



Norwich Western Link

Environmental Statement

Chapter 9: Landscape and Visual Effects

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Appendices – separate documents

Environmental Statement Chapter 9: Landscape and Visual Appendix 9.1: LVIA Methodology (Document Reference 3.09.01)

Environmental Statement Chapter 9: Landscape and Visual Appendix 9.2: LVIA In-combination Assessment (Document Reference 3.09.02)

Environmental Statement Chapter 9: Landscape and Visual Appendix 9.3: LVIA Figures (Document Reference 3.09.03)

Environmental Statement Chapter 9: Landscape and Visual Appendix 9.4: LVIA Photographs (Document Reference 3.09.04)

Environmental Statement Chapter 9: Landscape and Visual Appendix 9.5: LVIA Photomontages (Document Reference 3.09.05)



Glossary of Abbreviations and Defined Terms

The definition of key terms used in this report are provided below.

Term	Definition
Cycleway	A public road reserved for exclusive use of pedal cyclists or/and pedal cyclists and pedestrians.
Footpath (FP)	A thoroughfare that is intended for use only by pedestrians and not other forms of traffic.
Landscape Character Areas (LCA)	Is a community led record of landscape character, creating a detailed bespoke evidence base. It describes the character and value of the local landscape, including its historic, ecological, and cultural qualities, and the character of settlements and how they have developed over time.
Landscape Character Types (LCT)	Generic, typically homogenous types of landscape that have similar geology, topography, drainage patterns, vegetation, land use, patterns of settlement and aesthetic character.
Receptor	In general terms, something that could be adversely affected by contamination (e.g. people, an ecological system, property or a water body).
Restricted Byways (RB)	Allowing a right of way on foot, on horseback, or leading a horse, cycling and for any vehicles other than those mechanically propelled.
Scheduled monuments	A site that is legally protected because of its historical importance.
Site of Special Scientific Interest (SSSI)	A Site of Special Scientific Interest (SSSI) is a conservation designation denoting a protected area in the United Kingdom and Isle of Man. A SSSI usually describes an area of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiological features that may lie in its boundaries.



Term	Definition
Source Protection Zones	Zones determined by the Environment Agency (EA) which show the level of risk to predominantly drinking water sources from contamination.
Special Area of Conservation (SAC)	A Special Areas of Conservation (SACs) is a strictly protected site designated under the EC Habitats Directive.
Landscape Receptors	Defined aspects of the landscape that have the potential to be affected by a proposal.
Visual Receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Landscape Effects	Effects on the landscape as a resource in its own right.
Visual Effects	Effects on specific views and on the general visual amenity experienced by people.
Landscape Value	The relative value that is attached to different landscapes by society, it is recognised that a landscape may be valued by different people or groups for a variety of reasons.
Visual Value	Not defined in the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3), but a mark of the overall value attached to a view by society in general. Visual value may be valued by different people or groups for a variety of reasons at different levels.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Sensitivity	A term applied to defined landscape and visual receptors that combines judgements on value and susceptibility to change. It is subsequently used in the assessment of significance of an effect.



Term	Definition
Magnitude	The term that combines judgements about the size and scale of an identified effect and the extent of the area over which it occurs. It also considers whether the effect is reversible or irreversible for the receptor and whether it is short or long term in duration.
Significance (of effect)	A measure of the importance or gravity of the environmental effect arrived at by considering both sensitivity of the receptor and magnitude of effect.



9 Landscape and visual effects

9.1 Introduction

9.1.1 This chapter reports the outcome of the assessment of likely significant effects arising from the Proposed Scheme upon landscape character and visual receptors.

9.1.2 The chapter describes the assessment methodology and the baseline conditions relevant to the assessment, which have been used to reach these conclusions, as well as a summary of the likely significant effects leading to the additional mitigation measures required to avoid, prevent, reduce or, if possible, offset any likely significant adverse effects, and the likely residual effects and any required monitoring after these measures have been employed. Opportunities for environmental enhancement, where such opportunities exist, are also discussed.

9.1.3 This chapter (and its associated figures and appendices – all separate documents) is intended to be read as part of the wider ES, with particular reference to **Chapter 7: Noise and Vibration** (Document Reference: 3.07.00), **Chapter 8: Cultural Heritage** (Document Reference: 3.08.00), and **Chapter 10: Biodiversity** (Document Reference: 3.10.00).

9.2 Legislative Framework, Policy and Guidance

Legislative Framework

9.2.1 The applicable legislative framework is summarised as follows:

- **The European Landscape Convention (ELC) 2007 (Ref. 9.8)** The ELC requires “landscape to be integrated into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as any other policies with possible direct or indirect impacts on landscape”. It also acknowledges that all landscapes can be important, whether or not they are designated. There is no legislation specifically covering landscape character or



visual amenity but the spirit of the ELC is carried through in planning policy and Government guidance.

- **National Parks and Access to the Countryside Act 1949 (Ref. 9.9)**
The Act provides the framework for the creation of National Parks and Areas of Outstanding Natural Beauty in England and Wales, and also addresses public rights of way and access to open land.

Policy

9.2.2 The applicable national and local adopted policies which have informed the development of the Proposed Scheme design and its mitigation is summarised as follows:

- **National Policy Planning Framework 2023 (Ref. 9.10);** The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied. It promotes a presumption in favour of sustainable development with policies which should be considered in developing local plans and reviewing planning applications.
- **Norfolk County Council Environmental Policy (2019) (Ref. 9.11);**
The policy takes at its starting point the Government's A Green Future: Our 25 Year Plan to Improve the Environment and is structured to reflect the key environmental concerns embodied in that plan. The policy uses the Government's goals as the basis for the framing this policy which will guide all the Council's future decision-making.
- **Broadland District Council Local Plan (Ref. 9.12);** Broadland's current local plan is made up of several documents including the Joint Core Strategy Development Plan Document (DPD), Development Management DPD, Site Allocations DPD, Growth Triangle Area Action Plan, and Neighbourhood Plans. The local plan sets out the long-term vision and objectives for the area, including strategic policies for steering and shaping development. It identifies broad locations for new



housing and employment growth and changes to transport infrastructure and other supporting community facilities, as well as defining areas where development should be limited.

- **Breckland District Council Local Plan (Ref. 9.13);** Breckland's local plan aims to set a spatial vision and strategy for the district, with clear economic, social and environmental objectives, and to meet the needs and aspirations of Breckland's residents. The local plan forms the development plan for the district.
- **Broadland District Landscape Character Assessment (Ref. 9.14);** The Landscape Character Assessment provides an up-to-date integrated assessment of the landscape character of the district in accordance with the current guidance and best practice. The study firstly assesses the landscape character of the district, considering not only scenic and visual characteristics but also the physical, historical influences that have shaped the landscape. A total of six Landscape Character Types are defined, within the six generic landscape types, and sixteen LCAs within the district. Regard will be taken to the Landscape Character Assessment in considering the Proposed Scheme in terms of the assessment but it also has informed the development of the design. Proposals will be considered for how well they conform to the distinctive character of an area, and whether they will add to or detract from this.
- **Breckland District Landscape Character Assessment (Ref. 9.15);** The Landscape Character Assessment forms part of the evidence base for the Breckland District Local Development Framework and informs landscape planning policy. It also provides evidence for the consideration of individual planning applications. The study describes, assesses and evaluates the character of the landscape within Breckland. It identifies strategies both for landscape management and enhancement and considerations for future change and development within each character area.



- **Green Infrastructure Strategy for Greater Norwich (Ref. 9.16).** The Green Infrastructure Strategy is one of a number of evidence bases commissioned by the Greater Norwich Development Partnership for informing future growth and infrastructure requirements in the Greater Norwich Joint Core Strategy Area for Norwich, South Norfolk and Broadland. The Green Infrastructure Strategy brings together the various strands of existing work being progressed at all scales across the Greater Norwich Area that contribute towards green infrastructure provision and management into a single proposed vision and makes recommendations for investing in the provision of multi-functional green infrastructure.

Guidance

9.2.3 The following guidance documents have been used during the preparation of this chapter:

- LA 104 Environmental Assessment and Monitoring, Highways England, 2019 (**Ref. 9.17**); LA 104 sets out the requirements and procedures to be followed when assessing, reporting and monitoring the environmental effects of projects in line with the requirements of the EIA Directive 2014/52/EU.
- LA 107 Landscape and Visual Effects, Highways England, 2019 (Revised February 2020) (**Ref. 9.18**); LA 107 sets out the requirements to be applied to the assessment, reporting and management of environmental effects on landscape and visual amenity from the delivery of projects.
- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition 2013 (GLVIA3) (**Ref. 9.19**). GLVIA3 is the industry standard work on LVIA presenting an authoritative statement of the principles of assessment. Offering detailed advice on the process of assessing the landscape and visual effects of developments and their significance, it



also includes a chapter on cumulative effects and guidance on presentation.

- Planning Practice Guidance. To support the policies of the NPPF, the Government produced its Planning Practice Guidance (PPG) covering a number of topics. Paragraph 037 of PPG (Ref. ID: 8-037-20190721) under the heading of Natural Environment, sub-heading Landscape, supports the use of landscape character assessment as a tool for understanding the character and local distinctiveness of the landscape to inform planning and decision making in addition to Natural England's National Character Area Profiles.

9.3 Consultation, Scope, Methodology and Significance Criteria

Consultation Undertaken to Date

- 9.3.1 **Table 9-1** provides a summary of the consultation activities undertaken in support of the preparation of this chapter.

Table 9-1 – Summary of consultation undertaken

Body / organisation	Individual / statutory body / organisation	Meeting dates and other forms of consultation	Summary of outcome of discussions
Norfolk County Council (NCC)	Green Infrastructure and Landscape Officer	Meeting on proposed viewpoint locations with NCC on 06/03/20.	The proposed viewpoints were agreed.
Broadland District Council (BDC)	Landscape Architect	Plan of proposed viewpoint locations issued to BDC for approval on 16/03/20.	The proposed viewpoints were agreed.
Key Stakeholders	Political representatives (MPs; county, district and parish councillors, council chief executives) Relevant public sector bodies Environmental bodies Emergency services Haulage companies Walking and cycling groups Wildlife groups Bus companies Representative industry bodies Businesses and residents within the vicinity of the pre-application consultation proposals Organisations and individuals who have previously expressed an interest in the project	Virtual consultation room Environmental Information Document and the consultation feedback questionnaire Fly-through video of the pre-application consultation proposals Telephone appointment to speak to the project team In-person consultation events	The proposed bund heights along the western side of the Proposed Scheme between Ringland Lane and The Broadway have been raised in order to provide a minimum of 4.5 metres effective screening from the carriageway and additional noise and visual mitigation for Weston Green and Weston Longville The provision of additional areas of woodland creation in the area of the road as essential mitigation but will also support biodiversity net gain (BNG). Refer to Landscape Plans (Document Reference: 2.07.00) and Essential Environmental Mitigation Plans (Document Reference: 2.11.00) for further information; The provision of increased mitigation areas beyond the Site Boundary, which will also support the achievement of BNG



Scope of the Assessment

- 9.3.2 The scope of this assessment has been established through a scoping process. Further information can be found in **Chapter 5: Approach to EIA** (Document Reference: 3.05.00).
- 9.3.3 This section provides an update to the scope of the assessment and re-iterates/updates the evidence base for scoping out elements following further iterative assessment.

Table 9-2 - Scoping opinion responses

Consultee	Comments provided in Scoping Response	Response to comments
NCC	<i>The study area has been suitably determined for the preliminary (Zone of Theoretical Visibility) ZTV and will be refined as necessary following field work and consultation.</i>	Study Area refined following production of ZTV and fieldwork (Section 9.3.7).
NCC	<i>The consideration of lighting would be the only element we would have some reservations on, however if the construction lighting is considered as part of the overall impacts, and operational lighting is restricted to minimal lighting which only serves to light a specific element such as signage the impacts should be minimal.</i>	Construction lighting considered as part of the overall impacts, see section 9.8 of this chapter, and operational lighting is restricted to minimal lighting to specific elements.
NCC	<i>...and the assessment should inform what this mitigation planting/screening is and where it is situated.</i>	Mitigation is described in section 9.7 of this chapter.
Breckland LPA	<i>The avoidance of a loss of vegetation should be evidenced by a survey of the existing types and quality. Where loss is unavoidable appropriate high quality boundary treatments are to be provided keeping, where possible, to historic boundaries and replacing hedgerows.</i>	A survey of existing types and quality of vegetation is provided in the ES (Chapter 10 Biodiversity – Section 10.9.21 (Document Reference: 3.10.00), Chapter 8 Cultural Heritage (Document Reference: 3.08.00), and Appendix 10-35a Arboricultural Survey Schedule (Document Reference: 3.10.35a)) and where loss of vegetation is unavoidable high quality boundary treatments are provided, see Landscape Plans (Document Reference: 2.07.00).
Breckland LPA	<i>Screening should be demonstrated from a number of vantage points with the use of natural topography enhancement where possible and justifiable screening earthworks where necessary.</i>	Screening is proposed from several sensitive receptor vantage points including receptors R6, R8, R10, R11 and R13. (See Design and Access Statement – Document Reference: 1.02.00)
Breckland LPA	<i>Species should be carefully considered to mitigate the impact to the landscape, and this should be jointly considered with biodiversity enhancements.</i>	All proposed planting types have been considered with biodiversity enhancements in mind while also being mindful of the landscape in which they will sit. Species appropriate to each planting type will be considered at Detailed Design.

Consultee	Comments provided in Scoping Response	Response to comments
Broadland LPA	<p><i>It is noted that consultation has taken place with Norfolk County Council's Landscape Team to agree the location of the viewpoints for the Landscape & Visual Impact Assessment, the District Councils have a Landscape Architect who also wishes to assess the visual effects and landscape impacts of the proposals. The extent of the study area should also be agreed with the District Councils Landscape Architect in advance of the assessment. The District Councils would wish to assess the impacts of the proposals on landscape and visual effects and welcomes the opportunity to review and discuss the proposed landscape and visual mitigation proposals with the design team. Loss of vegetation should be evidenced including detailed surveys of type, quality and sizes of species and replacement planting should be identified which results in clear beneficial landscape and biodiversity enhancements.</i></p>	<p>Landscape and Visual study area and viewpoints agreed with Broadland District Council / South Norfolk Council representative in March 2020.</p>



Elements scoped out of the assessment

9.3.4 The elements shown in **Table 9-3** are not considered to give rise to likely significant effects as a result of the Proposed Scheme and have therefore not been considered within this assessment:

Table 9-3 – Elements scoped out of the assessment

Element scoped out	Justification
Townscape	The Proposed Scheme is wholly located within agricultural land, where the overriding character is of open fields with sparse settlement. There is a lack of urban areas that would constitute townscape. Any built form present would be assessed as part of the landscape assessment.

9.3.5 Over time, views within the landscape change due to seasonal variation, changes in light level, human intervention and variation between night and day. When considering the impacts of the Proposed Scheme (magnitude of change) upon the perception of landscape character and respective views, the following scenarios have been scoped into assessment:

- Construction phase (2026-2029) – during the construction period, assuming a maximum perceived change situation (when construction activity is at its peak);
- Winter (Year 1 of opening) – a winter’s day in the year that the Proposed Scheme will open or be fully operational (with noise/visual screens and mounds in place but before any planted mitigation has begun to take effect); and
- Summer (Year 15) – a summer’s day in the fifteenth year after opening (i.e. when the planted mitigation measures can be assumed to be substantially effective).

9.3.6 The analysis assumes that the visual context applicable at the year of opening is that which will be experienced during winter months when the degree of



visual exposure is potentially greatest due to a lack of foliage within the wider landscape and prior to the establishment of mitigation planting. The analysis at fifteen years into operation in summer demonstrates the effectiveness following maturation of any mitigation planting proposals for the Proposed Scheme and when the degree of visual screening is potentially greatest due to foliage being in leaf within the wider landscape and within the mitigation planting.

Extent of the Study Area

Landscape Study Area

9.3.7 The extent of the landscape study area is shown on **Figure 9.1: Site Context Plan** in **Appendix 9.3** (Document Reference 3.09.03) and has been determined by a desk-based review and field work to understand the Proposed Scheme's position in relation to the wider landscape around it which the Proposed Scheme may influence in a significant manner (**Ref. 9.1**). This includes the mitigation elements within the Site Boundary and ensures that any potential effects to sensitive landscapes which may be influenced by the Proposed Scheme in the wider area are reported appropriately.

Visual Study Area

9.3.8 The visual study area for the visual assessment is initially defined by the extent to which the Proposed Scheme may be visible: by definition, visual effects can only occur where at least some part of the development is visible. The first step in identifying the extent of visibility is to identify the Zone of Theoretical Visibility (ZTV) for the Proposed Scheme. The ZTV shows the extent of potential visibility and forms the visual study area, as illustrated in **Figure 9.2: Zone of Theoretical Visibility Plan** in **Appendix 9.3** (Document Reference 3.09.03). The ZTV shows the extent of potential visibility and assists in defining the visual study area. Following the desk-based review, field work, a review of the ZTV which accounts for existing vegetation, topography and features that block distant views, and NCC and BDC's recommendations for viewpoint locations, a rectangular study area of



38.92km² (6.89 x 5.65km) was determined as appropriate for the assessment of both landscape and visual effects. The visual study area is the whole of the area shown in **Figure 9.1: Site Context Plan** in **Appendix 9.3** (Document Reference 3.09.03).

Site Boundary and Red Line Boundary

- 9.3.9 The Site Boundary is the areas within which the main engineering works (structures, carriageway, drainage, earthworks etc) will be undertaken and includes areas for temporary use during construction such as works compounds, storage sites, welfare facilities. The Site Boundary also includes the areas of Primary Mitigation as illustrated in the **Landscape Plans** (Document Reference: 2.07.00).
- 9.3.10 The Red Line Boundary contains all areas of land required temporarily or permanently for the construction and operational activities of the Proposed Scheme. This includes the Site Boundary, Areas for Environmental Enhancement and Essential Mitigation, and Areas identified as No Work Zones. Refer to General Glossary (Document Reference: 3.03.00) for definitions of Site Boundary and Red Line Boundary. This
- 9.3.11 This assessment has considered the likely impact of the Proposed Scheme within the Site Boundary on landscape character and visual amenity. As referenced above, this includes the main engineering works, areas for use during construction, and Primary Mitigation. The Proposed Scheme within the Red Line Boundary is not considered further as there would be no impacts anticipated within No Work Zones and Areas for Environmental Enhancement and Essential Mitigation are considered Additional Mitigation for the purposes of the assessment (See **Section 9.7.16**).

Method of Baseline Data Collation

Desk study

- 9.3.12 Information has been gathered primarily from a structured site survey, supported by desk study and consultation with relevant consultees.



9.3.13 The desk study included:

- Identifying natural and built features such as landform, vegetation, settlement patterns and hydrology in relation to the Proposed Scheme using Ordnance Survey (OS) mapping;
- Studying aerial photography and online photographic resources;
- Review of relevant national, regional and local planning policy documents; and
- Review of relevant published landscape character assessments.

Site visit and surveys

9.3.14 Detailed landscape and visual site survey work was carried out on Monday 16th and Tuesday 17th March 2020, Thursday 6th and Friday 7th August 2020, as well as Thursday 17th March 2022. The field surveys were designed to collect data for both the landscape and visual impact assessments during both winter and summer months and the most recent surveys took account of subsequent alignment changes. The field surveys were also to take photographs and survey features in photographs for preparation of verifiable photomontages (**Appendix 9.5: LVIA Photomontages (Document Reference 3.09.05)**).

9.3.15 The following tasks were undertaken as part of the survey work:

- Recording the baseline landscape and its character;
- Checking and ground-truthing the visual receptors;
- Identifying effects on both the landscape character and on visual amenity;
- Consideration of potential design and mitigation proposals; and
- Site photography.



9.3.16 Photography was undertaken with a full frame single-lens reflex (SLR) digital camera with a 50mm focal length lens, mounted on a tripod with a levelled panoramic head.

Assessment methodology

9.3.17 A full methodology for this assessment is set out in **Appendix 9.1** (Document Reference 3.09.01). In summary, the LVIA methodology identifies the value and susceptibility (or vulnerability) of the selected landscape and visual receptors to assess their sensitivity to the Proposed Scheme. The likely magnitude of effect (change) experienced by these receptors is then considered and combined with the receptor's sensitivity to identify the significance of effect for the Proposed Scheme.

9.3.18 The key assessment stages include:

- Establishment of the baseline conditions: the landscape character and visual context of the receiving environment and its quality, value and sensitivity to change;
- Contributions to the iterative process of design and mitigation based on understanding the nature, form and features of the Proposed Scheme;
- An evaluation of the magnitude of effect likely to result from the Proposed Scheme, both during construction and operation, on visual amenity and the landscape resource; and
- An assessment of the significance of landscape and visual effects considering the sensitivity of resources and the magnitude of effect.

Significance criteria

9.3.19 The significance level attributed to each effect has been assessed based on the sensitivity/value of the affected receptor(s) and the magnitude of change arising from the Proposed Scheme, as well as a number of other factors that are outlined in more detail in **Chapter 5: Approach to EIA** (Document Reference: 3.05.00) and **Appendix 9.1** (Document Reference 3.09.01). The



sensitivity of the affected receptor is assessed on a scale of very high, high, medium, low and negligible, and the magnitude of change is assessed on a scale of high, moderate, minor, negligible and no change, as set out in **Chapter 5: Approach to EIA** (Document Reference: 3.05.00) and **Appendix 9.1** (Document Reference: 3.09.01). Where appropriate, this assessment uses intermediate descriptors, such as minor to negligible, minor to moderate or moderate to high, where the assessor considers that the effect falls between the levels used. The magnitude of effect is determined from a number of factors including scale, geographical extent, and duration of effect.

Significance of Effect

9.3.20 The following terms have been used to define the significance of the effects identified and apply to both beneficial and adverse effects:

Table 9-4 – Significance of Effect

Level of effect	Landscape effect	Visual effect
Large	Considerable change over an extensive area of a highly sensitive landscape, fundamentally affecting the key characteristics and the overall impression of its character.	The development would be a prominent feature or a noticeably discordant or enhancing feature substantially affecting overall visual amenity or would result in a clearly noticeable change to a highly sensitive and well composed existing view. A clearly noticeable or substantial improvement or deterioration of the existing view.



Level of effect	Landscape effect	Visual effect
Moderate	Small or noticeable change to a highly sensitive landscape or more intensive change to a landscape of medium or low sensitivity, affecting some key characteristics and the overall impression of its character.	<p>The development would be a noticeable feature or a somewhat discordant or enhancing feature affecting overall visual amenity or would result in a noticeable change to a highly sensitive and well composed existing view or would be prominent within a less well composed and less sensitivity view.</p> <p>A noticeable improvement or deterioration of the existing view.</p>
Slight	Small change to a limited area of landscape of high or medium sensitivity or a more widespread area of a less sensitive landscape, affecting few characteristics without altering the overall impression of its character.	<p>The development would be a visible but not particularly noticeable feature or a slightly discordant or enhancing feature affecting overall visual amenity or would result in a small change to a highly sensitive and well composed existing view or would be noticeable within a less well composed and less sensitivity view.</p> <p>A small improvement or deterioration of the existing view.</p>



Level of effect	Landscape effect	Visual effect
Neutral	No discernible improvement or deterioration to the existing landscape character.	No discernible improvement or deterioration in the existing view.

9.3.21 As set out in **Chapter 5: Approach to EIA** (Document Reference: 3.05.00), effects that are classified as **moderate** or above are considered to be **significant**. Effects classified as less than **moderate** are considered to be **not significant**.

9.4 Baseline Landscape Conditions

9.4.1 This chapter identifies landscape features of the landscape study area which may be affected by the Proposed Scheme.

Local Landscape

9.4.2 The local landscape is characterised by medium sized fields containing woodland and arable farmland interspersed by settlements and scattered farmsteads. The Wensum River Valley floodplain is located at the northern end of the Proposed Scheme.

9.4.3 The settlements of Honingham, Ringland, Weston Green, Weston Longville and Attlebridge are located within the landscape study area. The Proposed Scheme is bound to north by the A1067 and to the south by the A47. Intermittent views of the higher ground to the east are visible from within the area, although largely blocked by existing vegetation.

Land use, roads and infrastructure

9.4.4 The closest large settlement is Norwich (approximately 12km south-east), however the landscape study area encompasses a relatively rural landscape with small villages and isolated dwellings. The biggest settlement is Honingham located to the south, with Ringland, Drayton and Weston Longville



being other notable settlements within this landscape. Wensum Valley Hotel, Golf and Country Club is located to the south-east of the Proposed Scheme.

- 9.4.5 Several minor roads cross through the landscape as well as the larger A47 and A1067 which run east-west at the south and north of the Proposed Scheme respectively. The wind turbines to the west on the old RAF Attlebridge airfield and the overhead line which runs north to south, combined with roads, are notable features within this landscape.

Topography and hydrology

- 9.4.6 The landscape is a wet lowland shallow valley in the north. To the south, the land rises and gently undulates becoming a plateau with small to medium regular fields contained by hedgerows. The Proposed Scheme is located between the A1067 Fakenham Road and the A47 with landform from Fakenham Road rising from approximately 21m AOD to approximately 40m AOD to the south towards the A47. There are two watercourses which are designated by the Environment Agency (EA) as 'main rivers' within the landscape study area, the River Wensum and the River Tud, which are in a Flood Zone 3 area. The River Wensum and its associated flood plain run north-west to south-east through the northern end of the landscape study area. The River Tud runs west to east through Honingham to the south of the landscape study area, while Foxburrow stream, a tributary of the River Tud, is crossed by the Proposed Scheme.

Vegetation and field pattern

- 9.4.7 Landcover is predominately arable farming with mixed plantation woodland reducing the uniformity of the landscape, and some fields have been turned over for pig rearing. Woodland belts are present in the fields either side of Ringland Lane and The Broadway generally running in a northwest to southeast direction. The prevailing field pattern within the landscape study area is small to medium regular fields contained by hedgerow and infrequent mature trees. This includes some veteran trees as well as important hedgerows. Field patterns are largely intact from the 14th century, however



there is evidence of larger fields and removal of hedgerows in some areas.

There are medieval manors which form country house estates such as Morton Hall to the north and Easton Estate to the south. There are small ponds throughout this landscape, often regular in shape. The river valley to the north and east following the River Wensum consists of wet meadow and small lakes.

Public Rights of Way (PRoW)

- 9.4.8 The Definitive Map published by Norfolk County Council identifies seven publicly accessible routes in the vicinity of the Proposed Scheme comprising of Public Highway (unclassified rural lanes), Restricted Byway (RB), Public Footpath (FP), and unsurfaced highway.
- 9.4.9 The existing routes present within the vicinity of the Proposed Scheme, are illustrated in **Figure 9.1: Site Context Plan** (Document Reference 3.09.03). The context plan illustrates the fragmented nature of the local traffic-free PRoWs, reliant upon interconnecting routes over the public highway network, and often sharing road space with vehicles due to the absence of dedicated footways alongside the carriageway.

Designations and cultural heritage

- 9.4.10 The Proposed Scheme does not contain or lie within 10km of any Areas of Outstanding Natural Beauty (AONB) or National Parks and Gardens. The River Wensum Special Area of Conservation (SAC), which is also designated a Site of Special Scientific Interest (SSSI), is the only SAC or SSSI within the landscape study area. Fakenham Road Roadside Nature Reserve (RNR) is located immediately adjacent to the Proposed Scheme along with a several County Wildlife Sites (CWS) and Ancient / Veteran trees throughout the landscape study area.
- 9.4.11 The nearest area of Ancient Woodland is Park Grove around 1km west of the Proposed Scheme along with Hockering Wood around 1.5km further west. Several areas of Ancient Replanted Woodland are located within and near the landscape study area at Mileplain Plantation north of the Proposed Scheme,



Primrose Grove next to the Proposed Scheme, Dryhill Plantation, Snake Wood, and Harman's Grove east of the Proposed Scheme, and Mouse Wood and Park Grove west of the Proposed Scheme. Ancient Replanted Woodland are woodland sites which contain evidence of former ancient woodland, or for which there is recorded evidence of former ancient woodland, and which have subsequently been planted with coniferous or broadleaved trees. For NPPF purposes this is still treated as Ancient Woodland.

9.4.12 There are a number of listed buildings in the locality of the Proposed Scheme which are not directly impacted by it, but which may have views towards it. Low Farm Barn a Grade II listed structure in particular is located 5m east of the Site Boundary. See **Chapter 8: Cultural Heritage** (Document Reference 3.08.00) for assessment of impact on historical setting in the landscape.

National landscape characterisation

9.4.13 The Proposed Scheme runs across two National Character Areas (NCAs) as identified by Natural England's profile reports published in 2014 (**Ref. 9.2**). These include predominantly NCA 78 - Central North Norfolk, and a small area at the southern extent within NCA 84 - Mid Norfolk.

9.4.14 Each profile defines conservation initiatives and provides a description of the natural and cultural features that shape the landscape, how they have changed over time, and key drivers for ongoing change.

9.4.15 The description provided for NCA 78 - Central North Norfolk acknowledges the similarities with the adjoining NCA 84 - Mid Norfolk area.

9.4.16 Key sensitivities and landscape opportunities identified by the two NCA profiles which are relevant to the development of the Proposed Scheme design include:

- *“Protect the historic enclosed field pattern, with its characteristic winding lanes and boundary hedges.*
- *Manage and enhance woodlands by replacing conifer and poplar plantations with native tree species, re-introducing traditional coppice*



management, creating new woodlands and connecting fragmented habitats.

- *Manage and enhance heathland habitats, restoring remnant areas and connecting fragmented habitats.*
- *Manage and enhance existing arable farmland for wildlife by working with landowners to reinstate hedgerows, increase areas of set aside and arable margins, and adopt wildlife-friendly land management practices through stewardship schemes.*
- *Plan green infrastructure, including areas of broadleaved woodland to screen new developments, to enhance landscape character, improve biodiversity and recreational opportunities, and to make a positive contribution to climate change.*
- *Plan strategic and local networks of sustainable transport and public access linkages to improve recreational opportunities and mitigate for increased visitor pressure.*
- *Minimising the effects of new development by avoiding areas with high tranquillity, incorporating green infrastructure and woodland buffers, and minimising new sources of light pollution.*
- *Enhancing sustainable access through the public rights of way network and National Trails, improving recreation and the health of the local community, and protecting agricultural management practices, habitats and wildlife.*
- *Investigating opportunities to create and enhance green infrastructure and public access by creating additional linkages between existing public footpaths, settlements, amenities and transport links.*
- *Maintaining the protected sites network, ensuring continued protection of priority habitats and species including the Norfolk Valley Fens SAC and River Wensum SAC, and SSSI including Foxley Wood.*



- *Maintaining and enhancing areas of ancient semi-natural woodland and planting new areas of broadleaved woodland to address fragmentation.*
- *Increasing the biodiversity of conifer plantations by re-introducing native broadleaved trees.”*

9.4.17 See the Design and Access Statement (**Table 4.2 How the Proposed Scheme responds to the National Character Area opportunities – Document Reference: 1.02.00**) for information on how the Proposed Scheme responds to the above sensitivities and opportunities.

Broadland District Landscape Character Assessment

9.4.18 This section describes the more localised Landscape Character Areas (LCAs) in which the Proposed Scheme is situated, as identified by Broadland District Council (BDC) in their landscape character assessment 2013 (**Ref 9.3**). As BDC has defined local Landscape Character Areas, this assessment has not needed to define its own local LCAs.

9.4.19 The Site Boundary is situated for the most part within two Broadland District Landscape Character Areas (LCAs) and to a smaller extent within and adjacent to two more, as shown in **Figure 9.3: Landscape Character Plan** (Document Reference 3.09.01), and listed as follows:

- A1 - Wensum River Valley; (within the Site Boundary)
- D2 - Weston Green Tributary Farmland; (within the Site Boundary)
- B1 - Horsford Woodland Heath Mosaic; and (within and adjacent to the Site Boundary)
- D1 - Cawston Tributary Farmland (within and adjacent to the Site Boundary).

9.4.20 The following describes the character identified in the BDC assessment for the district LCAs:



- A1 - Wensum River Valley

“In this character area the Wensum meanders through a confined valley floodplain. It is enclosed to the south by wooded rolling slopes, and to the north by less dramatic, gentler arable slopes. The Valley has a shallow V-shape, and the valley sides contain an intimate landscape. The valley floor comprises a lush tranquil pastoral landscape character including lowland grazing meadows and marsh, which provide a strong sense of visual continuity along the river corridor. The meadows are typically divided by dykes, which create an open landscape where long views can be seen along the valley floor. The river valley sides ascend gently from the valley floor and comprise a patchwork of small-scale arable fields with pockets of pasture, often lined with hedgerow boundaries and hedgerow trees. Woodland is a particular feature of the area; most commonly associated with large mixed blocks that blanket the river valley sides. These areas of woodland are commonly associated with large seventeenth century houses and historic Halls, such as Morton Hall and Weston Hall. Eastern parts of the area comprise a mixture of land uses, mainly associated with the settlement fringe of Norwich including golf courses and hospitals.

The area comprises a scattered settlement pattern. Small villages punctuate the landscape; often located on elevated land, next to crossing points. Some of these places have retained their traditional character, however many have expanded due to their proximity to Norwich. Narrow lanes run along the tops of the valley sides, and in places cut through the slopes. In eastern parts of the area, rolling wooded slopes, plantation woodland, scattered scrub and groves of willows, enclose the valley floodplain and periodically curtail views. Extensive blocks of woodland that blanket the river valley sides throughout the area create distinct wooded skyline views. There is a generally strong sense of tranquillity throughout much of the area.”



- D2 - Weston Green Tributary Farmland

“Located to the east of Norwich, this area encompasses a pocket of land, which is isolated from the rest of the district by the River Wensum. Landform is gently rolling and incised to the south of the narrow valley of the River Tud. The land continues to rise between the two river valleys, forming an elevated plateau, that extends south-west beyond the boundaries of the district. This section of the character area reaches elevations of 60AOD.

Mixed woodland extends south and along the Tud Valley. Interspersed between these plantations, medium-scale fields are in mixed use. Some are in arable cultivation, but many are turned over to pig rearing and sheep grazing. Occasional fields have been converted to residential use with associated horticulture. Further west where the woodland cover decreases dramatically, arable fields are medium-sized and rectangular in shape with strongly clipped hedgerows and small copses along boundaries and within fields. On the top of the plateau, field sizes increase and large-scale pig and poultry farming predominates.

There are few settlements in the area. Some small settlements, often with settlement greens which are illustrated on historic maps, appear to have seen little expansion and many have declined due to falls in population. Much of the land here appears to have been enclosed to form the large estates on the adjacent valley slopes of the Wensum. This has resulted in a limited number of small farmsteads in this area. The A47 cuts through the southern part of this character area along the lower land near the river Tud.

The Tud valley is a peaceful, rural landscape clearly defined by a broad shallow valley landform. Evidence of the wetland character associated with the Tud is apparent in the areas of wet meadow, grazed pasture and alder carr, although the course of the Tud is largely concealed by



wet woodland, with views of the river generally confined to crossing points. To the north west, the fabric of the landscape simplifies. Here, the higher relief, along with fewer variations in land use and reduced woodland cover, creates an open character allowing expansive views across the wooded slopes towards Norwich. Large steel pylons with overhead wiring that slice through fields dominate the skyline in this part. To the south, structure is provided by the numerous close clipped hedgerows and woodland copses, whilst the top of the plateau, large-scale fields, limited tree and hedgerow cover, and the elevated nature of the area create an exposed and less structured landscape.”

- B1 - Horsford Woodland Heath Mosaic

“Extending northwards through the centre of the District, this character area comprises a simple plateau landscape, encompassing the gentle upper side slopes of the River Bure. Apart from the minor undulations where tributaries of the River Bure and Wensum cut into the slope, there are few variations in topography. The area was once entirely covered by heathland. never sought for conversion to farmland, due to the infertile nature of the soils. North western parts have been encroached by large 17th and 18th century estates; using the land for large scale woodlands and plantations. Further encroachment occurred as a result of the Enclosure Acts, during this time land was divided into large rectangular blocks and converted to arable farmland. Today, the area is a mixture of arable farmland, old deciduous woodland and recent coniferous plantations. Only small remnant patches of heathland and fen are found within interior parts of the woodland, often protected by European designations for their high ecological value. Large rectangular arable fields abut the woodland in northern and southern parts of the area. Woodland cover is more intermittent in central parts, and small arable fields are interspersed with small-scale industrial units and isolated 20th century residential developments.



Due to limited agricultural activity, few settlements have developed here in the past and settlements are mostly located on the edge of the area. Development is mostly restricted to a scattering of twentieth century residences along straight roads that traverse through the area. Many of these dwellings reside on individual plots of rough grassland amid blocks of woodland. Views are strongly contained by woodland, often forming close horizons. From outside the area, woodland is prominent within views, forming distinctive wooded horizons. There are wide and expansive easterly views out from the edge of this area, across the gently sloping land that falls away to the Bure valley. A network of footpaths, cycle routes and bridleways traverse the area, including a national trail west of Horsford (Marriott's Way). The plantations provide an important recreational resource for the public in the District."

- D1 - Cawston Tributary Farmland

"Cawston Tributary Farmlands is situated in the central western part of the District, stretching north from the upper Wensum River Valley (A1). The sands and gravels of this area form a gently rolling landscape. The land becomes increasingly undulating where tributaries of the Wensum and the Upper Bure rivers incise it. The loam geology produces fertile soils and the area has a long established agricultural history. The mosaic of parkland, arable fields, woodland, copses of mature trees and clipped hedgerows creates a diverse and interesting landscape character. However, in central parts, the intensification of farming techniques has resulted in hedgerow and woodland losses.

Historic maps show a number of medieval market towns located within and adjacent to this area. Some such as Reepham and Cawston have expanded around a strong nucleated core and are busy towns today. Others such as Salle, have declined as the rural population fell or were incorporated into the large estates as 'closed villages'. Today the settlement pattern reflects a long history of development with



numerous nucleated settlements and towns. The settlements have many historic buildings and features and a strong local vernacular. To the north, grand houses, estate settlements and churches are distinctive features, and strongly contribute to the area's rich and distinctive character. In particular, Salle Park, a large parkland estate, is a key feature in the northern parts of the area. Developed on poorer soils, the estate is centred on a grand house, and includes landscaped gardens, parkland and plantations. Surrounding medium scale rectangular arable fields represent an extension of the park landscape. Further south, smaller red brick and pantiled manors and halls, dating from the seventeenth and eighteenth century litter the landscape. Here, the landscape is smaller in scale and more intimate, but with an equally rich historic character.

The diverse collection of landscape features, creates a strong landscape structure, with an interesting visual mosaic. In particular, the large designed parkland landscapes to the north, specifically designed to create an 'idyllic natural landscape' are very scenic. For the most part, the distinctive character of the area remains unspoilt and the arable landscape is well cared for. Historic associations and distinctive features give the area a rich character and a strong sense of place.

Loss of hedgerows creates an open skyline in central parts. Vertical elements, including lines of steel pylons that slice through field systems with overhead wiring that connect to an electrical substation west of Cawston, are prominent and repeated skyline features within central parts."

Breckland District Landscape Character Assessment

9.4.21 The Site Boundary is also located to a small extent within and near the border with Breckland District Council so consideration is needed of the LCAs identified for these neighbouring areas.



9.4.22 The Site Boundary is located to a small extent within and adjacent to the following LCAs in Breckland District (**Ref 9.4**):

- A5 Landscape River Valley Upper Tud Valley;

The Tud Valley is an easterly draining catchment with a broad shallow and well-defined valley, lying between 30-50m AOD. Landcover is predominantly pastoral farmland, with some areas of rough grazing and wet meadow/fen. Field pattern is predominantly regular and comprises small to medium scale fields. Settlement is small in scale and of a low density, generally nucleated pattern as at Hockering. Settlement within the Tud Valley is otherwise represented by small, isolated farmsteads and the linear hamlet of Rotten Row.

- B6 River Wensum and Tud Tributary Farmland;

A gently undulating landform, with topography ranging from 20-50m AOD. Tributaries of the River Wensum and River Tud are numerous, creating shallow valleys on the edges of the character area, flowing into the adjacent River Valley character areas. Arable cultivation is the primary land cover, although woodland and small areas of pasture are interspersed with the arable fields. Woodland ranges from small scale farm woodlands to larger strips of wet woodland associated with tributaries. In addition, there are two large areas of ancient woodland designated as SSSIs (Hockering Wood and Foxley Wood). Although fields are characteristically medium to large in scale, localised areas of small-scale fields adjoin the tributaries.

Future baseline

9.4.23 The landscape and visual study area of the Proposed Scheme is composed of adjoining deeply rural countryside and open floodplain along with Wensum and other small settlements. Based on professional judgement, review of committed developments and local policy, identification of likely changes to the baseline environment by the date of opening (Operation Year 1) has been made and discussed below.



9.4.24 There are no identified committed developments or changes to management in the area that are likely to affect the future baseline at the opening year, i.e. no introduction of several new visual receptors or experiencers of the landscape. It is therefore anticipated that existing trends may continue, including increases in traffic, increase in population and settlement expansion putting pressure on recreational areas and green space, as well as gradual changes in vegetation and species composition due to pathogens such as ash dieback.

9.4.25 Ash dieback, also known as Chalara dieback of ash is a serious disease that is killing ash across Europe. It is likely that ash dieback will spread across the UK such that gaps in woodland and tree lines can be expected to occur where this species is currently present but not to the extent that will change assumptions about intervening vegetation for the purposes of this assessment.

9.4.26 Overall, the future baseline is not anticipated to differ significantly from the current baseline in the immediate future, although current trends are likely to continue.

9.5 Baseline Visual Conditions

Overview

9.5.1 The visibility of the Proposed Scheme within the wider landscape provides a basis for consideration of the potential effects on visual amenity that may result through the development of the Proposed Scheme. GLVIA3 identifies visual receptors as, “*the different groups of people who may experience views of the development*” (GLVIA, para 6.3) (**Ref 9.5**). They may include “*people living in the area, people who work there, people passing through on road, rail or other forms of transport, people visiting promoted landscapes or attractions, and people engaged in recreation of different types*” (GLVIA, para 6.1) (**Ref 9.6**). Whilst it is the people living, working, passing through or enjoying recreational activities in the area who see the view and enjoy the



visual amenity, it is the places they may occupy that are mapped and described as the 'receptors' of the views.

Zone of Theoretical Visibility

- 9.5.2 The ZTV (**Figure 9.2** (Document Reference 3.09.01)) analysis represents the extent of the area over which the Proposed Scheme may theoretically be visible. A computer generated digital ZTV was produced for the Proposed Scheme. The ZTV is a 'with screening' ZTV (taking account of screening by existing trees, woodlands, buildings or structures and proposed earthworks) based on a viewer eye height of 1.6m, as recommended in GLVIA3, and using 2m LiDAR digital surface model. The Proposed Scheme was modelled at +4m above proposed levels to take account of the typical height of lorries. Whilst the LiDAR data provides more detailed modelling through inclusion of built form, it still required verification on the ground through fieldwork.

Fieldwork

- 9.5.3 Fieldwork was undertaken in order to determine the potential nature and extent of views of the Proposed Scheme and visual receptors likely to be affected. A series of photographs were taken during the fieldwork on Monday 16th and Tuesday 17th March 2020 and reconfirmed on Thursday 17th March 2022 following alignment changes from the locations illustrated on **Figure 9.4 Visual Assessment Plan** (Document Reference 3.09.01). These locations were initially identified as part of the desk-based study and by consultation with Norfolk County Council and Broadland District Council. These photographs were taken from areas to which the public have access i.e. along roads, PRow and within areas of public open space as well as from private land. Some minor changes were made during fieldwork where a better or more representative viewpoint was obtainable or where necessary to ensure a safe location but these still provide a representative view.



Viewpoints

9.5.4 **Appendix 9.4: LVIA Photographs** (Document Reference 3.09.04) illustrate fifteen representative viewpoints that have been selected to aid the assessment of effects on visual receptors. **Appendix 9.5: LVIA Photomontages** (Document Reference 3.09.05) illustrate the Proposed Scheme within seven of the viewpoints. Whilst this assessment is not based on the photomontages, they support the assessment in understanding the likely impact the Proposed Scheme would have on sensitive receptors. **Table 9-5** below outlines the viewpoint details and reason for selection.



Table 9-5 - Viewpoints

Number	Location	Reasons for selection	Approximate Distance from Proposed Scheme
01	Properties on Fakenham Road 52°41'47.22"N 1°10'1.23"E	Close view representing residential properties on Fakenham Road looking southeast towards the new viaduct.	120m
02	Old Hall Farm on Fakenham Road 52°41'45.82"N 1° 9'52.02"E	Close range view looking southeast across the River Wensum towards the viaduct.	130m
03	Wensum Valley Hotel, Golf and Country Club 52°41'13.71"N 1°11'1.56"E	Long range view looking west from Wensum Valley Hotel, Golf and Country Club. The Proposed Scheme would be within view from this elevated and open viewpoint.	1450m
04	PRoW (Ringland FP4) 52°41'4.77"N 1° 9'58.51"E	Mid-range north westerly view from PRoW (Ringland FP4). This viewpoint represents views experienced by users of the PRoW as well as the nearby residential property.	1050m



Number	Location	Reasons for selection	Approximate Distance from Proposed Scheme
05	Ringland Lane 52°41'27.66"N 1° 8'44.07"E	Close range view of Ringland Lane underpass. View experienced by road users.	On the Proposed Scheme
06	Weston Road (Representative Viewpoint for Residential Property off Ringland Road) 52°41'26.79"N 1° 7'35.03"E	Mid to close range view southeast towards the Proposed Scheme. This viewpoint represents the nearby residential property.	700m
07	Weston Longville 52°41'51.99"N 1° 7'31.54"E	Long range view representative of properties in Weston Longville village.	1300m
08	Weston Green Road 52°41'14.97"N 1° 7'32.04"E	Close to mid-range view of the Proposed Scheme from properties on Weston Green Road looking southeast.	460m



Number	Location	Reasons for selection	Approximate Distance from Proposed Scheme
09	A1067 Fakenham Road 52°41'55.84"N 1° 8'45.24"E	Long distance representative view of Morton Hall. The view is from an elevated position on Fakenham Rd looking southeast towards the viaduct.	1350m
10	Weston Road 52°40'58.78"N 1° 8'16.24"E	Close view from Weston Road representing a viewpoint experienced by users of PRow (Weston Longville FP9) and nearby residences of the Proposed Scheme and Weston Road overbridge.	115m
11	PRow (Honingham FP5/Weston Longville FP9) 52°40'43.35"N 1° 7'43.21"E	View from PRow looking northwest towards the Proposed Scheme. This viewpoint would be experienced by users of PRow (Honingham FP5/Weston Longville FP9).	200m



Number	Location	Reasons for selection	Approximate Distance from Proposed Scheme
12	Weston Green (Representative Viewpoint for Residential Properties in Weston Green) 52°41'7.67"N 1° 7'5.45"E	View representative of views experienced by properties in Weston Green, looking southeast. The Proposed Scheme and Breck Road overbridge will be experienced from this viewpoint.	610m
13	PRoW (Honingham RB1) 52°40'40.41"N 1° 6'21.65"E	View from PRoW (Honingham RB1). This view will be experienced by users of the PRoW as well as the nearby residential property on Wood Lane.	310m
14	Easton Estate 52°39'57.24"N 1° 6'56.81"E	View from Easton Estate property looking northwest towards the Proposed Scheme.	1025m
15	Ringland Lane 52°41'5.75"N 1° 9'14.51"E	View from Ringland Lane looking northwest towards the Proposed Scheme.	1000m



9.6 Sensitive Receptors

Landscape

- 9.6.1 Broadland District LCAs A1 Wensum River Valley and D2 Weston Green Tributary Farmland which the Proposed Scheme runs through are considered further regarding the sensitivity of the LCA, magnitude of change, and level of effect the Proposed Scheme has on the LCA.
- 9.6.2 The National Character Areas are not considered further due to their relatively large geographical extent and the likely limited impact the Proposed Scheme would have on them.
- 9.6.3 Broadland District LCAs B1 Horsford Woodland Heath Mosaic and D1 Cawston Tributary Farmland as well as Breckland District LCAs A5 Landscape River Valley Upper Tud Valley and B6 River Wensum Tud Tributary Farmland are also not considered further due to the likely limited impact of the Proposed Scheme on the whole of the LCAs. There is likely to be some visibility of the Proposed Scheme from areas at the edge of the LCAs but the likely visibility, and in turn effect, of the Proposed Scheme on the whole of the LCAs is not considered proportionate to consider further assessment of these areas. The likelihood of significant effects on a landscape receptor is determined from a several factors including geographical extent of influence, duration, and nature. **Table 9-6** below analyses the value and susceptibility of each LCA considered further to provide an overall sensitivity for the LCA.

Table 9-6 – Landscape sensitivity

Character Area	Comments
LCA1: A1 Wensum River Valley Value	The character of LCA1 is that of a distinct valley landform with flat valley flood plain and adjacent gently sloping valley sides. It has the strong presence of the River Wensum towards the centre of the floodplain which is a designated Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC). The LCA has willow pollards and lines of poplar flanking ditches and watercourses on the valley floor, plus areas of reeds, marshes, and grazing meadowland. LCA1 has a patchwork of small-scale fields, often lined with strong hedgerow boundaries and hedgerow trees; and blocks of mature woodland dotted along the valley sides. Views within the LCA are short to medium distance, often partially blocked by hedgerows or woodland. Generally, there is little development in the LCA with arable farming seen throughout. The villages of Ringland located to the south and Attlebridge located to the north, along with isolated dwellings make up the settlement in the area. River crossings and bridges provide landscape features within the valley corridor, while Wensum Valley Golf Course and Hotel is located to the higher ground in the east of the LCA and overlooks the valley floodplain. Overall, the area contains no landscape designations but has features with medium to high local importance and rarity worthy of conservation. The LCA has a level of tranquillity associated with the river, lessened somewhat by the existing road infrastructure, as well as reeds, marsh, and grazing meadow which are of higher value. As a result, the value of the LCA is medium .
LCA1: A1 Wensum River Valley Susceptibility	LCA1 has a rural character shaped predominantly by open fields, hedgerows and blocks of woodland. The field pattern is regular with the strong feature of the River Wensum running through the LCA. The presence of the A1067 is considered to lessen the tranquillity and enhance the tolerance of the area to some change of the nature of the Proposed Scheme, however the proposed viaduct over the River Wensum has the potential to introduce a highly visible, hard and linear feature into the landscape. The LCA is considered to have a moderate ability to accommodate the specific proposed change with some undue consequences for the maintenance of the baseline situation. The area's ability to accommodate change results in medium susceptibility to the proposed change.
LCA1: A1 Wensum River Valley Overall Sensitivity	Medium

Character Area	Comments
<p>LCA2: D2 Weston Green Tributary Farmland Value</p>	<p>LCA2 has a gently rolling landform, cut to the south by the valley of the River Tud. The land rises to the north, forming an elevated plateau that extends southwest. Mixed woodland extends south and along the Tud Valley, interspersed by medium-scale fields used for arable cultivation or turned over to pig rearing and sheep grazing. Further west where the woodland cover decreases, arable fields are medium-sized and rectangular in shape with strongly clipped hedgerows and small copses along boundaries and within fields. On the top of the plateau, field sizes increase, and are predominantly used for large-scale pig and poultry farming.</p> <p>There are few settlements in the area, however, the A47 cutting through the southern part of the character area is a noticeable influence on tranquillity in the landscape.</p> <p>The undulating slopes, rolling hills and mature blocks of woodland in the centre and east create a small-scale and intimate landscape, with a settled and unified character. Its diversity of land cover and land uses provide a strong visual mosaic with a robust landscape structure. The Tud valley is a tranquil, rural landscape, clearly defined by a broad shallow valley landform.</p> <p>Areas of wet meadow, grazed pasture and alder carr give the area a wetland character while the River Tud is largely concealed by wet woodland and views of the river generally confined to crossing points.</p> <p>To the north-west, the fabric of the landscape simplifies along with fewer variations in land use and reduced woodland cover, creating an open character allowing for more expansive views across the wooded slopes towards Norwich. Large steel pylons with overhead wiring that slice through fields dominate the skyline in this part of the LCA.</p> <p>Overall, the area's mix of land cover elements adds visual interest, creating a diverse rural landscape with a strong sense of visual integrity. With the exception of some localised visual and noise intrusion from the A47, this landscape comprises a unified, peaceful character. Isolated churches create prominent and historic built features, and although there are no landscape designations of note and few other features of historic or architectural interest in the area, LCA2's distinctive topography and natural features make it a valuable landscape resource. The overall value is therefore considered to be medium.</p>

Character Area	Comments
LCA2: D2 Weston Green Tributary Farmland Susceptibility	<p>Land within LCA2 is recognised as having a distinctive topography combined with mature blocks of woodland that provides a small-scale and intimate landscape and reduces the areas tolerance to change. It has a strong visual mosaic with a robust landscape structure in central and eastern parts, and an ecological integrity of the Tud valley, including a mosaic of wet woodland, grazing marsh and alder carr along the river. All of these features limit the LCA's ability to accommodate change without undue consequences for the landscape character.</p> <p>Tranquillity and a strong rural character are associated with the Tud Valley, while there is an open skyline in the plateau areas to the northwest and south of the LCA. Settlement is scarce but there is a valuable setting of churches and associated characteristic views to their towers in the landscape.</p> <p>Overall LCA2 generally has a unified, peaceful character with a diverse rural landscape and a strong sense of place, however there are no national or regionally designated landscapes present. The area's ability to accommodate change of the nature of the Proposed Scheme results in medium susceptibility to the Proposed Scheme.</p>
LCA2: D2 Weston Green Tributary Farmland Overall Sensitivity	<p>Medium</p>



Visual

- 9.6.4 The expectations and occupation or activity of a visual receptor helps determine their susceptibility to the type of development proposed (**Ref 9.7**). As views from residential receptors are fixed, they can be experienced over long periods of time, so they are generally considered to be of high susceptibility to change.
- 9.6.5 Visual sensitivity is a function of the susceptibility of the different visual receptors to changes in the view and visual amenity they enjoy, and the value attached to those views. The following **Table 9-7** sets out the value, susceptibility and subsequent sensitivity of the identified visual receptor or group of receptors, with reference to representative viewpoints where relevant. See **Figure 9.4** (Document Reference 3.09.03) for receptor / viewpoint locations.

Table 9-7 – Value, susceptibility and overall sensitivity of receptors

Site	Comments
R1 – Properties on Fakenham Road – Residential receptors (VP1)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R2 – Old Hall Farm on Fakenham Road – Residential receptors (VP2)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R3 - Wensum Valley Hotel, Golf and Country Club – Commercial receptors (VP3)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views for users of the golf course and hotel.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include Wensum Valley Golf Club and Hotel with direct views of the wider landscape, partly screened by existing vegetation. Their susceptibility to the type of development proposed is therefore considered to be moderate.</p> <p><u>Sensitivity:</u></p> <p>Medium</p>

Site	Comments
R4 – PRoW (Ringland FP4) – Transport receptors (VP4)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of the PRoW with direct but long distant and transient views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be low.</p> <p><u>Sensitivity:</u></p> <p>Medium</p>
R5 - Ringland Lane – Transport receptors (VP5)	<p><u>Value:</u></p> <p>The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.</p> <p><u>Susceptibility:</u></p> <p>The receptors in this locality would include those with some appreciation of their surroundings, but views would be transient and secondary to their employment (typically of getting from A to B). Their susceptibility to the type of development proposed is considered to be low.</p> <p><u>Sensitivity:</u></p> <p>Low</p>
R6 – Weston Road (Representative Viewpoint for Residential Property off Ringland Road) – Residential receptors (VP6)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>

Site	Comments
R7 - Weston Longville – Transport receptors (VP7)	<p><u>Value:</u></p> <p>The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of the PRow as well as properties in the nearby village with indirect long-range views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be low.</p> <p><u>Sensitivity:</u></p> <p>Low</p>
R8 - Weston Green Road – Residential receptors (VP8)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R9 – A1067 Fakenham Road – Transport receptors (VP9)	<p><u>Value:</u></p> <p>The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include travellers with direct but transient, glimpsed views of the wider landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.</p> <p><u>Sensitivity:</u></p> <p>Low</p>

Site	Comments
R10 – Weston Road – Transport receptors (VP10)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of the road as well as users of the PRow (Weston Longville FP9) and residents in the nearby property with direct close-range views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R11 – PRow (Weston Longville FP9) – Transport receptors (VP11)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of the road as well as users of the PRow (Weston Longville FP9) with direct close-range views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R12 – Weston Green (Representative Viewpoint for Residential Properties in Weston Green) – Residential receptors (VP12)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>

Site	Comments
R13 – PRow (Honingham RB1) – Transport receptors (VP13)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of the PRow with direct medium distance views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.</p> <p><u>Sensitivity:</u></p> <p>Medium</p>
R14 – Easton Estate – Residential receptors (VP14)	<p><u>Value:</u></p> <p>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</p> <p><u>Susceptibility:</u></p> <p>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</p> <p><u>Sensitivity:</u></p> <p>High</p>
R15 – Ringland Lane – Transport receptors (VP15)	<p><u>Value:</u></p> <p>The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.</p> <p><u>Susceptibility:</u></p> <p>Receptors in this locality include users of Ringland Lane as well as properties in the nearby village with indirect long-range views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be low.</p> <p><u>Sensitivity:</u></p> <p>Low</p>



9.7 Scheme Design and Mitigation

Overview of the Scheme

9.7.1 The Proposed Scheme consists of the construction, operation and maintenance of an approximately 6 kilometre (km) long dual-carriageway road connecting the A1067 Fakenham Road and the A47, with a dualled section of the A1067 to the existing A1270 roundabout. There are interactions with other side roads which are detailed below.

9.7.2 As part of the Proposed Scheme, the following structures are proposed:

- Viaduct crossing the River Wensum Special Area of Conservation and floodplain (approximately 490m long). The ten-span bridge design includes piled piers within the floodplain;
- A culvert crossing of a minor watercourse in the floodplain where it is intersected by a maintenance access track;
- Wildlife crossings structures, including underpasses and green bridges;
- Overbridges where required to maintain routes across the scheme for local landowner vehicles, non-motorised users (pedestrians, cyclists and horse riders) and/or wildlife; and,
- Culvert structure for a tributary of the River Tud.

9.7.3 The Proposed Scheme design includes sloped earth embankments and cuttings to manage the topography, earth bunds, landscape planting, drainage basins, and maintenance access tracks.

9.7.4 As part of a separate planned scheme, National Highways proposes to realign and dual the A47 between North Tuddenham and Easton. This scheme's Development Consent Order (DCO) was granted by the Secretary of State in August 2022. National Highways will construct the Honingham grade-separated junction, and the Proposed Scheme will connect to the north-eastern side of that junction.



- 9.7.5 The Proposed Scheme includes routes for Non-Motorised Users (NMU). As part of the Proposed Scheme, once it is operational, it will include local diversions to a small number of existing Public Rights of Way (PRoWs) to allow continued use and sections of new routes to be added to the local PRoW network to enhance and connect existing provision. This will include dedication of PRoWs over some sections of the Proposed Scheme's maintenance access tracks for dual-purpose. These are illustrated on the Non-Motorised User Strategy Plan (**Transport Assessment - Appendix 4: NMU Strategy Plan**, Document Reference: 4.01.04). A Sustainable Transport Strategy (reference 4.02.00) has been prepared that encompasses the proposals for NMU provision and the proposed treatment for existing side roads that cross the Proposed Scheme alignment within the Red Line Boundary.
- 9.7.6 No new lighting is proposed along the corridor of the Proposed Scheme or on any of the structures. The only lighting will be on the approach to the A47 where approximately 185m is lit to the required lighting level from the give way line on the new A47 roundabout. Lighting columns will be up to 10m high. Lighting design will include associated cabling ducts and feeder pillars as required.
- 9.7.7 It is expected that if planning permission is granted for the Proposed Scheme the construction work is expected to commence in early 2026 and continue until the road opening in early 2029. The key construction activities are summarised sequentially below (although there is likely to be some overlap between each stage / individual processes):
- **Enabling Works.** This will focus on logistics including compound set up, establishing haul roads, fence removal, advanced ecological mitigation, and installation of temporary fencing. Temporary fencing will be installed to secure the work areas from unauthorised access. Additional zones may require specific fencing, for example ecologically sensitive areas.



- **Site Clearance.** This will entail removal of existing fencing, vegetation clearance and topsoil stripping.
- **Earthworks.** Pre-earthwork drainage installation, bulk earthworks, stockpile maintenance and logistics
- **Structures (viaduct, underbridges, overbridges, retaining walls and culverts).** Area preparation and temporary works platform installation, piling, steel and concrete works, structural fills and beams and deck installation.
- **Drainage and Ancillary Works.** Installation of longitudinal drainage (carrier drains, filter drains, swales), constructing infiltration basins, service lighting ducts in line with the drainage strategy.
- **Pavement.** Capping and subbase construction, base, binder and surface course.
- **Finishing Works.** Installing vehicle restraints system, signage, lighting, road markings and boundary fencing.
- **Landscaping.** Topsoil laying, seeding and tree, scrub and hedgerow planting.
- **Stockpile and Material Management.**
- **Viaduct Construction.**

9.7.8 The anticipated access to construction areas will be from the A1067, Ringland Lane, Paddy's Lane, Wood Lane and the A47 when direct access is available. The main construction compound and material storage area is intended to be located directly south of Breck Lane at the Broadway Over Bridge location to the centre of the construction site. A temporary works platform will be built across the River Wensum Floodplain from which the viaduct will be constructed.



9.7.9 A full description of the Proposed Scheme including construction proposals can be found in **Chapter 3 - Description of the Proposed Scheme** (Document Reference 3.03.00).

Primary Mitigation

9.7.10 The principal landscape and visual constraints to the Proposed Scheme include:

- Users of Public Right of Way that run close to and through the Site Boundary; and
- The visibility of the Proposed Scheme from close and medium, and long-range receptors.

9.7.11 The design of the Proposed Scheme, where possible, has included for primary mitigation embedded into the Proposed Scheme design to avoid potential adverse landscape and visual effects. The primary mitigation will be detailed within a Landscape and Ecological Management Plan (LEMP) and will be consistent with the Landscape Plans. This includes:

- Providing a considered architectural design for the viaduct with a sinuous and simplistic appearance which complements its rural landscape setting. The span arrangement responds well to the constraints of the site by minimising the number of piers within the floodplain, whilst ensuring visual continuity in their spacing. The span arrangement also allows for the opportunity to limit the depth of bridge deck. The shallow and flat nature of the Wensum Valley informs a preference for shallow construction forms and constant depth to avoid being overbearing visually in the landscape.
- Closing of lanes crossed by the Proposed Scheme and the introduction of Green Bridges will create an area that is not crossed by local traffic. Away from the immediate proximity of NWL should become more tranquil because of road closures which, in combination with greater



connectivity along PRow, should provide an improved environment for walking, cycling, and horse riding, and be a local and distinct asset.

- Ringland Lane underbridge has been designed in line with those used on the Broadland Northway (formally the Northern Distributor Road) for visual continuity and consistency of maintenance operations. Detailing of this structure ensures it complements the rural setting.
- Overbridges are proposed to provide multi-functional connections east to west, across the scheme. The Overbridges have been designed in response to their setting, to replicate as so far as is practicable, the conditions which enable use/navigation by wildlife such as linear vegetation and 'dark' corridors, to ensure continued use of these routes.

9.7.12 As secured through the **Landscape Plans** (Document Reference 2.07.00), a robust landscape-led approach to the Proposed Scheme has been employed. This will ensure that it is successfully integrated into the landscape and that it responds positively to the recommendations of the relevant published landscape character assessments.

9.7.13 In broad terms, the aims of the proposed primary landscape mitigation (see **Landscape Plans** (Document Reference 2.07.00) with illustrative material of one way this could look set out in the **Design and Access Statement** – (Document Reference: 1.02.00)) are:

- To create carefully considered landscaped bunds along the Proposed Scheme to minimise the impact on visual amenity of nearby visual receptors.
- To incorporate landscape mitigation planting to provide screening and visual amenity reduce adverse effects on landscape character and visual amenity;
- To assimilate the Proposed Scheme into the surrounding landscape;



- To protect the existing landscape features where possible and incorporate the new landscape features into the wider landscape framework with reference to published landscape character assessments; and
- To create an attractive setting for the Proposed Scheme.

9.7.14 The key features of the proposed primary landscape mitigation planting measures across the Proposed Scheme including bund planting can be found in the **Landscape Plans** (Document Reference 2.07.00), and include:

- Existing trees and established areas of existing vegetation are proposed to be retained and enhanced where possible including existing woodland and Fakenham Road Roadside Nature Reserve;
- New specimen tree planting to provide instant visual screening at several locations;
- New woodland and scrub planting to enhance visual amenity of the Proposed Scheme and respond positively to the local character;
- Areas of species rich seeding to enhance visual amenity; and
- New understory planting, such as shrubs or trees that are small enough and sufficiently shade tolerant to thrive under the canopies of other, taller trees, to create habitat for wildlife and provide visual containment;
- New instant hedges, native hedges, and native hedges with trees; and
- Meadow grass for wet soils and wetland scrub.

9.7.15 As identified above, one of the aims of the proposed landscape mitigation within the Proposed Scheme is to avoid adverse effects of the Proposed Scheme and assimilate it into the landscape. By doing so, the visibility of the Proposed Scheme will be significantly reduced within surrounding views.



Additional Mitigation

Outline Construction Environmental Management Plan (OCEMP)

9.7.16 An OCEMP (Document Reference 3.03.01) has been included in the Planning Application. The controls and measures included in the OCEMP (which will be developed into a full CEMP pursuant to planning conditions) are considered additional mitigation for the purposes of assessment of potential effects during the construction phase in this LVIA. The key measures in the OCEMP relevant to landscape character and visual amenity include;

- No materials of any kind to be stored, dumped or discharged outside of designated construction areas;
- Measures will be put in place to prevent mud or stones being dispersed from the construction traffic;
- Clearly mark trees and vegetation that are to be retained and included within the CEMP(s) which can be shown and communicated to staff during construction;
- Trees and vegetation to be retained are to be protected in line with the methods references in **Appendix D Outline Arboricultural Method Statement** (Document Reference: 3.03.01d);
- No storage of equipment or materials in areas of retained vegetation or in the Root Protection Area of retained trees;
- No fires on site;
- Use of hoardings of a suitable colour to integrate into the surrounding landscape shall be considered to provide screening of main construction works from any residential receptors and PRow users;
- Tidy site management to reduce visual clutter associated with the works;
- The use of construction lighting (when required) to involve the use of well located, modern light fittings in accordance with best practice to



minimise light intrusion to surrounding sensitive receptors, including consideration of the direction of the lighting;

- Monitoring the effectiveness and suitability of root protection fencing ensuring no impacts to trees that are to be retained;
- Plant to be located in a site compound or in a suitable secured area when not in use;
- Work cabins to be sited as to minimise visual impact on nearby receptors;
- It is essential that any landscape management only be carried out by competent and qualified individuals; and
- Appropriate location, organisation and phasing of construction activities. Measures will be applied to clear areas for construction as close as possible to works commencing and top soiling, seeding and planting will be undertaken as soon as practicable, within seasonal constraints, after sections of work are complete. As far as practicable, plant and material storage areas will be sited to avoid landscape and visual impact.

Landscape and Ecological Management Plan (LEMP)

9.7.17 A LEMP will be produced prior to works commencement, in order to ensure the establishment and survival of Landscape and Ecological commitments set out within the Landscape Plans (Document Reference 2.07.00), as well as the commitments stated within the Ecological Mitigation Strategy, the Outline Bat Mitigation Strategy and the Outline Bat Monitoring Strategy, for approval by the county planning authority.

9.7.18 The LEMP will provide a strategy for the preparation, management, maintenance and monitoring practices for the landscaping and ecological mitigation and enhancement measures for the Proposed Scheme.

9.7.19 The key objectives of the LEMP will be to:



- Ensure the continued health and vigour of nay retained existing vegetation within the Red Line Boundary,
- Ensure the successful establishment and continued healthy growth through to maturity of all proposed vegetation, and,
- Ensure the continued existence of natural habitat for existing species and sustain the ecological environment.

9.7.20 The content of the LEMP will include:

- Establishment procedures for the different types of planting proposed,
- Species requirements for the different types of habitats,
- The setting of outcomes proposed to be delivered, particularly in relation to Bats,
- Procedures for the management and monitoring programme, across all planting proposed,
- The setting of specific planting management and monitoring expectations throughout their lifecycle.
- Examples of active measures that could be brought forward.

Essential Environmental Mitigation Areas

9.7.21 In addition to the extensive planting proposed adjacent to the Proposed Scheme, additional areas are required to provide essential mitigation (presented in the **Essential Environmental Mitigation Plans** (Document Reference: 2.11.00)) for:

- Tree loss compensation, improving the landscape character and setting, and providing additional visual screening; and
- Protected species (including bats, barn owls, water voles) to provide foraging areas and habitat; and
- to also separately provide Biodiversity Net Gain.



9.7.22 These areas include the following planting types which are presented on the **Essential Environmental Mitigation Plans** (Document Reference: 2.11.00):

- Woodland and scrub creation
- Woodland enhancement
- Woodland areas for bat box installation
- Grassland creation and enhancement of existing features
- Hedgerow creation and enhancement of existing features; and
- Water Framework Directive mitigation to naturalise watercourses.

9.7.23 These areas are being delivered through agreements with landowners who will be compensated for the use of their land and management of protected habitats in perpetuity.

9.7.24 The areas of land identified for use have been selected for their proximity to known flight paths or habitats for protected species where the mitigation will provide benefit and enhance connectivity to existing habitats or foraging areas.

9.7.25 The areas have been developed through an iterative process engaging the landowner for their feedback, to ensure they can maintain operations elsewhere on their property. Some offered preferences for the shape, placement or enlargement of planted areas – particularly woodland creation, which further benefits biodiversity and offers visual screening to properties.

9.8 Assessment of Potential Effects, Mitigation and Residual Effects
Table 9-8 – Assessment of potential effects, additional mitigation, residual effects and monitoring during construction

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
LCA1: A1 Wensum River Valley	The construction of the Proposed Scheme will include the temporary introduction of additional construction related features including an increase in construction traffic on the roads, views of construction activities such as plant, cranes, and the Temporary Works Platform (TWP), a reduction in tranquillity from the noise and air quality impacts associated with the construction works and an increase in activity within this portion of the LCA. However, construction is temporary and short-term in nature (proposed duration 36 months). The magnitude of effect during construction is considered to be high and as the sensitivity of the receptor is medium , the significance of effect, before additional mitigation, is moderate-large adverse .	A CEMP will be produced (to be in accordance with the Outline CEMP submitted with the Planning Application) for the Proposed Scheme in advance of the construction phase, to be secured by planning condition. The controls and measures within the CEMP would be implemented to mitigate potential impacts as a result of construction activities.	The sensitivity of LCA1: A1 Wensum River Valley is medium , and the magnitude of change, following mitigation, is moderate . Therefore, there is likely to be an indirect, temporary, short-term moderate adverse (significant) residual effect on LCA1: A1 Wensum River Valley following the implementation of additional mitigation measures.
LCA2: D2 Weston Green Tributary Farmland	The construction of the Proposed Scheme will include the temporary introduction of additional construction related features, including increase in construction traffic on the roads, views of construction activities from some receptors, a reduction in tranquillity from the noise and air quality impacts associated with the construction works and an increase in activity within this portion of the LCA. However, given the temporary and short-term nature of construction (of 24 months), the magnitude of effect during construction is considered to be moderate-high and as the sensitivity of the receptor is medium , the significance of effect, before additional mitigation, is moderate-large adverse .	Production of the CEMP including the matters set out above.	The sensitivity of LCA2: D2 Weston Green Tributary Farmland is medium , and the magnitude of change, following mitigation, is moderate . Therefore, there is likely to be an indirect, temporary, short-term moderate adverse (significant) residual effect on LCA2: D2 Weston Green Tributary Farmland following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R1 – Properties on Fakenham Road – Residential receptors (VP1)	The visual amenity of the receptors may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape such as cranes, plant, and temporary works platform, and reduction in tranquillity. Construction activities will occupy a noticeable portion of the receptor’s view, however, the existing vegetation, intervening farm buildings to the east, and temporary nature of the construction phase result in the magnitude of effect during construction being considered to be moderate and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is moderate-large adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R1 – Properties on Fakenham Road is high , and the magnitude of change, following mitigation, is minor-moderate . Therefore, there is likely to be an indirect, temporary, short-term slight-moderate adverse (not significant) residual effect on R1 – Properties on Fakenham Road following the implementation of mitigation measures.
R2 – Old Hall Farm on Fakenham Road – Residential receptors (VP2)	The visual amenity of the receptor may be adversely affected by construction related activities such as the visual intrusion of plant, machinery, cranes, temporary lighting, and temporary works platform and barriers in the landscape and reduction in tranquillity. Construction activities will occupy a large portion of the view at near distance, however the temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be moderate-high and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is large adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R2 – Old Hall Farm on Fakenham Road is high, and the magnitude of change, following mitigation, is moderate. Therefore, there is likely to be an indirect, temporary, short-term moderate-large adverse (significant) residual effect on R2 – Old Hall Farm on Fakenham Road following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R3 - Wensum Valley Hotel, Golf and Country Club – Commercial receptors (VP3)	The visual amenity of the receptor may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape and reduction in tranquillity. Construction activities will occupy a small portion of the view at a medium distance. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is medium , the significance of effect, before additional mitigation, is slight adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R3 - Wensum Valley Hotel, Golf and Country Club is medium , and the magnitude of change, following mitigation, remains minor . Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R3 - Wensum Valley Hotel, Golf and Country Club following the implementation of additional mitigation measures.
R4 – PRoW (Ringland FP4) – Transport receptors (VP4)	The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a small portion of the view around one kilometre from the receptor. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is medium , the significance of effect, before additional mitigation, is slight adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R4 – PRoW (Ringland FP4) is medium , and the magnitude of change, following mitigation, remains minor . Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R4 – PRoW (Ringland FP4) following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R5 - Ringland Lane – Transport receptors (VP5)	The visual amenity of the receptor may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape and the addition of plant, machinery, and cranes. Construction activities will occupy a significant portion of receptor views here, however, the temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be high and as the sensitivity of the receptor is low , the significance of effect, before additional mitigation, is moderate adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R5 - Ringland Lane is low, and the magnitude of change, following mitigation, is moderate-high . Therefore, there is likely to be an indirect, temporary, short-term slight-moderate adverse (not significant) residual effect on R5 - Ringland Lane following the implementation of additional mitigation measures.
R6 – Weston Road (Representative Viewpoint for Residential Property off Ringland Road) – Residential receptors (VP6)	The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a small portion of the view due to existing trees and hedgerow between the receptor and the Site Boundary. The temporary nature of construction will also contribute to a lower magnitude of effect. The magnitude of effect during construction is considered to be minor-moderate and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is moderate adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R6 – Weston Road is high , and the magnitude of change, following mitigation, is minor . Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R6 – Weston Road following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R7 - Weston Longville – Transport receptors (VP7)	The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy little or no portion of the view. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be negligible and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is slight adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R7 - Weston Longville is high , and the magnitude of change, following mitigation, remains negligible . Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R7 - Weston Longville following the implementation of additional mitigation measures.
R8 - Weston Green Road – Residential receptors (VP8)	The visual amenity of the receptor may be adversely affected by construction related activities such as visual intrusion of construction features in the landscape and reduction in tranquillity. Construction activities will occupy a noticeable portion of the view, however the temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor-moderate and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is moderate adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R8 - Weston Green Road is high , and the magnitude of change, following mitigation, remains minor-moderate . Therefore, there is likely to be an indirect, temporary, short-term slight-moderate adverse (not significant) residual effect on R8 - Weston Green Road following the implementation of additional mitigation measures.
R9 – A1067 Fakenham Road – Transport receptors (VP9)	The visual amenity of the receptor may be adversely affected by increase in construction traffic on the roads and the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a small portion of the view. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is low , the significance of effect, before additional mitigation, is slight adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R9 – A1067 Fakenham Road is low , and the magnitude of change, following mitigation, remains minor . Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R9 – A1067 Fakenham Road following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R10 – Weston Road – Transport receptors (VP10)	The visual amenity of the receptor may be adversely affected by increase in construction traffic on the roads and the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a small portion of the view, glimpsed through existing vegetation. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is moderate adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R10 – Weston Road is high , and the magnitude of change, following mitigation, is minor . Therefore, there is likely to be an indirect, temporary, short-term moderate adverse (significant) residual effect on R10 – Weston Road following the implementation of additional mitigation measures.
R11 – PRow (Weston Longville FP9)– Transport receptors (VP11)	The visual amenity of the receptor may be adversely affected by increase in construction traffic on the roads and the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a noticeable portion of the view. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be moderate and as the sensitivity of the receptor is high , the significance of effect, before additional mitigation, is moderate-large adverse .	Production of the CEMP including the matters set out above.	The sensitivity of R11 – PRow (Weston Longville FP9) is high , and the magnitude of change, following mitigation, remains moderate . Therefore, there is likely to be an indirect, temporary, short-term moderate adverse (significant) residual effect on R11 – PRow (Weston Longville FP9) following the implementation of additional mitigation measures.

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
<p>R12 – Weston Green (Representative Viewpoint for Residential Properties in Weston Green) – Residential receptors (VP12)</p>	<p>The visual amenity of the receptor may be adversely affected by construction related activities such as visual intrusion of construction features in the landscape and the presence of construction traffic on the roads, addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will occupy a small portion of the view due to distance, change in topography, and existing intervening vegetation. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is high, the significance of effect, before additional mitigation, is slight adverse.</p>	<p>Production of the CEMP including the matters set out above.</p>	<p>The sensitivity of R12 – Weston Green is high, and the magnitude of change, following mitigation, remains minor. Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R12 – Weston Green following the implementation of additional mitigation measures.</p>
<p>R13 – PRoW (Honingham RB1) – Transport receptors (VP13)</p>	<p>The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction. Construction activities will occupy a significant portion of the view, however, the temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be high and as the sensitivity of the receptor is medium, the significance of effect, before additional mitigation, is large adverse.</p>	<p>Production of the CEMP including the matters set out above.</p>	<p>The sensitivity of R13 – PRoW (Honingham RB1) is medium, and the magnitude of change, following mitigation, is moderate-high. Therefore, there is likely to be an indirect, temporary, short-term moderate-large adverse (significant) residual effect on R13 – PRoW (Honingham RB1) following the implementation of additional mitigation measures.</p>

Sensitive receptor	Potential effects	Additional Mitigation	Residual effects and monitoring
R14 – Easton Estate – Residential receptors (VP14)	<p>The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction.</p> <p>Construction activities will occupy little or no portion of the view due to due to distance, change in topography, and existing intervening vegetation. The temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be negligible and as the sensitivity of the receptor is high, the significance of effect, before additional mitigation, is slight adverse.</p>	Production of the CEMP including the matters set out above.	<p>The sensitivity of R14 – Easton Estate is high, and the magnitude of change, following mitigation, remains negligible. Therefore, there is likely to be an indirect, temporary, short-term slight adverse (not significant) residual effect on R14 – Easton Estate (following the implementation of additional mitigation measures).</p>
R15 – Ringland Lane – Transport receptors (VP15)	<p>The visual amenity of the receptor may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape and the addition of plant, machinery, and cranes. Construction activities will occupy little or no portion of the view due to intervening vegetation and the temporary nature of construction will result in the magnitude of effect being reduced. The magnitude of effect during construction is considered to be minor and as the sensitivity of the receptor is low, the significance of effect, before additional mitigation, is slight adverse.</p>	Production of the CEMP including the matters set out above.	<p>The sensitivity of R15 – Ringland Lane is low, and the magnitude of change, following mitigation, is negligible. Therefore, there is likely to be an indirect, temporary, short-term neutral (not significant) residual effect on R15 – Ringland Lane following the implementation of additional mitigation measures.</p>

Operational Phase

Table 9-9 – Assessment of potential effects, additional mitigation, residuals effects and monitoring during operation

Sensitive receptor	Potential effects
<p>LCA1: A1 Wensum River Valley</p>	<p>The Proposed Scheme would introduce a new highway including a new roundabout junction at the existing A1067 along with introducing a new viaduct across the Wensum Valley floodplain. The proposed viaduct would introduce a hard and linear feature into the landscape, readily noticeable within the River Wensum wet lowland valley and would be somewhat uncharacteristic of the surrounding landscape. The presence of the A1067 through the LCA is considered to lessen the magnitude of effect on landscape character and tranquillity. The Proposed Scheme would have intervisibility with users of the A1067, local residents, local PRow users and the Wensum Valley Golf Club. The section of new highway to the west, primarily in cutting, would have limited intervisibility with the surrounding landscape.</p> <p>The magnitude of effect is reduced by the introduction of primary mitigation planting at the A1067 and on the viaduct approach roads (see Landscape Plans (Document Reference 2.07.00)), as well as a considered viaduct design that responds to its context and landscape character with a simple, understated design and materials that complement the rural setting (See Design and Access Statement for further detail). The Proposed Scheme would, however, still result in some considerable change to existing landscape elements and landscape character and discernibly change the surroundings of local receptors. Given that the Proposed Scheme will introduce a noticeable change to the character of the existing landscape receptor in a localised part of the LCA, the magnitude of effect is considered to be moderate during operation.</p> <p>The sensitivity of LCA1: A1 Wensum River Valley is medium, and the magnitude of change on a winter's day at Year 1 of opening is moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate adverse (significant) residual effect on LCA1: A1 Wensum River Valley at Year 1.</p> <p>The proposed planting would establish over time providing further screening to visual receptors within the LCA and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer day at Year 15 would reduce to minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on LCA1: A1 Wensum River Valley at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>LCA2: D2 Weston Green Tributary Farmland</p>	<p>The Proposed Scheme would introduce a new highway with associated overbridges and green bridges through this section of the LCA. The Proposed Scheme also introduces earth bunds along the new highway to limit visibility to the surrounding landscape. Whilst the earth bunds will introduce new features within the landscape and have an impact in and of themselves, they are considered a more natural feature with considerably less impact than a road. This section of new highway, primarily in cutting and with the additional earth bunds, would have limited intervisibility with the surrounding landscape.</p> <p>The magnitude of effect is reduced by the introduction of new planting along the highway as well as on the earth bunds to help integrate the Proposed Scheme into the surrounding landscape context. The Proposed Scheme would result in some considerable change to existing landscape elements and /or landscape character such that its baseline is partly altered. Given that the Proposed Scheme will introduce partial change to the character of the existing landscape receptor in a localised part of the LCA, the magnitude of effect is considered to be minor-moderate during operation.</p> <p>The sensitivity of LCA2: D2 Weston Green Tributary Farmland is medium, and the magnitude of change on a winter's day at Year 1 of operation is minor-moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate adverse (significant) residual effect on LCA2: D2 Weston Green Tributary Farmland at Year 1.</p> <p>The proposed planting would establish over time providing further screening to visual receptors within the LCA and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to minor. Therefore, there is likely to be an indirect, permanent, long-term slight (not significant) residual effect on LCA2: D2 Weston Green Tributary Farmland at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R1 – Properties on Fakenham Road – Residential receptors (VP1)</p>	<p>Currently receptors at this location experience views to the south in which a large portion of the view is comprised of open arable fields in the foreground, farm buildings and established woodland in the background.</p> <p>Receptors will receive middle distance views of the Proposed Scheme when looking south. The Proposed Scheme will introduce a viaduct onto the previously open fields. The residential properties on Fakenham Road will receive open, direct views south to the viaduct, set within the rural landscape.</p> <p>The Proposed Scheme would have limited intervisibility with the receptors to the east due to existing vegetation surrounding the properties along with farm related buildings between the properties and the Proposed Scheme to the south-east. The viaduct would occupy a noticeable portion of views to the south from the properties, particularly from first floor windows.</p> <p>The magnitude of effect is reduced by the introduction of new planting at the A1067 and on the viaduct approach roads, as well as a considered viaduct design that responds to its context and landscape character with a simple, understated design and materials that complement the rural setting. The magnitude of effect is considered to be minor-moderate during operation.</p> <p>The sensitivity of R1 – Properties on Fakenham Road is high, and the magnitude of change on a winter’s day at Year 1, is minor-moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight-moderate adverse (not significant) residual effect on R1 – Properties on Fakenham Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change at Year 15 would reduce to minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R1 – Properties on Fakenham Road on a summer’s day at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R2 – Old Hall Farm on Fakenham Road – Residential receptors (VP2)</p>	<p>The Proposed Scheme would introduce a new highway viaduct to the east and south of the receptor. The Proposed Scheme would have limited intervisibility with the receptor due to existing vegetation surrounding the property and within the floodplain along with farm related buildings between the property and the Proposed Scheme to the east. The viaduct would occupy a small portion of views to the south from the property, particularly from first floor windows, however viewed through existing riparian vegetation along the River Wensum.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the viaduct approach roads, as well as a considered viaduct design in keeping with its rural setting. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor-moderate during operation.</p> <p>The sensitivity of R2 – Old Hall Farm on Fakenham Road is high, and the magnitude of change on a winter’s day at Year 1 of operation is minor-moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight-moderate adverse (not significant) residual effect on R2 – Old Hall Farm on Fakenham Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R2 – Old Hall Farm on Fakenham Road at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R3 - Wensum Valley Hotel, Golf and Country Club – Commercial receptors (VP3)</p>	<p>Currently users at this location receive views of the golf course in the foreground with associated scattered vegetation, and the River Wensum floodplain beyond in the background. The Proposed Scheme would introduce a new highway viaduct with associated approach roads to the north-west of the receptor within the River Wensum floodplain. The Proposed Scheme would be located approximately 1.5 kilometres from the receptor, however the elevated position of the receptor results in some visibility between the Proposed Scheme and the receptor above existing vegetation. The viaduct would, nevertheless, occupy a small portion of views to the north-west.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the viaduct approach roads, as well as a considered viaduct design. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity of R3 - Wensum Valley Hotel, Golf and Country Club is medium and the magnitude of change on a winter's day at Year 1 is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight adverse (not significant) residual effect on R3 - Wensum Valley Hotel, Golf and Country Club at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would remain minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R3 - Wensum Valley Hotel, Golf and Country Club at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>
<p>R4 – PRoW (Ringland FP4) – Transport receptors (VP4)</p>	<p>A large portion of the views received at this location are comprised of open arable fields in the foreground descending to the Wensum Valley floodplain with intermittent vegetation, before the land rises again to woodland beyond. The Proposed Scheme would introduce a new highway viaduct with associated approach roads approximately one kilometre to the north of the receptor within the Wensum Valley floodplain. The users of the PRoW here, at an elevated viewpoint, have some visibility of the Proposed Scheme above existing vegetation. The viaduct would occupy a small portion of views to the north due to the distance and intervening vegetation.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the viaduct approach roads, as well as a considered viaduct design. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity R4 – PRoW (Ringland FP1) is medium, and the magnitude of change on a winter's day at Year 1 of operation is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight adverse (not significant) residual effect on R4 – PRoW (Ringland FP1) at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to negligible. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R4 – PRoW (Ringland FP1) at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R5 - Ringland Lane – Transport receptors (VP5)</p>	<p>Currently receptors here receive relatively closed views of Ringland Lane with narrow strips of arable fields either side and woodland beyond.</p> <p>The Proposed Scheme would introduce a new highway overbridge crossing Ringland Lane with associated approach roads on embankments and a retention pond east of Ringland Lane. The users of Ringland Lane would have direct views of the bridge structure along with new earthworks and the retention pond. The Proposed Scheme would occupy a significant portion of views introducing a built element where there is currently an absence of built features.</p> <p>The magnitude of effect is reduced by a considered bridge design, the introduction of new woodland planting, scrub planting and species rich grassland planting on the approach roads, as well as wetland scrub and meadow grass planting around the pond. Given that the Proposed Scheme will introduce features which occupy a significant portion of the view, the magnitude of effect is considered to be moderate-high during operation.</p> <p>The sensitivity R5 - Ringland Lane is low, and the magnitude of change on a winter's day at Year 1 is moderate-high. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate adverse (significant) residual effect on R5 - Ringland Lane at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to minor-moderate. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R5 - Ringland Lane at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R6 – Weston Road (Representative Viewpoint for Residential Properties off Ringland Road) – Residential receptors (VP6)</p>	<p>Currently receptors at this location experience views to the south in which a large portion of the view is comprised of boundary vegetation in the foreground with glimpsed views through to open arable fields broken by field boundary hedgerows and areas of hedgerow trees.</p> <p>The Proposed Scheme would introduce a new highway to the south of the receptors including new earth bunds. The new highway alignment would cross over Ringland Lane to the south-east, and a green bridge would cross the highway to the south-west. The Proposed Scheme would have limited intervisibility with the receptor due to existing vegetation surrounding the properties and the new earth bunds which would be visible themselves but block much of the views of the highway and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds as well as the green bridge approach roads. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity of R6 – Weston Road is high, and the magnitude of change, on a winter's day at Year 1 of operation, is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight-moderate adverse (not significant) residual effect on R6 – Weston Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to negligible with little or no portion of the Proposed Scheme in view from this receptor. Therefore, there is likely to be an indirect, permanent, long-term neutral (not significant) residual effect on R6 – Weston Road at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R7 - Weston Longville – Transport receptors (VP7)</p>	<p>Receptors at this location currently receive views of the PRow enclosed by hedgerows and hedgerow trees on either side. Periodic breaks in the hedgerow afford views through to open fields with further field boundary vegetation beyond.</p> <p>The Proposed Scheme would introduce a new highway approximately one kilometre to the south of the receptor including earth bunds and bridges. The Proposed Scheme would have limited intervisibility with the receptors due to the distance, existing intervening vegetation, and the new earth bunds which would block views of the highway and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds as well as bridge approach roads. Given that the Proposed Scheme will introduce features which occupy little or no portion of the view, the magnitude of effect is considered to be negligible during operation.</p> <p>The sensitivity of R7 - Weston Longville is low, and the magnitude of change on a winter's day at Year 1 of operation is negligible. Therefore, there is likely to be an indirect, semi-permanent, medium-term neutral (not significant) residual effect on R7 - Weston Longville at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would remain negligible with little or no portion of the Proposed Scheme in view from this receptor. Therefore, there is likely to be an indirect, permanent, long-term neutral (not significant) residual effect on R7 - Weston Longville at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R8 - Weston Green Road – Residential receptors (VP8)</p>	<p>Currently receptors at this location experience views to the south across Weston Green Road in which a large portion of the view is comprised of hedgerow in the foreground with open arable fields beyond, broken by field boundary hedgerows and areas of hedgerow trees.</p> <p>The Proposed Scheme would introduce a new highway to the south of the receptors including new earth bunds. The new highway alignment introduces green bridges to cross the highway to the south-east as well as to the south-west at The Broadway.</p> <p>The Proposed Scheme would have some intervisibility with the receptors due to the medium distance, however, this would be limited by existing vegetation surrounding the properties and the new earth bunds which would have an impact in itself but would block much of the views of the highway and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds as well as bridge approach roads. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor-moderate during operation.</p> <p>The sensitivity of R8 - Weston Green Road is high, and the magnitude of change on a winter's day at Year 1 is minor-moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate adverse (significant) residual effect on R8 - Weston Green Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptors and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R8 - Weston Green Road at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R9 – A1067 Fakenham Road – Transport receptors (VP9)</p>	<p>Currently receptors at this location experience views to the south-east and south in which a large portion of the view is comprised of Fakenham Road and roadside hedgerows. Views of arable fields can be seen beyond with woodland in the background.</p> <p>The Proposed Scheme would introduce a new highway viaduct with associated approach roads approximately 1300 metres to the south-east of the receptor within the Wensum Valley floodplain. The users of Fakenham Road at a slightly elevated viewpoint results in some visibility between the Proposed Scheme and the receptors above existing vegetation. The viaduct would occupy a small portion of views to the south-east due to the distance and intervening vegetation.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the viaduct approach roads, as well as a considered viaduct design that responds to its context and landscape character and uses materials that complement the rural setting. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity R9 – A1067 Fakenham Road is low, and the magnitude of change on a winter’s day at Year 1 of operation, is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight adverse (not significant) residual effect on R9 – A1067 Fakenham Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptors and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R9 – A1067 Fakenham Road at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R10 – Weston Road – Transport receptors (VP10)</p>	<p>PRoW user views here currently consist of open pastoral fields beyond field boundary hedgerow that follows the PRoW. The Proposed Scheme would introduce a new highway to the north of the receptor with a green bridge to the north-east with associated approach embankments and new earth bunds along the highway. The receptors here would have indirect views north through the field boundary vegetation to the Proposed Scheme along with new earthworks and embankments associated with the green bridge. The Proposed Scheme would occupy a small portion of views, screened for the most part by the new earth bunds. The bunds, whilst having an impact themselves, are considered to be of lower impact than a highway.</p> <p>The magnitude of effect is reduced by the introduction of new grassland, hedgerow, scrub, and woodland planting on the bunds as well as on the green bridge embankments. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity R10 – Weston Road is high, and the magnitude of change on a winter’s day at Year 1 of operation, is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight-moderate adverse (not significant) residual effect on R10 – Weston Road at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R10 – Weston Road at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R11 – PRow (Weston Longville FP9)– Transport receptors (VP11)</p>	<p>PRow user views here currently consist of open pastoral fields beyond field boundary hedgerow that follows the PRow. The Proposed Scheme would introduce a new highway to the north of the receptor with a green bridge to the north-west at The Broadway with associated approach embankments and new earth bunds along the highway.</p> <p>The receptors here would have direct views north through the field boundary vegetation to the Proposed Scheme along with new earthworks and embankments associated with the green bridge. The Proposed Scheme including the new bunds would occupy a noticeable portion of views, however the highway would be screened for the most part by the new earth bunds, which are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new grassland, hedgerow, scrub, and woodland planting on the bunds as well as up the embankments. Given that the Proposed Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of effect is considered to be moderate during operation.</p> <p>The sensitivity R11 – PRow (Weston Longville FP9) is high, and the magnitude of change on a winters day at Year 1, is moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate adverse (significant) residual effect on R11 – PRow (Weston Longville FP9) at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would reduce to minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R11 – PRow (Weston Longville FP9) at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R12 – Weston Green (Representative Viewpoint for Residential Properties in Weston Green) – Residential receptors (VP12)</p>	<p>Currently receptors at this location experience views to the south in which a large portion of the view is comprised of open arable fields in the foreground as the land rises to the south with some field boundary vegetation in the background.</p> <p>The Proposed Scheme would introduce a new highway to the south and east of the receptor including new earth bunds and a green bridge at The Broadway. The Proposed Scheme would have some intervisibility with the receptor due to the medium distance, however, this would be limited somewhat by existing vegetation surrounding the properties and the new earth bunds which would have an impact in and of itself but block views of the highway and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds as well as bridge approach roads. Given that the Proposed Scheme will introduce features which occupy a small portion of the view, the magnitude of effect is considered to be minor during operation.</p> <p>The sensitivity of R12 – Weston Green is high, and the magnitude of change on a winter’s day at Year 1 of operation, is minor. Therefore, there is likely to be an indirect, semi-permanent, medium-term slight adverse (not significant) residual effect on R12 – Weston Green at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain minor. Therefore, there is likely to be an indirect, permanent, long-term slight adverse (not significant) residual effect on R12 – Weston Green at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R13 – PRow (Honingham RB1) – Transport receptors (VP13)</p>	<p>Currently receptors at this location experience views to the south in which a large portion of the view is comprised of open arable fields in the foreground, field boundary hedgerow in the middle ground and established woodland in the background.</p> <p>The Proposed Scheme would introduce a new highway to the south of the receptor including new earth bunds, a drainage basin, and a green bridge crossing the highway alignment at the Foxburrow Plantation. The Proposed Scheme would have significant intervisibility with the receptor due to the close distance. This would be limited somewhat by the new earth bunds which would be new features within the view and have a level of impact themselves but block much of the views of the highway alignment and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is further reduced by the introduction of new planting on the earth bunds as well as on the green bridge approaches. Given that the Proposed Scheme will introduce features which occupy a significant portion of the view, the magnitude of effect is considered to be moderate during operation.</p> <p>The sensitivity of R13 – PRow (Honingham RB1) is high, and the magnitude of change on a winter's day at Year 1, is moderate. Therefore, there is likely to be an indirect, semi-permanent, medium-term moderate-large adverse (significant) residual effect on R13 – PRow (Honingham RB1) at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer's day at Year 15 would reduce to minor-moderate. Therefore, there is likely to be an indirect, permanent, long-term slight-moderate adverse (not significant) residual effect on R13 – PRow (Honingham RB1) at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>

Sensitive receptor	Potential effects
<p>R14 – Easton Estate – Residential receptors (VP14)</p>	<p>Currently receptors at this location experience views to the west in which a large portion of the view is comprised of open arable fields in the foreground, some farm buildings and field boundary hedgerow and hedgerow trees in the background. Areas of woodland are glimpsed through hedgerows to the north-west.</p> <p>The Proposed Scheme would introduce a new highway approximately one kilometre to the north-west of the receptors including earth bunds. The Proposed Scheme would have little to no intervisibility with the receptor due to the distance, existing intervening vegetation, and the new earth bunds which would block views of the highway alignment and are considered a more natural feature with considerably less impact than a road.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds. Given that the Proposed Scheme will introduce features which occupy little or no portion of the view, the magnitude of effect is considered to be negligible during operation.</p> <p>The sensitivity of R14 – Easton Estate is high, and the magnitude of change, on a winter’s day in Year 1, is negligible. Therefore, there is likely to be an indirect, semi-permanent, medium-term neutral (not significant) residual effect on R14 – Easton Estate at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain negligible with little or no portion of the Proposed Scheme in view from this receptor. Therefore, there is likely to be an indirect, permanent, long-term neutral (not significant) residual effect on R14 – Easton Estate at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>
<p>R15 – Ringland Lane – Transport receptors (VP15)</p>	<p>Currently receptors at this location experience views to the north-west along Ringland Lane in which a large portion of the view is comprised of open arable fields either side of the road in the foreground, with areas of woodland beyond.</p> <p>The Proposed Scheme would introduce a new highway approximately 1200 metres to the north-west of the receptor including earth bunds and an overbridge. The Proposed Scheme would have limited intervisibility with the receptor due to the distance and existing intervening woodland which would block views of the highway.</p> <p>The magnitude of effect is reduced by the introduction of new planting on the earth bunds as well as bridge approach roads. Given that the Proposed Scheme will introduce features which occupy little or no portion of the view, the magnitude of effect is considered to be negligible during operation.</p> <p>The sensitivity of R15 – Ringland Lane is low, and the magnitude of change on a winter’s day in Year 1, is negligible. Therefore, there is likely to be an indirect, semi-permanent, medium-term neutral (not significant) residual effect on R15 – Ringland Lane at Year 1.</p> <p>The proposed planting would establish over time providing further screening to the receptor and help integrate the Proposed Scheme into the landscape. The magnitude of change on a summer’s day at Year 15 would remain negligible with little or no portion of the Proposed Scheme in view from this receptor. Therefore, there is likely to be an indirect, permanent, long-term neutral (not significant) residual effect on R15 – Ringland Lane at Year 15.</p> <p>No further monitoring is required save for any measures set out in the LEMP.</p>



Assessment against Future Baseline

- 9.8.1 As discussed above, the future landscape character and visual amenity baseline is expected to be the same as the present and so there are no changes from the results presented above for the current baseline for Year 1 or Year 15.

Cumulative Effects

- 9.8.2 This section considers the potential cumulative effects that are likely to arise as a result of the Proposed Scheme in combination with the identified committed developments (outlined in **Chapter 20 Cumulative Effects** (Document Reference 3.20.00)) on sensitive landscape and visual receptors. Of the committed developments identified, only the proposed dualling of the A47 North Tuddenham to Easton is considered to be of a scale and nature to have potential in-combination effects. See **Appendix 9.2: LVIA In-combination Assessment** (3.09.02) for further details on committed developments that have not considered further.

Construction Phase

- 9.8.3 The proposed dualling of the A47 by National Highways which lies to the south of the Proposed Scheme when developed will connect to the Proposed Scheme at its southern extent. The dualling of the A47 will introduce dualling of the single carriageway section of the A47 between Norwich and Dereham, linking together two existing sections of dual carriageway. The development will provide a new route to the south of Hockering and to the north of Honingham and include new junctions with locations yet to be determined. The development is likely to impact the landscape character of the area. Whilst there is an existing road currently in place, the realignment of the A47 along with the scale and nature of the A47 dualling would potentially impact the character of the area. Construction of the A47 dualling is likely to take place alongside the construction of the Proposed Scheme. The construction of the Proposed Scheme is likely to be read collectively with the construction works at A47 as one entity, resulting in an extended area of visual intrusion and change in Broadland LCA D2 Weston Green Tributary Farmland with



overall adverse effect on the character of the LCA as a result of the presence of machinery such as cranes, boring drills and HGVs. This is likely to impact upon the local landscape character, and medium and longer distance views within LCA. The overall cumulative effect on landscape character and visual amenity is therefore considered to be of **moderate-high (adverse)** significance, but temporary in nature.

9.8.4 The A47 dualling will also run through Breckland LCA A5 Landscape River Valley Upper Tud Valley and a small portion to the south of B6 River Wensum and Tud Tributary Farmland. The cumulative impact of the Proposed Scheme with the A47 dualling on LCA B6 River Wensum and Tud Tributary Farmland will be negligible due to the geographical extent and location of the schemes at the southern edge of the LCA.

9.8.5 Whilst the impact of the Proposed Scheme on LCA A5 Landscape River Valley Upper Tud Valley in isolation is considered to be negligible, the cumulative impact of construction activities with those of the A47 dualling on landscape character and visual amenity in the LCA is likely to be **moderate adverse (significant)**.

Operational Phase

9.8.6 The A47 dualling is expected to be visible to and from the southern extent of the Proposed Scheme once built. The dualling of the A47 will introduce dualling of the single carriageway section of the A47 between Norwich and Dereham, linking together two existing sections of dual carriageway, realigned in part through open agricultural fields, along with new junctions. It is likely to result in a **moderate-high adverse** permanent and negative in-combination effect on the landscape character and visual amenity of Broadland LCA D2 Weston Green Tributary Farmland on a winter's day at Year 1 due to the geographical extent and likely visibility of the schemes in combination within the LCA. At Year 15, following the establishment of planting proposed by each scheme, the cumulative impact of the Proposed Scheme alongside the A47 dualling is likely to reduce to **slight adverse**.



9.8.7 The cumulative impact of the Proposed Scheme and A47 dualling at operation on Breckland LCA B6 River Wensum and Tud Tributary Farmland is likely to be negligible. The cumulative impact of the Proposed Scheme and A47 dualling at operation on Breckland LCA A5 Landscape River Valley Upper Tud Valley is likely to be **moderate adverse** and reduce to **slight adverse** following the establishment of planting.

In-combination climate change impacts

9.8.8 Increased air temperature and increased incidence of heatwaves could result in reduced success in establishment of new planting and longevity of existing established vegetation. Consideration will be given to the potential effects of climate change on the selection of species for proposed planting and the management of new and existing planting. A LEMP will be produced prior to works commencement, in order to ensure the establishment and survival of Landscape and Ecological commitments set out within the **Landscape Plans** (Document Reference 2.07.00), as well as the commitments stated within the Ecological Mitigation Strategy, the Outline Bat Mitigation Strategy and the Outline Bat Monitoring Strategy, for approval by the county planning authority.

9.9 Opportunities for Environmental Enhancement

9.9.1 The potential for the Proposed Scheme to deliver environmental enhancements has been considered from an early stage of design, with initial opportunities identified and carried through into the current landscaping proposals shown on the **Landscape Plans** (Document Reference 2.07.00). In addition to the potential for the landscaping to provide enhancements to specific species and habitats as considered within the ecological assessment (**Chapter 10: Biodiversity** (Document Reference 3.10.00)), the design of the Proposed Scheme provides a number of more general enhancements such as earth bunds incorporated into the design either side of the mainline carriageway to screen views of the Proposed Scheme, drainage features such as grass swales and drainage basins to manage surface water run-off from the carriageway, and dual purpose access tracks for maintenance access and



non-motorised use. Further information on these design features can be found in the **Design and Access Statement** – Document Reference: 1.02.00).

9.10 Summary

9.10.1 The LVIA has been undertaken to inform the iterative design process of the Proposed Scheme and assess the likely effects on identified landscape and visual receptors.

9.10.2 The design of the Proposed Scheme incorporates embedded mitigation into the layout within the Site Boundary to avoid likely adverse landscape and visual effects, such as through the considered design of structures to complement the rural setting, creation of landscaped bunds along the Proposed Scheme to minimise the impact on visual amenity of nearby visual receptors and incorporating landscape mitigation planting to provide screening and visual amenity.

9.10.3 The effects of the Proposed Scheme on the identified LCAs and visual receptors have been assessed against the existing baseline conditions.

9.10.4 At construction, the Proposed Scheme will introduce construction related features, including an increase in construction traffic on the roads, views of construction activities such as plant, cranes, and the temporary works platform, a reduction in tranquillity from the noise of the construction works and an increase in activity in the rural character of LCA1: A1 Wensum River Valley. However, the temporary nature of construction activities and additional mitigation measures delivered pursuant to a CEMP results in a short-term moderate magnitude of change which, when considered along with the medium sensitivity of the receptor, the resulting residual effect on the LCA is considered to be **moderate adverse (significant)**.

9.10.5 At construction, the Proposed Scheme will introduce a moderate change in the character of LCA2: D2 Weston Green Tributary Farmland. The temporary nature of construction activities results in a short-term moderate magnitude of change which, when considered along with the receptor's medium sensitivity,



the resulting residual effect on LCA2 is considered to be **moderate adverse (significant)**.

9.10.6 At operation, the Proposed Scheme will result in the introduction of a new highway including a viaduct over the Wensum Valley floodplain, a new roundabout junction at the A1047 and connection to a new roundabout of the A47 North Tuddenham to Easton National Highway's scheme. The new infrastructure however is a moderate percentage of LCA1 which is already influenced by some road infrastructure and, while the Proposed Scheme is likely to contrast with the features of the LCA, primary landscape mitigation embedded into the Proposed Scheme, along with a considered viaduct design to fit within the rural setting will consequently result in the residual effect on the landscape to be **moderate adverse (significant)** at Year 1, reducing to **slight adverse (not significant)** at Year 15.

9.10.7 At operation, the Proposed Scheme will introduce a new highway including green bridges, earth bunds, and drainage basins through a small percentage of LCA2 and will result in the loss of areas of arable or pastoral land. Primary landscape mitigation embedded into the Proposed Scheme will further aid in the integration of the Proposed Scheme in the landscape and result in the residual effect on the landscape character to be **moderate adverse (significant)** at Year 1, reducing to **slight (not significant)** at Year 15.

9.10.8 Visually, during construction, the residual effects are anticipated to be in range of **neutral (not significant) to moderate-large adverse (significant)**, with **moderate adverse (significant)** effects only experienced by receptors R2, R10, R11, and R13. This is as a result of the close range and open views of the construction-related activities at these receptors' locations.

9.10.9 Visually, at Year 1 of operation, the residual effects are anticipated to be in range of **neutral (not significant) to moderate-large adverse (significant)** with **moderate adverse (significant)** or above effects only experienced for receptors R5, R8, R11, and R13. This is as a result of close distance open views of the Proposed Scheme introduced onto open agricultural fields. The



proposed planting on the earth bunds will provide enhanced visual amenity and interest here and once it establishes over time will reduce the residual effect on these receptors to **slight-moderate adverse (not significant)** or below. The remaining 11 of the 15 receptors are not likely to experience significant effects during operation of the Proposed Scheme at Year 15.

Table 9-10 – Summary of landscape and visual effects

Key to table:

P / SP / T = Permanent, Semi-permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term, N/A = Not Applicable

Receptor	Potential Effects	Additional Mitigation	Residual Effects
Construction Phase LCA1: A1 Wensum River Valley	The LCA may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape and reduction in tranquillity.	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to landscape character features.	Moderate adverse (significant) T / I / ST
LCA2: D2 Weston Green Tributary Farmland	The LCA may be adversely affected by construction related activities such as increased road use, visual intrusion of construction features in the landscape and reduction in tranquillity.	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to landscape character features.	Moderate adverse (significant) T / I / ST
R1 – Property on Fakenham Road – Residential receptors (VP1)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight-moderate adverse (not significant) T / I / ST
R2 – Old Hall Farm on Fakenham Road – Residential receptors (VP2)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Moderate-large adverse (significant) T / I / ST
R3 - Wensum Valley Hotel, Golf and Country Club – Commercial receptors (VP3)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R4 – PRoW (Ringland FP4) – Transport receptors (VP4)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R5 - Ringland Lane – Transport receptors (VP5)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight-moderate adverse (not significant) T / I / ST

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R6 – Weston Road (Representative Viewpoint for Residential Property off Ringland Road) – Residential receptors (VP6)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R7 - Weston Longville – Transport receptors (VP7)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R8 - Weston Green Road – Residential receptors (VP8)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight-moderate adverse (not significant) T / I / ST
R9 – A1067 Fakenham Road – Transport receptors (VP9)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R10 – Weston Road – Transport receptors (VP10)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Moderate adverse (significant) T / I / ST
R11 – PRoW (Honingham FP5/Weston Longville FP9) – Transport receptors (VP11)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Moderate adverse (significant) T / I / ST
R12 – Weston Green (Representative Viewpoint for Residential Properties in Weston Green) – Residential receptors (VP12)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R13 – PRoW (Honingham RB1) – Transport receptors (VP13)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Moderate-large adverse (significant) T / I / ST

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R14 – Easton Estate – Residential receptors (VP14)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Slight adverse (not significant) T / I / ST
R15 – Ringland Lane – Transport receptors (VP15)	The addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views during construction	Production of a CEMP to include environmental best practice measures, including working methods to minimise impacts to visual receptors.	Neutral (not significant) T / I / ST
Operational Phase LCA1: A1 Wensum River Valley	The LCAs may be adversely affected by visual intrusion of the Proposed Scheme into existing rural views, additional exposure of the Proposed Scheme to the immediate landscape where there is currently an absence of a highway and associated structures, loss of established field pattern; and loss of existing vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate adverse (significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
LCA2: D2 Weston Green Tributary Farmland	The LCAs may be adversely affected by visual intrusion of the Proposed Scheme into existing rural views, additional exposure of the Proposed Scheme to the immediate landscape where there is currently an absence of a highway and associated structures, loss of established field pattern; and loss of existing vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate adverse (significant) (Year 1) SP / I / MT Slight (not significant) (Year 15) P / I / LT
R1 – Property on Fakenham Road – Residential receptors (VP1)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight-moderate adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R2 – Old Hall Farm on Fakenham Road – Residential receptors (VP2)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight-moderate adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R3 - Wensum Valley Hotel, Golf and Country Club – Commercial receptors (VP3)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R4 – PRoW (Ringland FP4) – Transport receptors (VP4)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R5 - Ringland Lane – Transport receptors (VP5)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate adverse (significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R6 – Weston Road (Representative Viewpoint for Residential Property off Ringland Road) – Residential receptors (VP6)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight-moderate adverse (not significant) (Year 1) SP / I / MT Neutral (not significant) (Year 15) P / I / LT
R7 - Weston Longville – Transport receptors (VP7)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Neutral (not significant) (Year 1) SP / I / MT Neutral (not significant) (Year 15) P / I / LT
R8 - Weston Green Road – Residential receptors (VP8)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate adverse (significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R9 – A1067 Fakenham Road – Transport receptors (VP9)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R10 – Weston Road – Transport receptors (VP10)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight-moderate adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R11 – PRoW (Honingham FP5/Weston Longville FP9) – Transport receptors (VP11)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate adverse (significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT
R12 – Weston Green (Representative Viewpoint for Residential Properties in Weston Green) – Residential receptors (VP12)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Slight adverse (not significant) (Year 1) SP / I / MT Slight adverse (not significant) (Year 15) P / I / LT

Receptor	Potential Effects	Additional Mitigation	Residual Effects
R13 – PRow (Honingham RB1) – Transport receptors (VP13)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Moderate-large adverse (significant) (Year 1) SP / I / MT Slight-moderate adverse (not significant) (Year 15) P / I / LT
R14 – Easton Estate – Residential receptors (VP14)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Neutral (not significant) (Year 1) SP / I / MT Neutral (not significant) (Year 15) P / I / LT
R15 – Ringland Lane – Transport receptors (VP15)	Changes in perception of views within a currently rural and tranquil setting; and increased visibility of new structures due to changes in vegetation.	Newly created planting will be subject to management and monitoring in accordance with a LEMP to be produced for the Proposed Scheme. Additional planting associated with the Essential Environmental Mitigation Areas (Essential Environmental Mitigation Plans (Document Reference: 2.11.00)).	Neutral (not significant) (Year 1) SP / I / MT Neutral (not significant) (Year 15) P / I / LT



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