposed without fundamentally altering current character.</p> <p>Townscape designated for its international or national townscape value or with highly valued features.</p> <p>Outstanding example in an area of well cared for townscape or set of features that combine to give a very strong sense of place.</p> <p>Few detracting or incongruous elements.</p>
Medium	<p>Townscape characteristics or features with moderate capacity to absorb change without fundamentally altering their present character.</p> <p>Townscape designated for its local townscape value or a regional designated townscape where the characteristics and qualities that led to the designation of the area are less apparent or are partially eroded or an undesignated townscape which may be valued locally – for example an important open space.</p> <p>An example of a townscape or a set of features which is relatively coherent, with a good but not exceptional sense of place – occasional buildings and spaces may lack quality and cohesion.</p>
Low	<p>Townscape characteristics or features which are tolerant of change without detriment to their present character.</p> <p>An area with a weak sense of place and/or poorly defined character /identity.</p> <p>No designation present or of low local value or in poor condition.</p> <p>An example of monotonous unattractive visually conflicting or degraded townscape or set of features.</p>

10.4.19. The magnitude of impact on the townscape resource is the size or scale of change that would arise from the Proposed Scheme, the geographical extent of the area influenced and its duration and reversibility. Factors to consider are the scale of the impact, the nature of the impact, whether it is an adverse or beneficial change, and the timescale involved (i.e. temporary, short, medium or long term/permanent).

Table 10-5: Townscape Magnitude of Impact

Classification	Size or Scale of Change	Geographical Extent	Duration	Reversibility
Major	Highly noticeable change, affecting most key characteristics and dominating the experience of the townscape. Introduction of highly conspicuous new development.	Extensive, affecting the entire townscape area.	Long term (10+ years)	Permanent /Irreversible
Moderate	Noticeable change, affecting some key characteristics and the experience of the townscape. Introduction of some new elements.	Affecting the application Site and a proportion of the townscape area greater than the immediate setting.	Medium term (6-10 years)	Partially Reversible /Temporary
Minor	Localised change, affecting some characteristics and the experience of the townscape. Introduction of small or relatively inconspicuous new elements.	Limited to within the application Site and immediate setting.	Short term (0-5 years)	Reversible
Negligible	No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.	Limited to within the application Site and immediate setting.	Short term (0-5 years)	Reversible

Visual

- 10.4.20. For effects on visual amenity, the assessment of significance is determined by considering the sensitivity of the visual receptor and the magnitude of impact on visual amenity arising from the Proposed Scheme.
- 10.4.21. Visual assessment 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.
- 10.4.22. Visual effects may result from the changes in the composition of views or overall visual amenity consequent to the introduction of the Proposed Scheme. The degree to which people would be affected by change depends on factors, including:
- the activity of the receptor, such as taking part in leisure, recreational and sporting activities, travelling through the area or working;
 - the value of the viewing place or viewpoint, as reflected by designations, inclusion in guidebooks or the facilities provided for visitors, for example;
 - whether receptors are likely to be stationary or moving and how long they would be exposed to views of the Proposed Scheme;
 - the extent of the route or area over which the change would be visible;
 - whether receptors will be exposed to the change daily, frequently, occasionally or rarely; and
 - whether views are oblique or direct.
- 10.4.23. It is widely accepted that the magnitude of change in relation to views tends to decrease with distance. A desktop study determined likely areas where there could be views of the Site or the Proposed Scheme. Fieldwork has further clarified the influence of existing landform, buildings, and vegetation on the degree of potential views.
- 10.4.24. Visual sensitivity is categorised by the sensitivity of the visual receptor and will include local residents; users of promoted routes, PRoW and users of accessible open areas or recreational landscapes; people at work; and people travelling along roads or railway lines.
- 10.4.25. The magnitude of impact on visual amenity is the size or scale of change in the view that would arise from the Proposed Scheme when compared to the existing situation.
- 10.4.26. Factors to consider are the scale of the impact, the nature of the impact, whether it is an adverse or beneficial change, and the timescale involved (i.e. temporary, short, medium or long term/permanent).

Significance of Effect

- 10.4.27. The objective of the assessment process is to identify and evaluate the likely significant effects arising from the Proposed Scheme. Consideration is given to the residual effects likely to arise from the completed Scheme, following the implementation of embedded and additional mitigation measures and change over time. For the purposes of the assessment within this chapter, the design, mitigation and enhancement measures set out in **Section 10.6** and **Section 10.8** have been taken into account at the two stages of assessment. The effects of the Proposed Scheme upon the future baseline (including an operational Riverside 2) have been identified and assessed at two points in time:
- **Construction Phase:** during construction; and
 - **Operation Phase:** in years 1 and 15 of operation.
- 10.4.28. Whilst there is a large degree of professional judgement involved in determining the significance of townscape and visual effects, they can broadly be determined by the interaction of the sensitivity of the receptor and magnitude of change.
- 10.4.29. The gradations of magnitude of change and level of effect used in the assessment represent a continuum, which are described in a five-point scale: large; moderate; slight; negligible, no-change. Where appropriate, this assessment uses intermediate descriptors, such as slight-negligible, slight-moderate or moderate-large, where the assessor considers that the effect falls between the levels used.
- 10.4.30. Effects can be either beneficial or adverse and, in some cases, neutral (neither beneficial nor adverse). Effects assessed as moderate or greater are considered to be significant. Effects assessed to be slight-moderate or below are considered to be Not Significant.
- 10.4.31. The effects diagram provided below illustrates the typical relationship between the magnitude of effect and the sensitivity of the receptor.

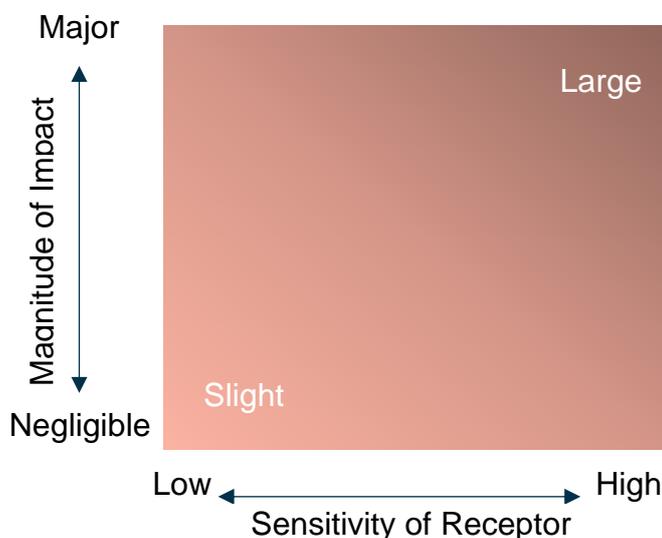


Figure 10-1: Significance of Effect Diagram

STUDY AREA

- 10.4.32. For the assessment of impacts during construction and operation, the Study Area extends to 2km from the Site Boundary, see **Figure 10-2: Townscape and Visual Site Context (Volume 2)**. The Study Area has been determined by the visual envelope illustrated in the ZTV, indicating the likely visibility of the Proposed Scheme, and verified by the summer and winter walkovers, taking into consideration landform, land use, landscape elements, townscape character, predicted visibility of the Proposed Scheme within the townscape and identification of the nearest visual receptors.
- 10.4.33. The Digital ZTV is a computer generated visual envelope, analysed from 379 points on the Proposed Scheme, which shows the theoretical extent of the area from which the Proposed Scheme, within the parameters (as described in **Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1)**) and the **Works Plans (Document Reference 2.3)**, is likely to be visible as it steps down to the south. The Digital ZTV illustrated the likely visibility from observer points representing multiple elevations of the Proposed Scheme (113m, 53m, and 35m), and supersedes the Preliminary ZTV (presented on **Figure 10-3: Visual Assessment Plan (Volume 2)** of the PEIR²⁰) which was analysis from a single reference point for the tallest point on the Proposed Scheme.
- 10.4.34. The Digital ZTV demonstrates the worst case scenario; the built form of the Proposed Scheme will likely have a smaller visual envelope. In addition, other built form and other features, such as hedgerows or street trees, are likely to provide filtering or reduction of views. The Digital ZTV was produced based on 1m resolution LIDAR data (Digital Terrain Model and Digital Surface Model based data) and is based on a user height of 1.6m AOD.
- 10.4.35. **Figure 10-3: Visual Assessment Plan (Volume 2)** illustrates the Digital ZTV, location of the Site for the Proposed Scheme, the 2km Study Area, and LBB suggested viewpoint locations within the Study Area as described below in **Table 10-6**.

SENSITIVE RECEPTORS

- 10.4.36. The following sensitive receptors have been identified:
- change of character and vegetation cover within the Site;
 - change in local townscape character (within approximately 2km of the Site Boundary);
 - change in character and visual amenity from Accessible Open Land (as categorised below);
 - change in visual amenity from the local PRoW network. See **Figure 10-2: Townscape and Visual Site Context (Volume 2)**;

- change in visual amenity from the local road network (within the 2km Study Area, see **Section 10.5**);
- change in visual amenity from residential areas with views towards the Proposed Scheme (and within the 2km Study Area, see **Section 10.5**); and
- arboricultural features (including trees and hedgerows, presented in the **Appendix 10-3: Arboricultural Impact Assessment (Volume 3)** and not considered further within this chapter).

10.4.37. A series of proposed viewpoints which are considered representative of the visual amenity receptors are outlined in **Table 10-6** below.

REPRESENTATIVE VIEWPOINTS

10.4.38. Following a review of the Riverside 2 ES²¹, Digital ZTV, site context and walkovers, a list of proposed representative viewpoint locations for the assessment of effects on visual amenity and locally designated views have been identified. These are listed within **Table 10-6** below and shown on **Figure 10-3: Visual Assessment Plan (Volume 2)**. The viewpoints are representative of the sensitive visual receptors outlined above.

10.4.39. LBB was consulted on and agreed with the proposed representative viewpoints as part of EIA Scoping, as summarised within **Table 10-2** above.

10.4.40. A walkover was undertaken on 20th July 2023, during the summer season, and on 29th November 2023, during the winter season, which is considered to represent a worst case scenario, to take photography.

Table 10-6: Suggested Representative Viewpoint Locations

Viewpoint Reference	Viewpoint Location	Reason For Selection
Sequential Views (more than one representative viewpoint along a route)		
SV1	England Coast Path (ECP), National Cycle Network 1 (NCN1) and PRoW Footpath 2 (FP2) – Viewing Platform	Close-range views from recreational receptors along the nationally designated England Coast Path (FP3/NCN1) and nationally designated NCN1. The route is also a local PRoW designated as FP2 west of the viewing platform and FP3 east of the viewing platform. Within the Site.

Viewpoint Reference	Viewpoint Location	Reason For Selection
SV2	ECP, NCN1 and FP2	Mid-range views from recreational receptors along the nationally designated England Coast Path (FP3/NCN1) and nationally designated NCN1. The route is also a local PRoW designated as FP2. Approximately 700m west of the Site Boundary.
Representative Views		
VP1	FP2	Close-range views from recreational receptors of the locally designated FP2 within Crossness LNR and the Accessible Open Land. Within the Site.
VP2	ECP, NCN1 and Footpath 3 (FP3)	Close-range views from recreational receptors along the nationally designated ECP and nationally designated NCN1. This section of the ECP is also a local PRoW designated as FP3. Approximately 10m east of the Site Boundary.
VP3	Clydesdale Way	Mid-range views from residential receptors on Clydesdale Way as well as road users from the local road network. Approximately 150m southeast of the Site Boundary.
VP4	The London Loop	Long-distance views from recreational receptors of the regionally designated London Loop. The view represents open views across the River Thames. Approximately 990m east of the Site Boundary.
VP5	Green Chain Walk	Long-distance views from recreational receptors of the regionally designated Green Chain Walk recreational route. Approximately 1.25km east of the Site Boundary.
VP6	Thames River Valley Panorama	Long-distance views from recreational receptors of the locally designated Thames River Valley Panorama viewpoint, as well as residential receptors of properties along Ruskin Road. The location is a local high point. Approximately 1.12km east of the Site Boundary.
VP7	Regional View Canary	Long-distance views from recreational receptors of the locally designated Regional View Canary Wharf Cluster 1, as well as recreational receptors of Lesnes Abbey

Viewpoint Reference	Viewpoint Location	Reason For Selection
	Wharf Cluster 1	greenspace and recreational visitors to the Lesnes Abbey Scheduled Monument. The Scheduled Monument is outside of the Study Area for historic environment and thus not considered in Chapter 9: Historical Environment (Volume 1) . Approximately 1.65km southwest of the Site Boundary.
VP8	Thamesmead Residential Receptors (Lytham Close)	Long-distance views from residential receptors at Thamesmead. Approximately 1.3km northwest of the Site Boundary.

NIGHT-TIME LANDSCAPE CHARACTER

- 10.4.41. As the Proposed Scheme will include the introduction of new lighting, the effects of this lighting on the night sky and on the character of the townscape have been considered. The character of the night-time environment in this appraisal is informed by a desktop review of the Site and its immediate surrounding areas along with fieldwork undertaken on Monday 26th of February 2024. It is also informed by the proposals in the **Outline Lighting Strategy (Document Reference 7.3)** and the **Design Principles and Design Code (Document Reference 5.7)**.
- 10.4.42. The Site is bound to the north by the River Thames and the adjacent England Coast Path (FP3/NCN1). The northern boundary is predominately dark and unlit, apart from lighting on the existing jetties (Thames Water Jetty, the Middleton Jetty and the other jetties on the northern bank of the River Thames) and access bridge (shown within **Appendix 10-5: Visual Assessment Night-time Photographs (Volume 3)**). Light spill in the vicinity of the Site is experienced in the form of night-time sky glow, glare from particular points of light, or a combination of both. The principal sources of light in the vicinity of the Site include:
- street lighting around 10m in height along Norman Road and within car parks at the industrial area;
 - security lighting and street lighting along internal roads and car parks at Crossness Sewage Treatment Works (STW);
 - lighting associated with Riverside 1;
 - lighting associated with Riverside 2;
 - lighting at Belvedere Business Park;
 - sky glow from built form in Belvedere;
 - sky glow from built form in Thamesmead;

- sky glow from the City of London and surrounding urban areas;
- street lighting along Eastern Way; and
- vehicle movement on Eastern Way.

Sensitivity

- 10.4.43. Sky glow is the brightness of the night sky in a built-up area as a result of light pollution. It is enhanced or weakened by atmospheric conditions such as cloud cover where the sky can be quite dark on clear nights i.e. without clouds, and the same sky can be very bright on cloudy nights, due to light scattering by the clouds.
- 10.4.44. Sky glow is already readily experienced across the townscape surrounding the Site as well as sources of direct glare likely noticeable from a range of locations and sensitive receptors, which together reduce the perceived darkness of the sky in the vicinity of the Site.
- 10.4.45. The Institution of Lighting Professionals (ILP) ‘Guidance Notes for the Reduction of Obtrusive Light’²² provides the basis for comparative analysis when defining whether an installation will be obtrusive to the environment and neighbouring properties. It assists in quantifying and providing acceptable maximum limitations for light intrusion, sky glow and glare from exterior lighting installations. **Table 10-7** is reproduced from the ILP Guidance to present the relevant Environmental Zone classifications.

Table 10-7: Environmental Zone Classification, ILP 2011²²

Environmental Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, National Landscapes
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night-time activity

- 10.4.46. The Site and the surrounding area are considered to be within environmental zone E4: High District Brightness, due to the urban and industrial nature of the area with high levels of night-time activity. Examples of this zone include town and city centres and other commercial areas.

10.4.47. Given the above, it is considered that townscape will be of low sensitivity to the introduction of further sources of lighting of the nature of the Proposed Scheme. Please see **Chapter 7 Terrestrial Biodiversity (Volume 1)** for consideration of lighting impacts on habitats and species. The assessment in this chapter is limited to appraisal of likely impacts on the Study Area night-time character only.

10.5. BASELINE CONDITIONS AND FUTURE BASELINE

- 10.5.1. The key sources of desk information on baseline conditions have been:
- analysis of OS mapping relating to landform, vegetation and settlement patterns;
 - consideration of historic OS maps to understand the development history of the area;
 - analysis of aerial photography and online photographic resource to identify key landscape/townscape designations/receptors and policies;
 - desk based review of documents relevant to townscape character and visual amenity within the Study Area including landscape/townscape character assessments, previous EIA and relevant planning documents; and
 - analysis of online planning designations map, Planning Datamap²³.
- 10.5.2. A short summary of the baseline conditions is presented below. The baseline conditions described have been informed by site walkovers and aligns with the Study Area presented in **Section 10.4**.

BASELINE CONDITIONS

Topography

10.5.3. The topography within the Study Area is fundamentally influenced by the Thames River Valley. The landform within and surrounding the Proposed Scheme is generally flat and open at approximately 2m AOD, protected from flooding by the Thames river wall. The land rises to the south towards Belvedere, where local hills peak at approximately 55m AOD and provide views across the Study Area to the north.

Land Use

10.5.4. The mixed age of buildings in the Study Area provides historical evidence of the mix of industrial development, marine engineering and transport infrastructure set amidst the marshland riverside environment. The northern section of the Site contains the River Thames and foreshore including the Middleton Jetty and the Belvedere Power Station Jetty (disused). The central section of the Site Boundary contains Riverside 1 and Riverside 2 (under construction at the time of writing). The southern section of the Site Boundary contains Munster Joinery, Borax North and South, Creekside, and Gannon land parcels.

10.5.5. The western section of the Site Boundary comprises coastal and floodplain grazing marshes, multiple ponds and ditches, and areas of grassland used for horse grazing. The areas green and blue infrastructure assets contribute to users' appreciation of the environment. This area has not been built upon and accommodates both Accessible Open Land and Non-Accessible Open Land within Norman Road Field and the Crossness LNR. Please see **Paragraph 10.5.31** below for a description of Accessible and Non-Accessible Open Land.

Townscape

- 10.5.6. The immediate surroundings of the Site Boundary are typical of the large-scale grain of the local townscape with wide roads and car parks interspersed between large industrial buildings and marshland, as detailed in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**. Beyond this local industrial townscape, the primarily residential areas of Belvedere lie to the south, Abbey Wood to the southwest, and Thamesmead to the west. The condition and legibility of the townscape is generally reasonable, but there is a disjointed character to the appearance closer to the Site due to the close proximity of the large-scale industrial buildings, vehicles, and workings, next to the more natural river, and marshland features.
- 10.5.7. The built form within the area surrounding the Site is typical of industrial land uses including light industry, logistics, and industrial processes businesses. They generally have a functional building design that is large in scale, with extensive floor area and varying building heights from around 20m up to approximately 90m with several columns and stacks extending further into the skyline. Other tall features in the townscape include wind turbines and the ADM Erith oil works columns.
- 10.5.8. The Crossness Sewage Treatment Works, located approximately 230m to the west of the Site Boundary, comprises a disused sludge incinerator and the Crossness Pumping Station. Munster Joinery is situated within the Site, while the closest individual business operations located adjacent to the Site Boundary are the Lidl Warehouse/Belvedere Regional Distribution Centre and Iron Mountain Records Storage Facility to the east, and the Asda Belvedere Distribution Centre to the southeast. Other individual business operations close to the Site Boundary include:
- The Morgan Pub and Restaurant, approximately 20m south;
 - Travelodge London Belvedere, approximately 30m south;
 - Snap Fitness, approximately 70m south;
 - Ctr Group, approximately 70m south;
 - Howdens Joinery, approximately 70m south;
 - Intersped Logistics (UK) Limited, approximately 90m south;
 - Tap'in 3PL Ltd, approximately 95m south;
 - HS Carlsteel Engineering Ltd, approximately 95m south;

- Starbucks Drive Thru, approximately 90m southeast;
- Freshasia Foods Ltd., approximately 100m south;
- Lidl, approximately 150m southeast;
- Asda ASC Recycling Centre, approximately 340m east;
- Belvedere Wharf, approximately 380m east; and
- The Amazon UK DBR1 and Erith Driving Test Centre, approximately 390m east.

- 10.5.9. The Study Area incorporates the residential areas of Belvedere (including Franks Park and Bexley College) located approximately 200m south of the Site Boundary; and Thamesmead, located approximately 1.3km northwest of the Site Boundary, beyond Crossness Sewage Treatment Works. Belvedere can be characterised primarily as pre-war Victorian and Edwardian development with two storey terraced properties, however, there was significant reconstruction following World War II with various developments introduced more recently such as Saxon House, a residential block located approximately 170m to the southeast of the Site Boundary. Thamesmead can be characterised as late 1960s block development with buildings varying in height up to four storeys.
- 10.5.10. Rainham Landfill is located approximately 2km east of the Site Boundary on the northern bank of the River Thames. The export facility for the Ford of Britain subsidiary of Ford Motor Company is also located on the northern bank of the river. There are numerous jetties protruding into the River Thames, further details on the jetties are provided in **Chapter 19: Marine Navigation (Volume 1)**.
- 10.5.11. The landscape setting along this stretch of the River Thames is open in nature and is reflective of historic field patterns established during the embankment of the river. Due to its exposed nature, relative remoteness from populated areas, and proximity to the River Thames, the location supports a mix of established green and blue infrastructure with occasional formally planted trees associated with the local industrial built heritage. Areas of Accessible Open Land and Non-Accessible Open Land (see **Paragraph 10.5.31** below) which incorporate policy public open space, Crossness LNR, Erith Marshes SINC, MOL and South East London Green Chain designations combine to produce a green and open setting for the mix of buildings and associated infrastructure and contribute to the character of the townscape.
- 10.5.12. In visual terms there is a separation between the river and the adjoining land by the existing exposed concrete flood defence wall. Views of the river are limited from adjoining land comprising predominantly industrial and office buildings and both Accessible and Non-Accessible Open Land as the land drops to the south. The elevated England Coast Path (FP3/NCN1) which follows the river wall mitigates this visual separation to some extent. The visual context of the townscape is also influenced by existing tall features such as wind turbines and tall columns and stacks which feature throughout long distance views.

National Character Areas

- 10.5.13. National Character Areas (NCA)²⁴ are distinct and recognisable areas of character at a national scale.
- 10.5.14. The Proposed Scheme is located within NCA 81: Greater Thames Estuary (see **Figure 10-2: Townscape and Visual Site Context (Volume 2)**). The NCA²⁵ covers a vast area but the broad characteristics of the areas near the Site are described as *“highly urbanised areas within London and on marsh edges subject to chaotic activity of various major developments including ports, waste disposal, marine dredging, housing regeneration, mineral extraction and prominent power stations plus numerous other industry-related activities. Increasing development pressures around major settlements and especially towards London, with urban, industrial and recreational sites often highly visible within the low-lying marshes”*. This description reflects the landscape and context of the Site.
- 10.5.15. Two other NCA are situated within the Study Area, and one just outside the Study Area:
- NCA 113: North Kent Plain, approximately 1km to the south of the Site Boundary;
 - NCA 111: Northern Thames Basin, approximately 1.4km to the north; and
 - NCA 112: Inner London, situated just outside the Study Area.

Townscape Character Areas

- 10.5.16. There are no published townscape character areas within the LBB, where the Proposed Scheme is situated. Neither are there any within London Borough of Havering or London Borough of Barking and Dagenham, both located to the north of the Site Boundary on the opposite bank of the River Thames.

Cultural Heritage Assets

- 10.5.17. Lesnes Abbey Scheduled Monument and Grade II listed building is situated approximately 1.8km southwest of the Site Boundary.
- 10.5.18. There are no Registered Parks and Gardens within the Study Area.
- 10.5.19. There are three Conservation Areas within the Study Area which are:
- Crossness Conservation Area, approximately 700m to the west of the Site Boundary comprising a complex of industrial buildings dating from the second half of the 19th and early 20th Century alongside related engineering works and sequence of large accessible and non-accessible open areas;
 - Erith Road Conservation Area, approximately 1.5km to the south of the Site Boundary; and
 - Woolwich Road Conservation Area, approximately 1.6km to the south of the Site Boundary.

- 10.5.20. There are no listed buildings within the Site. There are nine Listed Buildings within the Study Area (distances shown are from the Site Boundary):
- No. 4 Jetty and approach, formerly at Samuel Williams and Company, Dagenham Dock, approximately 750m to the northwest;
 - Workshop Range to southeast of Main Engine House Crossness Pumping Station, approximately 780m to the west;
 - Crossness Pumping Station, approximately 850m to the west;
 - Bexley College (Former Erith Technical Institute) including attached walls railings and gate piers, approximately 1.4km to the south;
 - Parish Church of All Saints, approximately 1.5km to the south;
 - Ruins of Lesnes Abbey, approximately 1.8km to the west;
 - Parish Church of St John the Baptist, approximately 1.7km to the southeast; and
 - First World War Memorial at St John the Baptist Church, Erith, approximately 1.7km to the southeast.
- 10.5.21. See **Figure 10-2: Townscape and Visual Site Context (Volume 2)** for the location of heritage assets.
- 10.5.22. Heritage features have been included for their contribution to the value of the associated townscape and the visual amenity experienced by visitors to heritage assets. For assessment relating to the impact on heritage assets, refer to **Chapter 9: Historic Environment (Volume 1)**.

Public Rights of Way

- 10.5.23. The England Coast Path (FP3/NCN1) 'Grain to Woolwich' (FP3) extends along the southern bank of the River Thames and passes through the Site. This section of the England Coast Path (FP3/NCN1) is also designated as NCN1 connecting Dover and the Shetland Islands, see **Figure 10-2: Townscape and Visual Site Context (Volume 2)**. Users of the England Coast Path (FP3/NCN1) when travelling through the Study Area experience industrial processes, fencing, and built form to the south including tall buildings with stacks and related infrastructure. Vegetation is scarce along the England Coast Path (FP3/NCN1), becoming more frequent close to the Site Boundary, as users' views open onto the Accessible and Non-Accessible Open Land of Norman Road Field and Crossness LNR. Users' experience to the north includes views of the open River Thames and the urban areas to the north of the river, interrupted in parts by the river wall, jetties, and overhead gantries. For visualisations, please see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**.
- 10.5.24. The London Loop Section 24 extends alongside a section of the River Thames' northern bank, approximately 1km east of the Site Boundary. The route is also designated as NCN13. Users here experience views to the south of the open river with industrial processes and built form including columns and stacks visible on the

south side of the river. For visualisations, please see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**.

- 10.5.25. FP1 is located at the southern extent of the Site extending northwest towards Belvedere Road, while FP2 begins at the southern extent of Norman Road and extends through the accessible open land northwest to the ECP. Users experience an open natural environment with green and blue infrastructure including marshland along with a backdrop of existing industrial buildings including fencing, infrastructure, traffic, and built form.
- 10.5.26. Two sections of the Green Chain Walk pass through the Study Area, Section 1 which runs on a north-south axis is situated approximately 1.3km east of the Site Boundary and Section 2 which runs on an east-west axis along the northern side of the local hills through Lesnes Abbey Wood and Frank's Park is situated approximately 1km south of the Site Boundary.
- 10.5.27. There are four PRoW²⁶ within the Site, as shown in the **Environmental Features Plans (Document Reference 2.7)**:
- FP1;
 - FP2;
 - FP3; and
 - FP4.
- 10.5.28. There is one further PRoW close to the Site:
- FP242.
- 10.5.29. There are no areas of registered Common Land/Open Access Land^a within the Study Area.

Landscape Designations

- 10.5.30. There are no National Landscapes (formerly Areas of Outstanding Natural Beauty), National Parks or Country Parks within the Study Area. The closest Country Park is Beam Valley Country Park, located approximately 2km north of the Site Boundary.

Open Land

- 10.5.31. The non built-up areas of the Site have an open character with a mix of green and blue infrastructure that influence the experience of the open land and include coastal and floodplain grazing marshes, multiple ponds and ditches, and areas of grassland used for horse grazing. For the purposes of this assessment, the Applicant has split such land into two descriptive areas, which are shown on **Figure 14-1: Accessible and Non-Accessible Open Land (Volume 2)**:

^a Land mapped as Conclusive Registered Common or Access Land under the Countryside Rights of Way (CRoW) Act 2000.

- **Accessible Open Land:** Land of open character within the Site that is accessible to the public. The Applicant considers that this land can also be classified as ‘public open space’ for Planning Act 2008 purposes as it is accessed and used by the public for recreational walking and activities. This land is designated as:
 - publicly accessible open space’ and as part of South East London Green Chain in the Bexley Local Plan 2023;
 - Metropolitan Open Land in the London Plan 2021; and
 - parts of the Accessible Open Land also fall within the Crossness LNR.
- **Non-Accessible Open Land:** Land of open character, but which is not accessible to the public (due to it being fenced off). The Applicant considers that this land is not classified as ‘public open space’ for Planning Act 2008 purposes as it is not able to be used for recreational purposes. This land is designated as:
 - publicly accessible open space’ and as part of Southeast London Green Chain in the Bexley Local Plan 2023;
 - Metropolitan Open Land in the London Plan 2021; and
 - parts of the Non-Accessible Open Land also fall within the Crossness LNR, including areas accessible to members only.

10.5.32. The aforementioned policy designations also apply to other locations within the Study Area, see **Figure 10-2: Townscape and Visual Site Context (Volume 2)**.

Visual Designations

- 10.5.33. There are several Locally Significant Views within the Study Area, as defined by the Bexley Local Plan 2023⁶. The views are designated by local policy as they ‘*highlight some of the best aspects of the borough’s built and natural environment*’ and ‘*possess sufficient architectural, townscape, landscape, or environmental quality*’⁶. The following are located within 2km of the Site Boundary:
- Canary Wharf Cluster 1 – regional view from the established viewing platform within Lesnes Woods, see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**; and
 - Thames River Valley Panorama – view from Ruskin Road, see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**.
- 10.5.34. The Proposed Scheme does not fall within the viewing corridor of the LVMF views or the Canary Wharf Cluster 1 regional view. The Proposed Scheme does fall within the Thames River Valley Panorama regional view.

FUTURE BASELINE

- 10.5.35. The future baseline describes the baseline conditions that are expected to develop and evolve if the Proposed Scheme were not to proceed.
- 10.5.36. Existing premises within the Site Boundary would likely remain at their current locations should the Proposed Scheme not proceed. These include Riverside 1, Middleton Jetty and Munster Joinery. Planning policy “*SP3 Employment Growth, Innovation and Enterprise*” within the Bexley Local Plan extends across part of the Site and establishes the principle of development within the area.
- 10.5.37. Riverside 2 (at the time of writing, construction works for Riverside 2 are being undertaken) would be operational in the future baseline and appear in views throughout the townscape. As outlined in **Section 10.4.10** above this assessment considers the likely impact of the introduction of the Proposed Scheme against this position (i.e. including an operational Riverside 2).

10.6. EMBEDDED DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 10.6.1. This section sets out the embedded design, mitigation and enhancement measures relevant to the air quality assessment. The **Design Principles and Design Code (Document Reference 5.7)** are commitments which will govern the design of the Proposed Scheme during the detailed design stage. The **Design Principles and Design Code (Document Reference 5.7)** are considered to be embedded mitigation for the purposes of the assessment presented in this chapter.

CONSTRUCTION PHASE

- 10.6.2. An **Outline CoCP (Document Reference 7.4)** has been submitted as part of the Proposed Scheme DCO application. The following mitigation and standard construction and operational management practices will be applied during the construction period, via the **Outline CoCP (Document Reference 7.4)**:
- Areas would be cleared for construction as close as practicable to works commencing and top soiling, reseeding and planting would be undertaken as soon as practicable after sections of work are complete.
 - Land/vegetation clearance and occupation would be limited to the minimum area necessary for the works. The applicant will ensure that when we are undertaking an oversailing of land with trees, the land will be protected, and trees will not be removed under any circumstances.
 - Temporary protection of vegetation, and other vulnerable features to be retained, would be undertaken in accordance with prevailing best practice.
 - Temporary storage of soils and other material considered of value for retention would be undertaken in accordance with prevailing best practice. Where practical,

stockpiles would be sited to screen the construction works from sensitive receptors such as people using the PRow network.

- The following measures are to be implemented ahead of construction to mitigate any adverse impacts on walkers and cyclists as a result of the permanent diversion (FP2):
 - The provision of appropriate and quality diversions which are established prior to construction and clear directions/signage for any alternative routes and appropriate alternative diversions would be clearly publicised by the Contractor(s) to maintain public access.
 - Public notices would be issued in advance so to inform local residents and businesses of dates and durations of road and rights of way closures. The Contractor(s) would ensure provision and maintenance of suitable and sufficient signs and barriers indicating temporary and permanent closures to public accesses and rights of way.
- Wherever practicable the England Coast Path (FP3/NCN1) and FP4 will remain open. During specific construction activities for the Proposed Jetty limited closures of the England Coast Path (FP3/NCN1) and FP4 may be required, the Contractor(s) will manage closures in the following priority order:
 - using a banksman to provide safe escorted access across the construction area, keeping waiting times to less than:10 minutes during peak times; and 30 minutes during off-peak times;
 - night-time closures, between 23:00 and 05:00 (non-peak times: 23:00 - 05:00 and peak times 07:00 - 19:00) when the England Coast Path (FP3/NCN1) is infrequently used; and
 - in occasional situations, where the above options are not practicable, a signed diversion route will be provided. The diversion route will be of a hard surface and will be suitable for all users.
- Footpath 1 (FP1) and Footpath 242 (FP242) will remain open throughout the construction phase.
- Construction area(s) would be kept tidy (e.g. free of litter and debris).
- The roads providing access to the construction site will be kept free of excessive dust and mud as far as is reasonably practicable.
- Lighting levels would be kept to a minimum necessary for security and safety. Directional luminaries used to limit unwanted light spill.
- Construction areas will be laid out to minimise adverse impacts arising from temporary structures, construction activities and lighting.
- Hoardings of appropriate appearance erected around the area of construction works to create a visual barrier to construction activities.

OPERATION PHASE

- 10.6.3. Relevant design, mitigation, enhancement measures and improvements are described within the **Design Approach Document (DAD) (Document Reference 5.6)**. The **Design Principles and Design Code (Document Reference 5.7)** are commitments which will govern the of the Proposed Scheme during the detailed design stage. The **Outline LaBARDS (Document Reference 7.9)** details the soft landscaping strategy including new and enhanced planting, secured through a requirement in the **Draft DCO (Document Reference 3.1)**.
- 10.6.4. The **Design Principles and Design Code (Document Reference 5.7)** and the soft landscaping strategy outlined within the **Outline LaBARDS (Document Reference 7.9)** and the **Outline Lighting Strategy (Document Reference 7.3)** are considered to be embedded mitigation for the purposes of this TVIA and include:

Design Principles and Design Code

- 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 the impacts of the Proposed Scheme.
- 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.

Outline LaBARDS

- 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.

Outline Lighting Strategy

- 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 the development of a full lighting strategy in substantial accordance with that outline, pursuant to a requirement within the **Draft DCO (Document Reference 3.1)**.

10.7. ASSESSMENT OF LIKELY IMPACTS AND EFFECTS

CONSTRUCTION PHASE

- 10.7.1. The likely significant townscape and visual effects resulting from the construction of the Proposed Scheme are set out below.
- 10.7.2. The construction assessment presented in this chapter considers only Option 1 as this presents the worst case scenario for this topic. This is because construction effects would continue for a longer period of time. The use of Option 1 in the assessment is also representative of the worst case scenario for this topic as it accounts for a single plant design or a two plant design.
- 10.7.3. The construction assessment presented in this chapter considers the operational presence of Riverside 2 as it represents the worst case scenario for the construction phase.

Potential Effects on Townscape Character

Site Character

- 10.7.4. The Site has a mixed character, comprising Riverside 1 and Riverside 2 industrial buildings, with ancillary fencing, hardstanding, and roads next to an area of semi natural marshland including Accessible Open Land and Non-Accessible Land (see **Section 10.5.31** for definitions of Accessible Open Land and Non-Accessible Open Land), set within an urban/industrial context including other built form such as the River Thames flood defences, with England Coast Path (FP3/NCN1) recreational route and Crossness Sewage Treatment Works located adjacent to the River Thames.
- 10.7.5. The construction activities associated with the Proposed Scheme would likely have direct impacts on the landscape fabric within the Site, including changes to specific features such as ground re-profiling and land cover. The visual environment would also alter within, and in the vicinity of, the Site, with visible proposed construction

activity including plant, cranes, machinery, and earthworks, however, these would be seen in the context of the existing urban/industrial environment.

- 10.7.6. The character of the Site is of medium quality with distinctive characteristics and features of local value. It has a moderate capacity to absorb change without fundamental alteration to present character. The Site character sensitivity is considered to be medium as it is not a designated landscape but has some features worthy of conservation including coastal and floodplain grazing marshes, multiple ponds and ditches and areas of grassland used for horse grazing.
- 10.7.7. The size and scale of change the construction activities are likely to have on site character is moderate to large. The geographical extent of activities would cover the whole of the Site, and the duration is temporary and short term. The overall magnitude of impact is considered moderate-major. There is likely to be a direct, temporary, short term, **Moderate-Large Adverse (Significant)** effect on the site character during the construction phase.

Townscape Character

- 10.7.8. There would likely be change in local townscape character within the Study Area during the construction phase. As outlined above in the description of the baseline (**Section 10.5.16**), there are no published townscape character areas within the local planning boroughs, however, the local townscape characteristics are considered likely to be adversely affected by the construction activities.
- 10.7.9. The proposed construction activities, notably vegetation loss, an increase in construction traffic on the local roads, views of construction activities including machinery such as tall cranes, a reduction in tranquillity from the noise and an increase in the activity within the townscape, have the potential to impact the townscape character, albeit in the short term. Direct impacts on the townscape character include changes to specific features and elements including landcover, perception of construction activities within Accessible and Non-Accessible Open Land, and visible construction machinery and plant for receptors within the townscape. The construction activity is unlikely to impact general townscape characteristics such as layout, density and scale, appearance, and local distinctiveness. The existing character is of low to medium quality with some distinctive features including the industrial heritage and infrastructure associated with the Crossness Conservation Area, along with a mix of waste, industrial and commercial land uses, residential areas, and large tracts of Accessible and Non-Accessible Open Land. There are no landscape designations, and the general townscape is readily influenced large scale development with tall elements.
- 10.7.10. The overall sensitivity of the receiving townscape is considered to be low, and the magnitude of impact during construction is considered to be moderate. There is likely to be a direct, temporary, short term, **Slight-Moderate Adverse (Not Significant)** effect on the townscape character during the construction phase.

Potential Effects on Visual Amenity (including locally designated views)

Accessible Open Land and Study Area Open Spaces

- 10.7.11. As well as the Accessible Open Land within the Site Boundary, there are several areas of open space within the Study Area, the visual amenity for which is likely to be impacted by the construction activities. The largest is Lesnes Abbey Woods, located approximately 1.65km southwest of the Site Boundary which includes a locally designated view 'Canary Wharf Cluster 1 (see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**). Another locally protected view 'Thames River Valley' panorama is located on Ruskin Road on the edge of the Study Area and has open views across the townscape from its elevated position, albeit at a long distance, see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**.
- 10.7.12. Users of the following components are particularly sensitive to change:
- Accessible Open Land – within the Site.
 - Lesnes Abbey Woods – located approximately 1.65km southwest of the Site Boundary;
 - Frank's Park – located approximately 1.3km east of the Site Boundary.
- 10.7.13. The construction activities associated with the Proposed Scheme would likely have direct impacts on the visual amenity of the users of the Accessible Open Land and Study Area open spaces. Users are likely to experience temporary changes due to the introduction of construction activities such as plant, machinery, cranes, and temporary lighting into views.
- 10.7.14. The value of the Accessible Open Land and the Study Area open spaces is medium as they are locally valued landscapes, reasonably attractive, and have moderately valued views for the users of the spaces.
- 10.7.15. The susceptibility to change for users of Accessible Open Land is medium-high as the nature of the surroundings is a contributor but not a significant factor in the enjoyment of the activity undertaken by users of the Accessible Open Land.
- 10.7.16. The susceptibility to change for users of the Study Area open spaces is low, as there is a high ability to accommodate the specific proposed change with little or no undue consequences for the maintenance of the baseline visual amenity for the users of these spaces.
- 10.7.17. The sensitivity of the users of Accessible Open Land, where recreation and enjoyment of the setting is important, is considered to be medium-high. The size and scale of construction activities would likely occupy a significant portion of views for users of the Accessible Open Land at close distance, however, the duration is short term, temporary and as such the magnitude of impact is moderate. There is likely to be a direct, temporary, short term, **Moderate Adverse (Significant)** effect on the users of the Accessible Open Land during the construction phase.

- 10.7.18. The sensitivity of the users of Study Area open spaces where recreation and enjoyment of the setting is important is considered to be medium. The size and scale of construction activities would likely be discernible but occupy a very small portion of views for Study Area open space receptors due to distance, change in topography, and intervening built form and vegetation. The duration is short term, temporary and as such the magnitude of impact is minor. There is likely to be a direct, temporary, short term, **Slight Adverse (Not Significant)** effect on the users of the Study Area open spaces during the construction phase.

Public Rights of Way

- 10.7.19. There is the potential for construction activities to have significant impacts on the PRoW network within the Study Area, some of which extend adjacent to and through the Site Boundary.
- 10.7.20. Users of the England Coast Path (FP3/NCN1) are likely to experience long sequential views of the construction activities including tall features such as machinery and cranes. Views would open and close at various locations along the route in the context of existing industrial built form including Crossness Sewage Treatment Works, Riverside 1 and Riverside 2, and Iron Mountain Records Storage Facility (see Sequential View 1 and 2 and View 2 within **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.21. Users of the London Loop Section 24, which extends alongside a section of the River Thames' northern bank, approximately 1km east of the Site Boundary, would have distant views of construction activities screened in part by existing built form and where visible seen in the context of existing industrial uses including Riverside 1 and Riverside 2 (see View 4 within **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.22. Users of PRoW within the Site and in the vicinity of the Site Boundary (FP1/FP2/FP4), would experience direct views of construction activities. Whilst the nature of the construction activities would not be entirely out of character for the area, the users of the PRoW, particularly those that cross the Accessible Open Land and users of the England Coast Path (FP3/NCN1) are likely to experience visual impact. (see View 1 within **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.23. The construction activities associated with the demolition of the Belvedere Power Station Jetty (disused), and construction of the Proposed Jetty and the elevated process pipe bridge, would be localised and experienced mainly by users of the England Coast Path (FP3/NCN1) (see View 2 within **Appendix 10-1: Visual Assessment Photographs (Volume 3)**). Whilst the magnitude of impact on users of FP3 may be significant due to the highly conspicuous nature of the construction activities, it would be transient and experienced as part of the sequence of views for users of the England Coast Path (FP3/NCN1). It is unlikely other PRoW would

experience the construction activity here and overall, the impact on PRow within the Study Area is not assessed to be significant.

- 10.7.24. Mitigation measures during the construction phase, including measures to reduce the impact on walkers and cyclists from possible diversions of PRow away from construction activities, are set out in the **Outline CoCP (Document Reference 7.4)** and **Section 10.6** above, would reduce the visual impact on the receptors.
- 10.7.25. The sensitivity of the users of England Coast Path (FP3/NCN1) is considered high as it is a PRow of national value and views of the surroundings contribute to the appreciation, experience, and enjoyment of the route, albeit set within an existing industrial backdrop. The size and scale of change is localised to small section of the route, while the geographical extent is limited for the most part to the immediate setting of the Site, and the duration is short term, temporary. The overall magnitude of impact is considered minor. Therefore, there is likely to be a direct, temporary, short term, **Slight-Moderate Adverse (Not Significant)** effect on the users of the England Coast Path (FP3/NCN1).
- 10.7.26. The sensitivity of the users of PRow within and in the vicinity of the Site Boundary (FP1/FP2/FP4) is considered to be medium as they are local routes of moderate importance. The views from these routes are of low value, without designation at national, regional, or local level and set within an industrial context. However the surroundings contribute to the appreciation, experience, and visual amenity of the routes. The size and scale of change is high as the construction activities would be dominant within views from the PRow. The geographical extent is extensive as the construction activities would be experienced at close proximity and affect much of the views, and the duration is short term, temporary. The magnitude of impact is considered moderate. Therefore, there is likely to be a direct, temporary, short term, **Moderate Adverse (Significant)** effect on the users of PRow within and in the vicinity of the Site Boundary (FP1/FP2/FP4).
- 10.7.27. The sensitivity of the users of London Loop Section 24 is considered to be medium as it is a regional tourist route of moderate importance and views of the surroundings contribute to the appreciation, experience, and enjoyment of the route, set within an urban, largely industrial context. The size and scale of change is localised to a very small section of the route with minor alteration to few elements of the baseline view such a cranes and taller elements of the construction activity. The geographical extent is limited to a small portion of the view at a medium distance, and the duration is short term, temporary. The overall magnitude of impact is considered minor. Therefore, there is likely to be a direct, temporary, short term, **Slight Adverse (Not Significant)** effect on the users of the London Loop Section 24.

Road Network

- 10.7.28. The proposed construction activities, notably cranes, vegetation loss, earth movement and traffic management have the potential to impact the visual amenity of users of the local road network in the Study Area. The Proposed Scheme would likely be visible from Norman Road, the A2016 Picardy Manorway/Eastern Way, Bronze Age Way, Yarnton Way, and from a network of minor and unclassified roads that cross the Study Area.
- 10.7.29. Construction activities would likely occupy a small but noticeable portion of views for users of the road network within the Study Area. Roadside vegetation that extends alongside many of the routes would screen substantial portions of the views from the surrounding townscape. Whilst glimpsed and periodic views of the Proposed Scheme would be tangible for these receptors their experience of the view of the Proposed Scheme would be transient in nature.
- 10.7.30. The sensitivity of the users of the road network is considered low as views of the surroundings are not an important contributor to appreciation and experience of the route and the user's susceptibility to the type of development proposed is therefore considered to be low.
- 10.7.31. The magnitude of impact on users of Norman Road is considered moderate due to the relatively high size, scale, and geographical extent of impacts on these receptors, along with a short term, temporary duration and embedded mitigation measures. Therefore, there is likely to be an indirect, temporary, short term, **Slight-Moderate Adverse (Not Significant)** effect on the users of Norman Road during the construction phase.
- 10.7.32. The magnitude of impact on users of Eastern Way is considered minor as the construction activities are likely to occupy a small portion of views above existing vegetation along the route along with a short term, temporary duration. Therefore, there is likely to be an indirect, temporary, short term, **Slight Adverse (Not Significant)** effect on the users of Eastern Way.
- 10.7.33. The magnitude of impact on users of Junction between Eastern Way/A2016/Yarnton Way is considered minor as the construction activities are likely to result in a minor alteration to the baseline views and occupy a small portion of views above existing vegetation. The impact would also be short term and temporary in duration. Therefore, there is likely to be an indirect, temporary, short term, **Slight Adverse (Not Significant)** effect on the users of Eastern Way.

Residential

- 10.7.34. There is the potential for change in visual amenity from residential areas (people occupying their homes) with views towards the construction activity of the Proposed Scheme. The change is due to the perception of construction activities, notably cranes, vegetation loss, earth movement and traffic management which have the potential to significantly impact the visual amenity for residential receptors.
- 10.7.35. As noted in **Section 10.4.3** above, a Residential Visual Amenity Assessment has been scoped out of this assessment. The assessment does not, therefore, consider individual private properties and does not assess the change to visual amenity, examining whether the Residential Visual Amenity Threshold is likely to be, or has been, reached.
- 10.7.36. The closest residential receptor is located approximately 50m southeast of the Site Boundary on Clydesdale Way. The residential area of Belvedere is located, at its closest point, approximately 170m south of the Site Boundary. Thamesmead residential area is located approximately 1.7km northwest of the Site Boundary.
- 10.7.37. The construction activity associated with the Proposed Scheme would be visible to a varying degree from these residential receptors. Views from residential properties are largely limited to those on the edges of settlements orientated towards the Site including those at Saxon House located approximately 170m to the southeast of the Site Boundary, on Lytham Close in Thamesmead, and from those located on higher ground along the edges of the Study Area.
- 10.7.38. Construction of the Proposed Scheme would likely have limited impact on the views from properties within the Study Area due to distance, intervening built form and vegetation, and the existing industrial nature of the townscape as illustrated on **Figure 10-3: Visual Assessment Plan (Volume 2)**.
- 10.7.39. The sensitivity of residential receptors (people occupying their homes) is considered to be medium due to the relatively low value of the views with no regional or local importance combined with the high susceptibility of the receptors at their place of residence where duration, orientation, and fixed nature of views contribute to a high susceptibility to proposed change.
- 10.7.40. The magnitude of impact of the construction activities on Belvedere is considered minor-moderate due to the varying distance from close to medium, along with the small proportion of views likely to be impacted and the short term duration of the construction phase. Therefore, there is likely to be a direct, temporary, short term, **Slight-Moderate Adverse (Not Significant)** effect on Belvedere residential receptors during the construction phase.
- 10.7.41. The magnitude of impact of the construction activities on Thamesmead residential receptors is considered minor due to the medium to long distance, limited proportion of views likely to be impacted and the short term duration of the construction phase. Therefore, there is likely to be a direct, temporary, short term, **Slight Adverse (Not**

Significant) effect on Thamesmead residential receptors during the construction phase.

OPERATION PHASE

- 10.7.42. The likely significant effects for townscape and the visual environment associated with the operation phase are set out below.
- 10.7.43. The assessment considers the impact at Year 1 and at Year 15 of operation of the Proposed Scheme taking account of anticipated embedded mitigation, including proposed planting. The design of the Proposed Scheme will continue to be developed post-determination of the DCO application to deliver an optimised layout.
- 10.7.44. Relevant design, mitigation and enhancement measures as outlined in **Section 10.6** above have been identified for the Proposed Scheme, the indicative details of which are set out in the **Design Principles and Design Code (Document Reference 5.7)** and **Outline LaBARDS (Document Reference 7.9)**. **Appendix 10-4: Photomontages (Volume 3)** illustrates the Proposed Scheme from each viewpoint, with the inclusion of mitigation.
- 10.7.45. The section below outlines the likely effects the operation phase would have on townscape character and visual receptors of the future baseline, including Riverside 2, which is due to be operational in 2026. As set out in **Section 10.4.10** above, where it is anticipated the magnitude of impact would differ in the absence of Riverside 2, a separate assessment is included for the receptor to consider the impact the Proposed Scheme would have without Riverside 2.

Potential Effects on Townscape Character

Site Character

- 10.7.46. The operation phase of the Proposed Scheme would have an impact on the landscape fabric within the Site including areas of Accessible Open Land and Non-Accessible Open Land. 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(s) (including the Absorber Column(s) and Stack(s), CO₂ Processing Plants, LCO₂ Buffer Storage, and Supporting Plant. The reciprocal relationship to the surrounding townscape would also likely be impacted, with views to and from the Site altered by the Proposed Scheme.
- 10.7.47. Embedded mitigation measures support the integration of the Proposed Scheme including design principles to organise built form and material selection to deliver a visually coherent design, and to orientate building massing and structure height to step down from high in the north to low in the south, reflecting the transition from the industrial river corridor to local community (see **Appendix 10-4: Photomontages View 1 (Volume 3)**).

- 10.7.48. The sensitivity of the site character is varied, but overall is considered medium as it is not a designated landscape but has features worthy of conservation including coastal and floodplain grazing marshes, multiple ponds and ditches and areas of grassland used for horse grazing. The size and scale of change is high, introducing highly conspicuous new development, affecting most key characteristics, and dominating the experience of the site character. The geographical extent is limited to within the Site Boundary and its immediate context where there is a visual interrelationship, and the duration is long and permanent, therefore the magnitude of impact is considered moderate-major. There is likely to be a direct, permanent, long term **Moderate-Large Adverse (Significant)** effect on the site character at Year 1 prior to the establishment of embedded mitigation planting.
- 10.7.49. Embedded mitigation, including screen planting, would establish over time. It is anticipated the magnitude of impact at Year 15 would reduce to moderate. Therefore, there is likely to be a direct, permanent, long term, **Moderate Adverse (Significant)** effect on the site character at Year 15.

Townscape Character

- 10.7.50. The townscape is largely industrial with numerous industrial estates in the surrounding area, as detailed in **Section 10.5.6** above. The local townscape character (within the Study Area) would likely experience changes as a result of the Proposed Scheme introducing large conspicuous new elements into the townscape including the Carbon Capture Plant(s) (including Absorber Column(s) and Stack(s)), CO₂ Processing Plant, and LCO₂ Buffer Storage, and Supporting Plant. The Proposed Scheme, would, however, be experienced in the context of the existing industrial and urban environment with several developments of a similar scale with tall elements in the townscape skyline.
- 10.7.51. The overall sensitivity of the receiving townscape is considered to be low due to the low to medium quality of the townscape with no designations and a mixed industrial, commercial, and residential character influenced by developments of a similar scale to the Proposed Scheme. The townscape's characteristics are tolerant of change without detriment to their present character.
- 10.7.52. The size and scale of change to the townscape would likely be relatively localised, affecting some characteristics and experience of the townscape across a proportion of the townscape greater than the immediate setting. The Proposed Scheme is likely to be experienced in the wider townscape due to its scale, height, and nature, however, views would likely be received in the context of existing industrial development. Accessible and Non-Accessible Open Land within the townscape would likely be impacted through the increased urbanisation of the skyline, reduction in visual openness, and increased perception of enclosure following the introduction of new built form. The visual openness and perceived increase in enclosure is resulting from built form of significant bulk and height introduced in close proximity to the Accessible and Non-Accessible Open Land. Whilst the Accessible Open Land and

Non-Accessible Open Land includes areas of Metropolitan Open Land, the impact on the MOL is included in the **Planning Statement (Document Reference 5.2)**.

- 10.7.53. Embedded mitigation supports the integration of the Proposed Scheme into the townscape, applying good design via design principles and design code to provide planted boundaries appropriate to local character, organise built form and material selection to deliver a visually coherent design, and orientate building massing and structure height to step down from high in the north to low in the south (see View 3, View 5, View 6, and View 7 in **Appendix 10-4: Photomontages (Volume 3)**). The mitigation measures consider the quality of views and experience of the Proposed Scheme within the townscape and reduce the level of adverse impact. The design of the Proposed Scheme mitigates to some extent the urbanisation of the skyline by the reduction in visible plume emanating from Riverside 1. The magnitude of impact, considering the scale, geographical extent, and duration of impact, is moderate. Therefore, there is likely to be a direct, permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the townscape character at Year 1, prior to the establishment of mitigation planting.
- 10.7.54. Proposed planting would establish over time which, to some extent, would help integrate the Proposed Scheme into the townscape and partially screen views from receptors in the immediate setting. The scale and nature of the Proposed Scheme, however, mean that the proposed planting would likely result in little to no change in the magnitude of impact on overall townscape character. The magnitude of impact at Year 15 would be moderate. There is likely to be a permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the townscape character at Year 15.

Night-Time Townscape Character

- 10.7.55. The proposed lighting design for the Proposed Scheme is not considered likely to produce significant adverse effects in the Study Area. This is due to the existing high levels of night-time lighting activity within the Study Area, and proposed levels which would be within the permitted obtrusive light limitations defined by the ILP Environmental Zone classification in which the Proposed Scheme sits.
- 10.7.56. 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 introduction of lighting by the Proposed Scheme into the townscape is considered to be a moderate addition in a localised area, reducing with distance (see **Outline Lighting Strategy (Document Reference 7.3)**).
- 10.7.57. The overall sensitivity of the receiving night-time townscape is considered to be low, and the magnitude of impact, considering the scale and type of lighting, is moderate. Therefore, there is likely to be a direct, permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the townscape prior to the establishment of mitigation measures.

Potential Effects on Visual Amenity (including locally designated views)

Accessible Open Land and Study Area Open Spaces

- 10.7.58. As identified above, Accessible Open Land lies within the Site Boundary. There are also several areas of open space within the Study Area, the visual amenity for which, may be impacted by the Proposed Scheme. The largest is Lesnes Abbey Woods, located approximately 1.65km southwest of the Site Boundary which includes a locally designated view **Appendix 10-1: Visual Assessment Photographs (Volume 3)**.
- 10.7.59. The operation phase of the Proposed Scheme would likely have direct impacts on the visual amenity of users of the Accessible Open Land and Study Area open spaces.
- 10.7.60. Users of the Accessible Open Land would have direct views of the Proposed Scheme. These views would likely have 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. Embedded mitigation measures support the integration of the Proposed Scheme including design principles to provide planted boundaries appropriate to local character, organise built form and material selection to deliver a visually coherent design, and orientate building massing and structure height to step down from high in the north to low in the south (see **Appendix 10-4: Photomontages (Volume 3)**). The mitigation measures consider the quality of views from both Accessible Open Land and Study Area open spaces and reduce the level of adverse impact experienced by the receptors.
- 10.7.61. Users of the Study Area open spaces would likely experience views of the Proposed Scheme to varying degrees. Due to the distance and intervening features such as existing roads, vegetation, and built form, the Proposed Scheme would likely occupy a very small portion of views from receptors in Study Area open spaces at longer distances from the Site Boundary (see View 5, View 6, and View 7 in **Appendix 10-4: Photomontages (Volume 3)**). Study Area open spaces such as Frank's Park and Lesnes Abbey Wood as well as the Thames River Valley locally protected view would have views of the Absorber Column(s) and Stack(s) being the tallest features within views, along with distant and limited views of the Carbon Capture Plant(s) and CO₂ Processing Plants, LCO₂ Buffer Storage, and Supporting Plant. As discussed in **Section 10.7.14** above, the value of the Accessible Open Land and Study Area open spaces is medium, the susceptibility to change for users of Accessible Open Land is medium-high, and the susceptibility to change for users of Study Area open spaces is low.

- 10.7.62. The sensitivity of the users of Accessible Open Land where recreation and enjoyment of the setting is important is medium-high. The Proposed Scheme would occupy a large portion of views and be a dominant series of features within the views from a close distance. Whilst the embedded mitigation would reduce the magnitude of impact to some extent, the scale and nature of the Proposed Scheme along with the long term and permanent duration result in the magnitude of impact for users of the Accessible Open Land to be major. Therefore, there is likely to be a direct, permanent, long term **Large Adverse (Significant)** effect on the users of the Accessible Open Land at Year 1, prior to the establishment of embedded mitigation planting.
- 10.7.63. The proposed planting would establish over time and have an influence on the magnitude of impact on users of the Accessible Open Land where proposed woodland, wood pasture, wetland, meadow and marsh enhance the visual environment of the Accessible Open Land and provide screening to the Proposed Scheme. The magnitude of impact for users of the Accessible Open Land is reduced to moderate-major, therefore there is likely to be a permanent, long term **Moderate-Large Adverse (Significant)** effect on users of Accessible Open Land at Year 15.
- 10.7.64. The sensitivity of the users of Study Area open spaces where recreation and enjoyment of the setting is important is considered to be medium. The magnitude of impact for users of Study Area open spaces at longer distances from the Site Boundary, such as Frank's Park and Lesnes Abbey Wood, including the locally protected 'Canary Wharf Cluster 1' view, is considered to be minor due to the transient nature of the receptors here, the longer distance and intervening features between the Proposed Scheme and the receptors, and the limited portion of the Proposed Scheme likely to be visible from these spaces. Therefore, there is likely to be a direct, permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the Study Area open spaces at Year 1, prior to the establishment of embedded mitigation measures.
- 10.7.65. Proposed planting would establish over time, however the nature of Study Area open space views at longer distances, primarily with partial views of the Proposed Scheme taller features, result in minimal reduction in magnitude of impact for users. The magnitude of impact at Year 15 would remain minor for users of Study Area open spaces. Therefore, there is likely to be a permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the Study Area open spaces at Year 15.

Public Rights of Way

- 10.7.66. There is potential for the Proposed Scheme to have impacts on the visual receptors (users) of the PRow network within the Study Area, some of which cross the Site Boundary.

- 10.7.67. Users of the England Coast Path (FP3/NCN1) are likely to experience long sequential views of the Proposed Scheme in part screened by the existing developments along the route including Riverside 1, Riverside 2, and Crossness Sewage Treatment Works, however, the Proposed Scheme would add to the scale of built form in views and the Proposed Jetty would be apparent in views from the ECP (see Sequential View 1 and 2, and View 2 in **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.68. Users of the London Loop Section 24, which extends alongside a section of the River Thames' northern bank, approximately 1km east of the Site Boundary, would experience an introduction of additional elements within views such as built form of the Absorber Column(s) and Stack(s) but for the most part these would be seen at a distance and in the context of existing developments of a similar scale (see **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.69. Users of PRoW within the Site and in the vicinity of the Site Boundary (FP1/FP2/FP4), would experience direct views of the Proposed Scheme where the existing open views across the marshland and vegetation of the Accessible and Non-Accessible Open Land form an element of the user's appreciation and experience.
- 10.7.70. 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(s) (particularly the Absorber Column(s) and Stack(s), CO₂ Processing Plant, LCO₂ Buffer Storage, and Supporting Plant. Whilst the introduction of the Proposed Scheme would be seen in the context of an existing industrial environment, the scale and nature of the built form is likely to be dominant within views and add to the sense of enclosure for users of the PRoW.
- 10.7.71. Embedded mitigation measures support the integration of the Proposed Scheme including design principles to provide planted boundaries to screen views and organise built form and material selection to deliver a visually coherent design (see View 1, View 2, View 4, and Sequential View 1 and 2 in **Appendix 10-4: Photomontages (Volume 3)**). The mitigation measures consider the quality of views for users of the PRoW and reduce the level of adverse impact experienced.
- 10.7.72. The sensitivity of the users of England Coast Path (FP3/NCN1) is considered high as it is a PRoW of national value and views of the surroundings contribute to the appreciation, experience, and enjoyment of the recreational route, albeit set within an existing industrial backdrop. The views of the Proposed Scheme are likely to be localised to small section of the route and seen beyond the existing Riverside 1 and Riverside 2, while the geographical extent is limited for the most part to the immediate setting of the Site with some views of taller elements likely from further distances. The overall magnitude of impact is considered minor. Therefore, there is likely to be a direct, permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the England Coast Path (FP3/NCN1) at Year 1, prior to the establishment of embedded mitigation measures.

- 10.7.73. Proposed planting will establish over time, which would likely partly screen views from the users of the PRoW, however the overall reduction in magnitude of impact would be minimal. The magnitude of impact at Year 15 would remain minor. Therefore, there is likely to be a permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the England Coast Path (FP3/NCN1) at Year 15.
- 10.7.74. The likely effect on users of the England Coast Path (FP3/NCN1) would increase slightly in the instance where Riverside 2 is not constructed. In the absence of Riverside 2, the impact on users of the England Coast Path (FP3/NCN1) would increase due to more direct views of the Proposed Scheme for a short section of the route. The overall magnitude of impact would, however, remain minor due to the changed being localised to a small section of the ECP and experienced as a sequential view. Therefore, there is likely to be a direct, permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the England Coast Path (FP3/NCN1) at Year 1, prior to the establishment of embedded mitigation measures.
- 10.7.75. Proposed planting will establish over time, which would likely partly screen views from the users of the PRoW, however the overall reduction in magnitude of impact would be minimal. The magnitude of impact at Year 15 would remain minor. Therefore, there is likely to be a permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of the England Coast Path (FP3/NCN1) at Year 15.
- 10.7.76. The sensitivity of the users of PRoW within and in the vicinity of the Site Boundary (FP1/FP2/FP4) is considered to be medium as the PRoW are local routes of moderate importance. The views from these routes are of low value, without designation and set within an industrial context, however the surroundings contribute to the appreciation, experience, and visual amenity of the routes. The size and scale of change is high as the Proposed Scheme would be dominant within views from the PRoW. The geographical extent is extensive as the built form would be experienced at close distance and affect much of the views. The overall magnitude of impact is considered moderate. Therefore, there is likely to be a direct, permanent, long term **Moderate Adverse (Significant)** effect on the users of PRoW within and in the vicinity of the Site Boundary (FP1/FP2/FP4) at Year 1, prior to the establishment of embedded mitigation planting.
- 10.7.77. Proposed planting would establish over time, which would likely partly screen views from the users of the PRoW, however the scale of the Proposed Scheme and distance to receptors result in a relatively small reduction in magnitude of impact. The magnitude of impact at Year 15 would remain moderate (albeit reduced slightly). Therefore, there is likely to be a permanent, long term **Moderate Adverse (Significant)** effect on the users of PRoW within and in the vicinity of the Site Boundary (FP1/FP2/FP4) at Year 15.

- 10.7.78. The sensitivity of the users of London Loop Section 24 is considered to be medium as it is a regional tourist route of moderate importance and views of the surroundings contribute to the appreciation, experience, and enjoyment of the recreational route, set within an urban, largely industrial context. The size and scale of change is localised to a very small section of the route with minor alteration to few elements of the baseline view such as the Absorber Column(s) and Stack(s) and taller elements of the Proposed Scheme visible beyond Riverside 1 and Riverside 2. The geographical extent is limited to a small portion of the view at a medium distance. The overall magnitude of impact is considered minor. Therefore, there is likely to be a direct, permanent, long term, **Slight Adverse (Not Significant)** effect on the users of the London Loop Section 24 at Year 1, prior to the establishment of embedded mitigation planting.
- 10.7.79. Proposed planting would establish over time, however the nature of receptor views at longer distances, primarily with partial views of the Proposed Scheme's taller features, result in little to no reduction in magnitude of impact for users of the London Loop Section 24. The magnitude of impact at Year 15 would remain minor. Therefore, there is likely to be a permanent, long term **Slight Adverse (Not Significant)** effect on the users of the London Loop Section 24 at Year 15.

Road Network

- 10.7.80. Within the Study Area, the Proposed Scheme would likely be visible from Norman Road, the A2016 Picardy Manorway/Eastern Way, Bronze Age Way, Yarnton Way, and from a network of minor and unclassified roads that cross the Study Area.
- 10.7.81. The Proposed Scheme would likely occupy a small portion of the view for users of the road network within the Study Area. Roadside vegetation that extends alongside the majority of potentially affected routes would screen views into the surrounding townscape. Whist glimpsed and periodic views of the Proposed Scheme would be tangible for these receptors their experience of the view would be transient in nature. There may be views of the taller elements of the Proposed Scheme above existing and proposed vegetation but would likely be limited to taller features including the Absorber Column(s) and Stack(s).
- 10.7.82. The sensitivity of the users of the road network is considered low as views of the surroundings are not an important contributor to appreciation and experience of the route and the user's susceptibility to the type of development proposed is therefore considered to be low.
- 10.7.83. The magnitude of impact on users of Norman Road is considered moderate-high due to the relatively high size, scale, and geographical extent of impacts on these receptors, along with a long term, permanent duration. Embedded mitigation measures including an organised interface with Norman Road would reduce the magnitude of impact. Therefore, there is likely to be an indirect, permanent, long term,

Slight-Moderate Adverse (Not Significant) effect on the users of Norman Road at Year 1, prior to the establishment of embedded mitigation planting.

- 10.7.84. Proposed planting would establish over time, which would likely partly screen views for users of Norman Road, however, the overall reduction in magnitude of impact would be limited due to the scale of the Proposed Scheme adjacent to the road. The magnitude of impact at Year 15 would reduce to moderate. Therefore, there is likely to be a permanent, long term **Slight-Moderate Adverse (Not Significant)** effect on the users of Norman Road at Year 15.
- 10.7.85. The magnitude of impact on users of Eastern Way is considered to be minor as the Proposed Scheme would likely to occupy a small portion of views above existing and proposed vegetation along the route. Therefore, there is likely to be an indirect, permanent, long term, **Slight Adverse (Not Significant)** effect on the users of Eastern Way at Year 1, prior to the establishment of embedded mitigation planting.
- 10.7.86. Proposed planting would establish over time, which would increase the density of the woodland buffer between the receptors and the Site and further screen views for users of Norman Road. The overall reduction in magnitude of impact would be limited due to the existing woodland screening views along the road. The magnitude of impact at Year 15 would remain to minor. Therefore, there is likely to be a permanent, long term **Slight Adverse (Not Significant)** effect on the users of Norman Road at Year 15.
- 10.7.87. The magnitude of impact on users of Junction between Eastern Way/A2016/Yarnton Way is minor-moderate as the Proposed Scheme would likely result in a minor alteration to the baseline views and occupy a small portion of views above existing vegetation. Therefore, there is likely to be an indirect, permanent, long term, **Slight Adverse (Not Significant)** effect on the users of Junction between Eastern Way/A2016/Yarnton Way.
- 10.7.88. Proposed planting would establish over time, which would increase the density of the woodland buffer between the receptors and the Site and further screen views for users of the junction. The overall reduction in magnitude of impact would be limited due to the existing woodland screening views at the junction and the taller features of the Proposed Scheme likely to remain visible above embedded planting. The magnitude of impact at Year 15 would remain to minor-moderate. Therefore, there is likely to be a permanent, long term **Slight Adverse (Not Significant)** effect on the users of Junction between Eastern Way/A2016/Yarnton Way at Year 15.

Residential

- 10.7.89. There is the potential for change in visual amenity from the Belvedere and Thamesmead residential areas within the Study Area through the introduction of new built form including the Carbon Capture Plant(s) (particularly the Absorber Column(s) and Stack(s), CO₂ Processing Plant, LCO₂ Buffer Storage, and Supporting Plant).

- 10.7.90. The Proposed Scheme would be visible to a varying degree from these residential receptors. Views from residential properties are largely limited to those on the edges of settlements orientated towards the Site including Saxon House to the southeast of the Site Boundary in Belvedere, on Lytham Close in Thamesmead, and from a few residential areas in Belvedere located on higher ground along the edges of the Study Area (see View 3, View 6, and View 8 in **Appendix 10-1: Visual Assessment Photographs (Volume 3)**).
- 10.7.91. The Proposed Scheme would likely have limited impact on the views from most residential receptors within the Study Area due to distance, intervening built form and vegetation, and orientation of receptors away from the Proposed Scheme. Embedded mitigation including design principles to organise built form and material selection to deliver a visually coherent design, and to orientate building massing and structure height to step down from high in the north to low in the south contribute to reducing the impact on residential receptors (see View 3, View 6, and View 8 in **Appendix 10-4: Photomontages (Volume 3)**).
- 10.7.92. The sensitivity of residential receptors (people occupying their homes) is considered to be medium due to the relatively low value of the views with no regional or local importance combined with the high susceptibility of the receptors at their place of residence where duration, orientation, and fixed nature of views contribute to a high susceptibility to proposed change.
- 10.7.93. The magnitude of impact of the Proposed Scheme on Belvedere is considered minor-moderate due to varying distances from close range at Saxon House to medium/long range at the edge of the Study Area. The Proposed Scheme would likely impact a limited number of receptor views and occupy a small proportion of views when visible. Therefore, there is likely to be a direct, permanent, long term, **Slight-Moderate Adverse (Not Significant)** effect on Belvedere residential receptors at Year 1, prior to the establishment of embedded mitigation planting.
- 10.7.94. The proposed planting would establish over time, however the distance of receptors from the Proposed Scheme and the scale and nature of the development mean the magnitude of impact is unlikely to change. The magnitude of impact at Year 15 would remain minor-moderate. Therefore, there is likely to be a permanent, long term, **Slight-Moderate Adverse (Not Significant)** effect on the Belvedere residential receptors at Year 15.
- 10.7.95. The magnitude of impact of the Proposed Scheme on Thamesmead residential receptors is minor due to the medium to long distance between the Proposed Scheme and the residential receptors, limited proportion of views likely to be impacted with only the taller features such as the Absorber Column(s) and Stack(s) likely to be visible, and the orientation of most buildings in a north to south direction, limiting direct views towards the Proposed Scheme. Therefore, there is likely to be a direct, permanent, long term, **Slight Adverse (Not Significant)** effect on Thamesmead

residential receptors at Year 1, prior to the establishment of embedded mitigation planting.

- 10.7.96. The proposed planting would establish over time, however the distance of receptors from the Proposed Scheme and limited visibility of only the taller features of the Proposed Scheme mean the magnitude of impact is unlikely to change. The magnitude of impact at Year 15 would remain minor. Therefore, there is likely to be a permanent, long term, **Slight Adverse (Not Significant)** effect on the Thamesmead residential receptors at Year 15.

10.8. ADDITIONAL DESIGN, MITIGATION AND ENHANCEMENT MEASURES

CONSTRUCTION PHASE

- 10.8.1. No additional design, mitigation or enhancement measures are proposed for townscape and visual in the construction phase.

OPERATION PHASE

- 10.8.2. The Applicant is also considering offsite improvements in the local area, including the Biodiversity Net Gain (BNG) Opportunity Area (shown in **Figure 7-7: Proposed Habitat Creation and Enhancements (Volume 2)**), which if brought forward would aim to achieve enhanced access and townscape outcomes in the area, in addition to ecological benefits. These would involve conversion of the disused gravel car park and 0.660ha of poor condition grassland to a combination of open mosaic and reedbed.
- 10.8.3. The offsite access improvements referenced in the **Outline LaBARDS (Document Reference 7.9)** would include provision of improved access, interpretation, and activation on PRow within accessible open spaces for all seasons, encouraging active and healthy lifestyles, points of engagement and benefit local people, and improved use and amenity value. As discussed in the assessment above, immediate views would be affected by the Proposed Scheme, however, a new route proposed would allow users to experience more of the surrounding environment where they have not been able to before. PRow and access improvements are relevant to the townscape as they benefit human interaction, the way people interact with the environment and contribute to the townscape character. Whilst the offsite improvements would benefit the local townscape, they are considered to be of a scale that would not materially alter the assessment of effect the Proposed Scheme would have on the overall townscape.

10.9. MONITORING

- 10.9.1. The performance of embedded landscape mitigation measures and enhancement (particularly biodiversity net gain/habitat creation) will be monitored pursuant to the **Outline LaBARDS (Document Reference 7.9)** as part of the detailed design of the Proposed Scheme.

10.10. RESIDUAL EFFECTS

10.10.1. **Table 10-8** below summarises the residual effects associated with the Proposed Scheme.

Table 10-8: Summary of Residual Effects

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Construction Phase				
<u>Potential Effects on Townscape Character</u>				
Change of character and vegetation cover within the Site Boundary	Site Character	Moderate-Large Adverse (Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Moderate-Large Adverse (Significant)
Change in local townscape character (within 2km of the Site Boundary)	Townscape Character	Slight-Moderate adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight-Moderate adverse (Not Significant)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
<u>Potential Effects on Visual Amenity (including locally designated views)</u>				
Change in character and visual amenity from Accessible Open Land	Accessible Open Land	Moderate Adverse (Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Moderate Adverse (Significant)
Change in character and visual amenity from Study Area open spaces	Study Area open spaces	Slight Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight Adverse (Not Significant)
Change in visual amenity for users of the England Coast Path (FP3/NCN1)	PRoW	Slight-Moderate Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight-Moderate Adverse (Not Significant)
Change in visual amenity for users of PRoW within and in	PRoW	Moderate Adverse (Significant)	No further mitigation measures beyond those outlined in the Outline	Moderate Adverse (Significant)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
the vicinity of the Site Boundary (FP1/FP2/FP4)			CoCP (Document Reference 7.4).	
Change in visual amenity for users of the London Loop Section 24	PRoW	Slight Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight Adverse (Not Significant)
Change in visual amenity for users of Norman Road	Road Network	Slight-Moderate Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight-Moderate Adverse (Not Significant)
Change in visual amenity for users of Eastern Way	Road Network	Slight Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4) .	Slight Adverse (Not Significant)
Change in visual amenity for users of Junction between	Road Network	Slight Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline	Slight Adverse (Not Significant)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Eastern Way/A2016/Yarnton Way			CoCP (Document Reference 7.4).	
Change in visual amenity from Belvedere residential area	Residential	Slight-Moderate Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4).	Slight-Moderate Adverse (Not Significant)
Change in visual amenity from Thamesmead residential area	Residential	Slight Adverse (Not Significant)	No further mitigation measures beyond those outlined in the Outline CoCP (Document Reference 7.4).	Slight Adverse (Not Significant)
Operation Phase				
<u>Potential Effects on Townscape Character</u>				
Change in Site character and vegetation cover	Site Character	Moderate-large Adverse (Significant) (Year 1) Moderate Adverse (Significant) (Year 15)	PRoW and access improvements. Biodiversity Net Gain (BNG) Opportunity Area improvements.	Moderate-large Adverse (Significant) (Year 1)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
				Moderate Adverse (Significant) (Year 15)
Change in local townscape character (within 2km of the Site Boundary)	Townscape Character	Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)		Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)
Change in night-time townscape character (within 2km of the Site Boundary)	Night-time Townscape Character	Slight-Moderate Adverse (Not Significant)	N/A	Slight-Moderate Adverse (Not Significant)
<u>Potential Effects on Visual Amenity (including locally designated views)</u>				
Change in character and visual amenity from Accessible Open Land	Accessible Open Land	Large Adverse (Significant) (Year 1) Moderate-large Adverse (Significant) (Year 15)	PRoW and access improvements. Biodiversity Net Gain (BNG) Opportunity Area improvements.	Large Adverse (Significant) (Year 1) Moderate-large Adverse

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
				(Significant) (Year 15)
Change in character and visual amenity from Study Area open spaces	Study Area open spaces	Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)		Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)
Change in visual amenity for users of the England Coast Path (FP3/NCN1)	PRoW	Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)		Slight-Moderate Adverse (Not Significant) (Year 1) Slight-Moderate Adverse (Not Significant) (Year 15)
Change in visual amenity for users of PRoW within and in the vicinity of the Site Boundary (FP1/FP2/FP4)	PRoW	Moderate Adverse (Significant) (Year 1) Moderate Adverse (Significant) (Year 15)		Moderate Adverse (Significant) (Year 1) Moderate Adverse (Significant) (Year 15)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Change in visual amenity for users of the London Loop Section 24	PRoW	Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)		Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)
Change in visual amenity for users of Norman Road	Road Network	Slight-moderate Adverse (Not Significant) (Year 1) Slight-moderate Adverse (Not Significant) (Year 15)		Slight-moderate Adverse (Not Significant) (Year 1) Slight-moderate Adverse (Not Significant) (Year 15)
Change in visual amenity for users of Eastern Way	Road Network	Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)		Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)
Change in visual amenity for users of Junction between Eastern Way/A2016/Yarnton Way	Road Network	Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)		Slight Adverse (Not Significant) (Year 1) Slight Adverse (Not Significant) (Year 15)

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Change in visual amenity from Belvedere residential area	Residential	<p>Slight-moderate Adverse (Not Significant) (Year 1)</p> <p>Slight-moderate Adverse (Not Significant) (Year 15)</p>		<p>Slight-moderate Adverse (Not Significant) (Year 1)</p> <p>Slight-moderate Adverse (Not Significant) (Year 15)</p>
Change in visual amenity from Thamesmead residential area	Residential	<p>Slight Adverse (Not Significant) (Year 1)</p> <p>Slight Adverse (Not Significant) (Year 15)</p>		<p>Slight Adverse (Not Significant) (Year 1)</p> <p>Slight Adverse (Not Significant) (Year 15)</p>

10.11. LIMITATIONS AND ASSUMPTIONS

10.11.1. The following limitations and assumptions have been identified:

- The assessment is based on, and limited to, the baseline conditions observed at the time of the walkover and additional desktop information.
- The prominence of the Proposed Scheme in the townscape and views would vary according to the prevailing weather conditions. The assessment has been carried out, as is best practice, by assuming the 'worst case' scenario i.e. on a clear, bright day in winter for Year 1, when neither foreground deciduous foliage nor haze can interfere with the clarity of the view obtained. For Year 15 a clear bright day in summer is assessed when foliage is in full bloom.
- The limitations and technical specifications for production of Digital ZTV are included within **Figure 10-3: Visual Assessment Plan (Volume 2)**.
- The walkover has been undertaken from public roads, PRoW and the Accessible Open Land and the Study Area open spaces. For residential receptors, assumptions have been made about the types of rooms in buildings and about the types and importance of views from these rooms. For there to be a visual effect, there is the need for a viewer and therefore only buildings that are in use have been considered in the visual assessment.
- The assessment of effects on visual receptors occupying buildings such as residences and public buildings includes consideration of potential for views from exterior areas associated with the building including gardens where appropriate. These effects are referenced where relevant.
- Subject to the assumptions made about the future baseline discussed in **Paragraphs 10.5.35, 10.5.36 and 10.5.37**, the assessment reflects the baseline situation at the time of writing and therefore does not take account of any changes to the landscape fabric which may have taken place after this date.

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<https://bexleycouncil.maps.arcgis.com/apps/webappviewer/index.html?id=21c7b3240e53496ab9ef46632ba84d26>