



South East Strategic Reservoir Option
Preliminary Environmental Information Report

Chapter 9 - Landscape and visual

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9 Landscape and visual

9.1 Introduction

- 9.1.1 This chapter of the Preliminary Environmental Information (PEI) Report provides the preliminary assessment of likely significant landscape and visual effects from the construction and operation of the proposed **SESRO Project** (the Project, as detailed in Chapter 2: Project description).
- 9.1.2 Within this chapter, aspect-specific sections are included on:
- Legislation, policy and guidance (Section 9.2)
 - Consultation, engagement and scoping (Section 9.3)
 - Assessment methodology (Section 9.4)
 - Study area (Section 9.5)
 - Baseline conditions (Section 9.6)
 - Project parameters, assumptions and limitations (Section 9.7)
 - Embedded design mitigation and standard good practice (Section 9.8)
 - Preliminary assessment of likely significant effects (Section 9.9)
 - Next steps (Section 9.10)
- 9.1.3 Landscape and Visual Impact Assessment (LVIA) is defined in Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (Landscape Institute and the Institute of Environmental Management (IEMA), 2013) (hereafter referred to as GLVIA3), as *'...a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity.'* These two key aspects, whilst interrelated, are also distinct from each other: the receptors considered in landscape assessment are components of landscape, including defined landscape character areas and formally designated landscapes. In contrast, the receptors considered in visual assessment are people. These two aspects are therefore presented, both in terms of baseline conditions and assessment of effects, in discreet sections within this chapter.
- 9.1.4 This chapter should be read in conjunction with Chapter 2: Project description and other chapters of key relevance, namely:
- Chapter 7: Terrestrial ecology (which considers ecological receptors and habitats that influence landscape character and condition, including irreplaceable habitats of ancient woodland, ancient and veteran trees (the latter two are identified and assessed in the Appendix 9.7: Preliminary Arboricultural Impact Assessment)).
 - Chapter 8: Historic environment (which considers heritage receptors that influence landscape character, including historic landscapes and the nature and setting of heritage assets within their landscape context, such as Conservation Areas, listed buildings, Scheduled Monuments, and Registered Parks and Gardens).
 - Chapter 15: Socio-economics and communities (which considers human receptors and effects on their amenity, (that closely relates to visual amenity), and considers many of the same receptor types, such as Public Rights of Way (PRoW) and other local routes).

9.1.5 This chapter is supported by the following figures and appendices:

- Figure 9.1: Landscape and visual study area
- Figure 9.2: Landscape designations and key constraints
- Figure 9.3: Landscape character areas
- Figure 9.4: Reservoir ZTV (bare earth / DTM)
- Figure 9.5: Reservoir ZTV (screening / DSM)
- Figure 9.6: Reservoir ZTV heatmap (screening / DSM)
- Figure 9.7: Intake / outfall ZTV (bare earth / DTM)
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- Figure 9.11: Viewpoint and photomontage locations (with ZTV)
- Figure 9.12: Dark skies and light pollution
- Figure 9.13: CPRE tranquillity mapping
- Figure 9.14: Visual receptors – users of linear routes
- Figure 9.15: Visual receptors – communities and other sensitive receptors
- Figure 9.16: Landscape receptors
- Appendix 9.1: Project-level Landscape Character Assessment
- Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape
- Appendix 9.3: Visual baseline
- Appendix 9.4: Viewpoint photography and visualisations
- Appendix 9.5: Preliminary assessment of effects for Landscape and visual
- Appendix 9.6: Technical methodology: photography, visualisations, and Zones of Theoretical Visibility
- Appendix 9.7: Preliminary Arboricultural Impact Assessment

9.1.6 This PEI Report does not constitute a draft Environmental Statement (ES). Assessments reported within this PEI Report chapter are considered a reasonable 'worst case' as a precautionary approach has been taken where design, construction or baseline information is incomplete. Nevertheless, the preliminary assessment is considered sufficiently robust to enable consultees to understand the likely significant environmental effects of the Project, based on current design information and understanding of the baseline environment. Gaps in information identified within the PEI Report will be considered and addressed as part of the assessment during the production of the ES, as noted in Section 9.10: Next steps.

9.1.7 Where provisional likely significant effects are identified at this stage, these may ultimately be determined as not significant in the ES once data gaps are addressed and the design and mitigation are further developed. The ES will be submitted with the Development Consent Order (DCO) application and will provide the final assessment of likely significant effects; this will be informed by the ongoing Environmental Impact Assessment (EIA) process and associated consultation and engagement.

9.2 Legislation, policy and guidance

9.2.1 Table 9.1 lists the legislation, policy and guidance relevant to the Landscape and visual assessment for the Project and specifies where in the PEI Report information is provided in

relation to these. A full policy compliance assessment will be presented within the Planning Statement as part of the DCO application.

- 9.2.2 National Policy Statements (NPS) form the principal policy for developments progressing through the Planning Act 2008 process. The NPS for Water Resources Infrastructure (NPSWRI) is the primary NPS for the Project. In addition, the Secretary of State must also have regard to any other matters which they think are both important and relevant to the decision and this could include regional and local planning policies.
- 9.2.3 The Project is located mainly within the Vale of White Horse District, with the exception of the far eastern extent on the eastern bank of the River Thames, which falls within the South Oxfordshire District. The Project is wholly within the county of Oxfordshire. The regional and local planning policies most relevant to the assessment within this chapter are included in Table 9.1.

Table 9.1 Relevant legislation, policy and guidance for landscape and visual

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Legislation		
Countryside and Rights of Way Act 2000, Sections 82 - 85 (Section 85 as amended by Section 245 of the Levelling-up and Regeneration Act 2023) Requires public authorities to seek to further the purpose of conserving and enhancing the natural beauty of National Landscapes (formerly Areas of Outstanding Natural Beauty - AONBs).	SESRO is located within the setting of the North Wessex Downs National Landscape. The LVIA must robustly assess impacts on the National Landscape's special qualities, character, setting, and key views, and demonstrate how the Project seeks to further the purpose of conserving and enhancing the natural beauty of the area.	Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape.
Water Industry Act 1991 (as amended), Section 3 Places a statutory duty on water undertakers, in relation to land they manage, to have regard to the protection and conservation of the beauty of the countryside. This includes consideration of visual quality, landscape character, and amenity of both rural and urban areas, and the use of open spaces for public enjoyment and recreation.	Supports the general requirement for assessment of effects on landscape character and visual amenity, as a means of ensuring that the statutory duty to protect the beauty of the countryside and associated public enjoyment is addressed.	Throughout Chapter 9: Landscape and visual and associated appendices.
National Policy Statement for Water Resources Infrastructure (NPSWRI) (Defra 2025)		

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Paragraph 4.9.1 – introduction to landscape and visual effects , and need for consultation	NPSWRI paragraph 4.9.1 notes the importance of setting, landscape and visual effects, including tranquillity, sensitive landscapes (including National Landscapes), and the need for early consultation with relevant local authorities. This has been considered within the Project LVIA and design.	Throughout Chapter 9: Landscape and visual and Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape. Engagement has been undertaken throughout project development with the Landscape and visual Technical Liaison Group (TLG), which includes representatives from the North Wessex Downs National Landscape, Natural England, South Oxfordshire and Vale of White Horse District Councils, Oxfordshire County Council, and the Environment Agency.
Paragraphs 4.9.2 – 4.9.4 - Sets out general requirements for LVIA	NPSWRI stipulates that the LVIA must be a core part of the Environmental Statement, ensuring that landscape and visual impacts are thoroughly assessed, including consideration of landscape character, historic landscape character, tranquillity, views and visual amenity, lighting, operational and construction effects, cumulative effects. This has been considered within the Project LVIA and design.	Throughout Chapter 9: Landscape and visual and associated appendices.
Paragraphs 4.9.5 – 4.9.6, and 4.9.11 – 4.9.14 - Emphasises ‘great weight’ of importance must be given to the need to conserve and enhance nationally designated landscapes .	These paragraphs require careful consideration of the setting of the National Landscape, minimising impacts on it and its setting, and inclusion of appropriate mitigation and enhancement measures. They require compliance with the respective duties in the National Parks and Access to Countryside Act 1949 and the Countryside and Rights of Way Act 2000. This	Chapter 9: Landscape and visual and Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape.

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
	has been considered within the Project LVIA and design.	
Paragraph 4.9.15 – Requires consideration of locally valued / designated landscapes	This paragraph requires consideration of locally valued / designated landscapes, including consideration of local landscape character areas. This has been considered within the Project LVIA and design.	Chapter 9: Landscape and visual, and Appendix 9.1: Project-level landscape character assessment.
Paragraphs 4.9.7 – 4.9.9, and 4.9.16 – Requirements for mitigation and enhancement	These paragraphs require the LVIA to propose mitigation measures that minimise landscape and visual effects, including potential offsite mitigation, as well as any enhancement opportunities. This has been considered within the Project LVIA and design.	Design development, and Chapter 9: Landscape and visual – embedded design mitigation and standard good practice.
Section 4.3.18: Requirements for avoiding or minimising impacts on ancient woodland and ancient and veteran trees	This section requires avoidance or minimisation of impacts on ancient woodlands, ancient trees, and veteran trees. This has been considered within the Project LVIA and design, and most specifically the arboriculture assessment.	Appendix 9.7: Preliminary Arboricultural Impact Assessment, and associated assessment methodology.
Paragraph 4.10.11 – Requirements for assessing and minimising impacts on trees and woodlands.	This paragraph requires avoidance or minimisation of impacts on all trees and woodlands, including assessment of impacts and provision of appropriate mitigation measures. This has been considered within the Project LVIA and design, and most specifically the arboriculture assessment.	Appendix 9.7: Preliminary Arboricultural Impact Assessment, and associated assessment methodology.
Other national policy		
Planning Practice Guidance - Natural Environment: Landscape (PPG ID: 8) (Ministry of Housing, Communities & Local	This guidance has informed the project-level landscape character assessment, defining sensitive receptors and	Throughout Chapter 9: Landscape and visual.

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Government, first published March 2014, last updated July 2019) - Provides high-level policy requirements for a robust LVIA, and guidance on assessing landscape impacts, including understanding landscape character and visual amenity.	evaluating the visual significance of the Project.	
Regional and local policy		
Key policies in Local Plans – South Oxfordshire District Council and Vale of White Horse District Council: draft Joint Local Plan (JLP) 2041 - (South Oxfordshire District Council and Vale of White Horse District Council, October 2024): Contains developing planning policies that help address the climate emergency, restore nature, and meet the needs of residents. Policy ENV1: Natural and Historic Environment Policy ENV2: Landscape Character ENV3: Green Infrastructure (This draft JLP is not yet adopted.) Equivalent policies in Vale of White Horse Local Plan 2031 (Vale of White Horse District Council, 2016): Sets out the spatial strategy and strategic policies for the district to deliver sustainable development. Policy Core CP43 Natural Resources Core Policy CP44 Landscape Core Policy CP45 Green Infrastructure	Although not yet adopted, these draft JLP policies are expected to set high-level requirements for sensitive integration of development within the surrounding landscape, protection of green infrastructure, and the need to preserve the visual and landscape quality of important scenic areas, particularly the National Landscape and its setting. These draft policies, and the associated landscape evidence which has been developed to support them, have been used to inform the development of the design, including options appraisals and studies, the landscape and visual baseline and the technical assessment of effects. .	Throughout Chapter 9: Landscape and visual and its appendices. For the landscape evidence that supports the draft JLP: Appendix 9.1: Project-level landscape character assessment, and Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape both draw on the following: South Oxfordshire and Vale of White Horse district Landscape Character Assessment (LUC, 2024); Tranquillity Assessment for South Oxfordshire and Vale of White Horse (LUC, 2024); Dark Skies/ Light Impact Assessment Methodology Report for South Oxfordshire and Vale of White Horse (LUC, 2024); Lighting Design Guidance for South Oxfordshire and Vale of White Horse (Vale of White Horse District Council and South Oxfordshire District Council, 2024).

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
And equivalent policies in South Oxfordshire Local Plan 2035 (South Oxfordshire District Council): Sets out the future for development in South Oxfordshire up to 2035. Policy ENV1 Landscape and Countryside Policy ENV6 Historic Environment		
Green Infrastructure Strategy and Open Space Study (South Oxfordshire and Vale of White Horse District Councils, 2024). Identifies and plans for green spaces, such as parks and natural areas to improve environmental and social well-being within the districts.	This local strategy provides background evidence which has been referred to and used to inform the baseline understanding of landscape character and visual amenity, the sensitivity of receptors, and the development of landscape design and mitigation measures.	Appendix 9.1: Project-level landscape character assessment (landscape character and sensitivity), Section 9.9: Preliminary assessment of likely significant effects and Appendix 9.5 (effects, and associated embedded mitigation).
Neighbourhood Plans: Neighbourhood plans set out specific planning policies for the local areas. Steventon Parish Neighbourhood Development Plan 2022 – 2031, East Hanney Neighbourhood Plan 2021 – 2031, Sutton Courtenay Neighbourhood Plan 2031, Wootton and St Helen Without Neighbourhood Plan 2019 – 2031, East Challow Neighbourhood Plan 2022-2031, Drayton Neighbourhood Development Plan 2015 – 2031, West Hanney Neighbourhood Development Plan 2016 to 2031, Appleton with Eaton Parish Neighbourhood Development Plan 2020-2031, Chilton Neighbourhood Development Plan 2021 to 2031. Additional Neighbourhood Plans for areas within the study area may	These neighbourhood plans provide contextual information, not captured in higher-level policies, that have been referred to and used to inform local landscape character assessment and consideration of local landscape and visual sensitivities. Examples: - Neighbourhood Plans for Steventon, East Hanney, Sutton Courtenay, Wootton and St Helen Without, and East Challow all identify key views and vistas that contribute to local character and sense of place, but might be affected by the Project. - East Hanney is identified within its neighbourhood plan as a 'dark sky village'.	Appendix 9.1: Project-level landscape character assessment, Appendix 9.3: Visual baseline, and landscape and visual sensitivity (recorded in Appendix 9.5).

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
become adopted, and will be reviewed, at the ES stage – notably the Plan for Abingdon-on-Thames is expected.		
North Wessex Downs Area of Outstanding Natural Beauty (AONB) Management Plan 2019 - 2024 (Note – this has been extended to November 2025, pending publication of the updated management plan) Provides detailed objectives to protect and enhance the landscape character and visual amenity of the AONB (National Landscape).	This has been referred to and used to inform the assessment and mitigation design in relation to the National Landscape and its setting.	Landscape sensitivity assessment (recorded in Appendix 9.5), landscape effects (including on the National Landscape and its setting), visual effects (views to and from the National Landscape, and effects on the North Wessex Downs National Landscape (all recorded under Section 9.9: Preliminary assessment of likely significant effects of this chapter, and Appendices 9.2: Effects on the North Wessex Downs National Landscape and 9.5: Preliminary assessment of effects for Landscape and visual).
North Wessex Downs AONB Position Statement on Setting (North Wessex Downs Area of Outstanding Natural Beauty Council of Partners, 2019) Requires development proposals to demonstrate how they will conserve and enhance the landscape and its associated qualities, such as tranquillity and visual character	This has been referred to and used to inform the assessment and mitigation design in relation to the National Landscape and its setting.	Setting of the National Landscape is addressed under: landscape effects assessment, visual effects assessment (views to and from the National Landscape) and effects on the North Wessex Downs National Landscape and its special qualities (all recorded under Section 9.9: Preliminary assessment of likely significant effects, and Appendices 9.2: Effects on the North Wessex Downs National Landscape and 9.5: Preliminary assessment of effects for Landscape and visual).
North Wessex Downs AONB Position Statement on Dark Skies and Artificial Light (North Wessex Downs Area of	This has been referred to and used to inform the assessment and mitigation design in relation to minimising light pollution to protect the area's	As above (linked to assessment of the setting of the National Landscape), and specific consideration of effects on the night sky. This is also informing the

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Outstanding Natural Beauty, 2021a) Guide policy makers to assist in the preparation of planning applications involving lighting and to assist in the decision-making process.	natural beauty, tranquillity, (and ecological health).	development of the emerging lighting strategy, which the LVIA is feeding in to.
Dark Skies of the North Wessex Downs a Guide to Good External Lighting (North Wessex Downs Area of Outstanding Natural Beauty, 2021b) Provides good practice on external lighting.	This has been referred to and used to inform the assessment and mitigation design in relation to minimising light pollution and preserving the National Landscape 's natural night-time environment.	As above (linked to assessment of the setting of the National Landscape), and specific consideration of effects on the night sky. This is also informing the development of the emerging lighting strategy, which the LVIA is feeding in to.
North Wessex Downs AONB Guidance on the selection and use of colour in development (North Wessex Downs Area of Outstanding Natural Beauty, 2020) Provides guidance on selection of colours for new developments that are likely to be harmonious with the existing landscape.	This has been referred to and used to inform the assessment and mitigation design in relation to colour selections that harmonise with the area's landscape, to limit visual impact and preserve the area's natural beauty.	Setting of the National Landscape (addressed under landscape effects, visual effects (views to and from the National Landscape), and effects on the North Wessex Downs National Landscape (all recorded under Section 9.9: Preliminary assessment of likely significant effects, and Appendices 9.2: Effects on the North Wessex Downs National Landscape and 9.5: Preliminary assessment of effects for Landscape and visual). The guidance also informed the development design / mitigation strategy, including of architectural elements and materials choices.
Guidance		
Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (GLVIA3)	Provides overarching professional guidance for undertaking LVIA in the UK, to which this assessment and its methodology complies.	Throughout Chapter 9: Landscape and visual, especially methodology (Section 9.4: Assessment methodology).

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Provides overarching professional guidance for undertaking LVIA in the UK.		
Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3), Technical Guidance Note 2024-01 (Landscape Institute, 2024) Provides a compilation of clarifications on GLVIA3.	Provides recent clarifications and best practice guidance relative to GLVIA3, to which this assessment and its methodology complies.	As above.
Assessing landscape value outside national designations, Technical Guidance Note 02/21 (Landscape Institute, 2021) Provides a structured approach for evaluating the value of landscapes that are not nationally designated.	Provides a structured approach for evaluating the value of landscapes that are not nationally designated, to which this assessment and its methodology complies.	Landscape sensitivity (recorded in Appendix 9.5: Preliminary assessment of effects for Landscape and visual), ensuring application of best practice.
Visual Representation of Development Proposals, Technical Guidance Note 06/19 (Landscape Institute, 2019) Sets out principles and standards for producing visualisations and photomontages for LVIA's <i>Note: this guidance was withdrawn in 2024 to make way for forthcoming guidance, pending which it is still referred to as the most recent relevant guidance on this aspect.</i>	Sets out principles and standards for producing visualisations and photomontages for LVIA's to which this assessment complies.	Viewpoint selection (Appendix 9.3: Visual baseline), Appendix 9.4: Viewpoint photography and visualisations.
An Approach to Landscape Character Assessment (Natural England, 2014a) Provides a structured methodology for identifying and describing landscape character.	Provides a structured methodology for identifying and describing landscape character to which this assessment complies.	Appendix 9.1: Project-level landscape character assessment.
Natural England Guidance on Landscape-led Reservoir Design Principles (expected to be published September 2025)	Although not published at the time of writing, draft versions of the core principles have been shared with the Project team throughout 2025, and Natural	Throughout Chapter 9: Landscape and visual, and Appendix 9.1: Project-level

Legislation, policy or guidance description	Relevance to assessment	Where in the PEI Report is information provided to address this
Provides non-statutory guidance on how a landscape-led approach to the design of new reservoir projects can be achieved.	England have provided regular guidance and advice in line with the content of their forthcoming document. It provides non-statutory guidance on how a landscape-led approach to the design of new reservoir projects can be achieved; sets out ways to ensure design is responsive to landscape context and character.	landscape character assessment
BS5837:2012 Trees in relation to design, demolition, and construction (British Standards Institution, 2012) Provides guidance on how to integrate trees into design, demolition, and construction projects, aiming to ensure trees are retained and protected during development.	Provides guidance for how to conduct tree survey and assessment, which is referred to and has been followed by the Arboriculture Impact Assessment.	Appendix 9.7: Preliminary Arboricultural Impact Assessment.

9.3 Consultation, engagement and scoping

- 9.3.1 Feedback from consultation and engagement is used to define the assessment approach and to ensure that appropriate baseline information is used. Feedback is also used to drive the design of the Project to avoid, prevent and reduce any likely environmental effects. In particular, feedback from key stakeholders has informed the Project's proposed mitigation measures. Specific mitigation measures relevant to the Landscape and visual assessment are summarised in Section 9.8: Embedded design mitigation and standard good practice of this chapter. Engagement is ongoing and will continue to inform the EIA and design process.

Scoping Opinion

- 9.3.2 The EIA Scoping Report (Thames Water, 2024) was issued to the Planning Inspectorate (PINS) on 28 August 2024. PINS provided its EIA Scoping Opinion (The Planning Inspectorate, 2024) on 8 October 2024, which included feedback from consultation bodies that it formally consulted.
- 9.3.3 Table 9.2 captures the key Scoping Opinion comments received from PINS and other key comments received from consultation bodies relevant to the Landscape and visual assessment, along with the Applicant's response to these at this stage of the assessment (this excludes issues relating to design and focuses only on those relating to assessment). Key activities to inform the final assessment that will be undertaken between the PEI Report

and ES are covered in Section 9.10: Next steps. The full consultee comments on the EIA Scoping Report and responses to these will be provided in the ES.

Table 9.2 Key Scoping feedback for landscape and visual

Stakeholder	Scoping comment	Applicant response
PINS	PINS 3.4.2 - The Inspectorate advises that, with regards to landscape photography and visualisations , the Applicant should seek to agree the number and location of wireframes / photomontages with the relevant consultation bodies.	The approach to landscape photography and visualisations for both the PEI Report and ES has been agreed with the relevant consultation bodies via the Landscape and visual TLG. Final numbers and locations of wireframes and photomontages were discussed and confirmed with the TLG in a meeting on 12/06/25, with written confirmation the same day.
PINS	PINS 3.4.3 - The Scoping Report does not propose to assess impacts on residential amenity without explanation. The ES should assess significant effects on residential amenity where they are likely to occur.	Residential amenity is influenced by a range of factors beyond visual impacts, however the Landscape and visual aspect assesses visual effects on local communities using a proportionate approach in line with GLVIA3 and other Landscape Institute guidance. The assessment is supported with reference to representative viewpoint photography, taken from nearby publicly accessible land, rather than private property. Private views from within individual dwellings are not considered, as per established planning principles. Due to the Project's location (in relation to residential property) and design, effects on residential visual amenity are not expected to be so great and living conditions so adversely affected, that the Project could be considered against the wider public interest; therefore a Residential Visual Amenity Assessment (RVAA) has been scoped out. This approach has been supported through engagement with consultees and assessment undertaken for the PEI Report.
Natural England, Oxfordshire County Council	Effects on the North Wessex Downs National Landscape (NWDNL): The development may impact the North Wessex Downs National Landscape. Consideration should be given to the effects on this designated landscape and, in particular, the effect upon its special qualities as set out in the management plan, and on the purpose for designation.	The PEI Report considers effects on the North Wessex Downs National Landscape, its setting, its special qualities, and its purpose for designation. The management plan has been a key source of information for the assessment. Effects on the National Landscape are presented within the LVIA chapter, plus an appendix focusing exclusively on the National Landscape, its special qualities and purpose for designation (Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape). This approach is reflected in the

Stakeholder	Scoping comment	Applicant response
		PEI Report assessment methodology and will be continued with greater detail in the ES.
Natural England, Oxfordshire County Council	Duty to seek to further the purpose of the designated landscape: Public bodies have a duty to seek to further the statutory purposes of designation in carrying out their functions (under section 245 of the Levelling Up and Regeneration Act 2023). This duty also applies to proposals outside the designated area but impacting on its natural beauty.	We have continued to engage with the NWDNL and other relevant consultation bodies through the Landscape and visual TLG, discussing opportunities to further the purpose of the National Landscape, and will continue to do so between the PEI Report and ES stages. Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape to the PEI Report LVIA considers mitigation and enhancement opportunities associated with the duty.
Natural England, Oxfordshire County Council	Effects on landscape character: The environmental assessment should refer to the relevant National Character Area profiles (NCAs). The ES should include a full assessment of the potential impacts of the development on local landscape character, including the North Wessex Downs Landscape Character Assessment. A project-level landscape character assessment, drawing from the published character assessments, but specific to the site and its wider landscape, is an essential part of the design process to make positive proposals for conserving, enhancing or regenerating character of the site within its wider landscape.	The online NCA profiles have been referred to in the LVIA and project-level landscape character assessment. The landscape assessment in the PEI Report considers effects in relation to local landscape character, including in relation to the North Wessex Downs Landscape Character Assessment. A draft project-level landscape character assessment was produced during the early stages of the Project. This has been used to inform design, design principles, options studies, and a range of landscape assessment work prior to PEI Report. The project-level landscape character assessment is provided in Appendix 9.1: Project-level landscape character assessment, which draws from published landscape character assessments, providing additional detail relevant to the Project.
Oxfordshire County Council, Vale of White Horse District Council	The LVIA should assess indirect and cumulative effects , including as a result of the potential re-provisioning of renewable energy (i.e. existing solar farms).	Direct, indirect and cumulative effects are considered in Chapter 9: Landscape and visual and will be further considered in the ES.
Oxfordshire County Council, Vale of White Horse District Council	Timeframes for assessment , including consideration of how construction differs throughout the phase. Need for early programming of landscape works, including advance planting to mitigate adverse effects. Early consideration should	The timeframes for assessment have been set out in the PEI Report methodology and agreed with the TLG. The design process, construction planning, and Chapter 9: Landscape and visual, have included consideration of opportunities for early mitigation planting. The development of a landscape management strategy, leading

Stakeholder	Scoping comment	Applicant response
	also be given to the ongoing management of different areas.	toward the production of an Outline Landscape and Ecological Management Plan is now commencing.
Oxfordshire County Council, Vale of White Horse District Council	Lighting and dark skies: The reservoir is within the setting of the North Wessex Downs National Landscape (NWDNL), the special qualities of which include dark sky and tranquillity. Notwithstanding the lack of detail at this stage we believe it necessary that dark sky/ lighting is scoped in to ensure that the impacts on the NWDNL and the surrounding rural landscape areas are adequately assessed. A Lighting Engineer should be involved to carefully design any lighting scheme and minimise light spill from any built form with reference to the Lighting Design Guide.	A qualitative assessment of impacts on the night sky is provided as a discreet section of the PEI Report, which will be consistent in the ES with a refinement of detail. Effects on dark skies and tranquillity have also been assessed as part of the assessment of special qualities of the North Wessex Downs National Landscape. This approach has been discussed and agreed with the relevant consultation bodies through the Landscape and visual TLG. Careful consideration of lighting and avoidance of light pollution is being addressed throughout design development, working closely with the lighting engineer and with reference to the Lighting Design Guide.
Oxfordshire County Council, Vale of White Horse District Council	Viewpoints: There may be a need for additional viewpoints, including to assess the intake/outfall structures.	Additional viewpoints and visualisations have been provided relative to those identified in the Scoping report, including to assess the intake/outfall structures. The approach to these has been discussed and agreed with the relevant consultation bodies through the Landscape and visual TLG.
Oxfordshire County Council, Vale of White Horse District Council	Visualisations: For a development of this scale and magnitude, we would expect an extensive number of visualisations such as wireframe images or photomontages to be prepared for most viewpoints. Due to the lack of visual references with regards to extent and height of the proposals, it would be difficult to visualise the proposals without wireframes.	The approach to visualisations for both PEI Report and ES stages was discussed with the Landscape and visual TLG during late 2024 and the first half of 2025, with the overall principles agreed, and full details for PEI Report stage confirmed on 12/06/25. For the PEI Report stage there are practical limitations to the provision of detailed visualisations, due to the lack of design certainty and detail at PEI Report stage, however simple 'wireline' visualisations are provided for every viewpoint, accurately showing the location, and vertical and horizontal scale of the reservoir embankment and other large infrastructure proposed. In addition, for nine viewpoints, 'colour massing' photomontages are provided; these do not provide photo-realistic rendering of the development, but accurately show the location, scale and basic form of the Project,

Stakeholder	Scoping comment	Applicant response
		and how much of it would actually be visible (foreground masking is applied); the extent to which the water within the reservoir might be visible is also shown where applicable. For three viewpoints, fully detailed, photorealistic 'Type 4' / 'AVR Level 3' photomontages are provided, indicating the likely 'look and feel' of the reservoir through application of realistic colours and textures, including representation of landscape planting. At the ES stage, a larger number of photorealistic photomontages will be provided and will show the development both at 'winter year 1' and 'summer year 15' stages, along with some during construction.
Vale of White Horse District Council, Culham Parish Council	Visual amenity: Need to understand that many views are part of the daily life of local people, including the landscape and public rights of way north of Grove. Need to consider views and visual amenity of users of the River Thames and nearby routes. There should also be an assessment of views from the reprovision of these lost footpath routes as part of the LVIA.	This is acknowledged and addressed - Public Rights of Way, the River Thames and the nearby routes are all assessed as visual receptors, with supporting viewpoint photography. The visual experience from new footpaths replacing those lost due to the footprint of the reservoir is assessed. New elevated footpaths along the embankment have been designed to provide improved views across the vale, which represents embedded mitigation for the impact of lost views, and a visualisation has been provided to illustrate the nature of these new elevated views from the embankment crest.
Oxfordshire County Council, Natural England	Iterative design process: The LVIA and design development must be an iterative process. The scheme design should be informed by the findings of the ES. The design should consider the relationship of the reservoir with the wider landscape. The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure.	An integrated, landscape-led approach has been applied to design development. A landscape context study and character assessment have informed all design teams and disciplines, and fed into options studies, and design principles throughout design development (see Chapter 2: Project description, for more information on the design approach). The PEI Report provides preliminary LVIA findings which are used to further inform design prior to ES.
Natural England, Oxfordshire County Council,	Local policies and guides: Account should also be taken of local design policies, design codes and guides, including for the North Wessex Downs and the recently	The North Wessex Downs management plan, position statements and guidance, and the recent landscape evidence prepared in support of the Draft Joint Local Plan, has been used to inform the design and EIA at PEI

Stakeholder	Scoping comment	Applicant response
Vale of White Horse District Council	updated District Council landscape evidence base.	Report stage, and will continue to do so throughout the development of the Project.
Vale of White Horse District Council	A tree survey and arboriculture impact assessment (AIA) in accordance with BS 5837:2012 should be provided.	A tree survey and Arboriculture Impact Assessment, consistent with BS 5837:2012 (BSI, 2012), will be provided as part of the DCO, the approach and methodology of which has been agreed with the local authority tree and planning officers and Landscape and visual TLG. A preliminary version of this is provided at PEI Report stage (i.e. Appendix 9.7: Preliminary Arboricultural Impact Assessment); whilst limited by survey data being incomplete at the time of its production, the combination of the survey data that has been gathered, plus desk top analysis across the wider area, has enabled preliminary assessment of likely impacts to trees across the Site area to be indicated, albeit with a need for further survey verification. Engagement with local authority tree officers will continue as surveys and assessment progress further toward DCO.

Non-statutory public consultation

- 9.3.4 Non-statutory public consultation on the emerging proposals for the Project was undertaken with stakeholders and local communities in Summer 2024. Formal responses to this non-statutory consultation feedback have been provided within the 'Statement of Response' (Thames Water, 2025). Any feedback relevant to the Landscape and visual assessment has been taken into account where appropriate.

Ongoing engagement

- 9.3.5 This section summarises the ongoing technical engagement for the Landscape and visual assessment with key stakeholders since EIA scoping (section 9.3 of the EIA Scoping Report provides the summary of equivalent engagement up to that point in time). This includes meetings and written correspondence with the Landscape and visual TLG, which comprises the following organisations:
- Natural England
 - The Environment Agency
 - The North Wessex Downs National Landscape
 - Oxfordshire County Council
 - South Oxfordshire and Vale of White Horse District Councils

9.3.6 Table 9.3 provides a summary of the ongoing technical engagement for the Landscape and visual aspect, including the issues raised and outcomes (this excludes issues relating to design, and focuses on those relating to assessment).

Table 9.3 Key ongoing engagement for landscape and visual

Stakeholder	Topics	Outcome
South Oxfordshire and Vale of White Horse District Councils (Tree Officer, and Planning Specialist Team Leader) (as part of the Landscape and visual TLG)	Presentation and discussion on approach to Tree Survey and Assessment, including specific methodology for assessing veteran and ancient trees. Discussion in context of awareness that approximately 200+ trees had (in Autumn 2024) been added to the Woodland Trust's Ancient Tree Inventory, indicating potential veteran and/or ancient trees within the draft Order limits.	Stakeholder agreed to the proposed approach, key aspects of which include the application of the NPPF definition of ancient and veteran trees (as opposed to other definitions which have less stringent criteria), and the application of the Recognition of Ancient Veteran and Notable trees methodology (RAVEN) (Forbes-Laird Arboricultural Consultancy (FLAC UK), 2023) methodology to establish if trees meet these criteria.
Representatives of the Landscape and visual TLG	Clarifications and additions of some aspects of LVIA methodology made after Scoping, as summarised under 'outcome' column.	- Duration of effect to be applied as a 'modifier' in assessment of magnitude, in line with the 2024 Landscape Institute (LI) Technical Guidance. - Visual assessment to be receptor-led, not viewpoint-led, with clear definition and grouping of receptors provided. - Viewpoints identified at Scoping stage will still be used, with some more viewpoints to be added. - Project-level landscape character assessment to be based on the 2024 district level landscape character assessment; greater coverage to the east and west of the draft Order limits to be provided relative to previous project-level landscape character assessment; additional coverage of settlements to be provided; the approach will aim to avoid repetition / duplication of information compared to the previous version, through less granular breakdown of areas. - Assessment of landscape effects will not be limited to the receptors defined by the project-level landscape character assessment but will include the North

Stakeholder	Topics	Outcome
		Wessex Downs National landscape in its own right, including its setting and special qualities, plus local landscape designations. • Landscape and visual assessment will include a brief qualitative assessment of effects on night skies, supported by night time photography from a small number of key viewpoints. • Photo-realistic photomontages from a range of viewpoints, more than the six identified at Scoping stage, will be provided at ES stage. For the PEI Report provision of photomontages will be more limited.
Representatives of the Landscape and visual TLG	PEI Report LVIA methodology, approach to viewpoints and visualisations for PEI Report and ES, assumptions and parameters for PEI Report, approach to assessing effects on the National Landscape, and meeting the requirements of the duty to 'seek to further' its purpose'.	The following key points were raised by TLG members which have been accommodated within the PEI Report: • Requests were made for cross sections through the reservoir embankment to be included within the PEI Report to ensure scale and proportion was clearly conveyed – cross sections have been included within Chapter 2: Project description, and verified 'wireline' visualisations provided for every viewpoint, accurately showing the Project's location and scale within the landscape context. • Requests to evidence the rationale for the scoping out of any National Landscape special qualities that were considered potentially affected – the rationale has been added to Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape • The criteria in Table 9.13: Criteria for defining geographical extent of visual impact, have been amended to provide clear differentiation between 'Very large' and 'large' Some other comments raised by TLG members have not been accommodated within the PEI Report: • Provision of standard definitions against each level of significance of effect. This had previously been considered across the EIA as a whole; it is considered that

Stakeholder	Topics	Outcome
		the levels of sensitivity and magnitude are the critical factors for which standard criteria are needed (and provided), with overall level of significance being the outcome of their combination. • The use of the term 'negligible' was requested instead of 'neutral' to describe a level of significance of effect. This was considered, but consistency in these terms was required across the EIA as a whole and the term 'neutral' was preferred. Note: the Landscape and visual aspect has not identified any effects falling into this category. • A request was made to colour code (red / amber / green) footpaths within the study area according to assessment outcomes. Applying this level of granularity of assessment for all the footpaths within the study area would not align with the proportionate approach adopted. At ES stage, opportunities to provide similar outputs (e.g. intersecting Zone of Theoretical Visibility (ZTV) outputs with footpaths) will be explored and discussed further with the TLG. • A request was made to assess visual impacts for users of rural roads, beyond the 2 kilometres (km) offset from the reservoir (to which assessment of these receptors has been limited). This limitation reflects their lower sensitivity and the need for a proportionate approach across the very extensive study area. More sensitive receptors, such as users of Public Rights of Way (PRoW), have however been assessed throughout, and their experience serves as an indicator of wider visibility and potential visual effects. This approach will be reviewed, and discussed further with the TLG, prior to the ES.

9.4 Assessment methodology

9.4.1 This section outlines the approach followed to assess the potential likely significant effects of the Project in relation to landscape and visual changes, including:

- Effects scoped into the assessment

- Study area
- Criteria for determining likely significant effects
- Assessment of cumulative effects

9.4.2 The project-wide approach to the assessment methodology is set out in Chapter 4: Approach to environmental assessment; this has been used to inform the LVIA. Any further data collection or site surveys, studies, modelling, or additional assessments that are still to be undertaken to inform the ES are set out in Section 9.10 Next steps.

9.4.3 Since the scoping stage, the methodology has been further refined in response to:

- Stakeholder comments in response to the Scoping report
- Further discussions with the Landscape and visual TLG
- Alignment of some terminology with the wider EIA
- The evolution of the design proposals, expansion of draft Order limits and the resulting need for additional viewpoints
- The publication, in 2024, of the Landscape Institute's Technical Guidance Note 2024-01 'Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3)' (LI TGN 2024-01).

9.4.4 The updated methodology, additional viewpoints and updated visualisation strategy, were shared and agreed with the Landscape and visual TLG, including Oxfordshire County Council and South Oxfordshire and Vale of White Horse District Councils, on 12/06/25.

Scope of the assessment

9.4.5 The scope of the assessment has been informed by the EIA Scoping process, including the EIA Scoping Report (Thames Water, 2024) and Scoping Option (The Planning Inspectorate, 2024), combined with subsequent changes to the Project design and an enhanced understanding of the baseline environment.

9.4.6 Matters that have been scoped out of the Landscape and visual assessment are documented within Appendix 4.1: Effects scoped out of the EIA, along with justification for this scoping approach. In summary, matters scoped out are a construction and operation Residential Visual Amenity Assessment (RVAA).

9.4.7 Effects that are scoped in for the LVIA relevant to the construction phase are:

- Effects on landscape character, relative to defined project-level landscape character areas
- Effects on views as experienced by defined visual receptors

9.4.8 Effects that are scoped in for the LVIA relevant to the operation phase are:

- Effects on landscape character, relative to defined project-level landscape character areas
- Effects on views as experienced by defined visual receptors

9.4.9 There have been some key design developments since the EIA Scoping stage. The draft Order limits have expanded as a result of these design developments, and also as a result of a more detailed understanding of construction access requirements. From an LVIA perspective, particularly important design developments are the potential inclusion of a

ground-mounted solar to the north-west of the proposed reservoir, and also the inclusion of floating solar arrays on the reservoir itself. Whilst these design developments do not affect the above (high-level) statements on the effects scoped in and out of the assessment, they do introduce new types of potential visual effects, including glint and glare from proposed solar panels. At this stage, no specialist glint and glare study has been scoped in because the level of design information available is too limited to enable one to be undertaken. Consideration of glint and glare within the LVIA is therefore limited to a precautionary qualitative assessment at this stage; this will be reviewed at the ES stage.

Study area

- 9.4.10 The study area for the LVIA is described in Section 9.5: Study area and shown in Figure 9.1: Landscape and visual study area. It includes all land within the draft Order limits and the wider landscape around it for which the Project may give rise to significant landscape and visual effects.
- 9.4.11 The study area has been informed by desk-based study, the extent of the zones of theoretical visibility (ZTVs), the extents of project-level landscape character areas likely to be affected by the Project, fieldwork, and discussion with the Landscape and visual TLG. Desk-based study has incorporated review of published landscape character assessments, designations, Ordnance Survey (OS) mapping, three-dimensional topographical data and aerial photography. The study area has also been reviewed in relation to changes in the Project proposals and draft Order limits which have been made since scoping stage.
- 9.4.12 These methods have combined to refine the study area since the scoping stage. The final study area has been simplified as a 10km offset from the outer toe line of the proposed reservoir embankment as this embankment is, from a landscape and visual perspective, the predominant component of the Project proposals, most likely to generate the most extensive visibility and potential effects.
- 9.4.13 With a large study area of approximately 45,000 hectares (ha) it is critical to ensure a proportionate approach, not least through a varied but strategically targeted level of granularity of assessment of effects upon visual receptors. This targeting of visual receptors within the study area has considered how numerous the receptor types are and the potential for grouping them together, their relative sensitivity, and their distance to the Project. Consideration of the less sensitive visual receptors is generally focused on areas closer to the Project, whereas consideration of the more sensitive receptors is provided throughout the study area, as summarised in the list below. Assessment of visual effects on people:
- Using National Trails, long-distance paths, Public Rights of Way, and National Cycle Routes – is considered throughout the 10km study area
 - Living and working within towns and villages – is limited to within 5km of the proposed reservoir embankment
 - Living in isolated properties – is limited to within 1km of the proposed reservoir embankment
 - Using local public roads – is limited to within 2km of the proposed reservoir embankment, and 1km of the potential solar re-provision
 - Other important groups, comprising: people visiting/ working at the South Oxfordshire Crematorium and Memorial Park, people using the River Thames for recreational

activity, and people visiting the Devil's Punchbowl Open Access Land within the North Wessex Downs National Landscape (NL)

- 9.4.14 A full explanation of the identification, grouping and level of detail of consideration of visual receptors is provided in Appendix 9.3: Visual baseline.

Zones of theoretical visibility (ZTVs)

- 9.4.15 ZTVs identify the theoretical extent of visibility of the main project components, i.e. areas from which they would not be visible and areas from which they could potentially appear in existing views. The technical methodology for production of the ZTVs is provided in Appendix 9.6: Technical methodology: photography, visualisations and Zones of Theoretical Visibility. Detailed description, analysis and interpretation of the ZTVs is provided in Appendix 9.3: Visual baseline.
- 9.4.16 ZTVs have been modelled using the 'Viewshed' tool in ESRI ArcMap Geographic Information System (GIS) Software.
- 9.4.17 'Bare earth' ZTVs have been prepared using digital terrain model (DTM) data with a resolution of 2m. These ZTVs represent a worst-case scenario as they do not include features such as existing buildings or vegetation which can screen or filter views.
- 9.4.18 Further ZTVs have been prepared that model the screening effect of existing buildings / structures and vegetation in views of the Project. These were prepared using digital surface model (DSM) data with a resolution of 2m.
- 9.4.19 All the ZTVs used to inform the LVIA use an assumed viewing height of 1.6 metres (m) above ground level to simulate the eye level of a person; this is in the middle of the potential range (1.5 – 1.7m) identified in paragraph 6.11 of GLVIA3, and corresponds to the camera height used in the viewpoint photography.
- 9.4.20 All the ZTVs have been reviewed for accuracy through fieldwork, whilst also being used to help target fieldwork to areas most likely to experience views. It is emphasised that none of the ZTVs can be considered 100% accurate, but they do provide a useful indication of potential visibility, with the DSM-based versions showing significantly less (approximately half) potential visibility, and being closer to the likely true picture, than the DTM-based versions.

Methodology

- 9.4.21 Judging the likely significant landscape and visual effects requires consideration of the range of possible interactions between components of the Project and the baseline landscape and visual resource. The principal steps for assessing landscape and visual effects are as follows:
- The landscape character of the search area is analysed, and landscape receptors identified
 - The visual baseline is recorded in terms of the different groups of people who may experience views of the Project and the nature of their existing views and visual amenity
 - Viewpoints are selected and agreed (including representative viewpoints, specific viewpoints and illustrative viewpoints) through engagement with relevant consultees

- The nature and scale of likely changes affecting landscape and visual receptors is considered
- The significance of landscape and visual effects are judged with reference to the sensitivity of the receptor (its susceptibility and value) and magnitude of impact (a combination of the scale of change, geographical extent and duration/ reversibility)

Baseline

Data collection

9.4.22 Baseline data collection has been undertaken to obtain information within the study area. This section provides the approach to collecting baseline data.

9.4.23 The following baseline studies have been undertaken:

- Landscape policy and guidance review, including a review of relevant local plans and evidence base documents
- Landscape character assessment: Appendix 9.1: Project-level landscape character assessment (informed by both desk-based study and field work)

9.4.24 The following data sources have been accessed to inform the baseline:

- 1:25,000 and 1:10,000 scale Ordnance Survey mapping
- Aerial photography (Esri/Google Earth/Google Maps) and Google Maps 'Street View'
- Campaign to Protect Rural England (CPRE) Light Pollution and Dark Skies (2019)
- Environment Agency (EA) 2m Composite LiDAR delivered Digital Terrain Model and other Lidar topography survey data (2020)
- GIS data sets for statutory and non-statutory designations, public rights of way and cycle routes
- National Character Area (NCA) Profiles 108, 109 and 116 (2013 – 2015), (Natural England, 2014b)
- North Wessex Downs AONB Integrated Landscape Character Assessment (Land Use Consultants (LUC), 2002)
- Ordnance Survey Explorer Mapping (1:25,000 scale)
- Green Infrastructure Strategy and Open Space Study, South Oxfordshire and Vale of White Horse District Councils (LUC, 2024)
- The Oxfordshire Wildlife and Landscape Study (Oxfordshire County Council, Natural England and The Earth Trust, 2004)
- Tranquillity Map: England National map with 2001 district boundaries (CPRE, 2007)
- Local Landscape Designation Review of South Oxfordshire and Vale of White Horse, South Oxfordshire and Vale of White Horse District Councils (LUC, 2024)
- South Oxfordshire and Vale of White Horse Renewable Energy Study: Landscape Sensitivity Assessment, South Oxfordshire and Vale of White Horse District Councils (LUC, 2024)
- Tranquillity Assessment, South Oxfordshire and Vale of White Horse District Councils (LUC, 2024)
- Lighting Design Guidance (South Oxfordshire and Vale of White Horse District Councils, 2024)
- Dark Skies/Light Impact Assessment, South Oxfordshire and Vale of White Horse (LUC and Hoare Lea, 2024)

- Landscape Character Assessment for South Oxfordshire and Vale of White Horse, South Oxfordshire and Vale of White Horse District Councils (LUC, 2024)
- Oxfordshire Historic Landscape Characterisation project, Oxfordshire County Council supported by Historic England, July 2017, including interactive map
- Green infrastructure interactive map (Natural England, no date)
- Oxfordshire draft Local Nature Recovery Strategy (Oxfordshire County Council, 2024), including interactive map

9.4.25 In addition to these data sources and the ZTV modelling described above, the LVIA also draws on environmental baseline data collated for other aspects, and by other disciplines, including Chapter 7: Terrestrial ecology and Chapter 8: Historic environment.

Site surveys

9.4.26 To inform the assessment, study area baseline surveys were undertaken, comprising walkover and photographic surveys during the winter of 2024/2025 and Spring of 2025 by Chartered landscape architects. The characteristics, features and views of and around the Site (i.e. the location of the Project) and study area were recorded in ESRI Fieldmaps and through photographic survey. These are summarised below:

Visual baseline (for more detail see Appendix 9.3: Visual baseline):

- Verification of the ZTV to inform the study area, taking into account the effect of intervening features such as buildings and vegetation
- Review and verification of the viewpoints identified at scoping stage, and the relevant visual receptors
- Viewpoint photography and associated technical data collection for visualisations
- Identification and field assessment of visual receptors and representative viewpoints including their sensitivity, the nature and extent of existing views and the potential magnitude of impacts

Landscape baseline (for more detail see Appendix 9.1: Project-level Landscape Character Assessment):

- Understanding of landscape character including obtaining perceptual information such as tranquillity, to inform judgements on the value of the landscape
- Field assessment of landscape receptors, including fieldwork to inform the project-level landscape character assessment, landscape sensitivity and potential magnitude of impacts

9.4.27 In addition to the above, the assessment also draws on baseline data collated through other aspects' site surveys, including Chapter 7: Terrestrial ecology, Chapter 8: Historic environment and Appendix 9.7: Preliminary Arboricultural Impact Assessment.

Future baseline

9.4.28 The assessment has considered the likely evolution of the baseline without the implementation of the Project. The future baseline for the assessment includes the following:

- **Urbanising influences** linked to national and local policy drivers that indicate an expected trend of increasing development, settlement expansion, and infrastructure encroachment (see paragraph 9.6.26 for full criteria for future baseline developments in this category, and 9.6.29 for specific developments). These land use changes are likely to occur in line with current and emerging planning and economic development policies and strategies, including the Joint Local Plan 2020-2041 for South Oxfordshire and Vale of White Horse. Spatial policies affecting likely future patterns of housing and infrastructure development are particularly relevant.
- **Naturalising influences** linked to national and local policy drivers for environmental enhancement and nature recovery, which are expected to counterbalance or modify the impacts of urbanisation described above. See 9.6.30 for further details of the policies and drivers for this land use change, which include the *North Wessex Downs National Landscape Management Plan 2024-2034* (North Wessex Downs National Landscape Partnership, 2024), and the *Draft Oxfordshire Local Nature Recovery Strategy: Statement of Biodiversity Priorities* (Oxfordshire County Council, 2024). These policies support a long-term trend toward a more mosaic-like, ecologically rich and visually diverse rural landscape, potentially altering perceptions of openness, enclosure, and naturalness within what is currently an intensively farmed and relatively open area.

Criteria for the assessment of effects

- 9.4.29 The methodology for assessing landscape and visual effects is based on the principle that the environmental effects of the Project, in relation to a receptor, should be determined by identifying the receptor's sensitivity, assessing the magnitude of impact the Project would have on the receptor and then using professional judgement in combining these two elements to identify the significance of effect.
- 9.4.30 The guidance in GLVIA3 is not prescriptive on the criteria to be used for assessing landscape and visual effects. The criteria for assessing sensitivity, magnitude and significance of effect have, therefore, been developed based on professional judgement by competent specialists with experience gained from the assessment of other similar projects in the UK and through engagement with the Landscape and visual TLG.

Landscape effects

- 9.4.31 The assessment of landscape effects considers effects on the project-level landscape character areas, which have been defined in relation to the Project. The method for defining the project-level landscape character areas is set out in Appendix 9.1: Project-level landscape character assessment.
- 9.4.32 Effects on landscape designations within the study area are also assessed, including the special qualities of the North Wessex Downs National Landscape and local landscape designations. A summary of the likely effects of the Project on the special qualities of the North Wessex Downs National Landscape and consideration of potential mitigation, having regard to the statutory purposes for the designation, is provided in Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape.
- 9.4.33 The changes to the constituent landscape features, elements and components of the landscape character areas, such as trees, woodlands, hedgerows, hedgerow trees, landform, field patterns and heritage assets, as well as effects on dark skies and

tranquillity, are considered in combination as part of the effects on landscape character and not as individual receptors. However, a discreet section of the report summarises the consideration of effects on dark skies. This proportionate approach is in line with GLVIA3. The landscape and visual assessment is also contributing to the emerging lighting strategy, ensuring that potential effects on dark skies from proposed lighting have been fully considered in the design.

- 9.4.34 Chapter 8: Historic environment undertakes a preliminary assessment of effects upon historic landscapes or gardens, considers the setting of heritage assets including listed buildings and conservation areas, and considers the general historic characteristics of the local landscape within the area affected by the Project. It is noted that this Historic environment assessment is undertaken within less extensive study areas than that applied in the Landscape and visual assessment (i.e. 1km from draft Order limits for non-designated assets, 2km for designated assets, and selected assets from within the ZTV beyond this). This targeted approach reflects professional judgement on the distances within which significant effects on these heritage assets might potentially be experienced, which is supported by the Landscape and visual assessment.

Sensitivity of landscape receptors

- 9.4.35 The sensitivity of landscape receptors has been established by assessing the value attached to the receptor and its susceptibility to the type of impact proposed. The outputs of this sensitivity assessment, along with supporting narrative, are recorded relative to each landscape receptor in Appendix 9.1: Project-level landscape character assessment.

Landscape value

- 9.4.36 GLVIA3 defines landscape value in the glossary as: 'The relative value that is attached to different landscapes by society'. A review of existing designations is the starting point in understanding the value of landscape receptors. However, GLVIA3 recognises that landscape value is not always signified by designation. Other areas of landscape, or individual elements or features of the landscape contributing to its character or views may not be recognised by formal designation but may nevertheless have value. The range of factors provided within Landscape Institute Technical Guidance Note (TGN) 02/21: Assessing landscape value outside national designations (Landscape Institute, 2021), have been considered in the identification of landscape value. The value of landscape receptors has been assessed in line with the criteria set out in Table 9.4.

Table 9.4 Criteria for determining landscape value

Landscape Value	Criteria
Very High	Designated landscapes of national importance (i.e. National Parks or National Landscapes); and/or very high value associated with factors* such as landscape condition, scenic and other perceptual qualities including tranquillity and dark skies, distinctiveness, rarity and representativeness, conservation interests (such as natural and cultural heritage), community, recreational and functional values and associations.
High	Areas of landscape identified/designated as having importance at the local authority or regional level; and/or high value associated with factors* such as landscape condition, scenic and other perceptual qualities including tranquillity and dark skies,

Landscape Value	Criteria
	distinctiveness, rarity and representativeness, conservation interests (such as natural and cultural heritage), community, recreational and functional values and associations.
Medium	Some value associated with factors* such as landscape condition, scenic and other perceptual qualities including tranquillity and dark skies, distinctiveness, rarity and representativeness, conservation interests (such as natural and cultural heritage), community, recreational and functional values and associations.
Low	Limited value associated with factors* such as landscape condition, scenic and other perceptual qualities including tranquillity and dark skies, distinctiveness, rarity and representativeness, conservation interests (such as natural and cultural heritage), community, recreational and functional values and associations.
Very Low	Very little or no value associated with factors* such as landscape condition, scenic and other perceptual qualities including tranquillity and dark skies, distinctiveness, rarity and representativeness, conservation interests (such as natural and cultural heritage), community, recreational and functional values and associations.

**Factors are based on those identified within Box 5.1 'Range of factors that can help in the identification of valued landscapes' in GLVIA3 and Table 1: 'Range of factors that can be considered when identifying landscape value' in Technical Guidance Note 02/21 Assessing landscape value outside national designations.*

Landscape susceptibility

9.4.37 Susceptibility to change is defined in accordance with GLVIA3, as the ability of a landscape receptor to accommodate a development *'without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies'* (GLVIA3 paragraph 5.40). Judgements on susceptibility will take the nature of the Project into account. The susceptibility of landscape receptors has been assessed in line with the criteria set out in Table 9.5.

Table 9.5 Criteria for determining landscape susceptibility

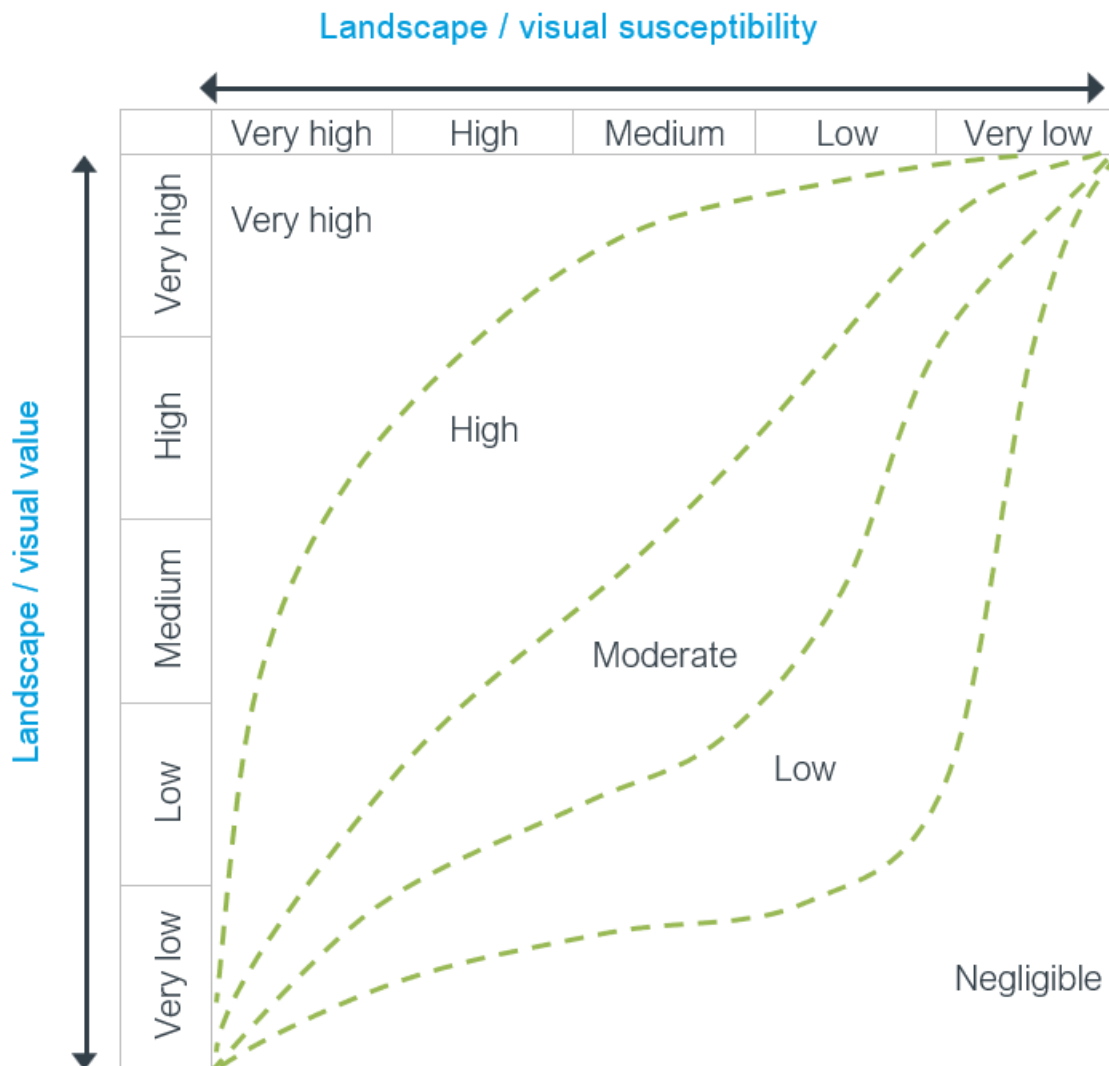
Landscape Susceptibility	Criteria
Very high	The landscape is very highly susceptible to the nature of the Project because the relevant characteristics or elements of the landscape have no, or extremely limited, ability to accommodate the development without undue effects, for example, because the proposals would result in the loss of key characteristics that are a very important component of the landscape.
High	The landscape is highly susceptible to the nature of the Project because the relevant characteristics or elements of the landscape have a very limited ability to accommodate the Project without undue effects, for example, because the proposals would result in the loss of characteristics that are an important component of the landscape.
Medium	The landscape is moderately susceptible to the nature of the Project because the relevant characteristics or elements of the landscape only have a limited ability to accommodate the Project without undue effects.

Landscape Susceptibility	Criteria
Low	The landscape has low susceptibility to the nature of the Project because the relevant characteristics or elements of the landscape are generally able to accommodate the Project without undue effects.
Very Low	The landscape is generally tolerant to the nature of the Project because the relevant characteristics or elements of the landscape are able to accommodate the Project without undue effects.

Combining judgements to determine landscape sensitivity

9.4.38 Judgements on the sensitivity of each landscape receptor take into account the judgements on value and susceptibility of the receptor. Plate 9.1 has been used as a guide to assist the application of professional judgement when drawing conclusions on landscape (and visual) sensitivity.

Plate 9.1 Matrix for informing landscape and visual sensitivity



Magnitude of landscape impact

- 9.4.39 The magnitude of impact is the degree of change that would occur associated with a project. The assessment assumes proposed embedded design and standard good practice mitigation is already in place. The magnitude of landscape impact has been determined by an assessment of the size and scale of the impact in conjunction with the geographical extent of those impacts. Duration and reversibility are considered in conjunction with the magnitude of impact as closely related, but separate, dimensions and in accordance with the assessment timescales. The overall magnitude of impact for each receptor is assessed using professional judgement rather than by a formulaic process.

Size and scale – landscape receptors

- 9.4.40 The size and scale of impact to the landscape is mainly a reflection of the extent or proportion of landscape elements lost or added and/or the degree to which aesthetic or perceptual aspects or key characteristics are altered, both of which may result in erosion or enhancement of landscape character. The criteria set out in Table 9.6 have been referred to in determining the size and scale of landscape impact.

Table 9.6 Criteria for defining size and scale of landscape impact

Size and scale of landscape impact	Criteria
Very large	• Loss of a very large extent or proportion of existing landscape elements, including those important to the landscape's character • Very large degree of change to the aesthetic/ perceptual landscape • Substantial change to the key characteristics of the landscape which are critical to its distinctive character, to such an extent that the character of the landscape is changed
Large	• Loss of a large extent or proportion of existing landscape elements, including those important to the landscape's character • Large degree of change to the aesthetic/ perceptual landscape • Change to the key characteristics of the landscape which are critical to its distinctive character
Medium	• Medium extent/ proportion of loss of existing landscape elements, likely to be of limited importance to the landscape's character • Medium degree of change to the aesthetic/ perceptual landscape • Limited change to the key characteristics of the landscape which are critical to its distinctive character
Small	• Loss of a small extent of existing landscape elements, likely to be of limited importance to the landscape character • Small degree of change to the aesthetic/ perceptual landscape • Insubstantial change to the key characteristics of the landscape which are critical to its distinctive character
Negligible	• Loss of a very small extent of existing landscape elements, likely to be of limited or no importance to the landscape character • Minimal degree of change to the aesthetic/ perceptual landscape

Size and scale of landscape impact	Criteria
	Barely perceptible change to the key characteristics of the landscape

Geographical extent – landscape receptors

- 9.4.41 The geographical extent of landscape impact is assessed by determining the area over which the change would influence the landscape. This could be very localised, within the immediate setting of a development, or affect the wider landscape character and a large proportion of a character area. In line with LI TGN 2024-01 judgements on geographical extent reflect the relevance of the location and spread of effects, as a 'modifier' to the scale of impact. The criteria set out in Table 9.7 have been referred to in determining the geographical extent of landscape impact.

Table 9.7 Criteria for defining geographical extent of landscape impact

Geographical extent of landscape impact	Criteria
Very large	The change would affect a very large extent of the landscape and/or a large proportion of a characteristic landscape element.
Large	The change would affect a large part of the landscape and/or a large proportion of a characteristic landscape element.
Medium	The change would affect a moderate part of the landscape and/or a notable proportion of a characteristic landscape element.
Small	The change would affect a small part of the landscape and/or a small proportion of a characteristic landscape element.
Negligible	The change would affect a very small, localised part of the landscape and/or a small proportion of a characteristic landscape element.

Duration and reversibility of landscape effects

- 9.4.42 Duration reflects how long the change will last. The changes as a result of the Project would be considered short-term when lasting less than two years; medium-term when lasting between 2 and 15 years; or long-term (permanent) when lasting more than 15 years. Table 9.8 sets out the definitions of duration of change used in the LVIA.

Table 9.8 Duration of landscape and visual impact

Duration	Description
Short-term	Changes, including from construction activity, that may be reversible, that would last up to two years.
Medium-term	Changes, including from construction activity, that may be reversible, that would last between two and 15 years.
Long-term (Permanent)	Changes that would last more than 15 years; these are considered to be permanent and irreversible for the purpose of LVIA.

Combining judgements to determine magnitude of landscape impact

- 9.4.43 The assessment of magnitude of landscape impact uses professional judgement to combine judgements on size and scale, geographic extent and duration and reversibility, supported by the criteria in Table 9.6 to Table 9.8. An initial assessment of magnitude is made by combining judgements on size and scale with judgements on geographic extent. The determination of magnitude is based on a five-point scale of very large, large, medium, low and negligible. This 'stage 1' assessment of magnitude may then be modified as a result of the duration of the effect, in line with Table 9.9 below, to determine the final assessment of magnitude.

Table 9.9 Applying duration in determining magnitude of impact

Stage 1 result / Duration	Magnitude				
	V Large	Large	Medium	Small	Negligible
Long term >15 yrs	V large				
Medium term 2-15 yrs		Large	Medium	Small	
Short term 1-2 yrs					
Short term 0-1 yrs					Negligible

- 9.4.44 Following any modification to the assessment of magnitude through the consideration of duration in line with Table 9.9. the conclusions of the assessment of magnitude of impact are supported by substantiated reasoning.

Visual effects

- 9.4.45 In accordance with GLVIA3, the LVIA includes an assessment of effects on the views available to people, and their visual amenity. GLVIA3 defines visual receptors as *'individuals and/or defined groups of people who have the potential to be affected by a proposal'*. Visual receptors are usually grouped by what they are doing at a particular place (e.g. local community, motorists, recreational users).

Viewpoints

- 9.4.46 Baseline photography from defined viewpoints, selected to support and inform the assessment of effects on visual and landscape receptors, is provided within Appendix 9.4: Viewpoint photography and visualisations. Figures 9.1: Study area, and 9.11: Viewpoint and photomontage locations (with ZTV) show the location and orientation of each viewpoint.
- 9.4.47 The viewpoints are 'representative', as they are used to show the typical views and visual amenity that can be considered indicative of the general experience for certain receptors or groups of receptors across a defined area. Two of them (viewpoints 3 and 9) can also be considered 'specific' viewpoints, because they are located to show specific views at particular locations. Night-time photography is provided for four of the viewpoints (numbers 1, 22, 35, and 50) to support consideration of effects on night skies.

- 9.4.48 The viewpoint photography provides a record of the visual baseline and is presented in Appendix 9.4: Viewpoint photography and visualisations. Winter views (captured during February – March 2025) and presented with annotations to highlight the locations of key places, features and landmarks, along with accurate ‘wireline’ representations of the location and extents of the Project. Summer views (captured from the same viewpoints during May – June 2025) are presented alongside the winter views, but without any annotation. Winter views represent a ‘worst-case’ scenario in terms of potential visibility of the Project, when deciduous vegetation is not in leaf resulting in less potential screening effect.
- 9.4.49 A total of 59 viewpoints have been provided, which is an additional 26 from the 33 viewpoints identified at the scoping stage. The additional viewpoints have been provided to ensure a robust consideration of effects supported by a correspondingly robust photographic evidence base, whilst responding to stakeholder feedback on viewpoints following the EIA Scoping Report, and through engagement with the Landscape and visual TLG. Some have also been added in response to the expansion of the draft Order limits since the scoping stage, including the addition of a potential solar reprovion to the west of the reservoir site. All viewpoint selection has also been informed through a combination of desk-based analysis including ZTV and receptor mapping, and site-based appraisal.

Visualisations

- 9.4.50 Besides baseline photography, Appendix 9.4: Viewpoint photography and visualisations also provides a range of visualisations which have been used to support the assessment. Three different types of visualisation have been provided, and their differences, limitations and value are outlined below. In all cases, the Project’s location and horizontal and vertical scale, have been represented according to a robust, accurate and verifiable process, in accordance with Visual Representation of Development Proposals, Technical Guidance Note 06/19 (Landscape Institute, 2019). More information about each of these visualisation types, including the technical detail on how they have been produced, is provided in Appendix 9.6: Technical methodology: photography, visualisations and Zones of Theoretical Visibility.
- **‘Wireline’** visualisations show the location, vertical and horizontal extent of the major physical components of the Project with a simple dashed red line; these have been provided for every viewpoint. They do not show the three-dimensional form of the Project, and no ‘foreground masking’ has been applied to them, meaning the wirelines simply sit ‘on top’ of the baseline photograph, and existing elements in the landscape (such as houses, trees, hedges landform) which might in reality be in front of the Project will appear behind the wireline. These visualisations therefore do not describe the extent of visibility of the Project within the views, only its location and scale, which is accurately and verifiably represented.
 - **‘Colour massing’** visualisations show the location, vertical and horizontal extent of the major physical components of the Project and also include simple colour renders to reveal the basic form of the Project components, along with foreground masking to reveal the extent of their visibility within a three-dimensional landscape context. The Project’s location and scale is accurately and verifiably represented, however the colour rendering is not intended as a realistic representation of surfaces / material colours or textures and there is no representation of architectural form or detail. A flat green tone is applied to elements of the Project which would have ‘soft’ landscape

finishes, regardless of whether that comprises grass, scrub, trees, woodland; elements of the Project which would have 'hard' material finishes, regardless of whether these are buildings, walls, fences, concrete, masonry, steel are coloured white; a flat blue tone is applied to any water introduced by the Project, if visible. These visualisations provide an accurate indication of the extent of visibility of the key project components within baseline views, but not their 'noticeability', as the rendering style exaggerates how visually prominent these components would be within the landscape, not least the hard elements as their pure white colouring contrasts particularly strongly within the baseline view.

- **'Photorealistic visualisations'** apply the same level of accuracy in representing the Project components as the above two examples, but are not limited to those main physical components, also showing associated elements and details such as footpaths, fences, recreational buildings, tree planting and other landscape features. These details should be considered 'illustrative' and have been added to allow comparison with the above, illustrating the likely appearance of the Project, with embedded landscape and environmental mitigation in place, and materials rendered with photorealistic representation of colours and textures. Buildings, however, have still been left white, due to a lack of architectural design detail at this stage. In terms of the maturity of proposed planting / vegetation these visualisations represent a stage approximately 5 years into the operation of the project, and it is assumed that the planting located in more 'peripheral' areas beyond the footprints of major engineering works would have been planted earlier in the construction process, therefore there is up to 10 years' of establishment and growth indicated for some of the planting. Overall, these three images provide a more realistic illustration of the likely degree of contrast and/or integration of the Project based on a small sample of viewpoints but should be considered indicative.
- To best understand the **limitations and value** of each type of visualisation, it is recommended that readers compare each of the three types provided for viewpoints 19 (north-western edge of Steventon) and 50 (eastern edge of East Hanney) side by side, and consider how the overall impression of the magnitude of landscape and visual impacts might differ for the same view depending on the type of visualisation referred to. The wirelines are useful in accurately conveying the overall location and scale of the Project in these views, but do not show how much of it would actually be visible. The colour massing visualisations add an accurate understanding of the extent of the Project's visibility relative to existing intervening elements in the landscape, but do not convey how noticeable it would be; they are likely to create the impression that the Project would be much more noticeable and more incongruous than it actually would be, due to the additional colour contrast they create. The photorealistic visualisations provide the most complete picture, illustrating how noticeable, or well-integrated, the Project would be with all the associated embedded landscape and environmental mitigation in place. These differences should be kept in mind before drawing any conclusions from any visualisations.

Residential visual amenity

- 9.4.51 GLVIA3 is clear that people living in the area of a proposed development have to be considered as receptors (paragraph 6.13) and that views from settlements should be considered (paragraph 6.20). LI TGN 2024-01 explains that:

'an LVIA should consider views from local communities focusing on the way that a community currently experiences views from public locations such as streets and open spaces and how those will change. Views from houses and individual properties are a matter of private amenity, noting that it is an established planning principle that there is no right to a view. However, it may be helpful for an LVIA to comment on changes to views that will be experienced from groups of properties, or in some cases individual properties, if these changes are likely to be significant.' (6(1))

- 9.4.52 The LI TGN 2024-01 states that *'residential visual amenity assessment (RVAA) may be required by the determining / competent authority, for example in situations where it is possible that the effect on outlook / visual amenity of a residential property or properties is so great that the proposed development is against the public interest, as explained in Technical Guidance Note 02/19 Residential Visual Amenity Assessment.'* RVAAs, where required, are a separate assessment which address the question of whether the effect of the development is of such a nature or magnitude that it potentially affects living conditions or residential amenity¹.

- 9.4.53 With regards to the Project, it is not considered that there would be any effects on views from properties that would be so great that it could affect living conditions and thus be against the public interest. Consequently, an RVAA has not been provided in addition to the LVIA. Questions on how the LVIA would consider residential amenity were raised in comments from statutory consultees in response to the Scoping report. These questions were subsequently discussed with the relevant consultees through the Landscape and visual TLG, and the approach set out here was agreed. Details on how consultee comments on the Scoping report have been addressed are provided in Table 9.2.

Sensitivity of visual receptors

- 9.4.54 The sensitivity of visual receptors is established by assessing the value attached to the views associated with each receptor, and the susceptibility of the visual receptor to changes in those views. The outputs of this sensitivity assessment, along with supporting narrative, are recorded relative to each landscape receptor in Appendix 9.3: Visual baseline.

Value attached to views

- 9.4.55 In accordance with GLVIA3, paragraph 6.37, judgements should be made about the value attached to the views experienced. Table 9.10 sets out the criteria used to determine the value of views.

¹ Residential amenity comprises a range of visual, aural, olfactory and other sensory components. Development can cause effects on one or more components of Residential Amenity, for example effects of noise, dust, access to daylight, vibration, shadow flicker, outlook and visual amenity. Sometimes this is referred to as 'living conditions'.

Table 9.10 Criteria for determining visual value

View Value	Criteria
Very High	Views that are associated with designated landscapes of very high/ national importance, for instance National Landscapes, or very important heritage assets, promoted in sources such as maps and tourist literature. Views may be linked with major landscape destinations where the view forms a widely recognised part of the visitor experience, or which have very important cultural associations, such as views that are formally 'protected'. Views of high scenic quality and few or no detracting features.
High	Views that are associated with areas of landscape identified/designated as having importance at the local authority or regional level or important heritage assets, promoted in sources such as maps and tourist literature, linked with popular landscape destinations where the view forms a recognised part of the visitor experience, or which have important cultural associations. Views of high scenic quality and few or no detracting features.
Medium	Views that are associated with landscapes considered to be valued by local communities and which may be promoted in local sources and linked with locally important landscape destinations where the view forms a recognised part of the visitor experience. Views of scenic quality and may have some detracting features.
Low	Views that, although they may have value to local people are not associated with designated or otherwise high-quality landscapes or with popular landscape destinations and have no more widely recognised cultural associations. Views of limited scenic quality and which are likely to have detracting features.
Very low	Views with very little value to local people and not associated with landscape destinations and with no cultural associations. Views of very little scenic quality with detracting features.

Susceptibility of visual receptors to change

- 9.4.56 The susceptibility of visual receptors to a change in their view and visual amenity is a function of *'the occupation or activity of people experiencing the view at particular locations; and the extent to which their attention or interest may, therefore, be focused on the views and the visual amenity they experience at particular locations'* (GLVIA3 paragraph 6.32). Visual susceptibility has been determined in relation to the criteria set out in Table 9.11.

Table 9.11 Criteria for determining visual susceptibility

Visual susceptibility	Criteria
Very High	Receptors for whom the nature of the view forms a very important part of their experience and visual amenity. These include people engaged in types of outdoor recreation where their attention is likely to be very focused on particular views; visitors to very important heritage assets or other major landscape destinations where views of the surroundings are an essential part of the experience; and users

Visual susceptibility	Criteria
	of National Trails and other nationally promoted recreational routes including those within nationally designated landscapes.
High	Receptors for whom the nature of the view forms an important part of their experience and visual amenity. These include people engaged in types of outdoor recreation where their attention is likely to be focused on particular views; visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience; and local communities. May include users of public rights of way and locally promoted recreational routes/trails.
Medium	Receptors for whom the nature of the view contributes positively to their experience, including travellers on roads where attention is generally less likely to be focused on views and visual amenity, although such views can still be appreciated. May include those engaged in outdoor pursuits such as golf or horse-riding where, although the view is appreciated, the primary focus is the activity itself.
Low	Receptors for whom the nature of the view is entirely secondary to their activity or occupation, including people engaged in outdoor sport or recreation which does not involve any appreciation of views; people at their place of work, where the setting is not important to the quality of working life; and travellers where the potentially affected view is incidental to the journey, such as views from main roads.
Very low	Receptors for whom the nature of the view is of no importance.

Combining judgements to determine visual sensitivity

- 9.4.57 Judgements on the sensitivity of each visual receptor take into account the judgements on value and susceptibility. Plate 9.1 is used as a guide to assist the application of professional judgement when drawing conclusions on visual (and landscape) sensitivity.

Magnitude of visual impact

- 9.4.58 The magnitude of impact is the degree of change that would occur associated with a project. The assessment takes proposed mitigation into account. The magnitude of visual impact is determined by an assessment of the size and scale of the impact in conjunction with the geographical extent of those changes. Duration and reversibility are considered in conjunction with the magnitude of impact as closely related, but separate, dimensions and in accordance with the assessment timescales. The overall magnitude of impact for each receptor is assessed using professional judgement rather than by a formulaic process.

Size and scale – visual

- 9.4.59 The criteria that have been used to assess the size and scale of visual impact are based upon the amount of change likely to occur as a result of a proposed development. The size and/or scale of impact upon views and visual amenity at representative (or other selected) viewpoints take the following into consideration within the reporting of visual effects (this includes the angle of view in response to the clarification in LI TGN 2024-01):

- The scale of the impact on the view with respect to the loss or addition of features in the view, changes in its composition, including the proportion of the view occupied by the change, and distance of view
- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of factors such as form, scale and mass, line, height, colour and texture
- The nature of the view of the Project, for example whether views would be full, partial or glimpses or sequential views while passing through the landscape
- The angle of view in relation to the main activity of the viewer, for example whether direct or oblique.

9.4.60 The criteria set out in Table 9.12 have been referred to in determining the size and scale of visual impact.

Table 9.12 Criteria for defining size and scale of visual impact

Size and scale of visual impact	Criteria
Very large	Complete or very substantial change in the view, resulting from the loss of important features or the addition of major new ones, to the extent that this would substantially alter the composition of the view and visual amenity.
Large	Substantial change in the view, resulting from the loss of important features or the addition of major new ones, to the extent that this would very noticeably alter the composition of the view and visual amenity.
Medium	Clearly noticeable change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would alter to a moderate degree the composition of the view and visual amenity.
Small	Perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would, to a limited extent, alter the composition of the view and visual amenity.
Negligible	Barely perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would not discernibly alter the composition of the view and visual amenity.

Geographical extent – visual

9.4.61 The LI TGN 2024-01 (6(8)) clarifies the preferred approach to assessing geographical extent for visual receptors, which is to assess the extent of the visual receptor affected (e.g. walkers on the footpaths affected for larger or shorter lengths, or larger or smaller parts of a community). Judgements on geographical extent reflect the relevance of the location and spread of changes, as a 'modifier' to the scale of changes. Judgements about the geographical extent reflect:

- The extent of the area over which the impacts would be visible (e.g. whether there is only one point from where the development can be glimpsed or whether visual effects would be seen from large areas).
- Considering the number of people potentially affected, where possible (e.g. the frequency of use of particular parts of a footpath in relation to visibility from those parts of the route).

9.4.62 The criteria set out in Table 9.13 have been referred to in determining the geographical extent of visual impact.

Table 9.13 Criteria for defining geographical extent of visual impact

Geographical extent of visual impact	Criteria
Very large	The Project / elements of it may be seen by the receptor in all or virtually all locations within a defined receptor area, or from all or virtually all of a linear route and/or by a very large numbers of viewers, or the view is available from all of a specific location.
Large	The Project / elements of it may be seen by the receptor in many locations, or from the majority of a linear route and/or by large numbers of viewers, or the view is available from all or most parts of a specific location.
Medium	The Project / elements of it may be seen by the receptor from a moderate number of locations or from a moderate part of a linear route and/or by a moderate number of viewers, or the view is available from a moderate proportion of a specific location.
Small	The Project / elements of it may be seen by the receptor at a small number of locations, from only limited sections of a linear route and/or by a small number of viewers, or the view is available from only a small proportion of a specific location.
Negligible	The Project / elements of it may be either barely discernible to the receptor or seen at a very limited number of locations or from a very limited section of a linear route, and/or by only a very small number of viewers, or the view is available from hardly any part of a specific location.

Duration and reversibility of visual impact

9.4.63 Duration reflects how long the change would last. The impacts as a result of the Project would be considered short-term when lasting less than two years; medium-term when lasting between two and 15 years; or long-term (permanent) when lasting 15 years or more. Table 9.8 sets out the definitions of duration of effects used in the LVIA.

Combining judgements to determine magnitude of visual impact

- The conclusion on the magnitude of visual impact uses professional judgement to combine judgements on size and scale, geographic extent and duration and reversibility, supported by the criteria in Table 9.12 and Table 9.13, plus Table 9.8 and Table 9.9. An initial assessment of magnitude is made by combining judgements on size and scale with judgements on geographic extent. The determination of magnitude is based on a five-point scale of very large, large, medium, small and negligible (plus 'no change'). This 'stage 1' assessment of magnitude may then be modified as a result of the duration of the effect, in line with Figure 9.9: Solar site ZTV (bare earth / DTM), to determine the final assessment of magnitude.

9.4.64 Following any modification to the assessment of magnitude through the consideration of duration in line with Table 9.9. the conclusions of the assessment of magnitude of impact are supported by substantiated reasoning.

Significance of landscape and visual effects

9.4.65 The significance of effect is determined by combining the sensitivity and the magnitude of impact for each receptor. Table 9.14 has been used to assist professional judgement when determining the significance of landscape and visual effects. The assessment of significance is not formulaic and professional judgement is a key part of the process. This is in line with GLVIA3 which advises that, *'Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters ... much of the assessment must rely on qualitative judgements...'*. Evidence is and reasoning is provided within the assessment to support judgements and conclusions.

9.4.66 Judgements on the sensitivity of each receptor and the magnitude of impact are combined to establish the level of significance of effect and whether effects are considered significant in EIA terms. There are important distinctions between these two terms:

- Significance of effect relates to the level recorded for any effect, with reference to the matrix set out in Table 9.14 below.
- Significant effects are those which are considered most important in the decision-making process. An effect in this LVIA is considered significant in EIA terms if it is of major or moderate significance. All other effects have been categorised as not significant.

Table 9.14 Significance matrix

Receptor sensitivity	Magnitude of impact				
	Negligible	Small	Medium	Large	Very large
Negligible	Neutral	Neutral	Minor	Minor	Moderate (significant)
Low	Neutral	Minor	Minor	Moderate (significant)	Moderate (significant)
Moderate	Minor	Minor	Moderate (significant)	Moderate (significant)	Major (significant)
High	Minor	Moderate (significant)	Moderate (significant)	Major (significant)	Major (significant)
Very High	Minor	Moderate (significant)	Major (significant)	Major (significant)	Major (significant)

9.4.67 The identification of the likely significant effects on landscape and visual receptors has relied on detailed analysis, professional judgement, and engagement with stakeholders.

Direction of effect

- 9.4.68 The resultant effects may be either adverse or beneficial, depending on the nature of the change. This judgement has been determined by considering the way in which the changes are likely to affect the baseline. Adverse effects are likely to occur where the Project introduces new elements or changes which are discordant or intrusive resulting in a deterioration to existing character or valued features of the landscape or of views and visual amenity. Beneficial effects are likely to occur where the Project enhances the character of the landscape or existing views.
- 9.4.69 Paragraphs 5.37 and 6.29 of GLVIA3 state that it is also possible for the direction of effects to be neutral for landscape and for visual receptors, where the receptor experiences a balanced combination of both adverse and beneficial effects. It is therefore possible for an effect to be anywhere on the scale of significance but still be neutral in direction, i.e. is considered neither adverse nor beneficial. Where a judgement of neutral direction of effect has been reached, reference has been made to the contribution of the Project to the baseline and acknowledging the beneficial and adverse aspects which have been considered.
- 9.4.70 Where the assessment has concluded no change in a receptor, the significance of effect is reported as 'none'. This may, for example, be a consequence of changes to the design which has avoided effects on receptors identified at the scoping stage.

Mitigation

- 9.4.71 For this preliminary assessment, the assessment of effects has assumed that 'embedded design mitigation' and 'standard good practice mitigation' relevant to the LVIA are in place (these measures are presented in Section 9.8: Embedded design mitigation and standard good practice). Nevertheless, as noted in Section 9.4: Assessment methodology, the preliminary assessment assumes that additional mitigation that may reduce any identified likely significant adverse effects is not applied, as the viability, nature, and extent of these are not confirmed at this stage in the EIA process. As a result, consideration of residual effects (those that remain after the implementation of all mitigation, including additional mitigation) has not been completed for this preliminary assessment; this will be undertaken in the ES. Additional mitigation that is being explored is presented in Section 9.10: Next steps.

Timescales for assessment

- 9.4.72 At this PEI Report stage landscape and visual effects are assessed during the construction phase, and at the 'winter year 1' operational stage. For the ES, this will be expanded to also consider the effects at 'summer year 15' operational stage, allowing for the further establishment of all planting undertaken as part of the Project, and the screening effects of deciduous vegetation being in leaf.
- 9.4.73 It is also expected that, at the ES stage, a greater level of detail and certainty will be available regarding the phasing of the works and the establishment of planting undertaken early within the construction phase, which can therefore be incorporated into visualisations to inform and support their more detailed consideration within the assessment of effects.

Assessment of cumulative effects

- 9.4.74 The cumulative effects assessment approach for both inter- and intra-project cumulative effects is broadly set out in Chapter 20: Cumulative effects. However, for this aspect further detail on the assessment process for inter-project cumulative effects is set out below.
- 9.4.75 The ZOI for inter-project cumulative effects associated with LVIA has been defined as 10km from the draft Order limits, plus an additional 5km all around the Ridgeway National Trail as a key elevated sensitive receptor within the North Wessex Downs National Landscape. This ZOI is larger than that defined for the main LVIA study area to encompass potential cumulative effects to key sensitive receptors in accordance with GLVIA3.
- 9.4.76 An assessment of the cumulative effects to landscape and visual arising from the Project with other developments has been undertaken in line with GLVIA. The basis of the assessment followed the principles of additional, rather than combined, cumulative effects as set out in GLVIA3 paragraph 7.18. Additional effects are those effects that could arise from the Project on top of all other developments that have been scoped in.
- 9.4.77 Inter-project cumulative landscape effects that have been considered comprised direct effects, where other developments will be located within the same landscape character area as the Project, and indirect effects, where the Project and other developments may affect the same landscape character areas due to their intervisibility and possible effects on tranquillity.
- 9.4.78 Inter-project cumulative visual effects that have been considered comprised both combined effects (where the observer is able to see both the Project and one or more of the other developments from a fixed viewpoint) and sequential effects (where the observer has to move along a route to another viewpoint to see the same or different developments).
- 9.4.79 The outcomes of the inter-project cumulative effects assessment are reported in Chapter 20: Cumulative effects. The intra-project cumulative effects assessment is summarised within Chapter 20: Cumulative effects, and within Chapter 20 signposts are provided to the location of the intra-project cumulative effects assessment (where it has been possible to provide at this stage).

9.5 Study area

- 9.5.1 The study area is defined according to the sensitivity of the receiving environment and the potential effects of the Project. The methodology used to define the study area is outlined in Section 9.4: Assessment methodology. The study area for Landscape and visual is shown in PEI Report Figure 9.1: Landscape and visual study area.
- 9.5.2 The Landscape and visual study area has been more clearly defined since the EIA scoping stage. At scoping stage it was described as being offset approximately 7km from the EIA Scoping Boundary, but it was not spatially defined on a map, and did not include the most distant viewpoints identified for assessment. Subsequent changes to the Project parameters, and the associated draft Order limits have been reviewed, along with the updated ZTV, before finalising the study area for the PEI Report stage. See Chapter 2: Project description for details of the Project parameters and assumptions.
- 9.5.3 The proposed reservoir embankment is the largest, most extensive feature within the Project, with a crest elevation of 81.7m AOD. This, combined with the primary and

secondary water towers (with heights of 105.4m AOD and 99.4m AOD respectively), pumping station, T2ST infrastructure and the proposed water sports centre buildings and café which are situated on the crest of the embankment, form the key components most likely to generate the greatest visibility from the greatest distances. Despite changes to the design which have been made since scoping stage, including increases in the heights of the water towers, only relatively minor changes to the extent of the ZTV have resulted. The landscape and visual study area has been set to accommodate the most distant viewpoints and is based on a 10km offset from the outer toe of the proposed embankment. This encompasses an area similar to that assessed at scoping stage, with no material expansion of the area or changes in effects considered, but now accommodates all of the proposed viewpoints.

9.6 Baseline conditions

- 9.6.1 To assess the significance of effects arising from the Project in relation to landscape and visual, it is necessary to identify and understand the baseline environment within the study area. This provides a reference state against which any potential effects on landscape
- 9.6.2 This section outlines the existing and expected future baseline conditions for landscape and visual within the study area.

Existing baseline - Landscape

Overview of landscape baseline

- 9.6.3 This assessment has considered the key landscape receptors within the study area. This baseline description should be read in conjunction with Appendix 9.1: Project-level landscape character assessment where it is expressed in full, and also with Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape, Appendix 9.4: Viewpoint photography and visualisations, and Figures 9.2 and 9.3. Landscape Receptors are illustrated on Figure 9.16: Landscape receptors.
- 9.6.4 In summary, the landscape within the study area is generally flat and low lying and this topography is highlighted by the rising ground of the Corallian Limestone Ridge to the north and the more distinguishing features of the North Wessex Downs National Landscape to the south.
- 9.6.5 Published assessment of historic landscape character within the study area is detailed within *The Oxfordshire Historic Landscape Characterisation* (Oxfordshire County Council, 2017). Chapter 8: Historic environment of this PEI Report provides a baseline description of the historic environment of the area.
- 9.6.6 Land use within the study area — between the River Thames, the Corallian Limestone Ridge, and the foot slopes of the North Wessex Downs — has evolved significantly since the 18th century. At that time the landscape was characterised by open field systems and areas of rough ground. To the west, patterns of both piecemeal and more planned enclosure emerged, typically comprising rectilinear, straight-bounded fields. Marshland reflected the area's naturally wet conditions, while the distribution of villages and farmsteads established a settlement pattern that remains recognisable today. In the 19th century further enclosure formalised the landscape structure, elements of which still

survive. This period also introduced industrial infrastructure, including straight roads, the Wilts and Berks Canal, and the expanding railway network. These developments facilitated the growth of local industries and contributed to a more connected rural landscape. By the 21st century, much of the agricultural land had been consolidated into large-scale prairie or amalgamated enclosures, reducing field boundaries and increasing field sizes, with limited new woodland planting. Nonetheless, rural settlements — particularly their historic cores — continue to represent some of the most enduring features of Oxfordshire's historic landscape character. Today, the landscape within the vale is expansive, open and broad and is characterised by wide, large scale agricultural fields interspersed by the remaining pattern of hedgerows, small wooded copses and linear woodland corridors along watercourses, public rights of way and infrastructure corridors. The numerous watercourses, ditches and riparian vegetation, reflect the historic flood plain character of the landscape. Isolated farmsteads and associated buildings, including the occasional mill building are interspersed with the agricultural fields. Silo towers are visible features that rise up above the flat landscape. Along the east-west road between East Hanney and Steventon there are occasional farms and buildings, including the distinctive military buildings and huts at Goose Willow Estate and these features create a sense of an artificial and slightly unsettling environment.

- 9.6.7 Solar farms, located centrally within the area, are contained within hedge and tree lined fields. These, combined with the built form and straight angular field patterns and land use, add to the managed, slightly monotonous character of this part of the vale.

- 9.6.8 Broadly, the draft Order limits are spatially defined by the busy and often audible A34 dual carriageway running north-south along the eastern edge and the straight and fast moving A338 road between Frilford and Grove along the western edge. An elevated railway line is located to the south. The A415 road runs between Abingdon and Frilford to the north. These local A roads serve to provide connectivity between the smaller settlements located along them including East Hanney, Marcham, Steventon and Grove. Whilst there is some new residential growth to some of these villages, all have distinctive and historic cores, with thatched and weather-boarded architecture being plentiful.

- 9.6.9 To the east are located the larger towns of Abingdon and Didcot, and their urban characteristics are emphasised by the industrial and commercial buildings extending from their edges. However, smaller village cores remain at Drayton, Sutton Courtenay and Culham. Here, the nearby River Thames and its riparian edge creates a more pastoral landscape that can be enjoyed via the long-distance trails located along its length and which criss-cross the area.

- 9.6.10 To the north the land gently rises towards the Corallian Limestone Ridge, though less distinctively than in the south. Its' more wooded character creates a detachment from the vale to the south, although there are areas that provide intervisibility with the distant North Wessex Downs and that emphasise the extensive scale of the lower, flat contained vale. This area feels less contained, with human influences from the larger settlements of Wooton and Kingston Bagpuize and these are interspersed with ribbon commercial developments, garden centres and residential properties. Whilst the significant tree cover and arable and livestock farmland, including pigs visible in roadside fields, provide some sense of rural identity, characteristics are varied and when combined detract from any significant sense of identity. Abingdon airfield is distinctive with its grass runway, hangars and fencing. Historic settlement cores remain, such as at Marcham.

- 9.6.11 To the south, the lower chalk foot slopes of the North Wessex Downs National Landscape provide a transition to the broad clay vale from the steeply rising high chalk downs to the south. The landscape within this immediate setting is more contained and pastoral, with the rolling hills and fields balanced by woodland belts and copses nestled in the folds of the land pattern. Small distinctive, characterful historic settlements and estates are interspersed with narrow streams that run north from the higher ground of the downs. Generally, any noise, such as the drone of the A34 to the east, feels distant within this more enclosed, pastoral, natural-feeling landscape where the landform, including that of the rising downs to the south, creates a distinctive and harmonious pattern.

Landscape Receptors

- 9.6.12 In accordance with GLVIA3, the LVIA includes an assessment of effects upon defined landscape receptors. GLVIA3 defines landscape receptors as *‘aspects of the landscape resource that have the potential to be affected by a proposal’* (Landscape Institute and the Institute of Environmental Management and Assessment, 2013).
- 9.6.13 The landscape receptors selected for assessment are set out, with the levels of sensitivity assessed for each, in Table 9.15, and shown on Figure 9.16: Landscape receptors. They comprise:
- Defined landscape character areas as described in the project-level landscape character assessment, and scoped in for assessment due to potential significant effects (as presented and explained in Appendix 9.1: Project-level landscape character assessment).
 - The North Wessex Downs National Landscape, including its setting and its special qualities (presented in Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape).
 - Proposed Local Landscape Designations (as identified in the South Oxford and Vale of White Horse draft Joint Local Plan; these areas are proposed as local designations under the draft Joint Local Plan – their status therefore is currently draft). There are four such areas: Appleford to Long Wittenham, Northern Thames Valley, West Oxford Hills, and West of Wantage.

Existing baseline - Visual

Overview of visual baseline

- 9.6.14 The visual baseline is recorded in terms of the different groups of people (visual receptors) who may experience views of the Project and the nature of their existing views and visual amenity. The nature of existing views experienced by specific defined receptors / receptor groups is described in Appendix 9.3: Visual baseline. These descriptions should be read in conjunction with Appendix 9.4: Viewpoint photography and visualisations.
- 9.6.15 Figures 9.4 – 9.10 (all ZTV figures), Figure 9.11: Viewpoint and photomontage locations with ZTV, Figure 9.2: Landscape designations and key constraints, and Figures 9.14 and 9.15 (visual receptors) also support the understanding of the visual baseline.
- 9.6.16 In summary, the landscape character described in paragraphs 9.6.3 to 9.6.10 particularly the topography and openness of the lowland vale, combined with higher elevation to the north and south, affords some very long range and sensitive views within the study area. Particularly sensitive views include long range views looking south across the vale with the scarp of the North Wessex Downs in the background, and also views looking north across

the vale from within the North Wessex Downs. The importance of such views is elevated due to the North Wessex Downs' protected status as a National Landscape. Where such views are from National Trails (the Ridgeway), long-distance paths (the Vale Way,), and other PRoW and important public open spaces, their sensitivity is again particularly high.

- 9.6.17 Besides views to and from the North Wessex Downs, other particularly notable views within the study area to highlight include views from the Thames Path National Trail which passes close to the proposed intake / outfall structure, views from the Vale Way Long Distance Path, and views which make a key contribution to the sense of place and distinctive character of local communities / settlements, as highlighted in several local neighbourhood plans.
- 9.6.18 Within the study area, in addition to the extensive and relatively sparsely populated rural agricultural areas, there are also population centres with many attractive rural villages, several of which are Conservation Areas, along with the larger towns of Abingdon, Didcot, Wantage and Grove.
- 9.6.19 The study area includes a range of urban development and infrastructure which, where present in views, can sometimes detract from the otherwise largely rural visual amenity. Key detractors include:
- Major industrial developments, most notably Didcot Power Station.
 - Existing solar farms, including two within the area of the proposed reservoir, and two between the proposed Site and the North Wessex Downs National Landscape.
 - Visually prominent agricultural infrastructure such as the silo towers at Willowbrook Farm. Overhead power lines and pylons.
 - Road infrastructure - the A34 in particular, plus the A338, detract from the surrounding largely rural scene and tranquillity, with movement, noise, and light pollution.
 - Rail infrastructure, including overhead infrastructure (cables and supporting structures), from the railway running toward Didcot to the south of the proposed reservoir.
 - The urbanising influence of the four towns within the study area, i.e. Abingdon, Wantage, Grove, and Didcot, including their associated industry, light pollution and movement when they appear within long range views across the vale.

Visual receptors

- 9.6.20 As stated in Section 9.4: Assessment methodology, to ensure a proportionate approach, the level of granularity and detail at which visual receptors are considered varies, with the most sensitive receptors and valued views targeted for the most in-depth consideration. Distance from the Site is part of the strategy for this varied level of detail. Also serving a proportionate approach, receptors have been grouped together where appropriate and are expected to experience broadly similar effects. An explanation of the identification, grouping, spatial definition, and level of detail of consideration of visual receptors is provided in Appendix: 9.3 Visual Baseline and illustrated on Figures 9.14 and 9.15 (visual receptors). The key types of visual receptor considered are summarised below. They are also set out, along with the levels of sensitivity assessed for each one, in Table 9.15.
- 9.6.21 **People using linear routes:** People's visual experience whilst travelling through the landscape is transitory, therefore assessment is generally not based on fixed points, but on that transitory experience, over defined parts of each route. The types of public route considered are:

- People using National Trails, i.e. the Ridgway, and the Thames Path
- People using other long-distance paths, i.e. the Vale Way and the Oxford Green Belt Way
- People using Public Rights of Way (PRoW) of all types (i.e. footpaths, bridleways, restricted byways, and byways open to all traffic (BOATs))
- People using National Cycle Network (NCN) routes, i.e. NCN Route 5, and NCN Route 544
- People moving through the area by roads and rail – this includes people using local roads within 2km of the proposed reservoir, people using local roads within 1km of the potential solar reprovion, and people travelling by rail toward/from Didcot within the study area
- People using local permissive footpaths between Jubilee Junction and Abingdon Marina

9.6.22 **Local Communities:** LVIA is primarily concerned with public, rather than private, views; effects on residential visual amenity at an individual property level is generally not considered here, with the exception of isolated / outlying properties located particularly close to the Site. Grouping of receptors at a 'community' level allows a much more proportionate approach and considers the overall visual experience of people living and working within these areas. This assessment has therefore considered residential visual amenity within broader community-level receptors, grouped by defined settlements and, where appropriate, clusters of settlements where visual effects are expected to be broadly similar. To enable a proportionate approach, and reflecting their relative typical sensitivity, these receptors have not been considered throughout the full 10km study area, but have been targeted as set out below:

- People living and working within defined towns and villages - within 5km of the proposed reservoir embankment
- People living and working at isolated / outlying properties - within 1km of the proposed reservoir embankment and/or potential solar reprovion

9.6.23 **Other important groups:** in addition to people using linear routes and local communities, there are three other specific types of receptor that have been identified. These are:

- People visiting the Devil's Punchbowl Open Access Land within the North Wessex Downs National Landscape
- People using the South Oxfordshire Crematorium and Memorial Park
- People using the River Thames for recreational activity

Future baseline – landscape and visual

9.6.24 As set out in Chapter 4: Approach to the environmental assessment, the preliminary assessment of effects considers the likely evolution of the baseline without the implementation of the Project. Where climate change may alter future landscape and visual baseline conditions and therefore LSEs, this is discussed as part of the In-combination Climate Change Impact (ICCI) assessment which brings together all climate related impacts on aspect assessments and is presented in Appendix 18.3.

9.6.25 Summarised below are **urbanising influences** linked to national and local policy drivers that indicate an expected trend of increasing development, settlement expansion, and

infrastructure encroachment within the wider landscape context of the Project, with corresponding implications for the setting, tranquillity, and openness of the area. New housing and road infrastructure, also create potential future visual receptors.

- 9.6.26 It is noted that the urbanising influences considered to sit within the future baseline for the Landscape and visual assessment include specific development proposals; the criteria for such developments falling under the future baseline, as opposed to projects considered under the inter-project cumulative effects assessment, is set out here. Developments are included in the future baseline where they are:
- Allocated in adopted or emerging Local Plans, and either:
 - Have planning consent (outline or full) in place, or
 - Are subject to such an advanced degree of policy commitment, national programme backing (e.g. Garden Villages/Towns), or infrastructure phasing certainty that their delivery within the assessment time scale is reasonably assured.
- 9.6.27 In addition, strategic transport infrastructure projects are included in the future baseline where they are defined under spatial policy commitments within the Local Transport and Connectivity Plan (2022–2050) (Oxfordshire County Council, 2022) and Local Plan safeguarding policies.
- 9.6.28 Developments are treated as reasonably foreseeable future projects within the cumulative effects assessment where they are:
- Established within local, but not national, strategies / policies
 - Allocated in adopted or emerging Local Plans but not yet consented
 - Not formally part of the same masterplan, delivery framework, or phasing as the future baseline projects
- 9.6.29 Developments that are included under the urbanising future baseline are:
- **Dalton Barracks Garden Village:** a strategic housing-led development allocated within both the adopted and draft local plans, and part of the government-backed 'Garden Villages' programme, it does not yet have planning permission, but benefits from a high degree of policy certainty, with an adopted masterplan framework and long-term commitment to delivery. The development could see construction of up to 5,250 homes over several decades, resulting in a new urban edge to the north-west of Abingdon, altering the surrounding landscape character and increasing built-form visibility in the wider area.
 - **Didcot Garden Town:** a government-designated Garden Town, forming a key growth area for Oxfordshire, with its delivery guided by the adopted Didcot Garden Town Masterplan and Delivery Plan (South Oxfordshire District Council, 2017), which establishes the spatial vision, objectives, and phasing for growth in and around Didcot. It comprises a programme of coordinated housing, employment, and infrastructure growth, supported by both the adopted and emerging local plans. Significant elements, including Great Western Park, Valley Park, and north-east Didcot, are already consented and under construction, providing clear certainty for inclusion within the future baseline.
 - **Consented Grove Housing developments:** Grove Airfield is a consented development, including outline planning permission for 2,500 homes, employment land, schools, local

centres, and open space. Monks Farm (North Grove) is a separate consented site, adjacent to but not part of the Grove Airfield development. Both developments already have phases under construction, already changing the local landscape.

- **Crab Hill (north-east of Wantage):** a strategic housing-led allocation within the adopted and emerging local plans. It benefits from outline planning permission for around 1,500 homes plus schools, local centres, and open space. With construction already underway, it is appropriately included within the future baseline.
- **Land East of Kingston Bagpuize:** a strategic allocation within the adopted and emerging local plans, with outline planning consent in place for up to 660 homes, an extra care facility, primary school, and local centre. With delivery programmed to commence from 2027, it is included within the future baseline.
- **Safeguarded Routes for Abingdon and Marcham Movement Corridors:** the Local Transport and Connectivity Plan 2022–2050 (Oxfordshire County Council, 2022), along with both the adopted and draft local plans, identify long-term aspirations for highway improvements to relieve congestion on the A415 corridor. Although no schemes are currently committed, the safeguarding of potential route alignments suggests that new transport infrastructure could emerge within the study area over several decades, with associated effects on landscape character, tranquillity, and visual amenity.
- **Sutton Courtenay Landfill:** an operational landfill site with extant planning permission allowing continued deposition of non-hazardous waste, clay extraction, surcharging of the existing landfill, temporary pulverised fuel ash storage, and associated activities. Operations are subject to amended phasing and conditions extending activity over the assessment period, followed by landscape restoration. The permitted ongoing operations form part of the future baseline due to their consented and actively managed status.
- **East Hanney Solar Farm:** a 63Ha proposed solar farm with battery storage, which received planning consent in February 2024, this development lies immediately to the south of the proposed solar re-provision under this project.

9.6.30 Summarised below are several potential **naturalising influences** linked to national and local policy drivers for environmental enhancement and nature recovery, which are expected to counterbalance or modify the impacts of urbanisation described above on the future baseline. Together, these policies support a long-term trend toward a more mosaic-like, ecologically rich and visually diverse rural landscape, potentially altering perceptions of openness, enclosure, and naturalness within what is currently an intensively farmed and relatively open area. Key drivers of the naturalising trend include:

- **Environment Act 2021 & Biodiversity Net Gain (BNG):** The legal requirement for new developments to deliver at least 10% BNG is expected to result in widespread habitat creation, enhancement of existing ecological networks, and visual softening of new development edges through landscape-led design.
- **Environmental Land Management Schemes (ELMs):** The post-Brexit transition away from the EU's Common Agricultural Policy toward new agri-environment schemes (notably the Sustainable Farming Incentive, Local Nature Recovery, and Landscape Recovery tiers) is expected to influence farming practices across the SESRO study area over the long term. These incentives encourage hedgerow planting, riparian buffers, low-input grassland, and woodland creation, supporting a more visually diverse and ecologically robust landscape.

- **Emerging Local Nature Recovery Strategy (LNRS):** Oxfordshire is preparing its Local Nature Recovery Strategy as required under the Environment Act 2021. This will identify priority habitats and spatial opportunities for restoration, which may result in targeted greening, improved connectivity between habitats, and wider landscape-scale interventions within the SESRO study area.
- **Oxfordshire Environmental and Spatial Policy Framework Supporting Nature Recovery:** *Oxfordshire Strategic Vision for Long-Term Sustainable Development* (Oxfordshire Growth Board, 2021), *Oxfordshire's Nature Recovery Network and Strategic Environmental Strategy* (Oxfordshire County Council, 2021), *Oxfordshire Plan 2050 (Regulation 18)* (Oxfordshire County Council, 2023). These strategies collectively signal a clear policy direction toward integrated nature recovery, environmental enhancement, and sustainable land-use planning within the study area.
- **Catchment-based approaches and floodplain restoration:** *Catchment Based Approach (CaBA)* (Department for Environment, Food & Rural Affairs (Defra), 2020), and *Thames River Basin Management Plan* (Environment Agency, 2015), provide an emphasis on using nature-based solutions such as wetland creation and floodplain reconnection to manage flood risk and improve water quality.
- **Oxfordshire Tree and Woodland Strategy:** *Oxfordshire Tree and Woodland Strategy* (Oxfordshire County Council, 2020) encourages the expansion of tree cover through the planting of new woodland, shelterbelts, and hedgerows, contributing positively to landscape character and visual interest.

9.6.31 Overall, the future landscape and visual baseline is likely to be shaped by both urbanising and naturalising pressures. While planned and potential housing and infrastructure development, such as at Dalton Barracks Garden Village, Didcot Garden Town, and ongoing housing development at the north of Grove may encroach slightly on the sense of ruralness in some areas, national and local environmental policy trends also point toward a more complex, ecologically rich, and visually soft environment.

Landscape and visual receptors considered in the Preliminary Assessment

9.6.32 The landscape and visual receptors that have been considered in the preliminary assessment for the PEI Report are listed in Table 9.15. In some cases, individual receptors have been grouped where anticipated effects and mitigation are likely to be very similar. The value, susceptibility and sensitivity of each receptor is defined in the table. The table also identifies the Effect ID(s) and Area ID relevant to each receptor. The Effect IDs are unique identifiers of each effect assessed (discussed further in Appendix 9.5: Preliminary assessment of effects for Landscape and visual), whilst the area ID relates to the spatial extent of the receptor assessed.

9.6.33 Figures 9.14, 9.15 and 9.16 show the locations of the receptors that have been spatially defined for the preliminary assessment for the PEI Report, with relevant Area IDs noted. Further data gathering to inform the ES will inform any revisions to the defined spatial extents of receptors.

Table 4.1 in Appendix 9.1: Project-level landscape character assessment and Table 5.1 in Appendix 9.3: Visual baseline list the landscape and visual receptors respectively, with the addition of commentary justifying the sensitivity category assigned, reference to the viewpoints associated with each receptor, plus in Table 5.1 the baseline description for visual receptors.

Table 9.15 Receptors assessed in the preliminary assessment

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
Landscape receptors (Area IDs shown in Figure 9.16)					
National designated landscapes					
North Wessex Downs National Landscape	Very High	Very High	Very High	LVIA-242, LVIA-260	EIA-194
Locally designated landscapes (LLD)					
Appleford to Long Wittenham LLD	High	High	High	LVIA-243, LVIA-261	EIA-195
Northern Thames Valley LLD	High	Very High	Very High	LVIA-244, LVIA-262	EIA-196
West of Wantage LLD	High	High	High	LVIA-246, LVIA-264	EIA-198
West Oxford Hills LLD	High	Very High	High	LVIA-245, LVIA-263	EIA-197
Project-level landscape character areas					
1A Wessex Downs Open Chalk Escarpment and Upper Slopes	Very High	Very High	Very High	LVIA-230, LVIA-247	EIA-177
6A Wessex Downs Chalk Escarpment Foothills	Very High	High	Very High	LVIA-231, LVIA-248	EIA-178
7D Oxford South Ridge Hilltops	High	High	High	LVIA-232, LVIA-249	EIA-179
8A Faringdon to Frilford Ridge Slope	Medium	Medium	Moderate	LVIA-233, LVIA-250	EIA-180
8B Frilford to Sandford Ridge Slope	Medium	Medium	Moderate	LVIA-234, LVIA-251	EIA-181
8C Cumnor to Abingdon Ridge Slope	Medium	Medium	Moderate	LVIA-235, LVIA-252	EIA-182
9B Wantage to Didcot Vale Edge Slopes	High	High	High	LVIA-236, LVIA-253	EIA-183
9C Milton Hill to Didcot Vale Edge Slopes	Medium	Medium	Moderate	LVIA-237, LVIA-254	EIA-184
10A Sinodun Lower Vale Hills	Very High	Very High	Very High	LVIA-224, LVIA-255	EIA-185
12B Western Middle Vale	High	Medium	Moderate	LVIA-225, LVIA-256	EIA-186
13A Ock Lower Vale	Medium	Medium	Moderate	LVIA-226, LVIA-257	EIA-187
13B Abingdon-Didcot Lower Vale	Medium	Medium	Moderate	LVIA-227, LVIA-258	EIA-188

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
13C East Thames Lower Vale	Very High	Medium	High	LVIA-228, LVIA-259	EIA-189
14D Abingdon to Kennington Thames Lower Valley	High	Medium	High	LVIA-229, LVIA-269	EIA-540
Abingdon-on-Thames townscape character area	High	Medium	High	LVIA-238, LVIA-265	EIA-244
Didcot townscape character area	Medium	Low	Moderate	LVIA-239, LVIA-266	EIA-245
Wantage townscape character area	High	Medium	High	LVIA-240, LVIA-267	EIA-246
Grove townscape character area	Medium	Medium	Moderate	LVIA-241, LVIA-268	EIA-295
Visual receptors (Area IDs shown in Figures 9.14 and 9.15)					
People using national trails					
People using The Ridgeway, between the A34 and A338	Very High	Very High	Very High	LVIA-7, LVIA-130	EIA-199
People visiting the Lord Wantage Monument on The Ridgeway	Very High	Very High	Very High	LVIA-8, LVIA-134	EIA-200
People using The Ridgeway between the A338 and the western edge of the study area	Very High	Very High	Very High	LVIA-10, LVIA-135	EIA-201
People using The Ridgeway, east of the A34	Very High	Very High	Very High	LVIA-12, LVIA-137	EIA-202
People using The Thames Path, between Abingdon (Nags Head bridge) and Culham (Tollgate Road bridge)	High	Very High	Very High	LVIA-13, LVIA-138	EIA-203
People using long-distance paths					
People using the Vale Way long distance footpath, between Abingdon and Drayton Road	High	Very High	High	LVIA-14, LVIA-139	EIA-204
People using the Vale Way, at Steventon	High	Very High	High	LVIA-16, LVIA-141	EIA-206
People using the Vale Way, between Drayton Road and Milton	High	Very High	High	LVIA-15, LVIA-140	EIA-205
People using the Vale Way, between Steventon and West Hendred	High	Very High	High	LVIA-17, LVIA-142	EIA-207

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
People using the Vale Way, between West Hendred and Wantage	High	Very High	High	LVIA-18, LVIA-143	EIA-208
People using the Oxford Green Belt Way between Cumnor and Radley	High	Very High	High	LVIA-20, LVIA-144	EIA-296
People using PRoWs					
People using PRoW - close to The Ridgeway within the North Wessex Downs National Landscape	Very High	High	High	LVIA-21, LVIA-145	EIA-210
People using PRoW within, close to and up to the boundary of the North Wessex Downs National Landscape	High; Very High	High	High	LVIA-22, LVIA-146	EIA-211
Specific viewpoint from a memorial bench along PRoW 403/23/10 within the North Wessex Downs National Landscape	Very High	High	Very High	LVIA-23, LVIA-147	EIA-212
People using PRoW between the railway line and the North Wessex Downs National Landscape	High	High	High	LVIA-24, LVIA-148	EIA-213
People using PRoW Bridleways in / around Drayton	Medium	High	High	LVIA-25, LVIA-149	EIA-214
People using PRoW, southwest corner of site, between railway and A338	Medium	High	High	LVIA-26, LVIA-150	EIA-215
People using network of PRoW in Wooton / Boars Hill area, on the Corallian Limestone Ridge	Medium	High	High	LVIA-27, LVIA-151	EIA-216
People using PRoW around Little Wittenham within the North Wessex Downs National Landscape	Very High	Very High	Very High	LVIA-28, LVIA-152	EIA-217
People using PRoW in the Hinton Waldrist / Kingston Hill area, on the Corallian Limestone Ridge	Medium	High	High	LVIA-122, LVIA-219	EIA-285
People using PRoW in the Kingston Bagpuize area, on the Corallian Limestone Ridge	Medium	High	High	LVIA-29, LVIA-153	EIA-218
People using PRoW within the area of the proposed reservoir	Medium	High	High	LVIA-30, LVIA-154	EIA-219

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
People using PRoW in and around Garford, and within 1km of potential solar farm reprovision	Medium	High	High	LVIA-31, LVIA-155	EIA-221
People using PRoW to the south of Marcham	Medium	High	High	LVIA-281, LVIA-282	EIA-634
People using National Cycleways					
People using NCN Route 5 - Radley to Didcot	Medium	Medium	Moderate	LVIA-32, LVIA-157	EIA-223
People using NCN Route 544 - Wantage to Didcot	Medium	Medium	Moderate	LVIA-33, LVIA-158	EIA-224
People using permissive footpaths					
Permissive footpaths between Jubilee Junction and Abingdon Marina	Medium	High	High	LVIA-220, LVIA-123	EIA-286
People travelling on roads within 2km of the proposed reservoir embankment					
People travelling by road on the A338, north of East Hanney	Medium	Low	Low	LVIA-111, LVIA-206	EIA-251
People travelling by road on Grove Park Drive	Medium	Medium	Moderate	LVIA-112, LVIA-207	EIA-252
People travelling by road on the A34	Medium	Low	Low	LVIA-113, LVIA-208	EIA-253
People travelling by road on Steventon Road	Medium	Low	Low	LVIA-114, LVIA-209	EIA-254
People travelling by road through Garford	Medium	Medium	Moderate	LVIA-115, LVIA-210	EIA-255
People travelling along the A415 (Frilford Road / Marcham)	Medium	Low	Low	LVIA-116, LVIA-211	EIA-259
People travelling by road on Hanney Road	Medium	Low	Low	LVIA-128, LVIA-212	EIA-260
People travelling by road on B4017	Medium	Medium	Moderate	LVIA-129, LVIA-213	EIA-261
People using local roads within 1km of potential solar farm reprovision	Medium	Medium	Moderate	LVIA-132, LVIA-156	EIA-221
People travelling by rail					
People travelling by rail toward/ from Didcot	Medium	Low	Low	LVIA-118, LVIA-214	EIA-263

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
Local communities: villages within 5km of proposed reservoir embankment					
People living and working within Ardington, East and West Lockinge	Very High	High	High	LVIA-53, LVIA-170	EIA-236
People living and working within Charney Basset	High	High	High	LVIA-126, LVIA-222	EIA-288
People living and working within Culham	High	High	High	LVIA-48, LVIA-165	EIA-231
People living and working within Denchworth	High	High	High	LVIA-35, LVIA-160	EIA-226
People living and working within Drayton	High	High	High	LVIA-50, LVIA-167	EIA-233
People living and working within East and West Hendred	Very High	High	High	LVIA-54, LVIA-171	EIA-237
People living and working within East Hanney	High	High	High	LVIA-124, LVIA-159	EIA-225
People living and working within Frilford	Medium	High	High	LVIA-46, LVIA-163	EIA-229
People living and working within Garford	High	High	High	LVIA-45, LVIA-162	EIA-228
People living and working within Harwell	High	High	High	LVIA-56, LVIA-173	EIA-239
People living and working within Kingston Bagpuize, Fyfield & nearby villages on the Corallian limestone ridge	High	High	High	LVIA-44, LVIA-161	EIA-227
People living and working within Lyford	High	High	High	LVIA-58, LVIA-175	EIA-241
People living and working within Marcham	High	High	High	LVIA-47, LVIA-164	EIA-230
People living and working within Milton	Medium	High	High	LVIA-55, LVIA-172	EIA-238
People living and working within Milton Heights / Milton Hill	Medium	High	High	LVIA-52, LVIA-169	EIA-235
People living and working within West Hanney	High	High	High	LVIA-125, LVIA-221	EIA-287
People living and working within Shippon and Dalton Barracks (Military base / likely future Garden Village)	Medium	High	High	LVIA-57, LVIA-174	EIA-240
People living and working within Steventon	High	High	High	LVIA-51, LVIA-168	EIA-234
People living and working within Sutton Courtenay	High	High	High	LVIA-49, LVIA-166	EIA-232

Receptor Name	Value	Susceptibility	Sensitivity	Effect-ID(s)	Area-ID
Local communities: towns within 5km of proposed reservoir embankment					
People living and working within Abingdon-on-Thames (site-facing edges)	High	High	High	LVIA-104, LVIA-176	EIA-244
People living and working within Didcot (site-facing edges)	Medium	High	High	LVIA-105, LVIA-177	EIA-245
People living and working within Wantage (site-facing edges)	High	High	High	LVIA-106, LVIA-201	EIA-246
People living and working within Grove (site-facing edges)	Medium	High	High	LVIA-131, LVIA-223	EIA-295
Local communities: isolated individual properties within 1km of proposed reservoir embankment					
Residents at Bradfield Barn, Old Man's Lane (SW area of Site)	Medium	High	High	LVIA-107, LVIA-202	EIA-247
Residents at Chadwick's Farm (nr potential solar farm reprovion)	Medium	High	High	LVIA-127, LVIA-218	EIA-272
Residents at Marcham Mill (NE area of Site)	Medium	High	High	LVIA-109, LVIA-204	EIA-249
Residents at The Views (nr Steventon)	Medium	High	High	LVIA-110, LVIA-205	EIA-250
Residents at Venn Mill (NW area of Site)	Medium	High	High	LVIA-108, LVIA-203	EIA-248
Other important receptors in the study area					
People visiting the Devil's Punchbowl Open Access Land within the North Wessex Downs NL	Very High	Very High	Very High	LVIA-119, LVIA-215	EIA-264
Users of, and people working at, the South Oxfordshire Crematorium and Memorial Park	Medium	Medium	Moderate	LVIA-120, LVIA-216	EIA-265
People using the River Thames for recreational activity	High	High	High	LVIA-121, LVIA-217	EIA-266

9.7 Project parameters, assumptions and limitations

- 9.7.1 Chapter 2: Project description relies on the use of relevant parameters and assumptions to allow flexibility in the final design of the Project, in accordance with the Rochdale envelope approach (Planning Inspectorate, 2018). This preliminary assessment for the Landscape and visual aspect uses the parameters and assumptions outlined in Chapter 2: Project description as well as additional parameters and assumptions specific to this aspect to ensure that the reasonable worst-case scenario is considered within this assessment.

Project parameters and assumptions specific to this aspect

- 9.7.2 Table 9.16 identifies the Project parameters, components and activities relevant to this assessment where assumptions specific to the preliminary Landscape and visual assessment have been generated.

Table 9.16 Project parameters and assumptions forming the basis of assessment

Project parameter / component / activity	Assumption (basis of assessment)
Reservoir embankment	The wave protection is assumed to be a concrete wall for the top section of the embankment and open stone asphalt at lower levels, to account for worst-case for visual amenity.
Reservoir embankment	The slopes of the outer face of the embankment are assumed to be 1:9 gradient as a reasonable and typical average, noting there will be some localised variations, which have been factored into the assessment. See cross sections through embankment in Chapter 2: Project description for clear representation of scale and profile of embankment.
Access tracks	Access tracks are assumed to be asphalt.
River tunnels	The area above the tunnel will remain as existing or be reinstated to match existing conditions.
Buildings and structures	All buildings and structures are assumed to have the maximum parameter dimensions as set out in Chapter 2: Project description. The primary and secondary reservoir towers are noted to be taller than the reservoir embankment. Buildings and structures proposed on the crest of the reservoir embankment are limited to one café, and a series of buildings associated with the water sports centre. The T2ST infrastructure includes a water tower, the dimensions of which are assumed to be, and have been shown in visualisations as, 10m x 15m (width / breadth) x 26m (above ground level) with the highest point being 82mAOD (i.e. marginally higher than the maximum height of reservoir embankment crest, which is assumed to be 81.7mAOD, including limits of deviation). Other buildings and structures are noted to have roof levels / maximum heights set lower than the top of the embankment.
Solar on structures	Assume solar Photovoltaic (PV) on T2ST Water Treatment Works, all building cluster roofs and car ports at the recreational centre and nature education centre for 400 and 100 spaces respectively.

Project parameter / component / activity	Assumption (basis of assessment)
Ground-mounted solar	A maximum height of 4.5m for the solar panels has been assumed. It is assumed that space for landscape and ecological improvements (such as linear woodland and wide hedgerows) would be included around the edges of the potential solar farm re-provision area, which will provide visual screening.
Landscape mitigation	Embedded mitigation, such as earthworks and planting around proposed structures and features, will be undertaken to help integrate these into the surrounding landscape context as described in Chapter 2: Project description, and within Appendix 2.2: Draft commitments register.
Habitat creation areas	As described in Chapter 2: Project description, 515Ha of woodland and grassland will be created and enhanced within the draft Order limits; Figure 2.1: Project overview indicates the potential locations being considered for this. This quantum of habitat creation and enhancement serves as landscape and visual (as well as ecological) mitigation and, although the exact details remain uncertain, is considered embedded design mitigation.
Timing of planting	Whilst no areas of advanced planting within the Core Project Area are assumed at PEI Report stage, it is assumed that habitats in the wider draft Order limit areas, which include large scale planting of woodland and scrub, will where possible be undertaken early within the construction programme, as stated in Chapter 2: Project description. It is assumed therefore that some visual screening and landscape integration will be achieved both during construction and from the start of the operation phase. It is assumed this planting will be establishing during the construction phase and will deliver some visual screening and landscape integration both during construction and from the start of the operation phase. It is assumed that planting and seeding of the outer face of the embankment will have been done before the very end of the construction phase and will be green in appearance from the start of the operation phase.
Species mix	Proposed planting will consist of a variety of species including native deciduous species selected to: suit local conditions; be appropriate to the character of the area; and support biodiversity.
Lighting	New permanent lighting will be kept to a minimum, with the majority of areas unlit, and lighting limited to where there is a clear functional or safety requirement. Existing unlit junctions will remain unlit and existing lighting on highways will not increase. Similarly, construction phase lighting will be kept to a minimum and will be dark-sky considerate.
Nature Education Centre - Observation tower	The maximum height of the observation tower at the Nature Education Centre will be 20m above ground level (including limits of deviation) which will not exceed the maximum embankment crest height.
Construction working hours	Core working hours are as set out in Chapter 2: Project description. There is a range of activities which require operations outside of core working hours, therefore it is assumed there will be regular periods of

Project parameter / component / activity	Assumption (basis of assessment)
	24-hour working, with limited activities potentially extending to 7 days a week, throughout the construction phase.

Assessment assumptions and limitations

9.7.3 This section identifies the aspect-specific assumptions and limitations for the preliminary Landscape and visual assessment including those related to the availability of data to inform the assessment and assumptions used in the methodology. The assessment of effects in this chapter is preliminary and will be revisited in the ES considering data available at that time and the design taken forward for submission. Assessments reported within with PEI Report chapter are considered a reasonable ‘worst case’ as a precautionary approach has been taken where design, construction or baseline information is incomplete. Nevertheless, the preliminary assessment is considered sufficiently robust to enable consultees to understand the likely significant environmental effects of the Project, based on current design information and understanding of the baseline environment. Gaps in information identified within the PEI Report will be considered and addressed as part of the assessment during the production of the ES, as noted in Section 9.10: Next steps. Assumptions and limitations identified in relation to the preliminary Landscape and visual assessment include:

- The landscape evidence base underpinning the South Oxfordshire and Vale of White Horse Joint Local Plan are currently regarded as draft and therefore not available from the Council for use as GIS data. Specifically, data from 2024 for proposed Local Landscape Designations, tranquillity and dark skies (although available to view online, and therefore referred to and considered as part of this assessment) could not be made available to incorporate into figures for the PEI Report; subject to future availability, it is intended to include this data in figures for the ES. As an alternative, Figures 9.12 and 9.13 have been provided at this stage to show the patterns of dark skies and tranquillity respectively across the study area using older data (from 2016 and 2007 respectively) from the Campaign to Protect Rural England (CPRE). The patterns shown by this CPRE data are fundamentally the same as the patterns described by the 2024 data.
- The North Wessex Downs National Landscape Management Plan and Landscape Character Assessment are in the process of being updated and their updated iterations have not been able to be considered as part of this PEI Report. The current versions have been referred to for the purposes of the PEI Report and the updated versions will be considered at ES stage subject to their availability.
- The assessment has been based on the information presented in Chapter 2: Project description, and the indicative site layout shown on Figure 2.1: Project Overview. It is based on the maximum parameters of the Project, taking account of embedded mitigation, to represent a reasonable worst-case.
- The preliminary assessment has been undertaken with reference to the baseline conditions recorded at the time of undertaking initial winter and summer fieldwork surveys between January – June 2025. All fieldwork has been, and will continue to be, undertaken from publicly accessible locations. Professional judgement has been used to assess views from private land or residential buildings, aided by maps, aerial photography and fieldwork observations.

- A proportionate approach has been taken to assessing visual receptors. Rather than assessing every individual visual receptor within the ZTV extents, receptors have been grouped, where appropriate. The greatest adverse effect within the group has been assessed with regards to size and scale of change, informed by representative viewpoints. In adopting this approach, this assessment considers the most likely worst-case outcome for the receptors within the group and reports this as a single effect in the assessment.
- For the construction phase assessment, the assessment of effects is based on a scenario in winter during peak activity of the construction phase.
- The operational assessment has been based on conditions during the winter of year 1 of operation, which assumes a worst-case scenario in terms of likely visibility.
- The development of the Masterplan is underway and will be developed further as the Project design progresses, including in response to the statutory consultation in autumn 2025. Where the details of proposed mitigation measures are not yet fixed, then it has been assumed that planting will be provided to assist with integrating the structures into the landscape and to provide visual screening.
- The assessment is based on professional judgement and takes into account both the adverse and beneficial contribution that new development can have upon the landscape and visual environment.
- The extent of the Project components modelled in the ZTV analysis and shown in the wireline and colour massing visualisations (presented in Appendix 9.4: Viewpoint photography and visualisations) are limited to the parameters of the largest and most visible components of the Project, comprising: the proposed reservoir embankments, the intake/ outfall structure, the reservoir towers and pumping station, the T2ST infrastructure, the proposed buildings located on the crest of the embankment (i.e. the water sports centre, and the café on the crest), and the potential solar re-provision. Other components with less vertical elevation such as: smaller buildings and structures, car parks, roads and footpaths, watercourse diversions, the proposed water channel to be provided for the Wilts and Berks Canal, floating solar panels, and proposed landscape planting, are not included. Whilst these elements have still been considered in the assessment and have been represented illustratively in three photorealistic visualisations (also presented in Appendix 9.4: Viewpoint photography and visualisations), the assessment at ES stage will provide a greater level of visual representation of this finer grain of detail.
- No consideration has been given to the potential visual effects of reservoir drawdown at this stage. Linked to the above point, with more detailed visual analysis tools and photomontages at ES stage, it will be possible to consider the extent to which reservoir draw down in summer months will be apparent in views and might influence visual effects.
- At this preliminary stage design information on proposed lighting is limited and very high level, and a precautionary approach has therefore been adopted for assessment of effects.
- No glint and glare study has been produced at this PEI Report stage. The need for this will be reviewed for the ES stage in relation to any proposals for solar panels.
- It has not yet been possible to include both winter and summer baseline views for all viewpoint photography, due to some logistical issues including availability of land access and nesting birds. These gaps will be filled at the ES stage, subject to land

access. Of the defined viewpoints, seasonal photography is missing or incomplete at twelve locations.

9.8 Embedded design mitigation and standard good practice

- 9.8.1 As described within Chapter 4: Approach to the environmental assessment, identified embedded design (primary) mitigation and standard good practice (tertiary) measures are assumed to be applied within this preliminary assessment, to reduce the potential for environmental effects.
- 9.8.2 Embedded design mitigation identified for the Project at this stage are noted in Chapter 2: Project description. These, and standard good practice measures to be applied, are described in greater detail within the Draft commitments register in Appendix 2.2. In addition, the Project-level landscape character assessment has identified key characteristics and valued qualities for each character area and drawn these into project-specific design guidance to assist in the development of the design.
- 9.8.3 Table 9.17 and Table 9.18 list the embedded design mitigation and standard good practice measures applicable to the preliminary Landscape and visual assessment during construction and operation respectively, including the unique commitment IDs that relate to the Draft commitments register (where further detail on each can be referred to). The tables also state the purpose of each mitigation and the applicable securing mechanisms.

Table 9.17 Construction: Relevant embedded design mitigation and standard good practice measures, their purpose and the securing mechanisms

Embedded design mitigation or standard good practice measure (unique commitment ID)	Purpose of mitigation measure	Indicative securing mechanism
Design the Project to reduce the need to import material as far as practicable (ED-04)	To reduce landscape and visual effects by reducing construction traffic and temporary works associated with large scale material import.	Under the terms of the DCO
Use of rail to transport bulk construction materials, if practicable (ED-05)	To reduce landscape and visual effects by maximising more visually discreet use of railway (compared to use of local road network)	Under the terms of the DCO
Provision of Project Priority Areas for Biodiversity (ED-27)	To reduce landscape and visual effects by retaining, reinforcing and expanding structural landscape planting, softening or limiting views of the development during and following construction.	Under the terms of the DCO
Standard good practice measures to protect trees during construction (SGP-11)	To reduce landscape and visual effects by safeguarding the retention of existing trees, thus maintaining existing elements of landscape fabric and character, whilst softening or limiting views of the development during and following construction.	CoCP
Standard good practice measures for establishment	To reduce landscape and visual effects by optimising the success and rate of establishment of new planting which, as it develops, will soften, filter and	Under the terms of the DCO

Embedded design mitigation or standard good practice measure (unique commitment ID)	Purpose of mitigation measure	Indicative securing mechanism
of trees and other planting (SGP-12)	screen views of the development during and following construction, integrating it into the wider landscape.	CoCP
Good practice measures for protecting landscape and visual receptors during construction (SGP-13)	To reduce landscape and visual effects through sensitive planning, sequencing, siting and design of construction activities, that limits the visibility of construction to surrounding areas.	Under the terms of the DCO
Land that is only required temporarily during construction to be reinstated (SPG-34)	To reduce landscape and visual effects by reducing the physical and visual footprint of construction.	Under the terms of the DCO
Reduce light spill from construction (SGP-51)	To reduce landscape and visual effects by minimising impacts on the night skies from construction light spill.	CoCP

Table 9.18 Operation: Relevant embedded design mitigation and standard good practice measures, their purpose and the securing mechanism

Embedded design mitigation	Purpose of the mitigation measure	Indicative securing mechanism
Provision of Project Priority Areas for Biodiversity (ED-27)	To reduce landscape and visual effects by retaining, reinforcing and expanding structural landscape planting, softening or limiting views of the development during and following construction	Under the terms of the DCO
Design and establishment of planting, habitats, and/or landform to help control, limit, soften and filter views of new infrastructure (ED-57)	To reduce landscape and visual effects by maximising opportunities for soft landscape elements to control, limit, soften and filter views of new infrastructure.	Under the terms of the DCO
Landscape-led design that responds to landscape character, provides a sense of place and identity, ecological resilience and integrates into the wider landscape setting (ED-58)	To reduce landscape and visual effects by ensuring new infrastructure is integrated into the wider landscape setting, and the overall masterplan responds sensitively to landscape character, sense of place and identity.	Design Principles
Design to reduce adverse effects on the North Wessex Downs National Landscape (ED-59)	To reduce landscape and visual effects by ensuring that the design responds sensitively to the character and special qualities of the North Wessex Downs National Landscape.	Design Principles

Embedded design mitigation	Purpose of the mitigation measure	Indicative securing mechanism
Design project and lighting strategy to reduce light spill from permanent facilities (ED-60)	To reduce landscape and visual effects by reducing impacts on the night skies from light spill from permanent facilities.	Under the terms of the DCO
Standard good practice measures for establishment of trees and other planting (SGP-12)	To reduce landscape and visual effects by optimising the success and rate of establishment of new planting which, as it develops, will soften, filter and screen views of the development during and following construction, integrating it into the wider landscape.	Under the terms of the DCO CoCP

9.9 Preliminary assessment of likely significant effects

Introduction

- 9.9.1 This section summarises the findings of the preliminary assessment of effects for landscape and visual amenity, focusing on key effects that are initially anticipated to be 'significant', be they adverse, beneficial or neutral. The judgement of significance has been made assuming that embedded design mitigation and standard good practice mitigation relevant to landscape and visual amenity is applied (these are noted in Table 9.17 and Table 9.18 and provided in detail in the Draft commitments register in Appendix 2.2). Nevertheless, the assessment assumes that additional mitigation is not yet applied, as the precise nature and extent of any additional mitigation measures is not confirmed at this stage in the EIA process. As a result, consideration of residual effects (those that remain after the implementation of *all* mitigation, including additional mitigation) has not been completed for the PEI Report.
- 9.9.2 As noted in paragraphs 9.1.6 and 9.1.7, assessments reported within this PEI Report chapter are considered a reasonable 'worst case' as a precautionary approach has been taken. Where initial likely significant effects are identified at this stage, these may ultimately be determined as not significant in the ES once data gaps are addressed, and the design and mitigation are further developed. The next steps for the Landscape and visual amenity assessment, including further exploration of relevant additional mitigation, are set out in Section 9.10: Next steps.
- 9.9.3 Appendix 9.5: Preliminary assessment of effects for Landscape and visual, sets out the preliminary assessment of effects, receptor by receptor, for construction and operation phases respectively. The appendix is split into tables that list effects that are initially anticipated to be significant, and tables that list effects that are not anticipated to be significant. The tables identify the following for each effect:
- Receptor name, the Effect ID (a unique identifier for each effect), and sensitivity category
 - Project components and activities giving rise to the effect
 - Relevant embedded mitigation and standard good practice mitigation (with unique Commitment ID, which relates to Appendix 2.2: Draft commitments register)

- Magnitude of impact category and narrative
- Initial category of effect significance, including whether it is adverse, beneficial or neutral (taking account of embedded design mitigation and standard good practice mitigation)
- Description and duration of the effect and
- Any additional mitigation and monitoring identified at this stage (with unique Additional Mitigation ID to enable cross reference to the measures noted in Section 9.10: Next steps)

9.9.4 Additional discussion is also provided in this section on key findings related to a number of specific aspects and themes, which are: effects on night skies, effects on the North Wessex Downs National Landscape, the Arboricultural Impact Assessment, and tree losses and emerging planting strategies.

Summary of likely significant construction effects

9.9.5 This section summarises and discusses the construction effects that are initially anticipated to be 'significant' through the preliminary assessment of landscape and visual effects. It identifies the key causes of significant effects, highlighting common issues and scenarios which have been found to be determining factors in generating significant effects; it also describes the spatial distribution of significant effects, highlighting the effect of distance whilst acknowledging the large scale of the Project.

Key potential causes of construction effects:

9.9.6 Chapter 2: Project description explains the construction components and activities for the Project. Key construction effects on landscape character and visual amenity may result from the following:

- General construction activities and machinery, introduction of temporary compounds, haul roads, construction traffic, rail sidings, stockpiles, fencing and signage which would temporarily increase the human influence and perception of built development. These causes of effect would be most likely to be perceptible for closer receptors; for distant receptors (beyond approximately 5km), this type of detail of construction activity is, generally, much less likely to be perceived.
- Excavation and the appearance of the extensive proposed areas of earthworks, which might be expected to be visible as a brown streak or line within a relatively green rural landscape (noting that the colours in the landscape do also change seasonally, with agricultural fields adding yellow and brown tones, and winter trees and woodlands also adding browner tones). These effects may be perceptible for closer, as well as more distant, receptors. At greater distances (beyond approximately 5km), the effect of foreshortening can be expected to limit the visibility of the earthworks to a thin line which, in particularly distant views, may not be noticeable despite the large scale of the Project, with potential colour contrasts becoming much lower in the haze of the distance.
- Construction lighting, particularly during winter evenings, and particularly in relation to the darker skies on the western side of the Project area, is a key consideration in all construction effects.

Key likely significant construction effects

- 9.9.7 Whilst receptor sensitivity and the specific nature of effects are always critical, distance between receptors and the Project has a clear influence on landscape and visual effects, as indicated below. The likely major (significant) and moderate (significant) construction effects on landscape and visual receptors are summarised below and provided in full in Appendix 9.5: Preliminary assessment of effects for Landscape and visual.
- 9.9.8 For construction, all landscape and visual effects are considered adverse in nature, regardless of their level of significance, because the changes are typically considered to be caused by a range of intrusive / incongruous elements and activities, generally without the benefit of completed or established mitigation helping to integrate, soften or screen these changes. This will be reviewed and might change at the ES stage, with further detail on construction sequencing and advanced planting.

Major (significant) construction effects

- The likely 'major' construction effects (all considered adverse, and long-term) identified are the most localised and limited to visual receptors that pass within 1km of the proposed reservoir embankment, or within 100m of the proposed intake / outfall structure, and the landscape character area within which the most extensive construction would take place.
- Visual receptors that would likely experience major significant (adverse and long-term) construction effects are:
 - People using the Thames Path, and the River Thames itself for recreation, between Abingdon (Nags Head bridge) and Culham (Tollgate Road bridge), and people using permissive footpaths between Jubilee Junction and Abingdon Marina (all of which are expected to experience close-range views of the construction of the proposed intake/outfall structure)
 - People using local PRoW - in the south-west corner of the Site (between the railway and A338), to the south of Marcham, within the area of the proposed reservoir, and within and around Drayton
 - People living / working within the villages of Drayton, Steventon, and East Hanney
 - People at local individual properties: Bradfield Barn, Venn Mill, Marcham Mill, and The Views
- The only landscape receptor considered likely to experience major significant (adverse and long-term) construction effects is Landscape Character Area (LCA) 13A Ock Lower Vale. This character area would receive direct effects from construction of the proposed reservoir, construction compounds and activities, resulting in a substantial change to landscape character across a large extent.

Moderate (significant) construction effects

- The majority of the likely 'moderate' (adverse and long-term) construction effects that have been identified affect visual receptors within approximately 2km – 5km of the proposed reservoir embankment, or within 1km of the potential solar farm re-provision and/or intake/outfall structure, and landscape character areas within which construction would occur, or where construction would occur in close proximity.

- Visual receptors that would likely experience ‘moderate’ (adverse and long-term) construction effects are:
 - people using the Vale Way long distance path close to the reservoir and/or close to the intake/outfall structure
 - people using local PRow – between the railway line and the North Wessex Downs National Landscape, in and around Garford, within (but close to) and up to the boundary of the North Wessex Downs National Landscape
 - people living / working within the villages and towns of Frilford, Garford, Culham, Marcham, West Hanney, and Grove
 - people travelling on local roads – the A338, A34, Steventon & East Hanney Road, B4017
 - people at a specific viewpoint – a memorial bench on PRow 403/23/10 in the North Wessex Downs National Landscape
 - people at Chadwick’s Farm
- There are three landscape receptors considered likely to experience ‘moderate’ (adverse and long-term) construction effects:
 - LCA 12B Western Middle Vale: where construction of the potential solar farm reprovision would occur, and where the presence of construction activities associated with the proposed reservoir would be within approximately 500m at the nearest point, resulting in both physical and perceptual changes to landscape character.
 - LCA 13B Abingdon-Didcot Lower Vale: within which construction of the intake/outfall structure would occur. The size and scale of effect have been judged as large due to the change in perceptual character (including tranquillity on the River Thames, a valued characteristic of the existing landscape), although the change would occur across a relatively small geographical extent.
 - LCA 9B Wantage to Didcot Vale Edge Slopes: where a small degree of change is anticipated as a result of the proposed reservoir approximately 1.5km away at the nearest point, which may be perceptible across a medium extent of the area, affecting a character area of high sensitivity.

Summary of likely non-significant construction effects

- 9.9.9 This section summarises the justification for construction effects that are initially anticipated to be ‘non-significant’ through the preliminary assessment of effects for Landscape and visual amenity. As noted in paragraph 9.9.8, for construction, all landscape and visual effects are considered adverse. Therefore, this section particularly highlights the key embedded design mitigation and standard good practice mitigation that will be applied and are anticipated to reduce certain adverse effects to be non-significant.
- 9.9.10 Where effects have been judged non-significant, the composition of views would typically not be discernibly or sufficiently altered by construction activities due most commonly to their distance from receptors, and/or the presence of intervening screening elements including landform, vegetation and tree belts, and/or due to the limited scale and

geographic extent of the visibility of the construction activity, and/or due to limited loss of, or changes to, characteristic elements of the landscape.

- 9.9.11 The embedded design mitigation and standard good practice mitigation set out in Table 9.17 contributes to reducing the significance of effects. 'Best practice measures for protecting landscape and visual receptors during construction' is particularly relevant, requiring sensitive planning, sequencing, siting and design of construction activities, to limit the visibility of construction to surrounding areas. More work will be developed for the ES stage on the specifics of this measure.

Summary of likely significant operation effects

- 9.9.12 This section summarises the operation effects that are initially anticipated to be 'significant' through the preliminary assessment of landscape and visual effects. It identifies the key causes of significant effects, highlighting common issues and scenarios which have been found to be determining factors in generating significant effects; it also describes the spatial distribution of significant effects, highlighting the effect of distance whilst acknowledging the large scale of the Project.

Key potential causes of operation effects

- 9.9.13 Chapter 2: Project description explains the operation components and activities for the Project. Operation effects on landscape character and visual amenity result from the following:
- The appearance of the proposed reservoir embankment at 'winter year 1', noting the assumptions at this PEI Report stage that its outer face will be green and vegetated from the start of the operational phase, but with no 'advanced planting' there or within any other areas of infrastructure construction or earthworks. The assessment of effects therefore assumes tree / shrub planting in any such areas is immature / recently planted at year 1 of operation. In the longer term, planting on the outer face of the reservoir embankment can be expected to increasingly soften its outline and form, progressively helping it to blend into the surrounding landscape, to a greater degree than has been allowed for in this preliminary assessment.
 - The appearance of the reservoir and its raised embankments is the component of the Project considered likely to be the primary cause of landscape and visual effects in the majority of cases, especially at distances beyond 2km, as this is such a large and extensive new landform (albeit one which is designed, through a landscape-led design approach including gentle profiling of its outer face and landscape planting, to integrate as much as possible into its surroundings) within an open and flat landscape, and is likely to be visible from a considerable distance.
 - The form of the reservoir embankment particularly where its crest (and any associated infrastructure) stands above the horizon, blocking or limiting more distant views, and changing the form of the skyline, is more specifically a key cause of significant effects. Notable locations from which the embankment (and, in some cases, also associated buildings / infrastructure) stands above the horizon in views are: the northern and western edges of Steventon (see wirelines for viewpoints 18, 19 and 20, in Appendix 9.4: Viewpoint photography and visualisations); western edges of Drayton (see wirelines for viewpoints 29 and 30); areas south of Marcham (see wireline for viewpoint 33); and areas to the north and east of East Hanney (see wirelines for viewpoints 49 and 50). In such cases, effects are generally greater, with it being more challenging to

integrate the form of the embankment / infrastructure into the wider landscape, than where the crest appears below the existing horizon. The wireline visualisations referred to above are particularly useful in highlighting this scenario, focusing the eye on the scale and extent of change, but must also be considered in conjunction with, and compared to, the photorealistic visualisations provided for viewpoints 19 and 50. These provide a more realistic overall impression of how noticeable and intrusive, or how well integrated, the new infrastructure would likely be with all the associated landscape and environmental mitigation in place.

- The appearance of the intake/outfall structure is a particularly notable cause of localised landscape and visual effects. This is a spatially separate and distinct component of the Project, located within an attractive section of the River Thames, with sensitive nearby receptors, including users of the Thames Path National Trail, likely to experience views of it at relatively close range (see viewpoints 24 - 28, in Appendix 9.4: Viewpoint photography and visualisations). Typically, the locations affected by the intake/outfall structure are not also affected by the main reservoir development. At the point of the design freeze for this preliminary assessment, options were continuing to be explored for better integration of this infrastructure within the local landscape and reduction of landscape and visual effects. That work remains ongoing, and will continue toward the ES stage, informed by the outcomes of this preliminary assessment. There currently remain some competing, and potentially conflicting, issues to balance such as the requirement, emphasised by the Environment Agency, to minimise any flood risk (conveyance) impacts associated with placing the intake / outfall structure in this location within the flood plain, versus the benefits of providing naturalistic tree planting to control and soften views of the structure and improve its overall integration within the river corridor.
- Other large infrastructure associated with the reservoir, particularly components with a significant vertical elevation, are important contributors to landscape and visual effects from the Project. They typically add to significant effects in combination with the reservoir itself, rather than independently. These components are: the reservoir towers and pumping station, the T2ST infrastructure (including water tower), and the water sports centre buildings and café proposed to be located on the crest of the reservoir embankment. Areas from which these elements are particularly noticeable tend to be within approximately 2km. For example, in views from Steventon and Drayton these components are prominent features, limiting the extent to which the reservoir embankment can be integrated into the surrounding natural landscape, forming important determining factors in assessments of magnitude and significance (see wirelines and visualisations for viewpoint 19 – north-western edge of Steventon, and viewpoint 30 - PRoW north-west of Drayton). In contrast, these components are barely discernible in more distant views from the North Wessex Downs National Landscape.
- Smaller elements of supporting infrastructure, and elements with much less vertical elevation, such as car parks, new roads and footpaths, other recreational and operational buildings, the watercourse diversions, and the water channel for the Wilts and Berks canal, are important considerations in the assessment, but tend to be influential factors at relatively short range, typically within 1km.
- Operational lighting, particularly in relation to the darker skies on the western side of the Project area, is an important consideration within the assessments of effects at all distances, in combination with the infrastructure it is associated with.

- Large-scale changes in land use, with a loss of extensive areas of open agricultural land and existing field patterns and associated new patterns of green infrastructure including large blocks of woodland are additional considerations in assessment of effects. These changes would often be most evident to receptors in close and middle-distance views where elements of the Project in front of the reservoir embankment are clearly visible.
- The potential solar farm re-provision is a major development, spatially separate from the reservoir, and generating specific effects independently of, as well as in combination with, the other reservoir infrastructure.
- The appearance of the water within the reservoir, which under some conditions would reflect light and therefore potentially visually contrast with the surroundings, is another consideration. The proposed floating solar panels on the reservoir surface may also reflect light. Receptors from which it may be possible to see the surface of the reservoir are expected to be limited to the elevated, but also very distant, areas of the North Wessex Downs National Landscape, and the high ground of the Corallian Limestone Ridge. As noted under paragraph 9.7.3, potential visual effects of reservoir draw down during summer months have not been explored in detail at this stage but will be considered further at the ES stage, informed by more detailed visual analysis tools and visualisations.

Key likely significant operation effects

- 9.9.14 As with construction effects, whilst receptor sensitivity and the specific nature of effects are always critical, distance between receptors and the Project has a clear influence on landscape and visual operation effects. The likely major (significant) and moderate (significant) operation effects on landscape and visual receptors are summarised below and provided in full in Appendix 9.5: Preliminary assessment of effects for Landscape and visual.
- 9.9.15 The direction of effect, although a separate judgement to the level of significance, has most commonly been assessed as adverse where operation effects have been judged as significant. In locations where the reservoir embankment is visible above the horizon, intercepting skylines, obscuring valued distant views, and/or creating an intrusive and incongruous feature within the wider landscape and visual context the direction of effect is clearly adverse. In these situations and locations, the introduction of the Project cannot be as effectively mitigated, and the resulting change would detract from the quality and character of the landscape and views.
- 9.9.16 There are also exceptions to the above pattern, as highlighted below:
- A beneficial (major significant) visual effect has been recorded for users of PRoW within the area of the proposed reservoir, because the replacement walking routes along the embankment are considered likely to provide more varied and elevated visual experiences than at present, with more expansive views across the vale and toward the North Wessex Downs.
 - A neutral (moderate significant) visual effect has been recorded for residents at Venn Mill (north west area of Site) where a mix of adverse and beneficial visual would be experienced, noting new green infrastructure elements such as wetland habitats and woodland planting, balancing other aspects to create a neutral overall result.

- A neutral (major significant) landscape effect has been recorded on the host landscape character area '13A Ock Lower Vale'. Whilst the assessment concluded a high magnitude of impact to the area's fabric and perceptual qualities, the change would be neither clearly beneficial nor adverse. This is due to the extent and richness of proposed green infrastructure, naturalised areas, public open spaces and designed features which would be established as part of the integrated, landscape-led design of the Project, creating a new positive landscape character and sense of place compared to the existing baseline.
- A neutral (moderate significant) landscape effect has been recorded on the landscape character area 9B Wantage to Didcot Vale Edge Slopes.

9.9.17 Neutral operation effects typically occur in situations where the Project is perceptible as a distant change to the landscape or view, but the nature of that change is not judged to result in either harm or benefit overall. In these scenarios, the 'hard' infrastructure — such as the water towers, pumping station, and other buildings or structures — may not be noticeable at all or will be well-integrated into the surrounding context in terms of their size, scale, line and form. In addition, the reservoir embankment and associated green infrastructure, though visible, tends to appear well-integrated with the surrounding landscape. The profile of the proposed embankment slopes and proposed planting helps them to blend into the surrounding landscape and avoid them appearing incongruous or discordant and, in many cases, not altering the overall composition of views. In other cases, neutral operation effects result where the green infrastructure benefits associated with the proposed watercourses, wetlands, woodland and other planting and habitats create some benefits to landscape character and views, which may balance out more adverse aspects associated with other project components. These neutral effect scenarios occur commonly for the non-significant operation effects, but rarely for the significant effects, as noted above.

Major (significant) operation effects

- The 'major' operation effects identified are the most localised and limited to receptors that pass within 1km of the proposed reservoir embankment, or within 100m of the proposed intake / outfall structure, and the landscape character area within which the Project directly sits.
- Visual receptors considered likely to experience major significant operation effects are:
 - People using the Thames Path between Abingdon and Culham, along with people using the River Thames itself, and people using permissive footpaths between Jubilee Junction and Abingdon Marina, all of whom are considered likely to experience major, adverse and permanent significant effects from the appearance of the proposed intake/outfall structure, visible at close range.
 - People living / working within three villages located within 1km-2km of the proposed reservoir, i.e. East Hanney, Drayton and Steventon, all of which are likely to experience some views toward the reservoir where its crest stands above the horizon, changing the form of the skyline and significantly altering the composition of characteristic existing views. These effects are considered major, adverse and permanent.
 - People using PRoW at distances of up to approximately 2km from the proposed reservoir, including within the area of the proposed reservoir itself, to the south of

Marcham, in and around Drayton, and between the railway and the A338 in the south-west corner of the Site. As above, the reservoir embankment is likely to create changes in the skyline, significantly altering the composition of characteristic existing views for receptors in these areas. With one exception, these effects are considered major, adverse and permanent; the exception is people using PRow within the area of the proposed reservoir, for whom the effect is considered major and permanent, but beneficial.

- People at three individual isolated properties within 1km of the proposed reservoir, i.e. Bradfield Barn, The Views, and Marcham Mill, at which locations the close proximity of the reservoir will change existing views almost completely. These effects are considered major, adverse and permanent.
- The only landscape receptor considered likely to experience major significant operation effects is LCA 13A Ock Lower Vale, a 'host' landscape character area (i.e. the landscape character area within which physical elements of the Project are proposed), most of which will be occupied and transformed by the proposed reservoir. The effect was found to be 'Neutral' in direction and permanent.

Moderate (significant) operation effects

- The 'moderate' operation effects identified are also relatively localised, with no significant effects beyond 5km from the proposed reservoir embankment, or 1km of the potential solar farm reprovision.
- Visual receptors considered likely to experience 'moderate' (adverse and permanent) operation effects are:
 - people living / working within the local villages of Garford, Frilford, Marcham, West Hanney and Culham
 - People using the Vale Way and PRow at distances of up to around 3km from the reservoir or 1km from the potential solar farm reprovision
 - People using local roads passing through or alongside the Site, including the A338 north of East Hanney, the A34, and the Steventon/ Hanney Road
 - People at individual isolated properties within 1km of the potential solar farm reprovision and/or reservoir (i.e. Chadwick's Farm, and Venn Mill)
- Landscape receptors considered likely to experience 'moderate' operation effects are:
 - LCA 12B Western Middle Vale: where the potential solar farm reprovision would be located, and where the proposed reservoir would be within approximately 500m at the nearest point, resulting in both physical and perceptual changes to landscape character. (Effect considered moderate, adverse and permanent.)
 - LCA 13B Abingdon-Didcot Lower Vale: where the intake/outfall structure would be located. The size and scale of effect has been judged as large due to the change in perceptual character associated with an incongruous element affecting the tranquillity and aesthetic character of the River Thames, a valued feature of the existing landscape, although the change would occur across a relatively small geographical extent. (Effect considered moderate, adverse and permanent.)
 - LCA 9B Wantage to Didcot Vale Edge Slopes: where a small degree of change is anticipated as a result of the proposed reservoir approximately 1.5km away at the

nearest point, which may be perceptible across a medium extent of the area, affecting a character area of high sensitivity. This effect is considered moderate, and permanent, but unlike the two above 'neutral' in direction.

Summary of likely non-significant operation effects

- 9.9.18 This section summarises the justification for operation effects that are initially anticipated to be 'non-significant' through the preliminary assessment of landscape and visual effects. Non-significant landscape and visual operation effects have frequently been judged to be neutral in their direction, as the scenarios described in paragraph 9.9.17 which give rise to neutral effects are also often associated with judgements of non-significance. Only a few (four visual and one landscape) non-significant but adverse effects have been identified, where the balance of change is considered to be adverse. Therefore, this section particularly highlights the key embedded design mitigation and standard good practice mitigation that will be applied and are anticipated to reduce certain adverse effects to be non-significant.
- 9.9.19 Where effects have been judged non-significant, the composition of views would typically not be discernibly or sufficiently altered by the Project, due to the distance of the receptor, and/or the presence of intervening screening elements including landform, vegetation and tree belts, and/or due to a limited geographic extent of effect, and/or due to very limited loss of, or changes, to characteristic elements of the landscape.
- 9.9.20 The significance of effects has already been reduced by the embedded design and standard good practice mitigation measures: as set out in Appendix 9.5: Preliminary assessment of effects for Landscape and visual, a range of features is already included in the current Project design to help integrate the infrastructure into the wider landscape setting, responding to landscape character, sense of place and identity. The gentle outer slope profile of the reservoir embankment, carefully designed planting on the embankment slopes, and wide range of planting and habitat creation and enhancement proposals, have been developed as part of a landscape-led approach to masterplanning which has reduced the level of effects on landscape and visual receptors.

Effects on Night Skies

- 9.9.21 Consideration of both construction lighting and operational lighting has been factored into the individual assessments of construction and operational effects respectively, albeit at a high level at this design stage.
- 9.9.22 As described within Appendix 9.1: Project-level landscape character assessment, the areas within the study area with the darkest skies, and which have the most potential to be affected by the Project, include the central and western parts of the Site, including the 'dark sky village' of East Hanney; and the North Wessex Downs National Landscape to the south.
- 9.9.0 The darkness levels have been mapped recently within the Dark Skies Assessment for South Oxfordshire and Vale of White Horse (LUC, 2024) into Environmental Zones E1 to E4 (presented in Figure 6.1 of that document). Most of the study area falls within Zone E1 (natural dark zone), with the urban areas of Abingdon, Milton, Didcot, Harwell Campus, Wantage and Grove falling within Zone E3 (suburban medium district brightness zone) and other settlements including Steventon, Drayton, Marcham and Kingston Bagpuize falling

within Zone E2 (rural low district brightness zone). The rest of the landscape and smaller settlements including East and West Hanney and the villages within the National Landscape all fall within Zone E1. The Dark Skies of the North Wessex Downs: A Guide to Good External Lighting (North Wessex Downs AONB, 2021) also includes a map of light control zones for the area within the National Landscape. The darkest part of the National Landscape is defined as E0 – Dark Sky Zone. Very small parts of Zone E0 fall within the extreme south of the study area around Letcombe Bassett and Farnborough. The remaining National Landscape area away from rural settlements and economic hubs is defined as E1 (rest of AONB) with the exception of Harwell Campus which is E2 (rural settlements and economic hubs).

- 9.9.1 Patterns of darkness in the night skies are shown on Figure 9.12: Dark skies and light pollution. It is noted that this is based on data from 2016 from CPRE, not the more recent data from South Oxfordshire and Vale of White Horse described above as this could not be available for inclusion in mapping, however the key patterns shown remain the same.
- 9.9.2 Night-time baseline photographs have been provided for four viewpoints (see Appendix 9.4: Viewpoint photography and visualisations), providing an indication of the existing night skies within the study area:
- Viewpoint 01 includes a night-time view looking north across the vale from the Ridgeway National Trail (east) - West Ilsley car park, within the North Wessex Downs National Landscape. The existing lighting and skyglow associated with urban areas including Wantage and Grove, Didcot, Didcot Power Station, Harwell Science and Innovation Campus, Abingdon and the A34 is clear; whilst this is mostly to the east of the proposed reservoir - which would be located in a relatively dark part of this view, there are existing light sources across that part of the view also.
 - Viewpoint 22 includes a night-time view looking west across the vale from Wittenham Clumps, within the North Wessex Downs National Landscape. The existing lighting and skyglow associated with urban areas including Didcot, Didcot Power Station, Drayton and Abingdon create visible light points spanning across the extents of the proposed reservoir. The darker skies of the North Wessex Downs National Landscape are evident on the left side of the image.
 - Viewpoint 35 includes a night-time view looking south-west across the vale from the southern edge of Shippon, towards the North Wessex Downs National Landscape. Compared to the above views there is a smaller amount of existing lighting within the extents of the proposed reservoir from this viewpoint, although some clearly noticeable light sources do overlap with the extents of the reservoir, particularly on the Abingdon / Drayton (eastern) side (left side of image). Street lights on the Marcham Road Interchange are also clearly visible.
 - Viewpoint 50 shows a night-time view looking east from the eastern edge of East Hanney. There are very few noticeable light sources in this view, limited to properties on Steventon Road (and the bright light of a car's headlights on Steventon Road), but more distant skyglow is also evident, likely originating from Didcot, Drayton and Abingdon.
- 9.9.3 As described in Chapter 2: Project description, the strategy for construction lighting would be 'dark-sky considerate', seeking to reduce obtrusive light issues and to mitigate them as far as reasonably practicable. Whilst further work is required on the development of the emerging lighting strategy, with more detailed qualitative analysis of potential effects, it is

not currently expected that construction lighting would, in itself, cause significant effects on landscape or visual receptors.

- 9.9.4 Similarly for operational lighting, the embedded mitigation contained within the current Project design and lighting strategy to minimise light spill from permanent facilities, coupled with the context of the baseline night skies, indicates that the likely effects of lighting from the Project would not in themselves be likely to cause significant effects on landscape or visual receptors. The Project proposals in the west of the study area around East Hanney have been designed to have minimal built development or public facilities and therefore minimal need for lighting. The distance from the Project, and the objectives set out for the emerging lighting strategy, likewise indicate that it is not likely that lighting would result in significant effects on dark skies within the North Wessex Downs National Landscape.
- 9.9.5 The ES stage will include a more detailed consideration of effects on night skies as the current Project design and lighting strategy are iteratively developed and informed by the Landscape and visual assessment.

Effects on the North Wessex Downs National Landscape

- 9.9.6 A preliminary assessment of effects on the North Wessex Downs National Landscape is set out in detail in Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape. Overall, it is considered that the Project is unlikely to result in any significant effects on the National Landscape, its special qualities or statutory purpose.
- 9.9.7 It is likely there would be some views, and perception, of the Project from within the National Landscape both during construction and operation, however, due to the distance and visual/ perceptual separation of the National Landscape from the vale, the presence of the Project would create a minimal change to the character and special qualities. Whilst there would be some changes to perception of, and views towards, the Downs Plain and Scarp of the National Landscape from the north of the study area, the distance and relatively intermittent nature of views towards the scarp from within the study area, means that it is unlikely that any changes would result in significant effects on its special qualities.
- 9.9.8 The current Project design has been designed to avoid effects on the National Landscape and its setting as far as practicable. A continuation of the landscape-led approach to the Project design would help to ensure that proposed planting responds positively to the local character and integrates the Project effectively into its landscape setting, thus minimising any effects on the National Landscape.
- 9.9.9 Within 15 years of operation the proposed planting would have established to provide further beneficial effects on the landscape character within the setting of the National Landscape compared to the baseline conditions.

Effects on landscape character, views and visual amenity within the National Landscape and its setting

- 9.9.10 No significant effects on landscape character within the National Landscape have been identified either during construction or operation. Some significant effects on landscape character within the setting of the National Landscape have been identified for both construction and operation (for project-level landscape character areas 12B, 13A and 9B). During construction, effects have been identified as adverse, and during operation effects have been identified as neutral, and in one case, adverse, relating to the presence of the potential solar farm re-provision. These effects reflect the substantial change that would

result from both the construction of, and presence of the proposed raised reservoir within the flat, agricultural landscape, and the presence of the potential solar farm re-provision.

- 9.9.11 Two significant effects on views and visual amenity have been identified during construction (for people using PRoW within the North Wessex Downs National Landscape and up to its boundary; and for the specific viewpoint from a memorial bench along PRoW 403/23/10 within the North Wessex Downs National Landscape). These effects relate to the small but perceptible change in view likely to result from general construction activity and earthworks in the northern part of the National Landscape, approximately 3.5 – 4.5km from the proposed reservoir embankment toe. Eight significant effects during construction and operation have been identified for receptors whose views look towards the North Wessex Downs (including receptors in and around Drayton, Marcham, on PRoW around Garford and the South Oxfordshire Crematorium). These generally relate to the proximity to the proposed reservoir embankments creating a substantial change to views.
- 9.9.12 Whilst there may be significant effects on character and views within the setting of the National Landscape, it is considered that these effects would not result in or constitute significant effects on the National Landscape itself, its character or its special qualities.

Arboricultural Impact Assessment – preliminary key findings

- 9.9.13 Appendix 9.7: Preliminary Arboricultural Impact Assessment provides an assessment of the potential effects of the Project on the trees within the draft Order limits. The site survey work underpinning this is currently ongoing, therefore results are limited at this stage to the extent of the completed site survey work, however it has also been possible to make some preliminary projected conclusions for the remainder of the trees within the draft Order limits, by combining survey work to date with desktop assessment. Key findings are summarised below:

Veteran and ancient trees

- 250 trees have been identified within the draft Order limits on the Woodland Trust's Ancient Tree Inventory as being potentially ancient or veteran; 116 of these trees have been surveyed so far by a competent arboriculturalist for the Project, and of these ten have been confirmed as being ancient or veteran. These ten are comprised of eight Crack Willow, one Field Maple and one Ash. A further 134 of the trees within the draft Order limits on the Woodland Trust's Ancient Tree Inventory are still to be surveyed (subject to land access agreements) however, based on the combination of survey work and desk top assessment to date, it is anticipated that the proportion of trees that will ultimately be confirmed as being ancient or veteran (relative to those identified as such on the Ancient Tree Inventory) will remain broadly in line with the proportion confirmed so far.
- Seven of the ten confirmed ancient or veteran trees within the draft Order limits lie within the reservoir footprint and would therefore need to be removed for the Project, The other three ancient or veteran trees lie in areas where it would likely be possible to retain and protect these.
- It is noted that, whilst Appendix 9.7: Preliminary Arboricultural Impact Assessment is a data source on the presence of veteran and ancient trees and considers impacts to them from an arboricultural perspective (along with all other trees within the draft Order limits), Chapter 7: Terrestrial ecology considers the impacts on veteran and ancient

trees as an ecological receptor. At this preliminary stage that assessment is made on a precautionary basis and identifies three potential effect pathways leading to significant adverse effects, i.e. habitat loss and modification due to construction activities and land use change, air quality effects and air pollution during construction, and hydrological changes driven by alteration of the trees' physical environment and land-use pressures during the operation of the Project. The Terrestrial ecology assessment notes that habitat mitigation for these effects will be required under a specific mitigation strategy, including monitoring and management.

Ancient Woodland

- There is one area of ancient semi-natural woodland within the draft Order limits, which is located adjacent to the location of the potential solar farm re-provision, and covers 0.26ha. This area will be protected and retained as per Natural England and Forestry Commission 'standing advice' for ancient woodland, ancient trees and veteran trees. Further review of this woodland is proposed to determine the potential for enhancement and species mitigation.

Other protected trees / woodland

- No disturbance is expected on trees protected by Tree Preservation Orders (TPOs) (note, TPO reference 98V18, comprising 36 Oak, 43 Horse Chestnut, and 18 Ash, on the east side of Steventon Road, Drayton, is the extent of all TPO'd trees located within the draft Order limits) or within conservation areas; these will be retained with precautionary measures.
- Drayton Copse is considered to be a Long-Established Woodland, as defined by the Woodland Trust in The England Trees Action Plan 2021-2024 (UK Government, 2021).

Overall impacts

- The arboricultural impact assessment identifies and quantifies anticipated tree losses associated with the development; this will continue to be developed for inclusion in the ES.

Tree losses and emerging planting strategies

- 9.9.14 The design of embedded mitigation will continue iteratively following this PEI Report, toward the ES and DCO submission and be informed by the assessments of effects on arboriculture, ecology, and landscape and visual amenity. Considering both the anticipated tree losses and planting strategy together, there will be an overall net increase in tree cover and tree numbers as a result of the Project.
- 9.9.15 It is also expected that, within this increase in tree cover, there will be an increase in species diversity and habitat value as a result of the Project. Of all the tree species expected for removal to enable the Project, the majority (approximately 34% of total losses) are currently expected to be *Salix fragilis* (common name Crack Willow), which is among the fastest-growing native broadleaved trees in the UK. The planting strategies being developed will mitigate adverse effects and deliver multiple benefits, including Project Priority Areas for Biodiversity (PABs), Biodiversity Net Gain (BNG), habitat connectivity,

access to nature for the public, and the integration of the proposed reservoir and associated infrastructure into the surrounding landscape.

- 9.9.16 The arboricultural survey work and assessment will continue to develop toward the ES stage, adding further survey coverage and developing more detail on mitigation strategies, including the strategy for compensation of any loss of veteran and ancient trees – which will be developed collaboratively between terrestrial ecology, arboriculture and landscape disciplines. It will also continue to inform the ongoing development of planting strategies, aiming to maximise opportunities for mitigation, enhancement, and delivery of multiple benefits.

9.10 Next steps

- 9.10.1 As part of next steps, the Project is proactively developing the design, refining the construction approach and continuing to define the environmental baseline, in conjunction with ongoing consultation and engagement. These activities will inform the EIA process and provide a robust evidence base for the ES. The aim is that where initial likely significant effects are identified at this stage, these may ultimately be determined as not significant in the ES once data gaps are addressed, and the design and mitigation proposals are further developed. Effects that remain after the implementation of all mitigation are referred to as 'residual effects'. These effects are not reported in the PEI Report as additional mitigation is not assumed to be implemented at this stage of the assessment. The assessment of the significance of residual effects after all mitigation is applied is a key outcome of the EIA process and will be reported within the ES, which will be submitted with the DCO application.
- 9.10.2 The next steps anticipated to be undertaken in relation to the Landscape and visual assessment prior to completion of the ES and submission of the DCO application are explained below.

Further exploration of additional mitigation

- 9.10.3 A key aspect of the next steps is to further explore additional mitigation that may reduce adverse effects that the preliminary assessment has initially identified as likely to be significant. Additional mitigation that has been identified for the Landscape and visual assessment is noted against relevant likely significant effects in Appendix 9.5: Preliminary assessment of effects for Landscape and visual. All additional mitigation that has been identified in relation to the Landscape and visual assessment to date is listed below in Table 9.19 along with a description of what each measure entails. Each measure has a unique Additional Mitigation ID to enable cross reference between Appendix 9.5: Preliminary assessment of effects for Landscape and visual and Table 9.19. As noted previously above, the preliminary assessment presented in the PEI Report assumes that additional mitigation is not yet applied, as the precise nature and extent of any additional mitigation measures is not confirmed at this stage in the EIA process.

Table 9.19 Additional mitigation identified to date in relation to the Landscape and visual assessment

Additional mitigation ID	Additional mitigation name	Description of additional mitigation measure
AM-78	Implementation of construction design measures to reduce landscape and visual impacts and identify potential benefits during construction	The preparation and implementation of a construction design measures as part of the CoCP may include strategy, principles, and specific design requirements to reduce landscape and visual impacts and maximise potential benefits during the construction period. The measures may cover issues including: temporary works and routes, design of compounds, stockpiling and materials processing sites, design of fencing / hoardings and other barriers / enclosures, lighting, design of temporary screen planting / temporary vegetation covers, public information installations and sequencing of works. This measure will help reduce construction effects.
AM-36	Phase the works to enable early establishment of woodland / structural planting between the development and sensitive visual receptors	Further consideration of phasing to enable early establishment of woodland / structural planting between the Project and visual receptors which are particularly vulnerable to effects on visual amenity, where early planting could be critical in reducing the level of significance. Examples include: • any planting south of the South Oxfordshire Crematorium and Memorial Park • woodland and other planting between Little Hanney and the development • screening for the intake/outfall This measure will help reduce both construction and operation effects, with additional opportunities for early planting to be further explored, leading to greater clarity, detail and certainty on the sequencing of early planting.
AM-27	Long term management and maintenance of planting and habitats	Detailed long-term management and maintenance plans would be implemented in relation to planting and habitats. These may include measures for other landscape, visual and ecological mitigation and enhancements to ensure their continued function and quality, informed by the outline Landscape and Ecological Management Plan and Biodiversity Net Gain requirements. This measure will help reduce operation effects, providing assurance on the success of planting and habitats through a clearly defined strategy and set of principles for their establishment and longer-term management.

9.10.4 As well as the additional mitigation measures set out above, there remains ongoing work on the development of mitigation measures identified as embedded at this stage. As the design of these measures continues to be refined, through (for example) more detailed consideration of topography and planting densities in relation to specific views, there may be scope for further reduction of significant effects.

Other next steps

- 9.10.5 Other steps that are continuing or are planned to be undertaken to support the Landscape and visual assessment prior to completion of the ES and submission of the DCO application are noted below with an explanation of how these will inform the EIA process. They include further engagement and consultation, continued development of design, and more detailed assessment work supported by more sophisticated visual analysis tools and reflecting more detailed design information.

Consultation and Engagement

- Further engagement with the Landscape and visual TLG to address feedback from this preliminary assessment and consider the additional detail and refinement required for the ES stage assessment, including effects on the North Wessex Downs National Landscape and its setting, and further collaboration on the development of measures to mitigate effects.
- Engagement with local communities around detailed design aspects at the interfaces between local villages and the Project.

Design and mitigation development

- Continued integration of the Landscape and visual assessment with design development, ensuring alignment with Natural England's forthcoming guidance, 'Reservoirs in the Landscape: Design Principles' (expected to be published summer / autumn 2025) and that landscape continues to be an integrating framework for the Project's design, influencing and integrating all technical disciplines, and that the findings of this preliminary Landscape and visual assessment help to steer the ongoing design, including the refinement of all embedded mitigation measures which reduce landscape and visual effects.
- A particular focus will be applied to any opportunities to further mitigate 'major' landscape and visual effects, such as the appearance of the intake/outfall structure and its surrounding area, and the effects on local communities such as East Hanney, Steventon and Drayton. In these, and all design processes, landscape mitigation needs must be balanced with competing design objectives, as highlighted above in section 9.9.13 in relation to the intake/outfall structure and flood risk.
- Development of more detailed proposals for advanced mitigation planting, identifying key areas where early planting can be achieved and securing commitment to the delivery of that early planting, resulting in a reduction of landscape and visual effects.
- More detailed input from a landscape and visual perspective into the design and mitigation proposals for the renewable energy options, including the potential solar farm re-provision, proposals for floating solar panels on the reservoir, and proposals for solar panels on roofs.
- Development of additional mitigation to address potential cumulative effects from the combination of the potential solar farm proposed by this Project with the proposed Willow Fields Energy Park immediately to the north; development of the design of the proposed woodland planting located to the south of the potential solar farm proposed by this Project, ensuring effective separation between that and the consented East Hanney solar farm situated further south.

- Development of construction design plans and strategies, ensuring landscape and visual effects influence siting and design of construction elements such as compounds, fencing and hoarding, haul roads, materials stockpiles, and any temporary landscape mitigation measures such as seeding, planting and landform.
- Further input to the ongoing development of the lighting strategy and design, reducing effects on night skies, both during construction and operation.
- Development of the Outline Landscape and Ecological Management Plan, setting out how the Project's landscape and ecological components and requirements will be delivered, established and managed. This will include:
 - The blue green infrastructure strategy and governance
 - Objectives and prescriptions for the implementation, establishment, maintenance and long-term management of each asset type, and the stewardship proposed
 - The future stakeholder engagement strategy, and monitoring and review framework.

Refinement of Technical Assessment

- Refinement of the assessment of effects on the National Landscape at ES stage will be integrated with ongoing design and mitigation development to further reduce both construction and operation effects wherever possible; this will be informed by consultee responses from this preliminary assessment and further stakeholder engagement via the Landscape and visual TLG. More detailed planting strategies for the reservoir embankments and surrounding landscape will be a key element of ongoing mitigation design. The more detailed level of assessment will be informed by more detailed visualisations (see below).
- Development and provision of additional visualisations, and provision of more detailed visualisations, to inform and refine assessments of effects. This will include greater provision of photomontages in general, with more photomontages being developed to 'Type 4' / 'AVR Level 3' photorealistic level of detail, including full representation of all key project design components and embedded mitigation. Visualisations will also include representation of the Project both at winter year 1 stage and at summer year 15 stage (for some views the latter will indicate the effect of summer draw down of the water within the reservoir); some views will also indicate the appearance during the construction phase. Besides informing a more detailed assessment process, these photomontages will provide a robust evidence base supporting the resulting judgements. For example, they will provide demonstration of the extent to which individual Project components such as car parks and specific buildings might be noticeable in long range views from the North Wessex Downs National Landscape.
- Further photographic viewpoint survey work will be undertaken, to fill gaps in the provision of winter and/or summer baseline views at this preliminary stage.
- Further site appraisal work will be undertaken, to inform and refine assessments of effects in relation to the ongoing evolution of the design.
- Refinement and additional layers of detail to be added to assessments of effects, reflecting further design detail and more extensive and detailed visualisations. Additional consideration within assessment of more detailed design aspects such as mitigation planting, lighting, architectural form and finishes, colour, reflectivity of materials and water.

- Further arboricultural survey work will be undertaken, expanding the tree survey coverage within the draft Order limits, developing, updating and refining the arboricultural impact assessment accordingly, along with mitigation and compensation strategies – not least the compensation strategy for the loss of ancient and veteran trees.

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