The Cambourne to Cambridge Order

Transport And Works Act 1992

Transport And Works (Applications And Objections Procedure) (England And Wales) Rules 2006

Technical Report 8: Landscape

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1 INTRODUCTION

1.1.1 The Scheme runs between the edge of Cambridge city centre and Cambourne, 8 miles west of Cambridge. It will serve existing and growing settlements along the route, including Cambourne and Hardwick, and future developments, including Bourn Airfield and Cambourne West.

1.1.2 The Scheme consists of the following main elements:

- a two-way guided busway 13.6 kilometres in length commencing at Sterling Way, Cambourne and terminating at Grange Road, Cambridge segregated from local highways except for stretches along St Neots Road and Charles Babbage Road;
- intermediate bus stops along the route and an emergency and maintenance access track to be dedicated as a bridleway running alongside the two-way guided busway for most of the length of the guided busway (the Service Track);
- a new travel hub building and Park and Ride site east of Scotland Farm with access for the buses over the existing A 428 bridge
- new bridges over the M11 and at Bin Brook to provide for the two-way guided busway and adjoining emergency and maintenance track;
- access roads, temporary compounds, stopping up, diversion and creation of public rights of way, highway crossings, drainage works and attenuation and infiltration ponds.

1.1.3 Further details about the C2C Scheme proposal are set out in Chapter 3 of the Environmental Statement (ES).

1.1.4 This Landscape and Visual Impact Assessment (LVIA) technical report presents the identification and assessment of likely significant effects arising from the Cambourne to Cambridge (C2C) Scheme on both the landscape as an environmental resource in its own right and on people's views and visual amenity. Landscape and visual assessments are separate although linked processes, describing closely related but distinct sets of effects. The scope of this LVIA technical report is in accordance with the EIA Regulations (See ES Chapter 2 for further details on the EIA process).

1.1.5 The technical report includes an overview of the assessment methodology (See Appendix TR8.1 – LVA Methodology for full methodology), a description of the baseline conditions relevant to the assessment, and primary embedded mitigation that forms part of the C2C Scheme. It identifies and assesses the likely significant effects of the C2C Scheme and any recommended monitoring. Opportunities for environmental enhancement, where such opportunities exist, are also identified though enhancements are not taken into account in the assessment of likely significant effects. The assessment is based on the Scoping Opinion[1] issued.

1.1.6 This technical report (and its associated figures and appendices) forms part of the Environmental Statement. Reference has been given to **Chapter 2: The EIA process, Chapter 3: Scheme**

[1] Scoping Opinion

Description, Chapter 5: The Environment Along the Route, Chapter 6: Mitigation Through Design and Practice, Chapter 7 Effects on People and Communities, Chapter 9 Effects on the Cultural Environment, and Chapter 11 Cumulative Effects.

1.2 ENGAGEMENT

1.2.1 The Greater Cambridge Partnership (GCP) Landscape, Ecology and Heritage Working Group, which includes representatives from GCP, Cambridge County Council, South Cambridgeshire District Council, Greater Cambridge Planning, Cambridge Past Present and Future, Historic England, National Trust, WSP, and Atkins were consulted on the LVIA study area and visual receptors. **Table TR8-1-1** provides a summary of the responses received and outcome of discussions for the LVIA Technical Report.

Table TR8-1-1 – Summary of Engagement

Body / organisation	Meeting dates and other forms of engagement	Summary of outcome of discussions
Greater Cambridge Shared Planning (GCSP) *Dinah Foley-Norman (Principal Landscape Architect)*	Meeting on proposed visual receptors with GCSP on 16/03/22.	Visual receptor locations agreed with 6 no. additional receptors suggested and views during hours of darkness suggested.
Cambridge Past, Present & Future (CPPF) *James Littlewood (Chief Executive) /* *Sarah Nicholas (Principal Planning Officer)*	Proposed visual receptor locations were issued by WSP on 14/04/2022 for comment and recommendations on selected visual receptors; and any landscape or visual sensitivities which are needed to be considered.	Comments provided in relation to proposed visual receptor direction and additional visual receptor locations suggested.
National Trust *Jess Johnston* *East of England Covenant Officer*	Proposed visual receptor locations were issued by WSP on 14/04/2022 for comment and recommendations on selected visual receptors; and any landscape or visual sensitivities which are needed to be considered.	Comments provided in relation to proposed visual receptors and additional visual receptor locations suggested in order to fully understand the impact on National Trust covenanted land and ensure that this is taken into account in this Technical Report.

1.3 STUDY AREA

1.3.1 The extent of the Study Area has been determined through desk-based review, preliminary viewshed analysis (Google Earth), local stakeholder consultation, and fieldwork to understand the setting of the C2C Scheme in its landscape and visual context and how these factors may experience significant effects. As part of the desk-based study and to appreciate the extent of visibility of the Scheme more accurately in the wider landscape, a computer generated 'with screening' Zone of Theoretical Visibility (ZTV) was generated for the C2C Scheme, which accounts for objects above ground such as buildings, vegetation and infrastructure. The ZTV shows the extent of potential visibility and is central in defining the Study Area as, by definition, effects can only occur where at least some part of the development is visible. See **Section 2.2.2** below for further description of the ZTV.

1.3.2 Following the desk-based review, field work, review of the ZTV, and stakeholder consultation, a rectangular Study Area of 121 square kilometre (9.9 x 12.2 kilometre) was set for the assessment of both landscape and visual effects. The Study Area is shown in **Figure 8.1: ZTV Plan**. In setting the Study Area, the assessment accounts for the limits of deviation where it is not anticipated and further significant adverse effects outside of the Study Area.

2 BASELINE ENVIRONMENT

2.1 BASELINE LANDSCAPE CONDITIONS

2.1.1 This section identifies landscape features of the Study Area which may be affected by the C2C Scheme. As described in **Chapter 3: Scheme Description**, the C2C Scheme consists of the construction of a guided busway from Cambourne to Cambridge.

NATIONAL CHARACTER AREA ASSESSMENTS

2.1.2 The Study Area lies wholly within National Character Area 88: Bedfordshire and Cambridgeshire Claylands (**Ref 8.1**). The key characteristics of the Study Area in relation to landscape character are:

- Gently undulating, lowland plateau dissected by shallow river valleys;
- Underlying geology of Jurassic and Cretaceous clays overlain with boulder clay and sand and gravel on the river valleys;
- Lime-rich, loamy and clayey soils;
- Variable woodland cover comprises woodland belts, plantations, copses, secondary woodland, pollarded willows and poplar along river valleys and clusters of ancient woodland.
- Open arable farmland landscape of planned and regular fields bound by open ditches and trimmed, often species poor hedgerows;
- Major transport routes, including the M11 cross the area; and
- Larger settlements cluster along major road and rail corridor and smaller settlements often nucleated around a church or village green.

LOCAL LANDSCAPE CHARACTER ASSESSMENT

2.1.3 The 1991 Cambridgeshire Landscape Guidelines (**Ref 8.2**), the Greater Cambridge Landscape Character Assessment (**Ref 8.3**), the Cambridge Inner Green Belt Study (**Ref 8.4**), the Cambridge Inner Green Belt Study Supplement (**Ref 8.5**), and the Cambridge Landscape Character Assessment **(Ref 8.6)** provide the most up to date local landscape character assessments for the Study Area.

2.1.4 The Cambridgeshire Landscape Guidelines (**Ref 8.2**), though published in 1991, remain relevant. The document places the Study Area in the Western Claylands LCA, describing the LCA as "*a large-scale arable farmland with open fields, sparse trimmed hedgerows and watercourses often cleared of bankside vegetation. There are scattered woodlands and approximately half of these are ancient semi-natural woodlands of considerable importance in the county context. Elsewhere individual woods are of importance in visual and nature conservation terms, but they tend to be isolated incidents in an area dominated by arable farmland. The landscape of this part of Cambridgeshire has been greatly affected by modern agricultural practices. Increased mechanisation has led to the removal of hedgerows and amalgamation of fields. Many of the remaining hedges are 'gappy' and trimmed almost out of existence by regular cutting*." While the guidelines are relevant to our understanding of the Study Area, they are superseded by the more recent studies (Cambridge Inner Green Belt Study 2016 and Greater Cambridge Landscape Character Assessment 2003) discussed below and upon which this assessment will be based.

2.1.5 The Cambridge Inner Green Belt Study (and supplement) 2016 (**Ref 8.5**) is not a statutory planning document, but it is an important background document that formed the evidence base of the current South Cambridgeshire District Council (SCDC) and Cambridge City Council (CCC) Local Plans. In

both the SCDC and CCC local plan, this technical report Study Area is located within the Western Claylands Landscape Character Area (LCA) and West Cambridge Townscape Character Area (TCA). West Cambridge TCA is considered further in this assessment due to its relevant scale and nature.

2.1.6 The key characteristics of the Study Area in the Western Claylands LCA are:

- The gently undulating topography is divided by broad, shallow valleys;
- It is a predominantly open and intensive arable landscape. Fields are either bounded by open ditches, or closely trimmed hedgerows, both with a variable number of hedgerow trees;
- Woodlands are scattered. Large, ancient woodlands are particularly concentrated in the north and west of the area;
- Occasional parklands and orchards add interest and variety in the landscape; and
- Each village is identified by a church spire, or tower, which enliven the skyline.

2.1.7 The key characteristics of the Study Area in West Cambridge TCA are:

- An area is dominated by university and college buildings;
- Comprising colleges, playing fields, and large bespoke residential houses built for Fellows of the University;
- Houses are set back from the road and have large gardens with mature trees giving the area a green, leafy character; and
- A corridor of rural land penetrates the urban area, running in to the University rugby ground on Grange Road.

2.1.8 The Greater Cambridge Landscape Character Assessment is the most recent assessment and places the C2C Scheme primarily within LCA 4B Lolworth to Longstowe Wooded Claylands and to a more limited extent LCA 3B Bourn Tributaries Lowland Farmlands, LCA 4A Croxton to Conington Wooded Claylands, and Cambridge Urban Area. The Study Area also includes LCA 2A Longstanton Fen Edge Claylands, LCA 9A Cam River Valley-Cambridge, and LCA 9B Cam River Valley, however, are not considered further due to distance, topography, and intervening built form and vegetation. The key characteristics of the Study Area in relation to this are:

- Scattered, small blocks of woodland, including some ancient woodland, linked by mature, fragmented hedgerow network;
- Irregular, generally rectilinear field pattern;
- Distinctive repetition of designed parkland features including historic parkland and the American Cemetery;
- Landscape divided by straight linear features including roads, tracks and a dismantled railway;
- Dense settlement pattern of small and medium sized villages concentrated close to main roads;
- Villages generally have well defined edges defined by mature hedgerows, woodlands and clumps of trees; and
- Distinctive wide, open views towards Cambridge from Coton Countryside Reserve and towards Ely from the American Cemetery.

GREEN BELT

2.1.9 The Study Area includes part of the Cambridge Green Belt between Cambridge and the eastern boundary of Hardwick. The Green Belt is a statutory environmental and planning policy that regulates the rural space around the city of Cambridge. The NPPF states "*the fundamental aim of*

Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence". This LVIA seeks only to consider the Green Belt insofar as landscape and visual matters may be relevant and excludes consideration of visual openness or combined analysis of visual and spatial aspects in respect to openness in the Green Belt. This LVIA also excludes a Green Belt Assessment (in respect to the 5 purposes) and a Tranquillity Assessment. See **Consideration of Green Belt Issues Report (C2C-18-01)** for further information on the Green Belt and the predicted impact of the C2C Scheme on the Green Belt purposes.

REGISTERED PARKS AND GARDENS

2.1.10 There are three Registered Parks and Gardens of Special Historic Interest in England in the Study Area, namely Grade II Childerley Hall, Grade II Madingley Hall and the Grade I American Military Cemetery (See **ES Technical Report 7: Heritage Impact Assessment (incorporating the historic environment desk-based assessment)** for further information on historic landscapes). However, through desk-based review, review of the ZTV, and fieldwork, it is anticipated there would be little to no intervisibility between the C2C Scheme and these designated features due to changing topography, intervening vegetation, and existing infrastructure features. It is anticipated that no significant effects are likely on both visual amenity and the landscape setting of the parks and gardens.

CONSERVATION AREAS

2.1.11 The Study Area for this technical report includes the following conservation areas.:

- Hardwick;
- Madingley;
- Coton; and
- West Cambridge.

2.1.12 This technical report does not assess the impact on heritage assets and only considers the conservation areas features and character insofar as they relate to landscape and visual matters. See ES Technical Report 7: **Heritage Impact Assessment (incorporating the historic environment desk-based assessment)** including the **Appendix TR7.1: Heritage Statement** for further information on West Cambridge and Coton conservation areas. Hardwick and Madingley conservation areas are outside of the Technical Report 7 Study Area.

PUBLIC RIGHT OF WAY

2.1.13 The 'Definitive Map' published by Cambridgeshire County Council identifies several publicly accessible routes within the C2C Scheme Study Area, comprising of Public Footpaths and Bridleways. The existing routes present within the vicinity of the C2C Scheme, are illustrated in **Figure 8.2: Context Plan** and considered further in this assessment.

IMPORTANT LANDSCAPE FEATURES

2.1.14 The following landscape features within the Study Area are considered relevant to the assessment of landscape character and visual amenity.

- Ancient Woodland - Madingley Wood Ancient and Semi-Natural Woodland is an ash-maple woodland, characteristic of clayland landscapes in eastern England. The woodland is used by

the University of Cambridge for research and education and is designated as a SSSI by Natural England;

- Traditional Orchards - there are several small orchards in the Study Area, some of which are traditional orchards. Coton Orchard is the largest;
- Topography - the A428 and A1303 follow a ridgeline which descends into Cambridge east of the American Military Cemetery. The land slopes away from the ridge to the Fens in the north and the Bin Brook valley to the south;
- There are several listed buildings in Coton, Madingley, Hardwick and Upper Cambourne; and
- There are some broad non designated historic landscape areas that are definable, along the route of the C2C Scheme (See **ES Technical Report 7: Heritage Impact Assessment (incorporating the historic environment desk-based assessment)** for further information on historic landscapes).
  - Between Cambourne and the Madingley Mulch roundabout;
  - Between the Madingley Mulch and just to the west of the M11;
  - Between the M11 and the West Cambridge Conservation Area; and
  - At the junction of Rifle Range Lane and Grange Road.

2.2 BASELINE VISUAL CONDITIONS

OVERVIEW

2.2.1 The visibility of the C2C 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 C2C Scheme. GLVIA3 identifies visual receptors as, "*the different groups of people who may experience views of the development*" (GLVIA, para 6.3**) (Ref 8.7)**. 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 8.8**). 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

2.2.2 The Zone of Theoretical Visibility (ZTV) (**Figure 8.1**) analysis represents the extent of the area over which the C2C Scheme may theoretically be visible. A computer generated digital ZTV was produced for the C2C Scheme which took 237 points along the route centreline at a height of +3m above the proposed surface for each point to take account of the typical height of buses. 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 1m LiDAR digital surface model. Whilst the LiDAR data provides more detailed modelling through inclusion of built form, it still required verification on the ground through fieldwork.

FIELDWORK

2.2.3 Fieldwork was undertaken in order to determine the potential nature and extent of views of the C2C Scheme and visual receptors likely to be affected. A series of photographs were taken during winter and summer season on Monday 27th January, 8th April, and Tuesday 12th September 2022 from locations illustrated on **Figure 8.4 Visual Assessment Plan** to represent views experienced by the visual receptors. These locations were initially identified as part of the desk-based study and through

consultation with relevant stakeholders (See section 1.2 above for further information on engagement). These photographs were taken from areas to which the public have access i.e. along roads, public rights of way and within areas of public open space. 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 still provide a representative view.

VIEWPOINTS

2.2.4 **Figure 8.5: Visual Assessment Photographs** illustrate 28 representative viewpoints within the Study Area that have been selected to aid the assessment of effects on the 37 visual receptors covering near, middle, and long-distance views, as well as fixed and sequential views of the C2C Scheme from the selected receptors. Some representative viewpoints cover multiple visual receptors, while some visual receptors are in areas where a representative viewpoint is not possible from publicly accessible locations.

2.3 SENSITIVE RECEPTORS

LANDSCAPE CHARACTER

2.3.1 National Character Area 88: Bedfordshire and Cambridgeshire Claylands is not considered further due to its relatively large geographical extent and the likely limited impact the C2C Scheme would have on it due to the lack of intervisibility with the majority of the character area.

2.3.2 The C2C Scheme Study Area includes the following character areas:

- Cambridge Inner Green Belt Boundary Study (**Ref 8.4**)
  - Townscape Character Area 2, West Cambridge
- Greater Cambridge Landscape Character Assessment (**Ref 8.3**):
  - LCA 2B Cottenham Fen Edge Claylands;
  - LCA 3B Bourn Tributaries Lowland Farmlands;
  - LCA 4A Croxton to Conington Wooded Claylands, and
  - LCA 4B Lolworth to Longstowe Wooded Claylands.

2.3.3 Greater Cambridge Landscape Character Area LCA 2A Longstanton Fen Edge Claylands, LCA 2B Cottenham Fen Edge Claylands, LCA 9A Cam River Valley-Cambridge, and LCA 9B Cam River Valley are not considered further as the C2C Scheme does not run through the area and the ZTV and fieldwork verified that there is likely to be little to no intervisibility between the LCAs and the C2C Scheme.

2.3.4 **Table TR8-1-1** below analyses the value and susceptibility of each LCA considered further to provide an overall sensitivity for the LCA. See **Appendix TR8.1 LVIA Methodology** for further information on assigning value, susceptibility and sensitivity.

Table TR8-1-1 – Landscape Sensitivity

Character Area	Comments
TCA 2 West Cambridge	
Overall Sensitivity to C2C	Medium
Value: High	The character of TCA 2 is described in the Cambridge Inner Green Belt Boundary Study as *a distinctive area of the city dominated by university and college buildings, with Grange Road functioning as the main spine road through the area. It comprises colleges, playing fields, large bespoke residential houses built for Fellows of the University, the residential area of Newnham and ongoing large-scale university development along Madingley Road… The houses are set back from the road and have large gardens with mature trees giving the area a green, leafy character. A corridor of rural land penetrates the urban area, running in to the University rugby ground on Grange Road. A key landmark is the University Library tower.* The area includes the West Cambridge Conservation Area as well as several listed buildings. The study describes the area as a distinctive townscape defined as specifically recognisable and distinctive to the city. It includes townscape and landscape components such as distinctive buildings; quintessential views, topographical features, setting and backdrops to the city; historic approach routes and landmarks of distinctive character.
Susceptibility to change: Low	Whilst the area has distinctive and recognisable characteristics it is also urban in nature with existing infrastructure features. The predominantly urban character along with the distinctive quality and importance of the 'green corridor' west of Grange Road as the closest rural landscape to the historic core, make the TCA susceptible to certain change. The TCA is considered to have a medium-high ability to accommodate the specific proposed change with some undue consequences for the maintenance of the baseline situation focused around the 'green corridor' west of Grange Road. The ability of the area as a whole to accommodate change results in low susceptibility to the proposed change.
LCA 3B Bourn Tributaries Lowland Farmlands	
Overall Sensitivity to C2C	Medium
Value: Medium	LCA 3B is generally a well settled rural landscape, with distinctive radio telescopes on the skyline that is strongly influenced by the wide, shallow valley of the Bourn Brook. The key characteristics of the overall LCA include a wide valley, a generally strong, regular rectilinear field pattern with smaller scale pastoral fields near villages, and ecological richness associated with the river. There is a network of major roads that locally detracts from the otherwise tranquil, rural character including the M11 which runs north to south in the east of the LCA. Coton Countryside Reserve is linked to the historic core of Cambridge by views towards the city's historic core and a green corridor which contributes to the setting of the city. Coton village in the north of the LCA, close to the C2C Scheme, is located within the Bin Brook Valley. It is a conservation area with several listed buildings and has a local character associated with the surrounding open arable land on the

Character Area	Comments
	valley slopes as well as Coton Orchard, providing distinctive local landscape features. The overall value is therefore considered to be medium.
Susceptibility to change: Medium	Land within LCA 3B is recognised as having specific landscape sensitivities including the green corridor linking Coton Countryside Reserve and the historic core of Cambridge which contributes towards the setting of the city, the distinctive radio telescopes that form a prominent landmark on the skyline, and the well-defined settlement edges defined by mature trees, copses and thick hedgerows enclosing small scale fields and paddocks. It is also recognised as having existing infrastructure that detracts from the landscape setting. The distinctive local landscape features around Coton village increase the susceptibility of the area to development of the nature of the C2C Scheme. Overall LCA 3B generally has a unified, peaceful character with a diverse rural landscape and a strong sense of place along with existing infrastructure. The area's ability to accommodate change of the nature of the C2C Scheme results in medium susceptibility to the C2C Scheme.
LCA 4A Croxton to Conington Wooded Claylands	
Overall Sensitivity to C2C	Low
Value: Low	LCA 4A is generally a settled rural landscape where small woodlands, shelterbelts and tree clumps combine to create a well treed character. The key characteristics of the overall LCA are scattered small blocks of woodland, including some ancient woodland, with expanses of large arable fields in between. Settlements vary in sizes including the new town at Cambourne near the C2C Scheme and the large village of Papworth Everard, along with several small villages, linear settlements along roads and isolated farms. The landscape is undesignated with a relatively ordinary and common character, particularly locally to C2C Scheme. The overall value is therefore considered to be low.
Susceptibility to change: Low	Land within LCA 4A is recognised as having some specific landscape sensitivities including the parkland features at Conington Hall and Croxton Park and a generally unified and peaceful character, however, the LCA has no landscape designations and close to the C2C Scheme the local character is urban in nature with the new town at Cambourne and existing road infrastructure. The area's ability to accommodate change of the nature of the C2C Scheme results in low susceptibility to the C2C Scheme.
LCA 4B Lolworth to Longstowe Wooded Claylands	
Overall Sensitivity to C2C	Medium
Value: Medium	LCA 4B is a settled rural landscape with a distinctive wooded parkland character. The key characteristics of the LCA are scattered, small blocks of woodland, including some ancient woodland, linked by mature, fragmented hedgerow network. The LCA has an irregular, generally rectilinear field pattern and a distinctive repetition of designed parkland features including historic

Character Area	Comments
	parkland and the American Cemetery. The landscape is divided by straight linear features including the A428 and Madingley Road with land falling to the south. There is a settlement pattern of small and medium sized villages such as Coton and Hardwick concentrated close to main roads and the villages generally have well defined edges defined by mature hedgerows, woodlands and clumps of trees. The LCA also has distinctive wide, open views towards Cambridge from Coton Countryside Reserve and towards Ely from the American Cemetery The overall value is therefore considered to be medium.
Susceptibility to change: medium	Land within LCA 4B is recognised as having specific landscape sensitivities including the distinctive repetition of designed parkland features, well defined village edges of small fields and paddocks with mature hedgerows, woodlands and clumps of trees, and distinctive wide, open views towards Cambridge from Coton Countryside Reserve and towards Ely from the American Cemetery. There is also the green corridor linking Madingley Wood and the historic core of Cambridge which contributes towards the setting of the city. Overall LCA 4B 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 and the LCA is influenced by existing infrastructure. The area's ability to accommodate change of the nature of the C2C Scheme results in medium susceptibility to the C2C Scheme.

NIGHT-TIME LANDSCAPE CHARACTER

Overview

2.3.5 As the C2C Scheme will include the introduction of new lighting at the proposed Park and Ride site at Scotland Road, the effects of this lighting on the night sky and its effects on the character of LCA 4B: Lolworth to Longstowe Wooded Claylands, within which the proposed Park and Ride site is located, has been considered. Due to the location of the Park and Ride at the centre of the LCA, no other LCA are considered likely to have significant effects and are not considered further. No other proposed lighting on the C2C Scheme is considered further due to the low likelihood of significant impacts on night-time character of the LCA.

2.3.6 The character of the night-time environment in this assessment is informed by fieldwork undertaken in September 2022 and the Lighting Strategy report[2]. A number of photographs were taken from viewpoints chosen in consultation with relevant stakeholders to demonstrate the appearance of the night sky and existing local light sources near the Park and Ride from nearby sensitive receptors. The locations were chosen to best assess the likely effect of the proposed Park and Ride on the character of the night sky. These night-time photographs are shown on **Figure 8.5: Night-Time Photographs** with photograph locations (N1 to N3) shown on **Figure 8.4: Visual Assessment Plan**.

[2] Lighting Strategy (Documents reference: 70086660-WSP-C2C-XX-RP-LI-0001).

2.3.7 Light spill from the receptor locations was experienced in the form of night-time sky glow or glare from particular points of light or a combination of both. The principal sources of light spill include:

- High level flood lights at junction of Scotland Road with A428;
- Vehicle movement on A428;
- Commercial, Agricultural, and Residential properties at Scotland Road; and
- Sky glow from built form in Hardwick.

Sensitivity

2.3.8 Overall, sky glow was low but already readily perceived across the landscape surrounding the Site as well as sources of direct glare noticeable from a range of locations which reduce the perceived darkness of the sky in the vicinity of the Site. The Lighting Strategy[2] identifies the environmental zones, a categorisation of lighting environment determined by the International Commission on Illumination, across the length of the scheme will vary between an E2 and E3 zone with the Park and Ride site likely to be in an E2 zone - a low district brightness area (such as rural small villages or relatively dark urban locations) which is largely reflective of the existing sky glow. See the Lighting Strategy[2] for further information on environmental zones.

2.3.9 Given the above, it is considered that LCA 4B Lolworth to Longstowe Wooded Claylands will be of **medium** sensitivity to the introduction of further sources of lighting.

VISUAL

2.3.10 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.

2.3.11 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. **Table TR8-1-2** sets out the value, susceptibility and subsequent sensitivity of the identified visual receptor or group of receptors, with reference to representative viewpoints where relevant. The GCP's Landscape Heritage and Ecology working group, which included representatives from the National Trust, Historic England, relevant local authorities, and Cambridge Past, Present and Future were consulted on provisional receptor locations. Additional visual receptors suggested by members of the working group have been included in this assessment. See **Figure 8.4** for receptor / viewpoint locations.

Table TR8-1-2 – Value, Susceptibility and Overall Sensitivity of Receptors

Site	Comments
R1 – St. Neots Road – Residential receptors Number: 13 Approx. Distance: At the Site	Value: The view obtained is considered to be of low value as it is not a recognised view of importance and has no local or regional importance with minimal or no cultural associations. Susceptibility: As the receptors in this locality will include residents, their susceptibility to the type of development proposed is considered to be high.

Site	Comments
	Sensitivity: Medium
R2 – West Drive, Caldecote – Residential receptors Number: 10 Approx. Distance: 480m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms a valued characteristic of views. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R3 – PRoW (Caldecote 38/1) – Recreation receptors	Value: The view obtained is considered to be of low value as it is not a recognised view of value, and views are enclosed by existing vegetation on St. Neots Road. Susceptibility: Receptors in this locality include users of PRoW (Caldecote 38/1) where the nature of the surroundings is not a significant factor in the enjoyment of the activity. Their susceptibility to the type of development proposed is therefore considered to be medium. Sensitivity: Low
R4 – PRoW (Childerley 48/4) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is from a recognised view of value in relation to a local heritage asset, Childerley Hall registered park and garden, and the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: Receptors in this locality include users of the PRoW where views of the surroundings are an important contributor to appreciation, experience and enjoyment. Their susceptibility to the type of development proposed is therefore considered to be high. Sensitivity: High
R5 - Scotland Road – Residential receptors Number: 10 Approx. Distance: At the Site	Value: The view obtained is considered to be of low value as it is not a recognised view of importance and does not have any cultural or locally important associations. Views of the wider landscape are in part screened by existing vegetation.

Site	Comments
	Susceptibility: The receptors in this locality will include those in their place of residence. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R6 – PRoW (Dry Drayton 66/17) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of local or regional importance, but the open fields forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R7 - PRoW (Dry Drayton 66/18 & 66/19) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of importance but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: Receptors in this locality include users of the PRoW where the attractive nature of the countryside is a significant factor in the enjoyment of the walk. Their susceptibility to the type of development proposed is therefore considered to be high. Sensitivity: High
R8 - PRoW (Dry Drayton 66/19) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of importance but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: Receptors in this locality include users of the PRoW where the attractive nature of the countryside is a significant factor in the enjoyment of the walk. Their susceptibility to the type of development proposed is therefore considered to be high. Sensitivity: High
R9 – PRoW (Dry Drayton 66/17) – Recreational receptors	Value:

Site	Comments
	The view obtained is considered to be of medium value as it is not a recognised view of local or regional importance, but the open fields forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R10 – PRoW (Dry Drayton 66/17) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of local or regional importance, but the open fields forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R11 – St Neots Road – Residential receptors Number: 31 Approx. Distance: At the Site	Value: The view obtained is considered to be of low value as it is not a recognised of view of importance and has no local or regional importance with minimal or no cultural associations. Susceptibility: As the receptors in this locality will include residents, their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R12 – Northfield Farm – Residential receptors Number: 1 Approx. Distance: 775m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms a valued characteristic of views from the receptor. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium

Site	Comments
R13 – Madingley Road – Residential receptors Number: 8 Approx. Distance: 75m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open views across the valley with fields with vegetation forms a valued characteristic of views from the receptors. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R14 – PRoW (Barton 20/1) - Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of local or regional importance, but the open fields forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R15 – Whitwell Way - Residential receptors Number: 36 Approx. Distance: 420m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms a valued characteristic of views from the receptors. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R16 – PRoW (Coton 55/2) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of local or regional importance, but the open fields forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high.

Site	Comments
	Sensitivity: High
R17 – Madingley Road – Transport receptors	Value: The view obtained is considered to be of low value as it is not designated and with no local or regional importance with minimal or no cultural associations. Susceptibility: Receptors in this locality include users of the road with some appreciation of their surroundings, but with transient views, secondary to their employment (typically of getting from A to B). Their susceptibility to the type of development proposed is therefore considered to be low. Sensitivity: Low
R18 – Madingley Road – Residential receptors Number: 4 Approx. Distance: 235m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open views across the valley with fields with vegetation forms a valued characteristic of views from the receptors. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R19 – PRoW (Coton 55/2) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not designated but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: Receptors in this locality include users of the PRoW with direct views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be high. Sensitivity: High
R20 – Madingley Rise – Residential receptors Number: 1 Approx. Distance: 190m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open views across the valley with fields with vegetation forms a valued characteristic of views from the receptors. Susceptibility:

Site	Comments
	The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R21 – Cambridge Road – Residential receptors Number: 14 Approx. Distance: 40m	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms a valued characteristic of views from the receptors. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R22 – Coton Orchard Garden Centre – Visitor receptors	Value: The view obtained is considered to be of low value as it is enclosed by surrounding vegetation and has no local or regional importance with minimal or no cultural associations. Susceptibility: Receptors in this locality include those at their place of work or shopping in Coton Orchard Garden Centre. Their susceptibility to the type of development proposed is therefore considered to be low. Sensitivity: Low
R23 – The Footpath – Residential receptors Number: 24 Approx. Distance: 180m	Value: The view obtained is considered to be of low value as it is not a recognised view of value and receptors views are enclosed by existing vegetation. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R24 – Rectory Farm – Hotel/Events receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms an important factor in enjoyment of views.

Site	Comments
	Susceptibility: Receptors in this locality include those visiting and working in Rectory Farm where views of the surroundings are an important contributor to appreciation, experience and enjoyment of the farm. Their susceptibility to the type of development proposed is therefore considered to be high. Sensitivity: Medium
R25 – PRoW (Cambridge 39/30) – Recreational receptors	Value: The view obtained is considered to be of low value as it has no local or regional importance with minimal or no cultural associations. Susceptibility: Receptors in this locality include those using the PRoW M11 overbridge with existing views of major infrastructure. Their susceptibility to the type of development proposed is therefore considered to be low. Sensitivity: Low
R26 – PRoW (Cambridge 39/30) – Recreational receptors	Value: The view obtained is considered to be of low value as it has no local or regional importance with minimal or no cultural associations and is enclosed by existing vegetation and in the context of the M11. Susceptibility: Receptors in this locality include those using the PRoW where the nature of the surroundings, next to a highway and enclosed by existing vegetation, is not relevant to the enjoyment of the activity. Their susceptibility to the type of development proposed is therefore considered to be low. Sensitivity: Low
R27 – PRoW (Barton 20/4) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity:

Site	Comments
	High
R28 – Coton Countryside Reserve (Red Meadow Hill) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R29 – Coton Countryside Reserve – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value, but the landscape forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R30 – PRoW (Cambridge 39/31) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not designated and has no local or regional importance with minimal or no cultural associations but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW with direct views of the landscape, partly screened by existing vegetation. Their susceptibility to the type of development proposed is considered to be medium. Sensitivity: Medium
R31 – PRoW (Cambridge 39/31) – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not designated and has no local or regional importance with minimal or no cultural associations but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility:

Site	Comments
	As the receptors in this locality will include users of the PRoW with direct views of the landscape, partly screened by existing vegetation. Their susceptibility to the type of development proposed is considered to be medium. Sensitivity: Medium
R32 – Track – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open field with vegetation forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW where the activity is specifically associated with the experience and enjoyment of the landscape, their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R33 – Dane Drive – Residential receptors Number: 10 Approx. Distance: 225m	Value: The view obtained is considered to be of low value as it is not a recognised view of value and receptor's views are enclosed by existing vegetation. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R34 – Cranmer Road – Residential receptors Number: 4 Approx. Distance: 165m	Value: The view obtained is considered to be of low value as it is not a recognised view of value and receptors views are in part enclosed by existing vegetation. Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R35 – Rifle Range – Residential receptors Number: 5	Value: The view obtained is considered to be of low value as it is not a recognised view of value and receptors views are in part enclosed by existing vegetation.

Site	Comments
Approx. Distance: 45m	Susceptibility: The receptors in this locality are residents with fixed views of the landscape. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: Medium
R36 – Castle Mound – Recreational receptors	Value: The view obtained is considered to be of high value as it is from a recognised monument with elevated expansive views across Cambridge. Susceptibility: As the receptors in this locality will include users of Castle Mound where views of the surroundings are an important contributor to appreciation, experience and enjoyment of the mound. Their susceptibility to the type of development proposed is considered to be high. Sensitivity: High
R37 – Pleasant Drive – Recreational receptors	Value: The view obtained is considered to be of medium value as it is not a recognised view of value but the open view across the landscape forms an important factor in enjoyment of views. Susceptibility: As the receptors in this locality will include users of the PRoW with long distance views of the landscape, their susceptibility to the type of development proposed is considered to be medium. Sensitivity: Medium

3 METHODOLOGY SUMMARY

3.1 ASSESSMENT METHODOLOGY

3.1.1 A full methodology for this assessment is set out in the **Appendix TR8.1 LVIA Methodology**. 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 C2C Scheme. The likely magnitude of impact (change) experienced by these receptors is then considered and combined with the receptor's sensitivity to identify the significance of effect for the C2C Scheme.

3.1.2 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 C2C Scheme;
- An assessment of the magnitude of impact likely to result from the C2C Scheme, both from construction and from permanent features and the operation of the C2C Scheme, on visual amenity and the landscape resource; and
- An evaluation of the significance of landscape and visual effects arising temporarily during construction and permanently, considering the sensitivity of resources and the magnitude of impact.

3.2 DESK STUDY

3.2.1 Information has been gathered primarily from a site survey, supported by desk study and engagement with relevant consultees (set out in section 1.2 above).

3.2.2 The desk study included:

- Identifying natural and built features such as landform, vegetation, settlement patterns and hydrology in relation to the C2C 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.

3.3 SITE VISIT AND SURVEYS

3.3.1 Detailed landscape and visual site survey work was carried out on 27th January and 8th April 2022 during the Winter season, and Tuesday12th September 2022 during the Summer season. The field surveys were designed to collect data for both the landscape and visual impact assessments during both Winter and Summer months. 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.

3.3.2 Photography was undertaken following the Landscape Institute guidelines for visual representation Technical Guidance Note 06/19 (**Ref 9.7**), 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.

3.4 SIGNIFICANCE CRITERIA

3.4.1 The significance level attributed to each effect has been assessed based on the sensitivity/value of the affected receptor(s) and the magnitude of impact arising from the C2C Scheme. The sensitivity of the affected receptor is assessed on a scale of very high, high, medium, low and negligible, and the magnitude of impact is assessed on a scale of high, moderate, minor, negligible and no change, as set out in **Chapter 2: The EIA Process, Section 2.4**. 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 impact is determined from a number of factors including scale, geographical extent, and duration of effect.

3.5 SIGNIFICANCE OF EFFECT

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

Table TR8-2-1 – 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 will be a prominent feature or a noticeably discordant or enhancing feature substantially affecting overall visual amenity or will 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.
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.	The development will be a noticeable feature or a somewhat discordant or enhancing feature affecting overall visual amenity or will result in a noticeable change to a highly sensitive and well composed existing view or will be prominent within a less well composed and lower sensitivity view. A noticeable improvement or deterioration of the existing view.
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	The development will be a visible but not particularly noticeable feature or a slightly discordant or enhancing feature affecting overall visual amenity or will result in a small change to a highly sensitive and well composed existing

Level of Effect	Landscape effect	Visual effect
	altering the overall impression of its character.	view or will be noticeable within a less well composed and lower sensitivity view. A small improvement or deterioration of the existing view.
Neutral	No discernible improvement or deterioration to the existing landscape character.	No discernible improvement or deterioration in the existing view.

3.5.2 As set out in **Chapter 2: The EIA Process**, 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**.

4 ASSUMPTIONS AND EMBEDDED MITIGATION

4.1 OVERVIEW OF THE SCHEME

4.1.1 The Cambourne to Cambridge (C2C) Scheme will include a 13.6km long mainly dedicated busway connecting Cambourne in the west with Cambridge in the east. A service road and maintenance track, to be used as an active travel path, will run alongside the segregated sections of busway. The C2C Scheme will use hybrid vehicles (and in due course, electric vehicles), providing a service of around 10 buses per hour each way. The Scotland Farm travel hub (a park and ride facility) will be situated along the route, just north of the A428, approximately 5km west of Cambridge. Further details about the Scheme proposal are set out in Chapter 3 of the ES[3].

4.1.2 A draft Code of Construction Practice[4] (CoCP) has been prepared for the C2C Scheme, which sets out the controls and measures that will be implemented to mitigate potential impacts as a result of construction activity and will form part of the TWA Order and deemed planning permission applications.

4.2 PRIMARY MITIGATION

4.2.1 The design of the C2C Scheme, where possible, has included for primary mitigation embedded into the Scheme design to avoid potential adverse landscape and visual effects.

4.2.2 A Design and Access Statement (DAS)[5] has been prepared separately in support of the C2C Scheme. This emphasises a vision that seeks to use the environment as an opportunity in promoting a scheme that "*maximises access and movement, biodiversity, a sense of place, local character, sustainable water resources and enhanced health and well-being*". The DAS highlights opportunities for:

- enhancing local character and assets;
- designing with future trends in mind;
- increasing biodoversity and ecological features; and
- improving health and wellbeing.

4.2.3 The DAS sets out a series of overarching design principles and follows these with 11 area-specific concepts to achieve them, as well as to mitigate potentially adverse effects.

4.2.4 A full description of the C2C Scheme and landscape design can be found in the **Design and Access Statement**[5]. Please also refer to **Table 6-1** within the **Environmental Statement**[3] which summarises all embedded mitigation.

[3] Environmental Statement
[4] Code of Construction Practice
[5] Design and Access Statement

5 ASSESSMENT OF IMPACTS AND EVALUATION OF EFFECTS

5.1 TEMPORARY CONSTRUCTION EFFECTS

5.1.1 The construction of the C2C Scheme will include the temporary (up to 24 months) introduction of additional construction related features and intrusive elements into the landscape that may have an impact on landscape character and visual amenity. The construction activities include several construction compounds across the C2C Scheme, plant, cranes, increased road use from construction traffic, and temporary lighting, however, controls and measures are embedded in the C2C Scheme to mitigate the potential impacts as a result of construction activities (see the CoCP for full construction phase details). The below tables set out the predicted impact the construction phase will have on the landscape resource and visual amenity.

Table TR8-4-1 – Assessment of predicted effects on landscape during construction

Character Area	Comments
TCA 2 West Cambridge	
Predicted Impact	Slight-moderate adverse (**not significant**)
Predicted Effects	The construction of the C2C Scheme will introduce intrusive elements of construction plant into the landscape for a limited period (up to 24 months), particularly at the construction compound sites east of the M11, in the field north of Dane Drive, and west of University Rugby Ground. Additional construction traffic on local roads will also be notable, however, experienced within an existing urban environment accustomed to some traffic of this nature. Construction stage activity is mitigated where possible by measures outlined in the CoCP. The short-term nature of the construction activity along with the localised geographical extent of works within the whole of the TCA, and embedded mitigation result in the magnitude of impact during construction to be minor. However, the sensitivity of TCA 2: West Cambridge is high. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant) effect** on TCA 2: West Cambridge.
LCA 3B Bourn Tributaries Lowland Farmlands	
Predicted Impact	Slight adverse (**not significant**)
Predicted Effects	The construction of the C2C Scheme will include the temporary introduction of additional construction related features in the landscape. The activities will be across a localised area of the north the LCA. Construction traffic will be experienced on local roads while Cambridge Road will be the location of a construction compound. Wider parts of the LCA may have some intervisibility with construction activity due to rising land to the west and south and the proximity of the C2C Scheme to the village of Coton which may have visibility to construction activities to the north. Given the temporary and short-term nature of construction (proposed duration 24 months), the minimal construction activity within the LCA, and the limited intervisibility with the LCA confirmed through review of the ZTV and fieldwork, the magnitude of impact during construction is considered to be minor and as the sensitivity of the receptor is medium, there is likely to be a **temporary, short-term slight adverse (not significant)** effect.
LCA 4A Croxton to Conington Wooded Claylands	

Character Area	Comments
Predicted Impact	Slight adverse (**not significant**)
Predicted Effects	The construction of the C2C Scheme will include the temporary introduction of additional construction related features in the landscape. A very small part of the C2C Scheme and construction related activity is located within a small, localised portion of the south-east of the LCA. Given the temporary and short-term nature of construction (proposed duration 24 months), the minimal presence of construction activity within the LCA, and the limited intervisibility with the LCA confirmed through review of the ZTV and fieldwork, the magnitude of impact during construction is considered to be negligible and as the sensitivity of the receptor is medium**,** there is likely to be a **temporary, short-term slight adverse (not significant)** effect..
LCA 4B Lolworth to Longstowe Wooded Claylands	
Predicted Impact	Moderate adverse (**significant**)
Predicted Effects	The construction of the C2C Scheme will include the temporary introduction of additional construction related features within the LCA, particularly at the construction compound sites at Bourn, along St. Neots Road, along the C2C alignment between Madingley Road and Whitwell Way. The main site compound is also located at Scotland Farm. The construction activity will be seen in a large portion of the LCA with the C2C Scheme running through the LCA from east to west. The construction activity will include an increase in construction traffic on the roads, views of construction activities, a reduction in tranquillity from the noise and air quality impacts associated with the construction works and an increase in activity within the LCA. However, given the temporary and short-term nature of construction (proposed duration 24 months), the magnitude of impact during construction is reduced and considered to be moderate**.** As the sensitivity of the receptor is medium, there is likely to be a **temporary, short-term moderate adverse (significant)** effect.

Table TR8-4-2 – Assessment of predicted effects on visual amenity during construction

Visual Receptor	Predicted Impact
R1 – St. Neots Road – Residential receptors	The visual amenity of the receptors may be adversely affected by construction related activities such as increased road use and visual intrusion of construction features in the landscape. Construction activities will occupy a noticeable portion of the receptor's view, however, within a localised area already associated with road traffic. The temporary nature of the construction phase results in the magnitude of impact during construction considered to be minor. The sensitivity of R1 – St. Neots Road is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R1 – St. Neots Road.
R2 – West Drive – Residential receptors	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 barriers in the landscape and reduction in tranquillity. Construction activities will occupy a small portion of the view at a medium distance, seen through existing vegetation. A small part of the local area works compound located to the north-west may also be visible, although

Visual Receptor	Predicted Impact
	also viewed through existing vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R2 – West Drive is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R2 – West Drive.
R3 - PRoW (Caldecote 38/1) – Recreation receptors	The visual amenity of the receptor may be adversely affected by construction related activities such visual intrusion of construction features in the landscape. There is a local construction compound located approximately 250m to the west of the receptor. Construction activities will occupy a small portion of the view at a short distance but screened in part by existing vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R3 - PRoW (Caldecote 38/1) is low, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R3 - PRoW (Caldecote 38/1).
R4 – PRoW (Childerley 48/4) – Recreational receptors	The visual amenity of the receptor may be adversely affected by the addition of construction activity in the landscape, however, no part of the construction activity would be discernible in the view due to distance and topography. The magnitude of impact during construction is considered to be no change. The sensitivity of R4 – PRoW (Childerley 48/4) is high, and the magnitude of impact is no change. Therefore, there is likely to be a **temporary, short-term neutral** effect on R4 – PRoW (Childerley 48/4).
R5 - Scotland Road – Residential receptors	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 including the main site compound at Scotland Farm will occupy a significant portion of receptor views here, however, the temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate. The sensitivity of R5 - Scotland Road is medium, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R5 - Scotland Road.
R6 – PRoW (Dry Drayton 66/17) – Recreational receptors	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 addition of plant, machinery, and cranes. Construction activities including the main site compound at Scotland Farm will occupy a significant portion of receptor views here, however, the temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate. The sensitivity of R6 - PRoW (Dry Drayton 66/17) is high, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R6 - PRoW (Dry Drayton 66/17).
R7 - Scotland Road / PRoW (Dry Drayton 66/18	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 barriers in the landscape and reduction in

Visual Receptor	Predicted Impact
& 66/19) – Recreational receptors	tranquillity. Construction activities will likely occupy a very small portion of the view at long distance and seen through existing vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R7 - Scotland Road / PRoW (Dry Drayton 66/18 & 66/19) is high, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R7 - Scotland Road / PRoW (Dry Drayton 66/18 & 66/19).
R8 - PRoW (Dry Drayton 66/19) – Recreational receptors	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 barriers in the landscape and reduction in tranquillity. No part of the construction activity is likely to be discernible in the long-distance view seen through existing hedgerow. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be no change. The sensitivity of R8 - PRoW (Dry Drayton 66/19) is high, and the magnitude of impact is no change. Therefore, there is likely to be a **temporary, short-term neutral** effect on R8 - PRoW (Dry Drayton 66/19).
R9 – PRoW (Dry Drayton 66/17) – Recreational receptors	The sensitivity of R9 – PRoW (Dry Drayton 66/17) is high, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse** (**not significant**) effect on R9 – PRoW (Dry Drayton 66/17).
R10 – PRoW (Dry Drayton 66/17) – Recreational receptors	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 likely occupy a small portion of the view. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be no change. The sensitivity of R10 – PRoW (Dry Drayton 66/17) is high, and the magnitude of impact is no change. Therefore, there is likely to be a **temporary, short-term neutral** effect on R10 – PRoW (Dry Drayton 66/17).
R11 – St Neots Road – Residential receptors	The visual amenity of the receptors may be adversely affected by construction related activities such as increased road use and visual intrusion of construction features in the landscape. Construction activities will occupy a noticeable portion of the receptor's view, however, within a localised area already associated with road traffic. The temporary nature of the construction phase results in the magnitude of impact during construction considered to be minor. The sensitivity of R11 – St. Neots Road is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R11 – St. Neots Road.
R12 – Northfield Farm – Residential receptors	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 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 and existing intervening vegetation. The temporary nature of construction will result in the magnitude of impact being

Visual Receptor	Predicted Impact
	reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R12 – PRoW (Comberton 52/1) and Northfield Farm is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R12 – Northfield Farm.
R13 – Madingley Road – Residential receptors	The visual amenity of the receptor may be adversely affected by the addition of plant, machinery, cranes, and temporary lighting within views during construction. Construction activities will occupy a noticeable portion of the view, however, the temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R13 – Madingley Road is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R13 – Madingley Road.
R14 – PRoW (Barton 20/1) - Recreational receptors	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 very small portion of the view due to due to distance and change in topography. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R14 – PRoW (Barton 20/1) is high, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R14 – PRoW (Barton 20/1).
R15 – Whitwell Way – Residential receptors	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 addition of plant, machinery, and cranes particularly at the local area works compound site to the north of the receptors. Construction activities will occupy a noticeable portion of the view, limited somewhat by intervening hedgerow vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate. The sensitivity of R15 – Whitwell Way is high, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R15 – Whitwell Way.
R16 – PRoW (Coton 55/2) – Recreational receptors	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 addition of plant, machinery, and cranes. Construction activities will likely occupy a significant portion of the view due to the location of the location of the C2C Scheme in close proximity to the PRoW. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate-major. The sensitivity of R16 – PRoW (Coton 55/2) is high, and the magnitude of impact is moderate-major. Therefore, there is likely to be a **temporary, short-term large adverse (significant)** effect on R16 – PRoW (Coton 55/2).

Visual Receptor	Predicted Impact
R17 – Madingley Road – Transport receptors	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 addition of plant, machinery, and cranes. Construction activities will likely occupy a small portion of the view and the temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R17 – Madingley Road is low, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R17 – Madingley Road.
R18 – Madingley Road – Residential receptors	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 addition of plant, machinery, and cranes. Construction activities will likely be perceptible but not alter the overall balance of features and elements that comprise the existing view. The temporary nature of construction will also result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor-moderate. The sensitivity of R18 – Madingley Road is medium, and the magnitude of impact is minor-moderate. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse (not significant)** effect on R18 – Madingley Road.
R19 – PRoW (Coton 55/2) – Recreational receptors	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 addition of plant, machinery, and cranes. Construction activities will likely occupy a significant portion of the view due to the location on the route alignment. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate-major. The sensitivity of R19 – PRoW (Coton 55/2) is high, and the magnitude of impact is moderate-major. Therefore, there is likely to be a **temporary, short-term large adverse (significant)** effect on R19 – PRoW (Coton 55/2).
R20 – Madingley Rise – Residential receptors	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 addition of plant, machinery, and cranes. Construction activities will likely occupy a small portion of the view, however, the temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R20 – Madingley Rise is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight-moderate adverse** (**not significant**) effect on R20 – Madingley Rise.
R21 – Cambridge Road – Residential receptors	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 likely occupy a significant portion of the view and will be temporary in nature. The magnitude of impact during construction is considered to be moderate. The sensitivity of R21 – Cambridge Road is medium, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate (significant)** effect on R21 – Cambridge Road.

Visual Receptor	Predicted Impact
R22 – Coton Orchard Garden Centre – Commercial receptors	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 addition of plant, machinery, and cranes. Construction activities will likely occupy a very small portion of the view and will be temporary in nature. The magnitude of impact during construction is considered to be minor. The sensitivity of R22 – Coton Orchard Garden Centre is low, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R22 – Coton Orchard Garden Centre.
R23 – The Footpath – Residential receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely occupy little to no part of the view due to distance and existing intervening vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be minor. The sensitivity of R23 – The Footpath is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R23 – The Footpath.
R24 – Rectory Farm – Commercial receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views associated with the construction of the M11 overbridge and approach roads. Construction activities will likely occupy a noticeable portion of the view due limited somewhat by existing intervening vegetation. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate. The sensitivity of R24 – Rectory Farm is medium, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R24 – Rectory Farm.
R25 – PRoW (Cambridge 39/30) – Recreational receptors	The visual amenity of the receptor may be adversely affected by construction related activities such as visual intrusion of construction features in the landscape associated with the construction of the M11 overbridge and approach roads. Construction activities will likely occupy a noticeable portion of the view, however in the context of existing M11 infrastructure. The temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate. The sensitivity of R25 – PRoW (Cambridge 39/30) is low, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R25 – PRoW (Cambridge 39/30).
R26 – PRoW (Cambridge 39/30) – Recreational receptors	The visual amenity of the receptor may be adversely affected by construction related activities such as visual intrusion of construction features in the landscape associated with the construction of the M11 overbridge and approach roads. Construction activities will likely occupy a significant portion of the view, however in the context of the existing M11 infrastructure. The

Visual Receptor	Predicted Impact
	temporary nature of construction will result in the magnitude of impact being reduced. The magnitude of impact during construction is considered to be moderate-major. The sensitivity of R26 – PRoW (Cambridge 39/30) is low, and the magnitude of impact is moderate-major. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R26 – PRoW (Cambridge 39/30).
R27 – PRoW (Barton 20/4) – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely occupy a very small portion of the view and are temporary in nature. The magnitude of impact during construction is considered to be minor. The sensitivity of R27 – PRoW (Barton 20/4) is high, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R27 – PRoW (Barton 20/4).
R28 – Coton Countryside Reserve (Red Meadow Hill) – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely occupy a very small portion of the view due to distance and intervening existing vegetation. The construction activities are also temporary in nature reducing the magnitude of impact. The magnitude of impact during construction is considered to be minor. The sensitivity of R28 – Coton Countryside Reserve (Red Meadow Hill) is high, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R28 – Coton Countryside Reserve (Red Meadow Hill).
R29 – Coton Countryside Reserve – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely occupy a very small portion of the view due to distance and intervening existing vegetation. The construction activities are also temporary in nature reducing the magnitude of impact. The magnitude of impact during construction is considered to be negligible. The sensitivity of R29 – Coton Countryside Reserve is high, and the magnitude of impact is negligible. Therefore, there is likely to be a **temporary, short-term neutral** effect on R29 – Coton Countryside Reserve.
R30 – PRoW (Cambridge 39/31) – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely be a noticeable feature or element of the view which is readily apparent to the receptor. The construction activities are temporary in nature, however, reducing the magnitude of impact. The magnitude of impact during construction is considered to be moderate.

Visual Receptor	Predicted Impact
	The sensitivity of R30 – PRoW (Cambridge 39/31) is medium, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R30 – PRoW (Cambridge 39/31).
R31 – PRoW (Cambridge 39/31) – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely be a noticeable feature or element of the view which is readily apparent to the receptor. The construction activities are temporary in nature, however, reducing the magnitude of impact. The magnitude of impact during construction is considered to be moderate. The sensitivity of R31 – PRoW (Cambridge 39/31) is medium, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate adverse (significant)** effect on R31 – PRoW (Cambridge 39/31).
R32 – Track – Recreational receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely be a noticeable feature or element of the view which is readily apparent to the receptor. The construction activities are temporary in nature, however, reducing the magnitude of impact. The magnitude of impact during construction is considered to be moderate. The sensitivity of R32 – Track is high, and the magnitude of impact is moderate. Therefore, there is likely to be a **temporary, short-term moderate (significant)** effect on R32 – Track.
R33 – Dane Drive – Residential receptors	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 addition of plant, machinery, cranes, temporary lighting, and temporary barriers within views. Construction activities will likely not be discernible within the view for the receptor due to intervening vegetation. The construction activities are also temporary in nature, reducing the magnitude of impact. The magnitude of impact during construction is considered to be no change. The sensitivity of R33 – Dane Drive is medium, and the magnitude of impact is no change. Therefore, there is likely to be a **temporary, short-term neutral** effect on R33 – Dane Drive.
R34 – Cranmer Road – Residential receptors	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 addition of plant, machinery, and cranes, within views. Construction activities will likely not be perceptible but not alter the overall balance of features and elements that comprise the existing due to intervening vegetation. The construction activities are also temporary in nature, reducing the magnitude of impact. The magnitude of impact during construction is considered to be minor.

Visual Receptor	Predicted Impact
	The sensitivity of R34 – Cranmer Road is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R34 – Cranmer Road.
R35 – Rifle Range – Residential receptors	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 addition of plant, machinery, and cranes, within views. Construction activities will likely become the dominant feature or focal point of the view, however, the construction activities are also temporary in nature, reducing the magnitude of impact. The magnitude of impact during construction is considered to be minor. The sensitivity of R35 – Rifle Range is medium, and the magnitude of impact is minor. Therefore, there is likely to be a **temporary, short-term slight adverse (not significant)** effect on R35 – Rifle Range.
R36 – Castle Mound – Recreational receptors	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 addition of plant, machinery, and cranes, within views. Construction activities will likely only form little or no part of the view. The construction activities are also temporary in nature, reducing the magnitude of impact. The magnitude of impact during construction is considered likely to be negligible. The sensitivity of R36 – Castle Mound is high, and the magnitude of impact is negligible. Therefore, there is likely to be a **temporary, short-term neutral** effect on R36 – Castle Mound.
R37 – Pleasant Drive – Recreational receptors	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 addition of plant, machinery, and cranes, within views. Construction activities will likely only form no part of the view. The construction activities are also temporary in nature, reducing the magnitude of impact. The magnitude of impact during construction is considered likely to be no change. The sensitivity of R37 – Pleasant Drive is medium, and the magnitude of impact is no change. Therefore, there is likely to be a **temporary, short-term neutral** effect on R37 – Pleasant Drive.

5.2 LONG TERM AND OPERATIONAL EFFECTS

5.2.1 The magnitude of impact is considered from a combination of factors including the size, scale and nature of change in relation to the context; the geographical extent of the area influenced; and its duration and reversibility. The assessment considers the impact at year 1 and at year 15 taking regard of embedded mitigation including proposed planting. The below tables outline the predicted impact the operational phase will have on the landscape resource and visual amenity.

Table TR8-4-3 – Assessment of predicted effects on landscape during operation

Character Area	Comments
TCA 2 West Cambridge	
Predicted Impact	Year 1 - Slight-moderate adverse (**not significant**) Year 15 - Slight adverse (**not significant**)
Predicted Effects	The C2C Scheme will introduce a new guided busway into the townscape including approach road to a M11 overbridge. The busway will travel through existing roads in the University of Cambridge Campus before moving south through open fields and east along Rifle Range towards Grange Road. The C2C Scheme will have intervisibility with those in the University campus, users of the local PRoW, residents on Herschel Road, and the University Rugby Ground. Whilst the C2C Scheme will have limited visibility in the wider townscape, the area in which it travels through is an important existing green corridor and the closest rural landscape to the historic core of Cambridge. The magnitude of impact is reduced by the introduction of primary mitigation planting including tree planting at Rifle Range and street trees and rain-gardens at West Cambridge campus (see landscape plans - 70086660-WSP-GEN-XX-DR-LX-00000-00017). The C2C Scheme will result in some change to existing landscape features and have an impact on local receptors including users of local PRoW, however, there will be minimal impact on townscape character as a whole. Given that the C2C Scheme will introduce a minor change to the character of the existing townscape receptor in a localised part of the TCA, the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of TCA 2: West Cambridge is high, and the magnitude of impact on a winter's day at year 1 of opening is minor-moderate. Therefore, there is likely to be a semi-permanent, medium-term slight-moderate adverse (not significant) effect on TCA 2: West Cambridge at Year 1. The proposed planting will establish over time providing further screening to visual receptors within the TCA and help integrate the C2C Scheme into the townscape. The magnitude of impact on a summer day at year 15 will reduce to minor. Therefore, there is likely to be a permanent, long-term slight adverse (not significant) effect on TCA 2: West Cambridge at Year 15.
LCA 3B Bourn Tributaries Lowland Farmlands	
Predicted Impact	Year 1 - Slight-moderate adverse (**not significant**) Year 15 - Slight adverse (**not significant**)
Predicted Effects	The C2C Scheme will introduce a new busway with associated M11 overbridge through a small area to the north of the LCA. The C2C Scheme will travel through a small portion of the LCA, however it will result in some change to local landscape features such as Coton Orchard and have some intervisibility with nearby residential and commercial properties south of Madingley Road, along local PRoW, and within the village of Coton. There will also be some visibility in wider areas of the LCA such as Red Meadow Hill due to land rising to the south and west. The intervisibility is limited somewhat by existing vegetation along the M11, at field and property boundaries and within Coton Orchard. The magnitude of impact is reduced by a considered bridge design and the introduction of new planting and bunds along the busway to help integrate the C2C Scheme into the surrounding landscape context. New planting will include amenity grass-land planting as well as planted water features, trees, and native woodland planting at the University Sports Grounds and west of the M11 bridge. The planting at Coton Orchard aims to reinforce the

Character Area	Comments
	presence of the orchard with rigid planting of fruiting and non-fruiting tree species. The C2C Scheme will result in a discernible change to existing local landscape features and the surroundings of nearby receptors, however, the landscape character as a whole will be impacted such that its baseline is altered to minimal extent. Given that the C2C Scheme will introduce a minor change to the character of the existing landscape receptor along with a medium change to localised landscape features and in a localised part of the LCA, the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of LCA 3B Bourn Tributaries Lowland Farmlands is medium, and the magnitude of impact on a winter's day at year 1 of operation is minor-moderate. Therefore, there is likely to be a semi-permanent, medium-term slight-moderate adverse (not significant) effect on LCA 3B Bourn Tributaries Lowland Farmlands at Year 1. The proposed planting will establish over time providing further screening to visual receptors within the LCA and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to minor. Therefore, there is likely to be a permanent, long-term slight adverse (not significant) effect on LCA 3B Bourn Tributaries Lowland Farmlands at Year 15.
LCA 4A Croxton to Conington Wooded Claylands	
Predicted Impact	Year 1 - Neutral (**not significant**) Year 15 - Neutral (**not significant**)
Predicted Effects	The C2C Scheme will introduce a new busway through a very small area to the south-east of the LCA. It will have limited intervisibility with nearby residential and commercial properties in Cambourne, along with some local PRoW and Broadway road users. The magnitude of impact is reduced by the introduction of new planting along the bus-only link between Sterling Way and Broadway including stretches of hedgerows and tree planting to help integrate the C2C Scheme into the surrounding landscape context. The C2C Scheme will result in no noticeable alteration of existing features and elements and /or landscape character such that its baseline is altered. Given that the C2C Scheme will be of no change to the character of the existing landscape receptor in a localised part of the LCA, the magnitude of impact is considered to be no change during operation. The sensitivity of LCA 4A Croxton to Conington Wooded Claylands is medium, and the magnitude of impact on a winter's day at year 1 of operation is no change. Therefore, there is likely to be a semi-permanent, medium-term neutral (not significant) effect on LCA 4A Croxton to Conington Wooded Claylands at Year 1. The proposed planting will establish over time providing further screening to visual receptors within the LCA and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain no change. Therefore, there is likely to be a permanent, long-term neutral (not significant) effect on LCA 4A Croxton to Conington Wooded Claylands at Year 15.
LCA 4B Lolworth to Longstowe Wooded Claylands	
Predicted Impact	Year 1 - Moderate adverse (**significant**) Year 15 - Slight-moderate adverse (**not significant**)
Predicted Effects	The C2C Scheme will introduce a new busway through a large part of the LCA from Bourne in the west to the village of Coton in the east. In the west of the LCA the C2C Scheme will be embedded in the Bourne Airfield development before running through the field south of the

Character Area	Comments
	A428 and through Hardwick on the existing St. Neots Road. The C2C Scheme will have minimal impact on landscape fabric, features or character in the west of the LCA, reducing the magnitude of impact in the area. Proposed planting along the A428 includes replanting of disturbed shrub and woodland planting as well as species rich planting and clusters of trees at junctions. Within Hardwick, the proposed planting seeks to enhance a linear streetscape with street trees and enhanced verges. Beyond Hardwick the C2C Scheme turns south and runs west to east between Long Road and Cambridge Road. The land here is considered to have intrinsic visual, historic and cultural significance, which is fundamental to preserving the setting and special character of the historic city of Cambridge in accordance with its Green Belt purpose. There will be some noticeable change to existing landscape elements and landscape character, however there will be limited discernible changes to the surroundings of nearby receptors due to the embedded mitigation through low earth bunds and proposed planting. The planting seeks to avoid a horizontal linear feature in the landscape through north-south planting along old field boundaries. Meadow-rich grassland is proposed on the low bunds, with low-level hedgerows, or clusters of tree planting proposed where visual screening is required. A travel hub is located close to the Scotland Road A428 roundabouts. To mitigate the impact of the hub the hard-standing parking space is 'spliced' by planted 'green fingers' forming a green network and increasing opportunity for SuDS. The tree and shrub planting within the 'green fingers' also soften the rigid girded layout within the car-park space. Woodland planting and understorey planting will surround the core of the car parking area and anew amenity space is created at Callow brook including tree planting, water-side planting, riparian planting, and meadow-rich planting. The C2C Scheme will have some intervisibility with nearby residential and commercial properties in Highfields Caldecote, Hardwick, and Coton. It will also have some visibility from isolated rural properties, local road users, and local PRoW. The C2C Scheme may also be visible from key views on high ground in the wider LCA due to the varying topography. The magnitude of impact is reduced by the introduction of the new earth bunds and planting along the busway to help integrate the C2C Scheme into the surrounding landscape context. The C2C Scheme will result in a noticeable alteration of existing baseline landscape fabric and features, and landscape character locally near Coton such that its baseline is partially altered. However, the Scheme will have minimal impact in the rest of the LCA. The C2C Scheme will introduce a minor change to the character of the existing landscape receptor in a broad area of the LCA and the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of LCA 4B Lolworth to Longstowe Wooded Claylands is medium, and the magnitude of impact on a winter's day at year 1 of operation is minor-moderate. Therefore, there is likely to be a semi-permanent, medium-term moderate adverse (significant) effect on LCA 4B Lolworth to Longstowe Wooded Claylands at Year 1. The proposed planting will establish over time providing further screening to visual receptors within the LCA and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to minor. Therefore, there is likely to be a permanent, long-term slight-moderate adverse (not significant) effect on LCA 4B Lolworth to Longstowe Wooded Claylands at Year 15.

EFFECTS ON NIGHT-TIME LANDSCAPE CHARACTER

5.2.2 The predicted effects on night-time landscape character are assessed based on the recommended lighting strategy set out in the Lighting Strategy[2] Report. The proposed lighting design for the Scheme is recommended to adhere to the ILP GN01 Environmental Zone Criterion (Table 5-4 in the

Lighting Strategy[2] Report) to ensure the light levels do not exceed the limitations set for a given Environmental Zone.

5.2.3 At the C2C Park and Ride, the report recommends that "*car parks (including access and footway areas) within the scheme shall be lit to 20 Lux (average maintained) in accordance with BS 5489-1:2020 (Table 4) and BS EN 12464-2:2014 (Table 5.9) based on heavy traffic usage.*" It also recommends that "l*uminaires in outdoor car parks should be selected and mounted such as to avoid obtrusive lighting and excessive spill to the immediate surrounding area…consideration should be given to utilising established technologies such as Central Management Systems in order to implement dimming and/or switch off during off peak or hours of low use. Levels could potentially be reduced by one or two classes in order to save energy and carbon in addition to reducing the potential visual and ecological impacts of the scheme."*

5.2.4 Through the appropriate selection of lighting equipment including luminaire units, their mounting height and location, it is not predicted the C2C Scheme will have any significant adverse effects in the defined Study Area which encompasses LCA 4B Lolworth to Longstowe Wooded Claylands. This is due to the predicted low levels of light spill which will be within the permitted values defined by the Environmental Zone in which the Scheme sits. In addition, skyglow will be minimised to the 0% upward light ratio by proposing appropriate luminaires. It is also stated in the lighting strategy report that the lighting introduced by the C2C Scheme should be designed under the principle of Ultra Efficient Lighting (UEL) which means that the right light will be provided at the right time, in the right place, controlled by the right system. Any residual reflected light which may produce skyglow will be mitigated by using darker, low reflectance surfaces.

5.2.5 Light pollution in the form of direct glare and sky glow from existing sources such as the A428 and Hardwick/ Highfields has impacted the darkness of the night sky for the Park and Ride site within LCA 4B Lolworth to Longstowe Wooded Claylands. The introduction of lighting by the C2C Scheme into the area is considered to be a small addition in a localised part of the landscape character area. Similarly, visibility has been limited for sensitive receptors through design mitigation including planting.

5.2.6 Given the above, a minor magnitude of impact is considered likely as a result of the lighting introduced by the C2C Scheme across the landscape of LCA 4B Lolworth to Longstowe Wooded Claylands. A small magnitude of impact along with medium sensitivity of the receptor will result in a slight adverse (**not significant**) effect on the night-time character of the LCA during both construction and operation.

Table TR8-4-5 – Assessment of predicted effects on visual amenity during operation

Visual Receptor	Predicted Impact
R1 – St. Neots Road – Residential receptors	Currently users at this location experience views on St. Neots Road with associated road traffic and existing vegetation associated with the A428. Users will receive close distance views of the C2C Scheme when looking north. The C2C Scheme will remove traffic from St. Neots Road save for local residents and introduce a guided busway. The residential properties on St. Neots Road will receive direct views of the C2C Scheme and passing buses. The magnitude of impact is reduced by the introduction of new planting at St. Neots Road. The magnitude of impact is considered to be minor during operation.

Visual Receptor	Predicted Impact
	The sensitivity of R1 – St. Neots Road is medium, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight beneficial (not significant)** effect on R1 – St. Neots Road at Year 1. The proposed planting will establish over time to help integrate the C2C Scheme into the landscape. The magnitude of impact at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight beneficial (not significant)** effect on R1 – St. Neots Road on a summer's day at Year 15.
R2 – West Drive – Residential receptors	The C2C Scheme would introduce a new guided busway to the north of the receptor running west to east to the north of Wellington Way before turning north and rising to meet the St. Neots Road at grade. The C2C Scheme would have limited intervisibility with the receptor due to existing vegetation within properties and a field boundary hedgerow and hedgerow trees to the north of West Drive. The busway would occupy a small portion of views to the north from the properties, particularly from first floor windows, however viewed through existing vegetation. Buses would be visible moving through the landscape but at a low frequency. The magnitude of impact is reduced by the introduction of new planting on the guided busway, particularly where it rises to St. Neots Road, to help integrate it into the landscape. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R2 – West Drive is medium, and the magnitude of impact on a winter's day at year 1 of operation is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R2 – West Drive at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **negligible**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R2 – West Drive at Year 15.
R3 – PRoW (Caldecote 38/1) – Recreational receptors	Currently users at this location receive views of St. Neots Road and associated hedgerow to the north in the foreground, and an open field beyond with existing vegetation separating the field from the A428 in the background. The C2C Scheme would introduce a new guided busway with NMU route to the north of the field approximately 125m north of the receptor. The busway would occupy a small portion of views to the north. The C2C would introduce species rich grassland planting and swale planting, however, this will have minimal impact on the visibility of the C2C Scheme. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R3 - PRoW (Caldecote 38/1) is low and the magnitude of impact on a winter's day at year 1 is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R3 - PRoW (Caldecote 38/1) at Year 1. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R3 - PRoW (Caldecote 38/1) at Year 15.

Visual Receptor	Predicted Impact
R4 – PRoW (Childerley 48/4) – Recreational receptors	A large portion of the views received at this location are comprised of open arable fields with intermittent existing vegetation at field boundaries and in Childerley Hall. The land also rises slightly to the south from the receptor limiting intervisibility with the C2C Scheme. The C2C Scheme would introduce a new guided busway approximately 1.7 kilometres to the south of the receptor. The users of Childerley Hall and the PRoW here have no visibility of the C2C Scheme due to the distance, topography, and intervening vegetation. The magnitude of impact is reduced by the introduction of new planting at the C2C Scheme. Given that the C2C Scheme will introduce features which occupy no portion of the view, the magnitude of impact is considered to be no change during operation. The sensitivity R4 – PRoW (Childerley 48/4) is high, and the magnitude of impact on a winter's day at year 1 of operation is **no change**. Therefore, there is likely to be a semi-permanent, medium-term **neutral** (**not significant**) effect on R4 – PRoW (Childerley 48/4) at Year 1. The magnitude of impact on a summer's day at year 15 will remain **no change**. Therefore, there is likely to be a permanent, long-term **neutral** (**not significant**) effect on R4 – PRoW (Childerley 48/4) at Year 15.
R5 - Scotland Road – Residential receptors	Currently road user receptors here receive relatively closed views of Scotland Road with narrow strips of verge and hedgerow either side. Open arable fields are glimpsed beyond to the east. Nearby residents on Scotland Road have oblique views of the open fields east of Scotland Road seen through existing vegetation. The C2C Scheme would introduce a new busway to the south of the A428 along with a new Park and Ride (P&R), and associated entrance, within the field to the east of Scotland Road. The users of Scotland Road would have indirect views of the P&R beyond the existing hedgerow. The nearby residents on Scotland Road would also have indirect views of the P&R seen through existing vegetation, however some properties to the south may have more direct views, particularly from first floor windows. The P&R will have a single storey building at its centre and will be permanently lit. The C2C Scheme would occupy a noticeable portion of views introducing a built element where there is currently an absence of built features. The magnitude of impact is reduced by a considered P&R design, the introduction of new tree planting, scrub planting and species rich grassland planting as well as wetland scrub and meadow grass planting around the detention pond to the east. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity R5 - Scotland Road is medium, and the magnitude of impact on a winter's day at year 1 is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R5 - Scotland Road at Year 1. The proposed planting will establish over time providing further screening to the receptors and help integrate the P&R into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R5 - Scotland Road at Year 15.

Visual Receptor	Predicted Impact
R6 – PRoW (Dry Drayton 66/17) – Recreational receptors	Currently users at this location experience views to the west in which a large portion of the view is comprised of open arable fields beyond Callow Brook broken by field boundary hedgerows and areas of hedgerow trees to the north and areas of existing vegetation to the south at the A428 and west at Scotland Road. The C2C Scheme would introduce a new busway to the south of the A428 along with a new permanently lit Park and Ride (P&R) to the west of the receptors in the arable field. The new P&R would include a detention pond in the foreground with an area of extensive parking beyond, broken by tree planting. The P&R would also have a single storey building at its centre. The C2C Scheme would have direct visibility with the receptor due to the open landscape and close proximity to the receptor. The magnitude of impact is reduced by the introduction of new planting as part of the P&R including specimen trees, a woodland edge, and species rich grassland and aquatic planting around the detention pond. Given that the C2C Scheme will introduce features which occupy a perceptible portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R6 – PRoW (Dry Drayton 66/17) is high, and the magnitude of impact, on a winter's day at year 1 of operation, is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R6 – PRoW (Dry Drayton 66/17) at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor**. Therefore, there is likely to be a permanent, long-term **slight-moderate (not significant)** effect on R6 – PRoW (Dry Drayton 66/17) at Year 15.
R7 - PRoW (Dry Drayton 66/18 & 66/19) – Recreational receptors	Receptors at this location currently receive views of Scotland Road looking south, enclosed in part by hedgerows and hedgerow trees on the eastern side with properties on Scotland Road partly visible in the background. Periodic breaks in the hedgerow afford views east through to open fields with further field boundary vegetation beyond. To the west views are open across the arable landscape as the land drops away to the west. The open fields are broken by field boundary vegetation. The C2C Scheme would introduce a Park and Ride approximately 1.2 kilometres to the south of the receptor including permeant lighting columns and a single storey building at its centre. The C2C Scheme would have limited intervisibility with the receptors due to the distance and existing intervening vegetation which would block views of the Park and Ride. The magnitude of impact is reduced by the introduction of new planting at the Park and Ride. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R7 - PRoW (Dry Drayton 66/18 & 66/19) is high, and the magnitude of impact on a winter's day at year 1 of operation is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral** (**not significant**) effect on R7 - PRoW (Dry Drayton 66/18 & 66/19) at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**.

Visual Receptor	Predicted Impact
	Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R7 - PRoW (Dry Drayton 66/18 & 66/19) at Year 15.
R8 - PRoW (Dry Drayton 66/19)– Recreational receptors	Currently users at this location experience views to the south across the arable landscape in which a large portion of the view is comprised of the existing hedgerow in the foreground with views through gaps in the hedgerow to open arable fields beyond, broken by field boundary hedgerows and areas of hedgerow trees. The C2C Scheme would introduce a Park and Ride to the south of the receptors. The new Park and Ride would introduce an area of hardstanding and lighting columns approximately 1.4 kilometres to the south. The C2C Scheme would have no intervisibility with the receptors due to the long distance, changing topography, and intervening vegetation. The magnitude of impact is reduced by the introduction of new planting within and around the Park and Ride to soften the hardstanding and provide a buffer to views from the surrounding landscape. Given that the C2C Scheme will introduce features which occupy a no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R8 - PRoW (Dry Drayton 66/19) is high, and the magnitude of impact on a winter's day at year 1 is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R8 - PRoW (Dry Drayton 66/19) at Year 1. The proposed planting will establish over time providing further screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R8 - PRoW (Dry Drayton 66/19) at Year 15.
R9 – PRoW (Dry Drayton 66/17) – Recreational receptors	Currently users at this location experience views to the south-west in which a large portion of the view is comprised of open arable fields with Callow Brook and associated vegetation in the foreground. The fields are broken by field boundary hedgerows and areas of hedgerow trees to the south and west at Scotland Road. The C2C Scheme would introduce a new busway to the south of the A428 along with a new permanently lit Park and Ride (P&R) to the south-west of the receptors. The new P&R would include a detention pond to its east with an area of extensive parking at its west. The P&R would also have a single storey building at its centre. The C2C Scheme would have limited visibility with the receptor due to the undulating landscape and medium distance and intervening vegetation. The magnitude of impact is reduced by the introduction of new planting as part of the P&R including specimen trees, a woodland edge, and species rich grassland and aquatic planting around the detention pond. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity R9 – PRoW (Dry Drayton 66/17) is high, and the magnitude of impact on a winter's day at year 1 of operation, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R9 – PRoW (Dry Drayton 66/17) at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time providing further screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R9 – PRoW (Dry Drayton 66/17) at Year 15.
R10 – PRoW (Dry Drayton 66/17) – Recreational receptors	PRoW user views here currently consist of open arable fields beyond field boundary hedgerow that follows the PRoW. Callow Brook and associated vegetation is on the left of view with Scotland Road and associated hedgerow and hedgerow trees on the right of view. The arable fields extend south from the receptor broken by field boundary hedgerow and a copse of trees. The C2C Scheme would introduce a new Park and Ride to the south of the receptor. The receptors here would have indirect views south through the field boundary vegetation to the C2C Scheme. The C2C Scheme would likely occupy a no part of views, screened by existing vegetation and changing topography. The magnitude of impact is reduced by the introduction of new planting as part of the P&R including specimen trees, a woodland edge, and species rich grassland and aquatic planting around the detention pond. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity R10 – PRoW (Dry Drayton 66/17) is high, and the magnitude of impact on a winter's day at year 1 of operation, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R10 – PRoW (Dry Drayton 66/17) at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R10 – PRoW (Dry Drayton 66/17) at Year 15.
R11 – St Neots Road – Residential receptors	Currently users at this location experience views on St. Neots Road with associated road traffic and existing vegetation associated with the A428. Users will receive close distance views of the C2C Scheme when looking north. The C2C Scheme will remove traffic from St. Neots Road save for local residents access and introduce a guided busway. The residential properties on St. Neots Road will receive direct views of the C2C Scheme. The magnitude of impact is reduced by the introduction of new planting at St. Neots Road. The magnitude of impact is considered to be minor during operation. The sensitivity of R11 –St. Neots Road is medium, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight beneficial (not significant)** effect on R11 – St. Neots Road at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight beneficial (not significant)** effect on R11 – St. Neots Road on a summer's day at Year 15.
R12 – Northfield Farm – Residential receptors	Currently receptors at this location experience views to the north in which a large portion of the view is comprised of hedgerow in the foreground and open

Visual Receptor	Predicted Impact
	arable fields beyond. The residential receptors at Northfield Farm experience views north across open arable fields as the land rises to the north towards St. Neots Road. The views are partially blocked by existing vegetation and farm buildings. The C2C Scheme would introduce a new guided busway turning south-east from St. Neots Road to cross Long Road approximately 850m north of the receptors. The C2C Scheme including moving buses would have some intervisibility with the receptor due to the medium distance, however, this would be limited by existing vegetation surrounding the properties and farm buildings between Northfield Farm and the C2C Scheme. The magnitude of impact is reduced by the introduction of new planting along the guided busway as well as the new junction with St. Neots Road including hedgerow, clumps of trees, woodland planting, and species rich grassland. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of R12 – Northfield Farm is medium, and the magnitude of impact on a winter's day at year 1 of operation, is **minor-moderate**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R12 – Northfield Farm at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R12 –Northfield Farm at Year 15.
R13 – Madingley Road – Residential receptors	Currently users at this location experience views of Madingley Road bordered by hedgerow and hedgerow trees. The users have glimpsed views through the vegetation to the south in which a large portion of the view is comprised of open arable fields in the foreground with Red Meadow Hill beyond on the far side of the valley. Madingley Road is on a ridgeline with land dropping away to the south towards the western edge of Coton. The nearby properties are mostly located close to Madingley Road with long rear gardens and substantial vegetation limiting views to the south. One property is located at the southern end of its land and has direct views to the south. The C2C Scheme would introduce a new guided busway and NMU route approximately 275m to the south of the receptors including new low earth bunds and a detention pond. The C2C Scheme and associated buses moving through the landscape would have limited intervisibility with the receptors due to the medium distance and intervening vegetation. This would be reduced further 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 busway alignment. The magnitude of impact is further reduced by the introduction of new planting on the earth bunds. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R13 – Madingley Road is medium, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R13 – Madingley Road at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R13 – Madingley Road at Year 15.
R14 – PRoW (Barton 20/1) - Recreational receptors	Currently users at this location experience views to the north in which a large portion of the view is comprised of open arable fields in the foreground which rise to the north towards Madingley Mulch. Areas of existing vegetation/woodland are seen on the horizon. The C2C Scheme would introduce a new guided busway approximately 750m to the north of the receptors including a detention pond and low earth bunds. The C2C Scheme would have little to no intervisibility with the receptor due to the distance, topography changes, and the new earth bunds which would block views of the highway alignment. There may be some visibility of the buses moving through the landscape. The magnitude of impact is reduced by the introduction of new species rich grassland planting. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R14 – PRoW (Barton 20/1) is high, and the magnitude of impact, on a winter's day in year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R14 – PRoW (Barton 20/1) at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R14 – PRoW (Barton 20/1) at Year 15.
R15 – Whitwell Way – Residential receptors	Currently PRoW users at this location experience views to the north from Whitwell Way in which a large portion of the view is comprised of open arable fields seen through and above hedgerow in the foreground. The land rises to the north with areas of woodland associated with Madingley Wood seen in the background. The C2C Scheme would introduce a new guided busway and NMU route running west to east approximately 475m to the north of the receptors including low earth bunds to help integrate the alignment into the landscape. The C2C Scheme would have limited intervisibility with the receptor due to the distance, change in topography, and existing intervening hedgerow which would in part block views of the busway alignment. The buses would likely be visible in part as they move through the landscape. The magnitude of impact is reduced by the introduction of new meadow rich grassland planting on the earth bunds. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be **minor** during operation. The sensitivity of R15 – Whitwell Way is high, and the magnitude of impact on a winter's day in year 1, is **minor-moderate**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R15 – Whitwell Way at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R15 – Whitwell Way at Year 15.
R16 – PRoW (Coton 55/2) – Recreational receptors	Currently PRoW users at this location experience views to the north from the PRoW in which a large portion of the view is comprised of open arable fields to the east of the PRoW and closed views to the west constrained by an underground storage reservoir. The land rises to the north with areas of vegetation and trees seen in the background. The C2C Scheme would introduce a new guided busway and NMU route running west to east approximately 150m to the north of the receptors including a PRoW crossing junction and new low earth bund. The C2C Scheme and buses would have intervisibility with the receptor due to the short distance, however, the earth bund would in part block views of the busway alignment and help it integrate into the landscape. The magnitude of impact is reduced by the introduction of new meadow rich grassland planting on the earth bunds and tree planting at the PRoW junction. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R16 – PRoW (Coton 55/2) is high, and the magnitude of impact on a winter's day in year 1, is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R16 – PRoW (Coton 55/2) at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R16 – PRoW (Coton 55/2) at Year 15.
R17 – Madingley Road – Transport receptors	Currently users of Madingley Road at this location experience views to the south over roadside hedgerow in which a large portion of the view is comprised of open arable fields which drop away into the valley towards Coton. The land rises to the south beyond Coton with Red Meadow Hill visible in the background. The C2C Scheme would introduce a new guided busway and NMU route running west to east approximately 300m to the south of the receptors. The C2C Scheme would have little to no intervisibility with the receptor, except for the buses moving through the landscape, due to the distance and change in topography, as well as the introduction of a new earth bund which would in part block views of the busway alignment and help it integrate into the landscape. The magnitude of impact is reduced by the introduction of new meadow rich grassland planting on the earth bund. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R17 – Madingley Road is low, and the magnitude of impact on a winter's day in year 1, is **negligible**. Therefore, there is likely to be a

Visual Receptor	Predicted Impact
	semi-permanent, medium-term **neutral (not significant)** effect on R17 – Madingley Road at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R17 – Madingley Road at Year 15.
R18 – Madingley Road – Residential receptors	Currently users of PRoW (Coton 55/2) at this location experience views to the south along the PRoW with a field boundary hedgerow on the right of view and open arable field on the left of view in the foreground. The land drops to the south into Coton with the church spire rising above existing vegetation. Beyond Coton the land rises again to the south with views afforded of Coton Countryside Reserve and Red Meadow Hill in the distance. The C2C Scheme would introduce a new guided busway and NMU route running west to east approximately 240m to the south of the receptors. The C2C Scheme would have limited intervisibility with the receptor due to the change in topography, as well as the busway being in cutting in this location which would block much of the views of the busway alignment and help it integrate into the landscape. The buses moving through the landscape would have some intervisibility with the receptor. The magnitude of impact is reduced by the introduction of new meadow rich grassland and tree planting. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R18 – Madingley Road is medium, and the magnitude of impact on a winter's day in year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R18 – Madingley Road at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R18 – Madingley Road at Year 15.
R19 – PRoW (Coton 55/2) – Recreational receptors	Currently users of PRoW (Coton 55/2) at this location experience views to the south along the PRoW with a field boundary hedgerow on the right of view and open arable field on the left of view in the foreground. The land drops to the south into Coton with the church spire rising above existing vegetation. The C2C Scheme would introduce a new guided busway and NMU route running west to east at this location on the PRoW. The C2C Scheme would occupy much of the view and introduce considerable change to features in the landscape. The magnitude of impact is reduced by the introduction of new meadow rich grassland and tree planting. Given that the C2C Scheme will introduce features which occupy a significant portion of the view, the magnitude of impact is considered to be major during operation. The sensitivity of R19 – PRoW (Coton 55/2) is high, and the magnitude of impact on a winter's day in year 1, is **major**. Therefore, there is likely to be a semi-permanent, medium-term **large adverse (significant)** effect on R19 – PRoW (Coton 55/2) at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time to help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **moderate-major**. Therefore, there is likely to be a permanent, long-term **moderate-large adverse (significant)** effect on R19 – PRoW (Coton 55/2) at Year 15.
R20 – Madingley Rise – Residential receptors	Currently receptors at this location are residents who experience views to the south of open arable fields seen beyond existing rear garden vegetation. The C2C Scheme would introduce a new guided busway and NMU route with moving buses running west to east approximately 200m to the south of the receptors, as well as a new junction for the busway crossing of Cambridge Road to the south-east of the receptor. The C2C Scheme would have some intervisibility with the receptor although limited due to the change in topography, existing rear garden vegetation, and the busway being in cutting in this location which would block much of the views of the busway alignment and help it integrate into the landscape. The magnitude of impact is reduced by the introduction of new meadow rich grassland and tree planting along the alignment as well as at the junction with Cambridge Road. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R20 – Madingley Rise is medium, and the magnitude of impact on a winter's day in year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R20 – Madingley Rise at Year 1. The proposed planting will establish over time providing further screening to the receptor and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R20 – Madingley Rise at Year 15.
R21 – Cambridge Road – Residential receptors	Currently users at this location experience views of Cambridge Road bordered by hedgerow and hedgerow trees. The users have glimpsed views through the vegetation to the west in which a large portion of the view is comprised of open arable fields rising to the west with vegetation beyond. To the east, through the roadside hedgerow there are glimpsed views of Coton Orchard. The nearby properties at the edge of Coton are located along Cambridge Road with long rear gardens and substantial vegetation limiting views to the north. The property located furthest north has direct yet oblique views to the north from first floor windows. The C2C Scheme would introduce a new guided busway and NMU route approximately 40m to the north of the receptors including a new junction crossing Cambridge Road. The C2C Scheme would have direct visibility with the receptor due to the close distance. This would be reduced by new species rich grassland, trees, and woodland planting. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R21 – Cambridge Road is medium, and the magnitude of impact on a winter's day at year 1, is **moderate.** Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R21 – Cambridge Road at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time providing further screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R21 – Cambridge Road at Year 15.
R22 – Coton Orchard Garden Centre – Commercial receptors	Currently users at this location experience direct views from Coton Orchard Garden Centre looking south into Coton Orchard. The C2C Scheme would introduce a new guided busway and NMU route approximately 150m to the south of the receptors including a new junction crossing Cambridge Road. The C2C Scheme would have very limited intervisibility with the receptor due to the intervening vegetation in the orchard. Given that the C2C Scheme will introduce features which occupy a little or no portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R22 – Coton Orchard Garden Centre is low, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R22 – Coton Orchard Garden Centre at Year 1. The proposed planting will establish over time providing further screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R22 – Coton Orchard Garden Centre at Year 15.
R23 – The Footpath – Residential receptors	Currently users at this location experience views from properties on The Footpath looking north. The views are filtered by existing rear garden vegetation as well as a band of vegetation which sits north of the allotment site that separates the properties from Coton Orchard. The C2C Scheme would introduce a new guided busway and NMU route approximately 150m to the north of the receptors. The C2C Scheme would have very limited intervisibility with the receptor due to the intervening vegetation. Given that the C2C Scheme will introduce features which occupy a little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R23 – The Footpath is medium, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R23 – The Footpath at Year 1. The proposed planting will establish over time providing further screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R23 – The Footpath at Year 15.
R24 – Rectory Farm – Commercial receptors	Currently users at this location experience views from Rectory Farm looking south through existing vegetation. The C2C Scheme would introduce a new guided busway with moving buses and NMU route approximately 250m to the south of the receptors including a new bridge and associated approach roads crossing the M11. The C2C Scheme would have some intervisibility with the

Visual Receptor	Predicted Impact
	receptor due to the relatively close distance and new embankments that would elevate the busway above existing ground level. The visibility of the C2C Scheme would be limited in part by intervening vegetation. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R24 – Rectory Farm is medium, and the magnitude of impact on a winter's day at year 1, is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R24 – Rectory Farm at Year 1. The proposed planting will establish over time providing screening to the receptors and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **slight-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate (not significant)** effect on R24 – Rectory Farm at Year 15.
R25 – PRoW (Cambridge 39/30) – Recreational receptors	Currently users at this location experience views from the PRoW bridge crossing the M11 with views north and south dominated by the transport infrastructure. The C2C Scheme would introduce a new guided busway and NMU bridge approximately 200m to the north of the receptors. The C2C Scheme would have direct intervisibility with the receptor due to the relatively close distance and the absence of intervening features. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R25 – PRoW (Cambridge 39/30) is low, and the magnitude of impact on a winter's day at year 1, is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R25 – PRoW (Cambridge 39/30) at Year 1. The proposed planting will establish over time, however, will not impact the magnitude of impact on the visual receptors here. The magnitude of impact on a summer's day at year 15 will remain **slight-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate (not significant)** effect on R25 – PRoW (Cambridge 39/30) at Year 15.
R26 – PRoW (Cambridge 39/30) – Recreational receptors	Currently users at this location experience views along the PRoW within an area of woodland next to the M11. The views are constrained by the woodland with glimpsed views through to the transport infrastructure. The C2C Scheme would introduce a new guided busway and NMU bridge and associated approaches approximately 60m to the south of the receptors. The C2C Scheme would have direct intervisibility with the receptor due to the close distance and the absence of intervening features following the clearance of the woodland. Given that the C2C Scheme will introduce features which occupy a significant portion of the view, the magnitude of impact is considered to be moderate-major during operation. The sensitivity of R26 – PRoW (Cambridge 39/30) is low, and the magnitude of impact on a winter's day at year 1, is **moderate-major**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R26 – PRoW (Cambridge 39/30) at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **moderate**. Therefore, there is likely to be a permanent, long-term **slight (not significant)** effect on R26 – PRoW (Cambridge 39/30) at Year 15.

Visual Receptor	Predicted Impact
R27 – PRoW (Barton 20/4) – Recreational receptors	Currently users at this location experience views from the PRoW north across the valley towards the proposed C2C Scheme. The views are to a large portion comprised of open arable fields in the foreground with field boundary vegetation which drop to the north towards Coton. Areas of existing vegetation/woodland are seen on the horizon. The C2C Scheme would introduce a new guided busway approximately 1750m to the north of the receptors including a detention pond and low earth bunds. The C2C Scheme would have little to no intervisibility with the receptor due to the distance, topography changes, and the new earth bunds which would block views of the highway alignment. Buses may be seen moving through the landscape but would be a very small part of the view. The magnitude of impact is reduced by the introduction of new species rich grassland planting. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R27 – PRoW (Barton 20/4) is high, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R27 – PRoW (Barton 20/4) at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R27 – PRoW (Barton 20/4) at Year 15.
R28 – Coton Countryside Reserve (Red Meadow Hill) – Recreational receptors	Currently users at this location experience views from Coton Countryside Reserve north across the valley towards the proposed C2C Scheme. The views are wide and open with arable fields in the foreground and field boundary vegetation on the right of view. The fields drop sharply to the north towards Coton. Areas of existing vegetation/woodland are seen beyond on the horizon. The C2C Scheme would introduce a new guided busway approximately 1750m to the north of the receptors including a detention pond and low earth bunds. The C2C Scheme would have minimal intervisibility with the receptor due to the distance, topography changes, and the new earth bunds which would block views of the highway alignment. Buses may be seen moving through the landscape but would be a minor feature in the receptor views. The magnitude of impact is reduced by the introduction of new species rich grassland planting. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R28 – Coton Countryside Reserve (Red Meadow Hill) is high, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R28 – Coton Countryside Reserve (Red Meadow Hill) at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R28 – Coton Countryside Reserve (Red Meadow Hill) at Year 15.

Visual Receptor	Predicted Impact
R29 – Coton Countryside Reserve – Recreational receptors	Currently users at this location experience views from Coton Countryside Reserve near to Bin Brook looking north-west towards the proposed C2C Scheme. The views are open with fields in the foreground and field boundary vegetation on the right of view. The receptors here are in the valley with land relatively flat before rising to the north. Areas of existing vegetation/woodland are located between the receptors and the C2C Scheme. The C2C Scheme would introduce a new guided busway approximately 1450m to the north/north-west of the receptors including low earth bunds. The C2C Scheme would have minimal intervisibility with the receptor due to the distance, topography changes, existing intervening vegetation, and the new earth bunds which would block views of the highway alignment. The magnitude of impact is reduced by the introduction of new species rich grassland planting. Given that the C2C Scheme will introduce features which occupy little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R29 – Coton Countryside Reserve is high, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R29 – Coton Countryside Reserve at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R29 – Coton Countryside Reserve at Year 15.
R30 – PRoW (Cambridge 39/31) – Recreational receptors	Currently users at this location experience views from the PRoW near to Cambridge University looking east towards the proposed C2C Scheme. The views are of open arable fields beyond field boundary vegetation along the PRoW. The C2C Scheme would introduce a new guided busway approximately 175m to the east of the receptors. The C2C Scheme would have some intervisibility with the receptor due to the short distance, however, would be blocked in part by existing intervening vegetation. The magnitude of impact is reduced by the introduction of new species rich grassland planting along with woodland planting and hedgerows between the receptor and the C2C Scheme. Given that the C2C Scheme will introduce features which occupy a small yet noticeable portion of the view, the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of R30 – PRoW (Cambridge 39/31) is medium, and the magnitude of impact on a winter's day at year 1, is **minor-moderate**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R30 – PRoW (Cambridge 39/31) at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R30 – PRoW (Cambridge 39/31) at Year 15.
R31 – PRoW (Cambridge 39/31) – Recreational receptors	Currently users at this location experience views from the PRoW near to Cambridge University looking south towards the proposed C2C Scheme. The views are of open arable fields to the south along the PRoW. The C2C Scheme would introduce a new guided busway south of the receptors. The

Visual Receptor	Predicted Impact
	C2C Scheme would have direct intervisibility with the receptor due to the short distance. The magnitude of impact is reduced by the introduction of new species rich grassland planting and tree planting. Given that the C2C Scheme will introduce features which occupy a noticeable portion of the view, the magnitude of impact is considered to be moderate during operation. The sensitivity of R31 – PRoW (Cambridge 39/31) is medium, and the magnitude of impact on a winter's day at year 1, is **moderate**. Therefore, there is likely to be a semi-permanent, medium-term **moderate adverse (significant)** effect on R31 – PRoW (Cambridge 39/31) at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will reduce to **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R31 – PRoW (Cambridge 39/31) at Year 15.
R32 – Track – Recreational receptors	Currently users at this location experience views along the track east towards Cambridge. The track is bordered to the north by a tall hedgerow with hedgerow trees. To the south the land is open arable fields with a block of woodland to the east limiting views through to Cambridge. The C2C Scheme would have some intervisibility with the receptors here as it cuts south through the hedgerow and turns east towards Cambridge. The magnitude of impact is reduced by the enhancement of the existing vegetation here along with the introduction of tree planting. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R32 – Track is high, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R32 – Track at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain to **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R32 – Track at Year 15.
R33 – Dane Drive – Residential receptors	Currently users at this location experience views from properties on Dane Drive looking north. The views are filtered by existing rear garden vegetation as well as a band of vegetation which sits north of the properties that separates them from the arable field beyond. The C2C Scheme would introduce a new guided busway and NMU route approximately 200m to the north of the receptors. The C2C Scheme would have very limited intervisibility with the receptor due to the intervening vegetation. Given that the C2C Scheme will introduce features which occupy a little or no portion of the view, the magnitude of impact is considered to be negligible during operation. The sensitivity of R33 – Properties on Dane Drive is medium, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R33 – Properties on Dane Drive at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent,

Visual Receptor	Predicted Impact
	long-term **slight adverse (not significant)** effect on R33 – Properties on Dane Drive at Year 15.
R34 – Cranmer Road – Residential receptors	Currently users at this location experience views from properties on Cranmer Road looking north. The views are filtered by existing rear garden vegetation as well as a band of vegetation which sits north of the properties between the arable field and the rugby field. The C2C Scheme would introduce a new guided busway and NMU route approximately 165m to the north of the receptors. The C2C Scheme and buses would have limited intervisibility with the receptor due to the intervening vegetation. Given that the C2C Scheme will introduce features which occupy a small portion of the view, the magnitude of impact is considered to be minor during operation. The sensitivity of R34 – Cranmer Road is medium, and the magnitude of impact on a winter's day at year 1, is **minor**. Therefore, there is likely to be a semi-permanent, medium-term **slight adverse (not significant)** effect on R34 – Cranmer Road at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor**. Therefore, there is likely to be a permanent, long-term **slight adverse (not significant)** effect on R34 – Cranmer Road at Year 15.
R35 – Rifle Range – Residential receptors	Currently users at this location experience views from properties on Rifle Range looking south. The views are filtered by existing rear garden vegetation, however, the C2C Scheme would introduce a new guided busway and NMU route directly south of the receptors. The C2C Scheme would have some intervisibility with the receptor including moving buses, screened in part due to the intervening vegetation. Given that the C2C Scheme will introduce features which occupy a small portion of the view at close distance, the magnitude of impact is considered to be minor-moderate during operation. The sensitivity of R35 – Rifle Range is medium, and the magnitude of impact on a winter's day at year 1, is **minor-moderate**. Therefore, there is likely to be a semi-permanent, medium-term **slight-moderate adverse (not significant)** effect on R35 – Rifle Range at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **minor-moderate**. Therefore, there is likely to be a permanent, long-term **slight-moderate adverse (not significant)** effect on R35 – Rifle Range at Year 15.
R36 – Castle Mound – Recreational receptors	Receptors at the Castle Mound experience expansive views across Cambridge from the elevated location. The C2C would be located approximately 1.1km south-west of the Castle Mound at its nearest point. Due to intervening built form and vegetation it is anticipated the C2C Scheme would have little to no intervisibility with the receptors at the Castle Mound. The sensitivity of R36 – Castle Mound is high, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R36 – Castle Mound at Year 1.

Visual Receptor	Predicted Impact
	The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R36 – Castle Mound at Year 15.
R37 – Pleasant Drive – Recreational receptors	Current users of Pleasant Drive experience expansive views south from the elevated location across the rural outskirts of Cambridge. The C2C would be located approximately 1.5km south-west of the receptors at its nearest point beyond the M11 and Madingley Road. Due to intervening built form, infrastructure, and vegetation, it is anticipated the C2C Scheme would have little to no intervisibility with the receptors at the Pleasant Drive. The sensitivity of R37 – Pleasant Drive is medium, and the magnitude of impact on a winter's day at year 1, is **negligible**. Therefore, there is likely to be a semi-permanent, medium-term **neutral (not significant)** effect on R37 – Pleasant Drive at Year 1. The proposed planting will establish over time and help integrate the C2C Scheme into the landscape. The magnitude of impact on a summer's day at year 15 will remain **negligible**. Therefore, there is likely to be a permanent, long-term **neutral (not significant)** effect on R37 – Pleasant Drive at Year 15.

5.3 ASSESSMENT AGAINST FUTURE BASELINE

5.3.1 Whilst there are considerable limitations to the predictions that can be made about baseline conditions at a future point in time, there are a number of proposed development schemes where their development will affect the landscape and visual baseline within the Study Area. The proposed developments are listed below. See **ES Chapter 11 Cumulative Effects**[3] for further information on committed developments.

- Cambourne West;
- Bourn Airfield New Village;
- Land at Highfields;
- Inspired Villages at Comberton;
- West Cambridge Development Site;
- Clerk Maxwell Road Scheme;
- Northwest Cambridge Development (Eddington);
- King's College accommodation, Newnham - Land Between 21 And 29 Barton Road;
- Darwin Green;
- New Development at St Chad's; and
- Grange Lane College Accommodation.

5.3.2 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. It will also be essential to implement maintenance measures that secure plant viability during adverse weather, such as heat waves.

5.4 PREDICTED CUMULATIVE EFFECTS

5.4.1 This section considers the potential in-combination effects that are likely to arise as a result of the C2C Scheme in combination with the identified committed schemes (outlined in **ES Chapter 11 Cumulative Effects**[3]) on sensitive landscape and visual receptors. Cumulative effects are considered for all development types proportionate to the C2C Scheme and with particular emphasis on the additional effect of the project in conjunction with other developments of the same type.

CONSTRUCTION PHASE

5.4.2 There are seven developments within 700m of the Site boundary:

- Bourn Airfield New Village;
- Land at Highfields;
- West Cambridge Development Site;
- Clerk Maxwell Road Scheme;
- Northwest Cambridge Development (Eddington);
- New Development at St Chad's; and
- Grange Lane College Accommodation.

5.4.3 The following schemes are currently under construction and will likely to complete (or near to) in advance of the commencement of works on the C2C Scheme: Grange Lane College Accommodation (41 units) and Clerk Maxwell Road Scheme (35 dwellings). Significant cumulative effects are therefore considered unlikely.

5.4.4 A planning application for St Chads (reference 19/1212/FUL) was granted in 2020. This cumulative scheme is small in size (23 units) and, therefore, providing that best practice measures are implemented to minimise the impact of construction activities on landscape character and visual amenity, significant cumulative effects are considered unlikely.

5.4.5 There is potential for the construction of the C2C Scheme to overlap with the construction phases of the following schemes which are committed development (all have been granted planning permission):

- West Cambridge Development Site (37,160 sq.m of academic floorspace);
- Land at Highfields (up to 140 units); and
- Northwest Cambridge Development (3000 units, 100000 sq.m of employment floorspace, 40000 sq.m of commercial floorspace, 60000 sq.m of academic floorspace, 5300 sq.m of gross retail floorspace, 6500 sq.m of senior living).

5.4.6 Of the committed developments identified above, none are considered to be of a scale, nature, or in a location where the construction activities associated with them could be seen as an extension of the C2C Scheme and as such are not predicted to result in significant in-combination adverse effects.

5.4.7 There is the potential for cumulative effects to occur as a result of the construction of Bourn Airfield New Village (a new mixed-use village comprising residential development of approximately 3,500 dwellings mixed uses comprising employment, retail, hotel, leisure, residential institutions education, community facilities and open space). However, the planning application (reference S/3440/18/OL) is still awaiting a decision **(Ref 8.9)**. There is the potential for cumulative effects on LCA 4B Lolworth to Longstowe Wooded Claylands as well as existing properties nearby due to the construction activities of the C2C Scheme and Bourn Airfield such as increased road use by construction vehicles and the introduction of intrusive visual elements of construction plant into the landscape for a limited period.

5.4.8 The mitigation measures proposed for the C2C Scheme (see the **CoCP**[4]) are targeted at reducing likely impacts of construction activity on landscape character and visual amenity. The Bourn Airfield application also sets out a Draft CoCP for the provision of best practice mitigation of construction activities on landscape character and visual amenity.

5.4.9 Overall, the cumulative effects of the construction of the C2C Scheme are considered to be slight-moderate, short-medium term, temporary in nature, and not significant following the implementation of the recommended mitigation measures.

OPERATIONAL PHASE

5.4.10 At operation it is considered that the committed developments near to the C2C Scheme are all of a scale and nature that would be unlikely to result in significant adverse in-combination effects alongside the C2C Scheme.

6 SUMMARY OF LIKELY SIGNIFICANT EFFECTS

6.1.1 A summary of the impact assessment upon sensitive landscape and visual receptors during construction and operation of the C2C Scheme is summarised below.

6.2 SUMMARY OF LIKELY EFFECTS: LANDSCAPE CHARACTER

6.2.1 The effects of the C2C Scheme on the existing landscape character and visual amenity have been assessed against the existing baseline conditions.

6.2.2 At construction, the C2C Scheme will introduce construction related activities into the landscape including increased traffic, plant, and lighting, and a notable change in the character of the existing agricultural fields where construction compounds are located as well as those the scheme runs through. However, the temporary nature of construction activities along with embedded mitigation results in a very short-term effect. When considered alongside the sensitivity of landscape character areas, only LCA 4B Lolworth to Longstowe Wooded Claylands is considered to be moderate adverse (significant).

6.2.3 At operation, the C2C Scheme will result in the partial loss of areas of arable land by introducing built elements, lighting and vehicles into the landscape. The C2C Scheme will only occupy a small percentage of the majority of the LCA considered, which are already influenced by urban or infrastructure features.

6.2.4 It is predicted that only LCA 4B Lolworth to Longstowe Wooded Claylands will have an effect of moderate adverse (significant) at year 1, however following the establishment of embedded mitigation at year 15 this will reduce to slight-moderate adverse (not significant).

6.3 SUMMARY OF LIKELY EFFECTS: VISUAL AMENITY

6.3.1 Visually, at construction, effects of the Scheme are anticipated to range from neutral to large adverse with moderate adverse effects for receptors R5, R6, R15, R21, R24, R26, R30, R31 and R32, and large adverse effects for receptors R16 and R19 only (representing users of Public Right of Way (Coton 55/2)). This is due to short distance views of construction activities introduced into open agricultural fields to the north of Coton.

6.3.2 Visually, during operation, the effects are anticipated to range from neutral to large adverse at Year 1, with moderate adverse effects identified for receptors R5 (representing residents on Scotland Road), receptor R6 (representing users of PRoW (Dry Drayton 66/17)), R16 (representing users of PRoW (Coton 55/2)), R21 (representing residents on Cambridge Road), R24 (representing users of Rectory Farm), and receptor R31 (representing users of PRoW (Cambridge 39/30)). Large adverse effects are likely for receptors at R19 (representing users of PRoW (Coton 55/2). This is due to short distance views of the C2C Scheme on previously open agricultural fields.

6.3.3 As the new planting establishes throughout the operational period, it will enhance visual amenity and further screen the C2C Scheme from the receptors. In this instance following establishment of embedded mitigation planting, adverse effects are not anticipated to be significant in any of the visual receptors apart from R19 PRoW (Coton 55/2).

REFERENCES

- **Reference 8.1:** Natural England, 2014, National Character Area profiles. [online]. Available at <http://publications.naturalengland.org.uk/category/587130> [Accessed November 2022].
- **Reference 8.2:** Cambridgeshire County Council, 1991, Cambridgeshire Landscape Guidelines - A Manual for Management and Change in the Rural Landscape;
- **Reference 8.3:** Greater Cambridge Shared Partnership, 2021, Greater Cambridge Landscape Character Assessment;
- **Reference 8.4:** LDA Design, 2015, Cambridge Inner Green Belt Study;
- **Reference 8.5:** LDA Design, 2016, Cambridge Inner Green Belt Study (Supplement);
- **Reference 8.6:** Cambridge City Council, 2003, Cambridge Landscape Character Assessment;
- **Reference 8.7:** Landscape Institute and Institute of Environmental Management & Assessment, Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, Routledge [paragraph 6.3]
- **Reference 8.8:** Landscape Institute and Institute of Environmental Management & Assessment, Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, Routledge [paragraph 6.1].
- **Reference 8.9:** Greater Cambridge Shared Planning: a strategic partnership between Cambridge City and South Cambridgeshire District Councils - https://applications.greatercambridgeplanning.org/online-applications/simpleSearchResults.do?action=firstPage [Accessed 27/04/2023]

62-64 Hills Road
Cambridge
CB2 1LA

wsp.com

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