Chapter 16
Landscape and Visual

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16 LANDSCAPE AND VISUAL

16.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) comprises a Landscape and Visual Impact Assessment (LVIA) addressing the likely landscape and visual impacts associated with the Construction and Operational Phases of the BusConnects Galway: Dublin Road, hereafter referred to as the Proposed Development.

The site of the Proposed Development is located within Galway City, which is a predominantly urban/city environment with several prominent natural landscape features (Lough Atalia, Merlin Woods, trees etc.), urban streets and spaces.

The aim of the Proposed Development is to provide an enhanced walking, cycling and bus infrastructure on this key entrance route to Galway city, which will enable and deliver efficient, safe, and integrated sustainable transport corridor.

The design of the Proposed Development has evolved through a comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Development are attained. In addition, feedback received from the comprehensive consultation programme undertaken throughout the option selection and design development process have been incorporated where appropriate.

The potential impacts arising during the construction of the project, as well as during the operational phase are assessed with regard to key landscape and visual receptors. Where required, mitigation measures are proposed to avoid, reduce, or remediate potential impacts on sensitive landscape and visual receptors.

16.2 Methodology

16.2.1 Introduction

The assessment is based on the recommendations in the Guidelines for Landscape and Visual Impact Assessment (GLVIA) as published by the Landscape Institute (UK) and the Institute of Environmental Management and Assessment (3rd Edition, 2013) including Notes and Clarifications (August 2024). The assessment also incorporates the landscape policies and objectives within the Galway City Council Development Plan 2023-2029 (GCDP) and considers the two guidelines on LVIA by the Transport Infrastructure Ireland (TII), as listed in Section 16.2.3.3 below.

This LVIA was carried out between May and December 2023. The LVIA is a combination of desk studies, field surveys and verified photomontages, the work was carried out by a team of landscape architects in JBA Consulting Ltd.

16.2.2 Study Area

The primary study area is a boundary-to-boundary carriageway and Active Travel corridor situated along Dublin Road, in Galway City, which incorporates the immediately adjoining landscapes and properties, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape, and visual planning considerations.

16.2.2.1 Establishing the Zone of Influence

The study area for the LVIA is based on the primary study area of the Proposed Development and extends where required to incorporate wider viewpoints and sensitive receptors, such as Protected Structures (RPS), as recorded by the GCDP, or National Monuments (NMS). In order to define the study area of the assessment the primary consideration is the Zone of Influence (ZoI). The ZoI (as represented in Figure 16-1 below) will show the area within which all effects from the Proposed Development are expected to be

experienced. This will be determined through desk-study research, establishing likely broad-scale effects on the landscape character and visual resource, and will be tested and further refined through on-site observations. A proportionate approach is taken based on the sensitivity of the landscape, the extents and nature of the proposal.

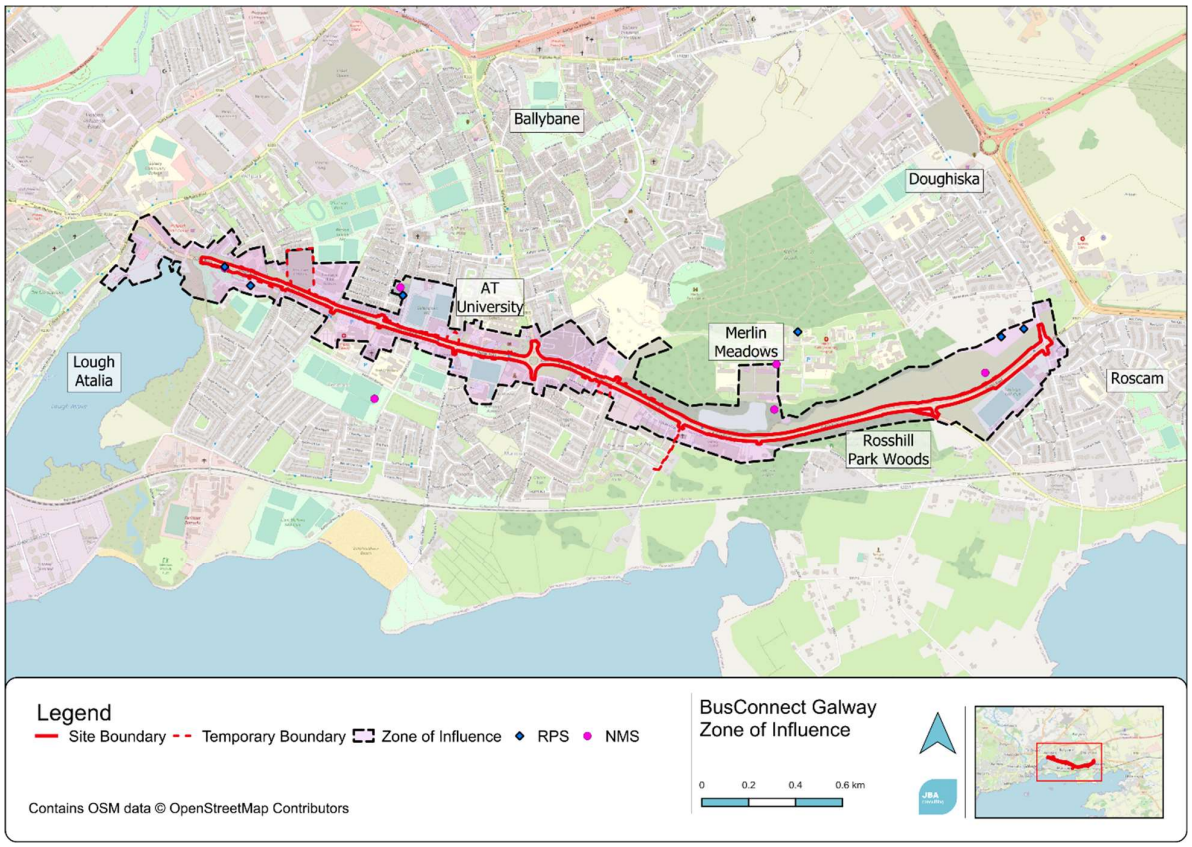

Figure 16-1 Zone of Influence (ZoI)

Considering the ground level nature of the Proposed Development, the ZoI is kept close to the Proposed Development, focusing on residential receptors in close proximity to Dublin Road, as well as open spaces and sensitive receptors in the wider landscape. For these reasons, the ZoI is defined to a maximum of 600 metres of the Proposed Development, where no landscape or visual impacts are likely to occur.

16.2.3 Relevant Guidelines, Policy, and Legislation

The assessment has been carried out with reference to the following legalisation, policy, and guidelines.

16.2.3.1 Legislation

- Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, as amended, and Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the EIA Directive);
- Planning and Development Act 2000, as amended;
- Planning and Development Regulations 2001, as amended; and
- European Landscape Convention 2000, as amended.

16.2.3.2 Policy

- Galway City Council Development Plan (GCDP), 2023-2029, Galway City Council (2023);
- Galway City Biodiversity Action Plan 2014-24 (the plan in force at date of writing);

- Galway Transport Strategy, Galway City Council (2016);
- Galway Public Realm Strategy, Galway City Council (2019); and
- Department of Arts, Heritage and the Gaeltacht, Landscape Strategy for Ireland 2015-2025 (NLS).

16.2.3.3 Guidelines

- Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA (2022);
- Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects – Overarching Technical Document (PE-ENV-01101), TII (2020);
- Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads - Standard (PE-ENV-01102), TII (2020);
- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) Guidelines for Landscape and Visual Impact Assessment (hereafter referred to as the GLVIA) 3rd edition (Landscape Institute and IEMA 2013) including Notes and Clarifications (August 2024);
- Landscape Institute Technical Information Note 05/2017 (Revised 2018) on Townscape Character Assessment (hereafter referred to as the TCA) (Landscape Institute 2018);
- Guidelines for treatment of tourism in an Environmental Impact Statement (Fáilte Ireland, 2011); and
- Visual representation of development proposals Technical Guidance Note 06/19 (Landscape Institute, 2019 currently under review).

16.2.3.3.1 Photomontage Methodology

Following a review of the Proposed Development, desktop study and visit to the site, a number of key reference viewpoints in the immediate surroundings were identified, photographed, and surveyed for the purpose of preparing photomontages. The photomontages help illustrate the visual effects of the Proposed Development on specific views from specific viewpoints in the short to mid-term, which is between 5 to 7 years post completion of the construction works. The viewpoints have been chosen to reflect a range of distances, directions, and sensitivity, and are illustrated on Figures 16.3 in Volume 3 of this EIAR.

In conjunction with the guidelines mentioned in Section 16.2.3.3 above, additional guidelines inform the preparation of Photomontages for this LVIA:

- *Visual representation of development proposals Technical Guidance Note 06/19* (Landscape Institute, 2019, currently under review).

Photomontages are visualisations that superimpose an image of a Proposed Development upon a photograph or series of photographs. They are intended as graphical representations of how a Proposed Development will appear in the existing landscape and are used as a tool in the LVIA process. It is common practice for photomontages to focus on more permanent impacts, such as the Proposed Development in the operational phase.

Verified photomontages were produced by external consultants using images taken on-site. The photomontages produced are verified and have been prepared in order to accurately illustrate the Proposed Development in the Operational Phase. They have been included to inform the reader of the location and size of the development. The assessment of impacts was based on the on-site observations of the surveyors and took onto consideration the verified photomontages.

16.2.3.4 Data Collection and Collation

Data collection and collation is based on initial desk studies, supported by full route walkovers, and augmented by further specific site reviews in relation to topography, land use, existing landscape features and overall landscape character along the corridor of the Proposed Development. This is accompanied by the selection and preparation of verified photomontages of the Proposed Development in Figure 16.3 in Volume 3 of this EIAR.

Desk studies, which allow for identification of designated and potential significant/sensitive areas, involved a review of:

- Mapping and drawings of the Proposed Development;
- General Arrangement Drawings;
- Historical and current mapping and aerial photography (e.g. Ordnance Survey Ireland, topographic survey, google earth, google maps);
- Galway City County Development Plan 2023-2029;
- Review of baseline information, including road infrastructure audits, Tree Survey Plans and Arboricultural Impact Assessment Report, and Impact Assessment Reports; and
- Other reports and documents relating to the baseline environment, including other chapters of this EIAR and in particular, Chapter 4, (Proposed Development Description), Chapter 5 (Construction), Chapter 12 (Biodiversity), and Chapter 15 (Archaeological and Cultural Heritage).

Site-based studies, which allow for verification of desk study findings and for analysis of current conditions in the baseline environment, involved the following:

- Full walkover surveys of the route of the Proposed Development and environs; and
- Selection of locations for verified Photomontages of the Proposed Development.

The information collected in the desk study and field surveys has been collated and presented in Section 16.3 of this Chapter.

The publicly available datasets listed in Table 16-1 have been consulted in the analysis of the baseline environment.

Table 16-1 Publicly Available Datasets

Name	Source	Description	Version
Ordnance Survey Ireland (OSI)	Geohive	Current and historical mapping	Accessed 2023
OSI	Geohive	Historical aerial imagery	Accessed 2023
Google	Google Maps	Mapping and aerial imagery	Accessed 2023
Microsoft	Bing	Mapping and aerial imagery	Accessed 2023
EPA	EPA Maps	Environmental datasets	Accessed 2023
National Parks and Wildlife Service (NPWS)	NPWS Maps and Data	Datasets provides information on national parks, protected sites, and nature reserves	Accessed 2023
Department of Culture, Heritage, and the Gaeltacht (DCHG)	Historic Environment Viewer	Database provides access to National Monuments Service Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH)	Accessed 2023
Galway City Development Plan 2023-2029 & Galway City Council Schedules	Designated Views data, Record of Protected Structures Schedule	Datasets provided as part of Galway City Development Plan Maps and Galway City Council Schedules	Accessed 2023

16.2.4 Landscape Impact Assessment Criteria

Landscape character assessment (LCA) is the process of identifying and describing variations in character of the landscape. LCA documents identify and explain the unique combination of elements and features that make landscapes distinctive by mapping and describing character types and areas. They also show how the landscape is perceived, experienced, and valued by people and identify key landscape features or areas to be protected.

When assessing the potential impacts on the landscape resulting from a Proposed Development, the following criteria are considered:

- Landscape character sensitivity;
- Magnitude of likely impacts; and
- Significance of landscape effects.

16.2.4.1 Sensitivity of the Landscape

The sensitivity of the landscape to change is the degree to which a particular Landscape Character Area (LCA) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics.

Landscape Sensitivity, often referred to as 'value', is classified using the following criteria which have been derived from a combination of industry guidelines from the Landscape Institute for Landscape and Visual Impact Assessment and professional judgement.

The baseline assessment of landscape sensitivity is to be based largely upon LCA's undertaken as part of the County Development Plan, supplemented by site visits to define smaller character zones.

- **Very high** - Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are very high value landscapes, protected at an international level e.g., World Heritage Site, where the principal management objectives are likely to be protection of the existing character;
- **High** - Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national level e.g., National Park, where the principal management objectives are likely to be protection of the existing character;
- **Medium** - Areas where the landscape character exhibits a medium capacity for change in the form of development. Examples of which are medium value landscapes, protected at a Local or Regional level e.g., Open space areas mentioned within a County Development Plan, where the principal management objectives are likely to be protection of the existing character;
- **Low** - Areas where the landscape character exhibits a high capacity for change and has very few or no designated landscapes or open space areas; and
- **Negligible** - Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

16.2.4.2 Magnitude of Likely Landscape Impacts

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the Proposed Development. The magnitude considers whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the boundary of the Proposed Development that may have an effect on the landscape character of the area.

- **Very high** - Change that would be large in extent and scale with the loss of critically important landscape elements and features, which may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality;
- **High** - Change that would be more limited in extent and scale with the loss of important landscape elements and features, which may also involve the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value and quality;
- **Medium** - Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of uncharacteristic new elements or features that would lead to changes in landscape character, and quality;
- **Low** - Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements;
- **Negligible** - Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable;

- **Neutral** - Changes that do not involve the loss of any landscape characteristics or elements and will not result in noticeable changes to the prevailing landscape character; and
- **Positive** - Changes that restore a degraded landscape or reinforce characteristic landscape elements.

16.2.4.3 Significance of Landscape Effects

The significance of the landscape impact will be the combination of the sensitivity of the landscape against the magnitude of the change. It is summarised in Table 16-2 below.

Table 16-2 Significance of Landscape and Visual effects based on Magnitude and Sensitivity (Adapted from GLVIA, 2013)

Significance of Landscape and Visual Impacts based on Magnitude and Sensitivity					
	SENSITIVITY				
MAGNITUDE	Very high	High	Medium	Low	Negligible
Very high	Profound	Very significant	Significant	Moderate	Slight
High	Very significant	Significant	Moderate	Slight	Slight
Medium	Significant	Moderate	Slight	Slight	Imperceptible
Low	Moderate	Slight	Slight	Imperceptible	Imperceptible
Negligible	Slight	Slight	Imperceptible	Imperceptible	Imperceptible
Neutral	Imperceptible	Imperceptible	Imperceptible	Imperceptible	Imperceptible
Positive	Positive	Positive	Positive	Positive	Imperceptible

16.2.5 Visual Impact Assessment Criteria

16.2.5.1 Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape.

The sensitivity of visual receptors is classified using the following criteria which have been derived from a combination of industry guidelines from the Landscape Institute for Landscape and Visual Impact Assessment and professional judgement. Visual receptors most susceptible to changes in views and visual amenity are shown below.

- **Very high** - Residents in properties within protected landscapes and travellers on a Scenic route where awareness of views is likely to be heightened;
- **High** – Residents in properties with predominantly open views from windows, garden, or curtilage. People, whether residents or visitors, who are engaged in outdoor recreation including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views, and those on a scenic route where the view is not specifically in the direction of the Proposed Development;
- **Medium** - Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience, and communities where views contribute to the landscape setting enjoyed by residents in the area;
- **Low** - People engaged in outdoor sport or active recreation on a local scale, which does not involve or depend upon appreciation of views of the landscape; and people at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life, and people travelling in vehicles where their view is limited to a few minutes at any viewpoint; and

- **Negligible** - Changes affecting restricted viewpoints.

16.2.5.2 Magnitude of Visual Impact

The magnitude of a visual effect is determined on the basis of several factors: the relative numbers of viewers, the distance from the viewpoint, the visual dominance of the Proposed Development within a view and its effect on visual amenity, as follows:

- **Very high** - The proposal intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene;
- **High** - The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene;
- **Medium** - The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it may generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. Alternatively, it may represent a balance of higher and lower order estimates in relation to visual presence and visual amenity;
- **Low** - The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene; and
- **Negligible** - The proposal would be barely discernible within the available vista and/or it would not detract from, and may even enhance, the visual amenity of the scene.

Magnitude can also be described as:

- **Neutral** - Changes that are not discernible within the available vista and have no bearing the visual amenity of the scene; and
- **Positive** - Changes that enhance the available vista by reducing visual clutter or restoring degraded features.

16.2.5.3 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix as used earlier in respect of landscape impacts, see Table 16-2.

16.2.5.4 Impact Classification Terminology

Table 16-3 presents the Impact Classification Terminology as published in the EPA guidance document[1]. Standard definitions are provided in this glossary, which permit the evaluation and classification of the quality, significance, duration, and type of impacts associated with a Proposed Development on the receiving environment.

Each impact is described in terms of its quality, significance, extent, duration & frequency, and type, where possible. The significance criteria as set out in the Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA (2022) have been used for the purpose of this assessment, see Table 16-3.

[1] EPA, *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, (2022)

Table 16-3 Impact Classification Terminology (EPA, August 2017)

IMPACT CHARECTERISTICS	TERM	DESCRIPTION
Quality of Effects	**Positive**	A change that improves the quality of the environment.
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation within the margin of forecasting error.
	Negative/ Adverse	A change that reduces the quality of the environment.
Significance of Effects	**Imperceptible**	An effect capable of measurement, but without significant consequences.
	Not significant	An effect which causes noticeable changes in the character of the environment, but without significant consequences.
	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
	Significant	An effect which, by its character, magnitude, duration, or intensity alters a sensitive aspect of the environment.
	Very significant	An effect which, by its character, magnitude, duration, or intensity significantly alters most of a sensitive aspect of the environment.
	Profound	An effect which obliterates sensitive characteristics.
Extent and Context of Effects	**Extent**	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions.
Probability of Effects	**Likely**	The effects that can reasonably be expected to occur because of the planned project, if all mitigation measures are properly implemented.
	Unlikely	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Duration and Frequency of Effects	**Momentary**	Effects lasting from seconds to minutes.
	Brief	Effects lasting less than a day.
	Temporary	Effects lasting less than a year.
	Short-term	Effects lasting one to seven years.
	Medium-term	Effects lasting seven to fifteen years.
	Long-term	Effects lasting fifteen to sixty years.
	Permanent	Effects lasting over sixty years.
	Reversible	Effects that can be undone, for example through remediation or restoration
	Frequency	Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Types of Effects	**Indirect/ Secondary)**	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.
	Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	'Do-Nothing'	The environment as it would be in the future should the subject project not be carried out.
	`Worst case'	The effects arising from a project in the case where mitigation measures substantially fail.
	Indeterminable	When the full consequences of a change in the environment cannot be described.
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost.
	Residual	The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
	Synergistic	Where the resultant effect is of greater significance than the sum of its constituents.

16.2.5.5 Landscape and Visual Mitigation

Mitigation measures are likely to form an important part of the final Proposed Development design in reducing landscape and visual impacts. Mitigation proposals aiming to reduce the significance of landscape, and visual significant or higher impacts will be developed to address impacts as they are determined as part of the appraisal and assessment process. This will be an iterative process during the drafting and finalisation of this assessment. Where proposed mitigation measures are incorporated into the Proposed Development design, they will inform further impact assessment, and this will in turn will inform refinement of the mitigation. Residual effects will also be assessed and described.

Mitigation measures will be designed in accordance with 'A Guide to Landscape Treatments for National Road Schemes in Ireland' (NRA (now TII) 2006). The approach to this will be high-level and will include generally indicative levels of mitigation along broad sections of the route. The levels of mitigation necessary will be mostly based on broad-scale quantification of effects on a landscape scale. Where significant localised effects are evident more detailed description of mitigation may be required, but this is likely to be limited to proximity to highly sensitive visual receptors. Mitigation within the Proposed Development extents is likely to include the following:

- Providing visual screening between the road corridor and visually sensitive properties or areas of sensitive landscape character using a mixture of landform and/or planting with a high evergreen content;
- Creating or maintaining vistas or views from the road corridor towards focal points or features of local importance by creating gaps in planting and/or lowering earth mounding; and
- Reconnection of severed and fragmented habitats and creation of green corridors and compensation plating within roadside planting.

Landscape and visual mitigation will also be considered in terms of its interaction with other environmental elements listed below. The mitigation will make cognisance of the specialist guidance and will be supplemented by additional sources during consultation with other design team environmental specialists:

- **Noise** – by use of landform to provide a combined noise and visual screening barrier where applicable. This will be in accordance with 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes' (NRA (now TII) March 2014);
- **Ecology** – by incorporating ecological mitigation and enhancement measures into the proposed planting design for the proposed alignment in accordance with 'Guidelines for Assessment of Ecological Impacts of National Road Schemes' NRA (now TII) June 2009);
- **Cultural Heritage** – by considering the impact of the proposed alignment on the landscape setting of historical buildings, demesnes, monuments, and artefacts and proposing materials sympathetic to their design within the landscape mitigation proposal. This will be in accordance with 'Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII Feb 2024); and
- **Tourism and Recreation** – by considering the impact of views from existing tourism facilities, scenic routes and walking trails, including any cultural heritage sites, areas of recognisable landscape and 'beautiful scenery' and 'nature, wildlife and flora.'

16.2.5.6 Cumulative Impact Assessment

The cumulative effect of a set of developments is the combined effect of all the developments taken together.

Cumulative effects on visual amenity consist of combined visibility and sequential effects.

Combined visibility occurs where the observer is able to see two or more developments from one viewpoint.

- Combined visibility may either be in combination (where several similar developments are within the observer's arc of vision at the same time) or in succession (where the observer has to turn to see the developments); and
- Sequential effects occur when the observer sees different developments when moving from one point to another. For example, this could be when travelling along roads or paths. The occurrence of sequential effects may range from frequently sequential (the features appear regularly and with short time lapses between, depending on speed of travel and distance between the viewpoints) to

occasionally sequential (long time lapses between appearances, because the observer is moving very slowly and / or there are large distances between the viewpoints).

Cumulative landscape effects affect the physical fabric or character of the landscape, or any special values attached to the landscape.

- Cumulative effects on the physical fabric of the landscape arise when two or more developments affect landscape components such as woodland, dykes or hedgerows. Although this may not significantly affect the landscape character, the cumulative effect on these components may be significant – for example, where the last remnants of former shelterbelts are completely removed by two or more developments; and
- Cumulative effects on landscape character arise from two or more developments. In this way, they can change the landscape character and create a different landscape character type. That change needs are not negative; some derelict or industrialised landscapes may be enhanced as a result of such a change in landscape character. The cumulative effects on landscape character may include other changes, for example trends or pressures for change over long time periods, which should form part of any consideration of a particular project.

The area in which the Proposed Development is located contains other road Works and therefore there is potential for cumulative effects on landscape and visual amenity.

16.3 Baseline Environment

The proposed route of the BusConnects corridor is approximately 3.9km in length and is situated along Dublin Road, Galway City (see Figure 16-2 below). It comprises a high quality multi modal corridor between the Moneenageisha Junction in the west to the Doughiska Junction in the east.

Figure 16-2 Site Location and Context

The Proposed Development includes a wide variety of suburban and city landscape, townscape, and visual features. This extends from streetscape boundary and urban realm features to residential and mixed-use zonings, as well as historic landscapes and boundaries to biodiversity and heritage assets.

The western portion, approximately 1.8 km in length, is set within a fully urban setting, whereas the eastern portion, approximately 2.1 km, is directly alongside Merlin Meadows and Rosshill Park Woods and thus in a more natural setting with open fields and woodlands.

The majority of the works associated with the Proposed Development will include improvements to the existing roadway, pedestrian facilities, and public spaces.

16.3.1 City Context

Galway is a city in the west of Ireland, within the county of Galway and province of Connacht. The city is characterised by its historical landmarks and landscapes, and is framed by important waterbodies such as River Corrib, Galway Bay, and Lough Atalia.

One of the main access points to Galway City centre is through the east, via Dublin Road. This important connection route is subject to widening of the existing road and new Active Travel links as part of the Proposed Development.

Galway city is a thriving tourist destination. Galway's landscape/townscape provides distinctiveness and continuity and is an important contributor to quality of life for people in the city and the economy. The city's heritage and sites covered by ecological designations form important components of the city's landscape.

The landscape within the city is low-lying and rises towards the east. The lowest elevation occurs surrounding Lough Atalia at approximately 4 m Above Ordnance Datum (AOD) and rises to approximately 30 m AOD at Roscam.

16.3.2 Overview of Route of the Proposed Development

The Proposed Development will be approximately 3.9km in length entirely on Dublin Road (R921 Regional Road). From west to east, it runs from Lough Atalia, through the outer city suburbs of Renmore, Glenina Heights, Lurgan Park, Woodhaven and Roscam. It crosses important amenities such as the Woodlands Campus, Connacht Hotel, Bon Secours Hospital, Galwegians Rugby Football Club, Atlantic Technological University, Gaelscoil Dara and Merlin Park University Hospital and Meadows. The Proposed Development ends at Roscam, at the junction between Dublin Road and Doughiska Road (L5036 Local Road).

The Proposed Development and Zone of Influence can be divided into two Sections according to the landscape character and land use. The western portion is generally residential and industrial, including other amenities such as schools, hospitals, and hotels. The eastern portion, on the other hand, is characterised by wide areas of open space, be it open fields such as the Merlin Meadows, or enclosed areas such as the Rosshill Park Woods. The eastern landscape comprises extensive areas of mature deciduous woodland, with mature tree lines accompanying the existing Dublin Road.

There are a number of prominent and distinctive features adjoining or close to the Proposed Development which includes the following:

- Lough Atalia is a prominent waterbody north of Galway Harbour and is a protected landscape under the Galway Bay Complex SAC (Special Area of Conservation) and the Inner Galway Bay SPA (Special Protection Area). The Lough Atalia is surrounded by open spaces with pedestrian trails that connect both sides of the lake. Dublin Road in this location, together with the existing walking trails, include open views of scenic quality towards Lough Atalia.

Plate 16-1 Lough Atalia adjacent to Dublin Road

- Immediately adjacent to Lough Atalia, to the east, there is a mature deciduous woodland followed by a group of school buildings within the Woodlands Campus. A boundary stone located within the woodland is identified in the Record of Protected Structures (RPS no. 8406) and National Monument Service (NMS no. GA094-03001) as Lynch's Stone. Standing stones appear to have served a variety of functions. Many were used as burial markers to designate the location of a cist grave, comprising a simple slab-lined box like grave. The Stone is not apparent from the Road and is screened by the existing woodland. The entrance building upon arriving at Woodlands Campus is identified in the RPS (no. 8405) as the Holy Family School. The protected structure and the existing Dublin Road are separated by a car park and an existing low concrete boundary wall.

Plate 16-2 Holy Family School adjacent to Dublin Road

- Connacht Hotel Galway, located along Dublin Road attracts visitors but also hosts events in Galway city. The hotel, together with the Bon Secours Hospital on the other side of the road are two imposing buildings in an area generally composed of small-scaled buildings. This Section of Dublin Road is a good representation of the mixed variety of uses and character that occur in Dublin Road and many areas of Galway City. Both buildings are surrounded by a mix of typologies such as the New Lawn Cemetery, Mervue United Football Club, and Glenina Heights Residential adjacent to Connacht Hotel; and Renmore Park Residential, Church of Saint Oliver Plunkett, Galway Hospice and Renmore Park adjoining Bon Secours Hospital Galway. Additionally, both buildings are partially or fully enclosed by screening vegetation and stone walls which further separates these buildings visually from their environs.

Plate 16-3 Bon Secours Hospital boundary with Dublin Road during winter

- St. James' Church and Cemetery is located approximately 130 metres north of Dublin Road, accessed by Michael Collins Road. The Church and Cemetery are identified as a National Monument (NMS no. GA094-010). The existing derelict church structure and cemetery are enclosed by stone walls in all directions, as well as residential dwellings to the north and south.

Plate 16-4 St. James' Church and Cemetery

- Galwegians Rugby Football Club (RFC) is an example of recreational amenity adjoining the Proposed Development. It is also immediately adjacent to St. James' Cemetery to the east. The Club includes two pitches and a club house. The latter is identified in the National Inventory of Architectural Heritage (NIAH no. 30409418) as Glenina House. This detached two-storey house was built in c. 1860 and retains some of the features from the 1800s such as varied timber sash windows and slate roof. RFC has recently been purchased. A new cemetery development by Galway City Council is currently in pre-application stage and is anticipated to be developed over the time period for the Bus Corridor Infrastructure Works.

Plate 16-5 Galwegians RFC entrance from Dublin Road

- Gaelscoil Dara is located immediately west of the existing Garda Western Regional Headquarters (Garda HQ) and comprises a pitch / formal kickabout area that is continuously used by students. The boundary of this pitch with the road is a low stone wall which, together with the open space buffer from Atlantic Technological University Galway (ATU), allows for a more open perception of the space in this location. However, there is no visual connectivity between the two, as they are visually separated by the road itself.

Plate 16-6 Gaelscoil Dara and ATU Galway green buffer on each side of Dublin Road

- Skerrit Roundabout is situated approximately midpoint along the Proposed Development. The junction is currently an uncontrolled large roundabout with four arms, and two approach lanes on each arm. To the west of this roundabout sits the Atlantic Technological University Galway (ATU) and Garda Headquarters, with Lurgan Park and an abandoned site located to the east. Buildings surrounding the roundabout are generally situated away from the road and include a buffer of planting or lawn, with the exception of the recently built Garda's Headquarters which is located relatively close to the existing roundabout. Each existing development comprises a boundary of low to medium height stone walls. Mature and semi-mature trees are planted linearly or in clusters within each site.

Plate 16-7 Skerrit Roundabout, as visible from the abandoned site boundary in the northeast

- The Merlin Park vehicular entrance is an obvious transition in character in the localised landscape. This entrance road marks the beginning of a more naturalised landscape and shifts away from a more urban character.

Plate 16-8 Merlin Park Hospital vehicular entrance from Dublin Road

Merlin Park Hospital is surrounded by extensive tall mature mixed woodland in all directions and thus caters to local biodiversity and ecological value. Merlin Woods is located north of the hospital buildings, while the south includes various clearings, including Merlin Meadows. These meadows are used as walking and recreation amenities. According to the National Monument Service, there is a Tower House within the Merlin grounds, identified as NMS no. GA094-023. Additionally, Galway City Council lists four protected structures inside the grounds, including the same Tower House (RPS no. 5901), Gravestones (RPS no. 5902), a quarry house (RPS no. 5903) as well as Marble Works (RPS no. 5904). All monuments are located north of the hospital buildings and away from Dublin Road.

Merlin Meadows boundary with Dublin Road is varied in vegetation and density of screening. Generally, the boundary is composed of mature tall deciduous tree lines, that, accompanied with other woodlands or open spaces on the southern side of the road, provide for an aesthetically pleasing approach to Galway city from the east.

The Merlin Meadows caters to existing grasslands, scrub, hedgerows, and tree groups and woodlands. These are rich in habitats and biodiversity of fauna and flora. The mosaic grassland habitats, which spread through Merlin Meadow, correspond in part to Annex I Hay Meadows (6510).

Plate 16-9 Dense boundary tree line along Merlin Meadows

Plate 16-10 Open Boundary between Merlin Meadows and Dublin Road

- Merlin Meadows and Woodlands extend through approximately half of the northern boundary of the existing Dublin Road. Throughout this extent, the southern boundary is accompanied by open spaces such as Lios an Uisce, as well as deciduous woodlands such as Rosshill Park Woods and associated trails. The grouping of the dense vegetation on both sides of the road creates a soft and somewhat scenic approach to Galway City. In some portions of this eastern Section of the road, the existing footpaths trail away from the road due to existing vegetation or change in elevation. The existing open spaces and woodlands are generally separated from the road and footpath by some variation of boundary treatment, such as timber fences or stone walls.

Plate 16-11 Rosshill Park Woods south of Dublin Road

16.3.3 Landscape Character

There is no Landscape Character Assessment available for Galway City, however, GCDP sets out strategic aims and objectives to ensure that the County's landscapes are suitably protected and that new developments avoid negative impacts upon the natural environment.

The Zoning Map prepared by Galway City Council (as shown in Figure 16-3 below) provides information on the existing land uses of the receiving landscape of the Proposed Development. The receiving landscape is composed of mainly three land uses, "Residential," "Community, Culture and Institutional," and "Recreation and Amenity." These land uses serve each other and are generally present together. Some pockets of "Enterprise, Light Industry and Commercial" are located to the west, in proximity to the city centre to the southwest but are rare in the receiving landscape.

Merlin Meadows and the entire Merlin Park grounds provide an apparent transition in landscape use and character from that of extensive residential and community / industrial areas. Although all residential areas

have dedicated open spaces, Merlin Meadows and grounds provide a hub for biodiversity, offering a sustainable habitat for the local flora and fauna.

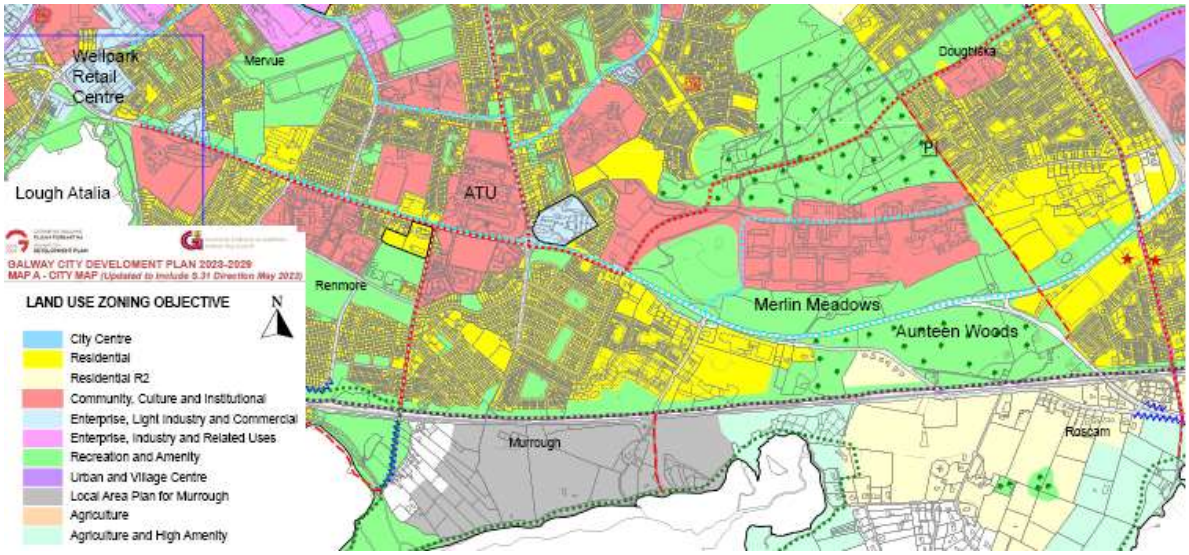

Figure 16-3 Galway City Zoning (Adapted from Map A, GCC)

16.3.4 Landscape Significance and Sensitivity

The GCDP sets out policies and objectives related to the city landscape and townscape, where the Proposed Development is located. Table 16-4 below describes the relevant policies within the GCDP that relate to the Proposed Development.

Table 16-4 Galway City Policies relevant to the Proposed Development

Chapter 4 – Sustainable Mobility and Transportation	
Policy	**Description**
4.3.1	"Support the implementation of Bus Connects Galway and the overall bus transport network which will include for a high frequency cross-city network of services and all associated infrastructural requirements, traffic management and priority arrangements."
4.3.10	"Support the modal change to public transport under the Galway Transport Strategy (GTS) through modal change targets for walking, cycling, and public transport within the lifetime of the City Development Plan."
4.4.5	"Facilitate cycling on the proposed Bus Connects Galway Routes where appropriate including on the proposed Cross-City Link."
Chapter 5 – Natural Heritage, Recreation and Amenity	
Policy	**Description**
5.1.12	"Improve accessibility to the City Parks, recreation and amenity areas and facilities and include for sustainable modes of transport, where appropriate."
5.2.4	"Support the implementation of the National Biodiversity Action Plan (2017- 2021) and the All-Ireland Pollinator Plan (2021-2025) and support the actions of the City Council's Heritage Plan 2016-2021 and Biodiversity Action Plan 2014-2024 relating to the promotion of ecological awareness, biodiversity and best practices."
5.2.6	"Protect Local Biodiversity Areas, wildlife corridors and stepping stones based on the Galway Biodiversity Action Plan 2014-2024 and support the biodiversity of the city in the Council's role/responsibilities, works and operations, where appropriate."

5.2.10	"Protect and conserve rare and threatened habitats and their key habitats, (wherever they occur) listed on Annex I and Annex IV of the EU Habitats Directive (92/43EEC) and listed for protection under the Wildlife Acts 1976 as amended and plant species listed in the Flora Protection Order 2015."
5.2.11	"Ensure that plans and projects with the potential to have a significant impact on European sites (SAC or SPA) whether directly, indirectly or in combination with other plans or projects are subject to Appropriate Assessment, under Article 6 of the Habitats Directive (92/43EEC) and associated legislation and guidelines, to inform decision making."
5.3	"Develop and enhance the recreational and amenity potential of the city's waterways and coastal area, while not compromising the ecological importance of these areas."
5.4.3	"Integrate existing trees and hedgerows on development sites where appropriate and require tree planting, as part of landscaping schemes for new developments."
5.5.8	"Promote and facilitate safe and convenient walking and cycling routes through land use policy and the implementation of measures set out in the Galway Transport Strategy."
5.7.1	"Protect views and prospects of special amenity value and interest, which contribute significantly to the visual amenity and character of the city, through the control of inappropriate development."
5.7.2	"Require landscaping schemes as part of planning applications to have regard to such views and limit any planting which could have a detrimental impact on the value of protected views."

There are no Protected Views within the Proposed Development. The closest Panoramic Protected View is "V3" which includes "seascape views of Lough Atalia from Lough Atalia Road, College Road, Dublin Road and Lakeshore Drive". Considering these views are from the Proposed Development directed away from it, the magnitude of change and therefore the significance of impact on the visual amenity is expected to be **neutral**.

There is no sensitivity analysis within GCDP, however for the purposes of this assessment it is considered that the area is of Medium Value and High Sensitivity to the western portion, and High Value and High Sensitivity to the eastern portion (considering the entrance to Merlin Park Hospital as the transition between west and east), given its location, context and setting within the city.

16.4 Potential Impacts

16.4.1 Characteristics of the Proposed Development

For the purpose of this assessment, potential impacts for Construction and Operational Phases will be described in the same order as the Construction Phasing described in Chapter 5 of this EIAR, as shown below.

- **Section 1**: East of Moneenageisha Junction to Skerritt Junction;
- **Skerritt Junction**; and
- **Section 2**: Skerritt Junction to Doughiska Road Junction.

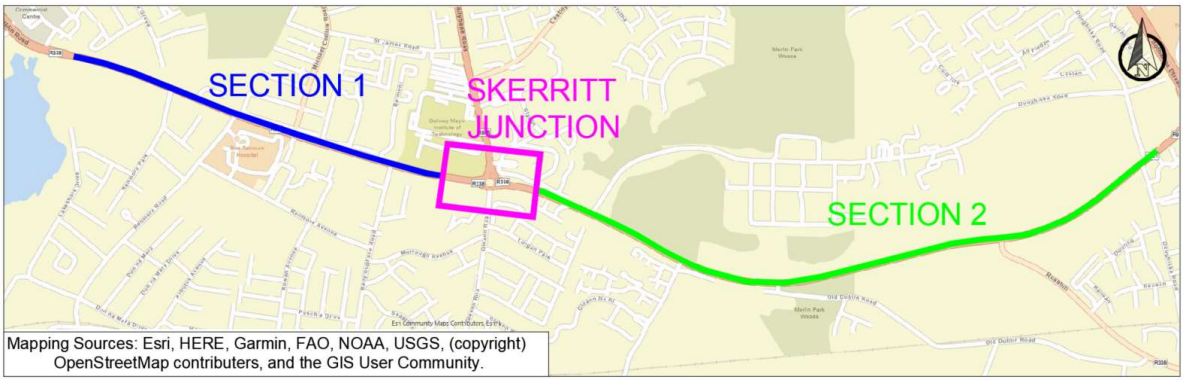

Figure 16-4 Construction Phasing

16.4.2 Do Nothing Scenario

The site of the Proposed Development is a busy road linking Galway City with the suburbs to its east and the N67 road. In the 'do nothing' scenario, the road would continue to be heavily used with no changes to its layout, lane allocation, or the surrounding hard and soft landscaping. There would be no negative effects associated with construction of the Proposed Development, nor the required tree removals along parts of the route. Similarly, there would be no scope for positive changes associated with reallocating sections of the road to public transport and active travel use nor additional planting and landscaping associated with the project. The overall effect of the 'do nothing' scenario would be **mid-term neutral to long-term negative imperceptible** as traffic deteriorates and active travel opportunities are not readily available.

16.4.3 Assessment of Effects on Landscape Character

The landscape of the area is mainly urban, with Merlin Meadows and Merlin Park in the eastern portion of the site providing an open space which reduces the urban influence of the surrounding areas.

During construction, there will be temporary impacts on landscape character through the use of construction machinery along the proposed route. Construction will take place in an urban area on a busy road corridor. The use of construction machinery and temporary erection of hoarding and construction compounds will not significantly affect the key characteristics of this landscape type.

Slight changes to the fabric of the landscape are expected through the removal of 446 no. trees, which will be needed for the proposed realignments along sections of the proposed route. The majority of these trees are mature and located along the eastern section of the Proposed Development. These impacts upon the landscape character would be temporary to short-term, as the replanting of 408 no. trees is proposed. The proposed tree planting is mainly consisting of young trees as this helps towards a successful establishment and adaptation to the conditions of the site. An exception to this is the tree planting in Merlin Meadows Park where larger trees have been proposed to have a more immediate positive visual impact. The proposed planting is not expected to fully mitigate the negative impact to the landscape. It is expected to reduce the magnitude of change to a negligible extent overtime.

The sensitive landscape of ecological relevance at Lough Atalia (SAC and SPA) is located outside of the Proposed Development boundary. The Proposed Development is not expected to affect any of the key characteristics of this landscape.

Merlin Park Meadows and Woods on the eastern portion of the site, including the Annex I grasslands in the southern section of the lands, will not be affected by the Proposed Development, due to the proposed works occurring outside of the grounds, on the existing road corridor and immediate boundaries. The landscape character of Merlin Park Meadows will remain unaltered, with changes in vegetation being localised to the southern boundary where vegetation loss will be replaced with new native hedgerow and tree planting. The majority of the works comprise road and path surface works and marking, which will not affect the surrounding landscape.

In the operational phase, the Proposed Development is not expected to affect any of the key characteristics of the surrounding urban landscape as a whole. Within a radius of 0.5km, the Proposed Development will have an **imperceptible** impact on landscape, except for where tree removals are required, where the impact will be **slight**. The impact upon the landscape is further reduced due to the already urban nature of most of the site, and the existing and retained screening vegetation in the eastern portion of the site.

In accordance with the methodology, within 0.5km the localised magnitude of change will be **low to negligible** during both construction and operation. In accordance with Table 16-2 and Table 16-5, the effect on landscape character within 0.5km would be **imperceptible** during both phases.

Effects will reduce with distance and beyond 0.5km the magnitude of change on the landscape will be **neutral**. In accordance with Table 16-2 and Table 16-5, the effect on landscape character beyond 0.5km would be **imperceptible**, reducing to **neutral** with distance. Outside the study area, i.e., beyond 1km, the Proposed Development is expected to have no impact on landscape character.

16.4.4 Assessment of Effects on Visual Amenity

Receptor groups were identified during the initial desktop investigation using aerial imagery and verified on site during the site visit. Receptors were grouped in terms of function, i.e., residential buildings, community buildings, etc., and location. Receptors with the same function and general location were grouped. These receptor groups are discussed below with an assessment of the effects on their visual amenity.

The receptors assessed below are shown in Figure 16-5. A description of each receptor and assessment of expected visual effects arising from the Proposed Development are described thereafter and summarised in Table 16-5.

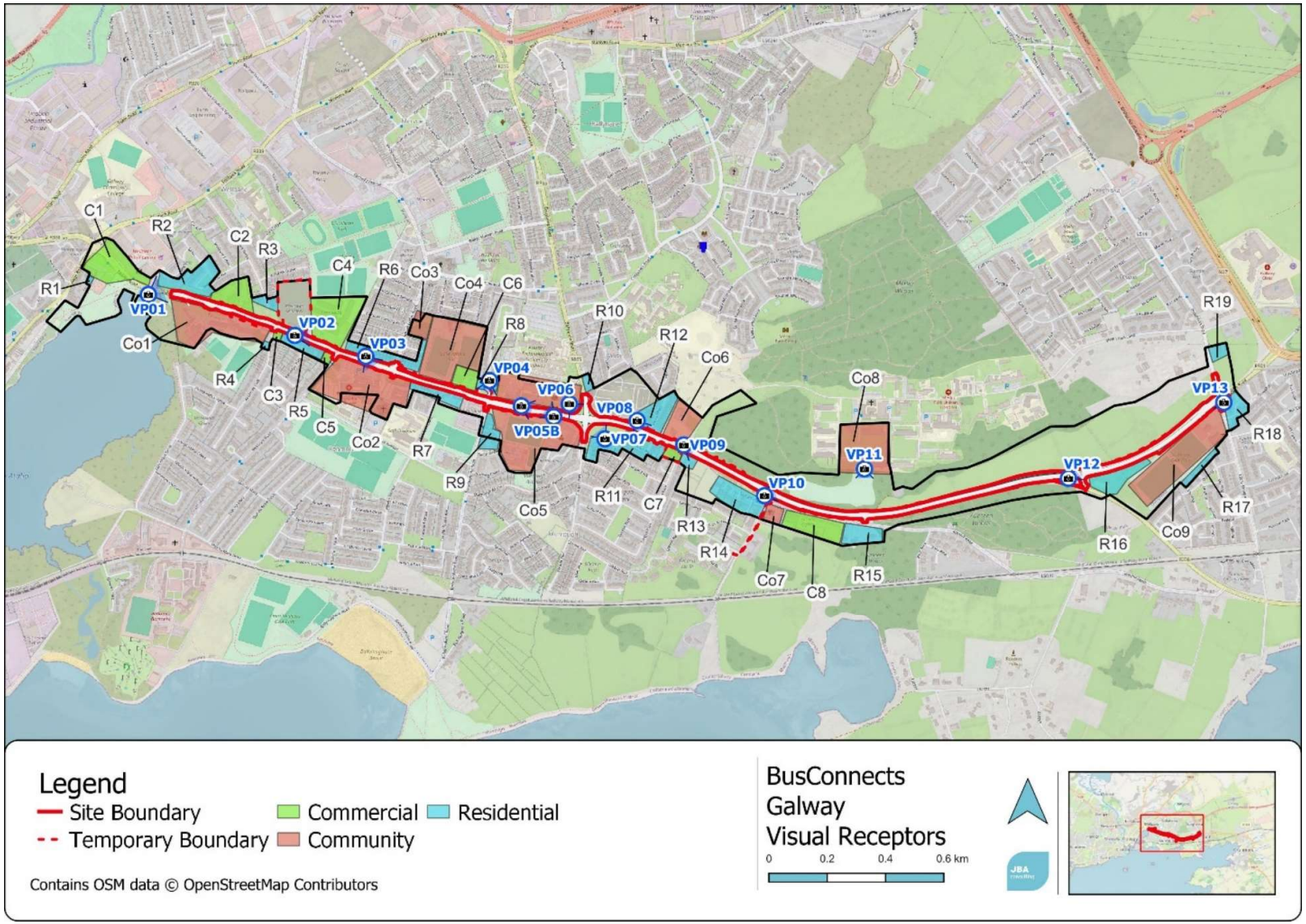

Figure 16-5: Visual Receptors

Table 16-5 Visual Assessment Summary

Receptor	Sensitivity	Magnitude during Construction	Magnitude during Operation	Visual Effects during Construction	Visual Effects during Operation (Year 1 to 10)	Visual Effects during Operation (> Year 10)
Residential Receptors						
R1	High	Low	Neutral	Temporary, Slight, Negative	Imperceptible	Imperceptible
R2	High	Low to Negligible	Neutral	Temporary, Slight, Negative	Imperceptible	Imperceptible
R3	High	Low	Low, to Negligible to Neutral	Temporary, Slight, Negative	Short-term, Slight, Negative	Imperceptible
R4	High	Low to Negligible	Neutral	Temporary, Slight, Negative to Imperceptible	Imperceptible	Imperceptible
R5	High	Medium to Low	Negligible	Temporary, Moderate to Slight, Negative	Imperceptible	Imperceptible
R6	High	Medium to Low	Low to Negligible to Neutral	Temporary, Moderate to Slight, Negative	Short-term, Slight, Negative	Imperceptible
R7	High	Medium to Low	Low to Negligible to Neutral	Temporary, Moderate to Slight, Negative	Short-term, Slight, Negative	Imperceptible to neutral
R8	High	Medium	Low to Positive	Temporary, Moderate, Negative	Short-term, slight, negative	Positive
R9	High	Negligible	Neutral	Imperceptible	Neutral	Neutral
R10	High	Low	Negligible to Positive	Temporary, Slight, Negative	Imperceptible	Imperceptible to Positive
R11	High	Low	Negligible to Neutral to Positive	Temporary, Slight, Negative	Imperceptible	Positive
R12	High	Medium	Low to Positive	Temporary, Moderate to Slight, Negative	Short-term, slight, negative	Positive
R13	High	Medium	Low to Negligible	Temporary, Moderate, Negative	Short-term, slight, negative	Imperceptible
R14	High	Low	Low to Negligible	Temporary, Slight, Negative	Short-term, slight, negative	Imperceptible
R15	High	Negligible	Neutral	Imperceptible	Imperceptible	Imperceptible
R16	High	Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
R17	High	Neutral	Neutral	Imperceptible	Imperceptible	Imperceptible

Receptor	Sensitivity	Magnitude during Construction	Magnitude during Operation	Visual Effects during Construction	Visual Effects during Operation (Year 1 to 10)	Visual Effects during Operation (> Year 10)
R18	High	Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
R19	High	Neutral	Neutral	Imperceptible	Imperceptible	Imperceptible
Community Receptors						
Co1	Low	Low	Negligible	Imperceptible	Imperceptible	Imperceptible
Co2	Low	Low	Negligible	Imperceptible	Imperceptible	Imperceptible
Co3	Medium	Neutral	Neutral	Imperceptible	Imperceptible	Imperceptible
Co4	Medium to Low	Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
Co5	Low	Medium to Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
Co6	Low	Medium to Low	Low to Negligible	Temporary, Slight, Negative to Imperceptible	Imperceptible	Imperceptible
Co7	Low	Negligible	Neutral	Imperceptible	Imperceptible	Imperceptible
Co8	Low	Negligible to Neutral	Neutral	Imperceptible	Imperceptible	Imperceptible
Co9	Low	Negligible	Neutral	Imperceptible	Imperceptible	Imperceptible
Commercial Receptors						
C1	Low	Negligible	Negligible	Imperceptible	Imperceptible	Imperceptible
C2	Low	Medium to Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
C3	Low	Medium to Low	Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
C4	Low	Medium	Low to Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible to Positive
C5	Low	Medium	Low	Temporary, Slight, Negative	Imperceptible	Imperceptible
C6	Low	Medium	Low to Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible to Positive
C7	Low	Medium	Low to Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
C8	Low	Medium	Low to Negligible	Temporary, Slight, Negative	Imperceptible	Imperceptible
Open Space Receptors						
Open Space Receptors	Medium to High	High	Low to Negligible	Temporary, **Significant** to Moderate, Negative	Short-term, slight, negative	Imperceptible

16.4.4.1 Residential Receptors

R1 (270m west of works, College Crescent)

A group of five terraced two- to three-storey houses. The houses face east towards the Proposed Development, with no screening of these views. The views to the east are over a car parking area, and green open space, with commercial buildings lining the R338 road as an angled view.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The dwellings have main views facing towards from the Proposed Development. However, the Proposed Development will be filtered by intervening vegetation and will form a small part of the overall view. In accordance with the methodology the magnitude of change will be *low* during construction. Once operational no visual impact is expected, and so the magnitude of change in the operational phase will be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

R2 (north of R338, Sáilín and Wellpark Grove)

A group of residential buildings in a mix of detached two-storey houses, and three-storey apartment blocks. The residences generally have either rear or front windows facing towards the southeast, and there is a green open space separating them from the proposed route.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The primary views from the houses face south and east, towards the Proposed Development. Glimpse views through deciduous and evergreen tree and hedge vegetation will be available during construction but are not the primary views experienced by these receptors. The primary views are over the immediate surrounding green spaces and gardens, which will not be impacted. In accordance with the methodology the magnitude of change would be **low to negligible** during construction, due to machinery and works along the Proposed Development site. Once operational phase is reached, the development will not change the character of the view from that of a road. The magnitude of change in the operational phase will be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** operation.

R3 (north of R338, Wellpark Grove)

A small group of detached and semi-detached two-storey dwellings in the Wellpark Grove estate. The houses face across a small road towards each other and are separated from the R338 by a small open green space. Views from this group generally look out over their front and rear gardens, with angled views towards the green space to the south and the R338 beyond that.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude Views from the dwellings are focused on the immediate surrounding green areas. Views towards the Proposed Development are partially filtered by intermittent vegetation and are angled. During construction there will be some views of machinery and the proposed works, but this will be temporary. Four trees in the intervening green area between the houses and the proposed route will be removed during construction. These will be replaced by 8 no. new trees, which will reduce the operational impact over time. In accordance with the methodology the magnitude of change will be **low** during construction due to the proposed tree removal. Once operational, the impact will be **low** reducing to **negligible** and then **neutral** as the new tree planting establishes and matures over time.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction. Once operational, the impact will be **short-term, slight, negative** due to the proposed tree removal, reducing to **imperceptible** over time.

R4 (60m south of R338, Renmore Park)

Two semi-detached houses in Renmore Park, south of the R338. The houses face north towards the Proposed Development, separated from the road by an area of open green space, with trees lining one side. Houses and a Dental Practice are visible on the right side of Renmore Park when facing north from the receptors.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude These dwellings are partially filtered from the Proposed Development by existing intervening vegetation**.** Views where available will be glimpsed through vegetation, and the Proposed Development will form a small part of the overall view due to the distance between this residential group and the Proposed Development. In accordance with the methodology the magnitude of change would be **low** to **negligible** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** to **imperceptible** during construction and **imperceptible** during operation.

R5 (adjacent to south side of R338)

A group of detached and semi-detached houses along the southern side of the R338, facing directly onto the proposed works. The houses generally have small front gardens which are used for car parking, with low walls along the boundaries, along with isolated trees or short vegetation. The visual effects from this receptor are encompassed in a verified photomontage (VP2).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude These dwellings face directly onto the proposed route, with limited filtering provided by vegetation in their gardens or the low garden walls**.** Direct views of the construction works, and associated machinery, will be available. Most trees in the area will be protected and retained, with approx. 6 trees to be removed, most on the far side of the road to the receptor group. The character of the view will not change from that of a road corridor. In accordance with the methodology the magnitude of change would be **medium to low** during construction due to the proximity of the works and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate to slight, negative** during construction and **imperceptible** during operation.

R6 (adjacent to north side of R338, Glenina Heights)

A group of detached two-storey houses along the northern side of the R338, facing directly onto the proposed works. The houses have small front gardens which are used for car parking, with low walls along the boundaries, along with isolated trees or short vegetation. Between the houses and the road is a narrow grassy strip with tall broadleaved trees.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude These dwellings face directly onto the proposed route, with limited filtering provided by vegetation in their gardens or the low garden walls**.** Direct views of the construction works will be available. Most trees in the area will be protected and retained, with approx. 10 trees to be removed on both sides of the existing carriageway. Approx. 14 trees will be planted to replace these trees. In accordance with the methodology the magnitude of change would be **medium to low** during construction. Once operational, the

magnitude of change will be **low** following the replanting of the felled trees, reducing to **negligible** over time as the trees establish and mature.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate to slight, negative** during construction and **short-term, slight, negative** during operation, reducing to **imperceptible** following tree replanting taking effect. As the new planting matures, it will also provide a **positive** impact.

R7 (adjacent to south side of R338, opposite Galwegians RFC)

A group of detached, semi-detached, and terraced residential buildings on the southern side of the R338, opposite Galwegians RFC. The houses face directly onto the proposed route and have little to no screening vegetation.

Sensitivity Receptors would be residents at home. Sensitivity is *high*.

Magnitude These dwellings are immediately adjacent to the existing road and face directly onto the proposed route, with limited filtering available**.** Direct views of the construction works, and associated machinery will be available. Approx. 6 trees will be removed, on the far side of the road to the houses. These will be replaced by approx. 15 new trees. In accordance with the methodology the magnitude of change would be **medium to low** during construction. Once operational, the magnitude of change will be **low** following tree replanting, reducing to **negligible to neutral** once planting establishes and matures.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate to slight, negative** during construction and **short-term, slight, negative** during operation, reducing to **imperceptible to neutral** following tree replanting taking effect.

R8 (north of R338, Belmont)

A small group of detached and semi-detached two-storey dwellings in the Belmont estate. The houses face across a small road towards each other and are separated from the R338 by a small open green space. Views from this group generally look out over the streetscape to the front, with angled views towards the green space to the south and the R338 beyond that. The visual effects from this receptor are encompassed in a verified photomontage (VP4).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude Views from the dwellings are focused on the immediate surrounding areas. Views towards the Proposed Development are angled but not filtered or screened by any existing vegetation. During construction there will be some views of machinery and the proposed works, but this will be temporary. The Proposed Development will result in the access road to Belmont being realigned slightly, however this will not have a visual impact on these receptors once operational. The landscape plan for the Proposed Development includes planting of 16 new trees along with shrub and seasonal bulb planting, which will result in a **positive** impact. In accordance with the methodology the magnitude of change will be **medium** during construction. Once operational, the impact will be **low** immediately following construction, with **positive** impacts as the proposed planting matures.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate, negative** during construction. Once operational, the impact will be **short-term, slight, negative** to **positive** due to the proposed planting. The green space south of the residential receptor will include a change of the road location but will remain in visual character as a planted space with an access road.

R9 (south of the R338, Ballyloughane Road)

A group of detached single-storey houses, and apartment blocks south of them. Primary views from the dwellings are onto the surrounding streetscape or the playing pitches to the east, with angled views only of

the R338 to the north available. The boundary between these receptors and the existing playing pitches includes tall mature planting which will offer screening to the angled views, including during winter when trees have no leaf.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude Views are expected to be filtered by existing vegetation and or screened entirely by the other buildings in the area. Views of the development site will be partial and highly angled. In accordance with methodology the magnitude of change will be **negligible** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during construction and **neutral** once operational.

R10 (north of R338, Ballybane Road)

A small group of detached residential buildings facing onto the Ballybane Road, north of the R338. Primary views are of their private gardens and the Ballybane Road beyond them. The Proposed Development site is visible through angled views from the front of the houses.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude Views are expected to be filtered by existing vegetation, with angled views available towards the proposed route. During construction, some machinery and works will be visible. New tree planting at the proposed junction to the south will be visible, which will result in a positive impact. In accordance with methodology the magnitude of change will be **low** during construction and **negligible** to **positive** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** once operational, with **positive** effects associated with new tree planting, albeit through angled views.

R11 (south of R338, Lurgan Park and Geata Na Mara)

A large group of detached and semi-detached residential buildings in the Lurgan Park and Geata Na Mara estates. The houses are south of the proposed junction on the R338 and are on slightly lower ground than the road to the north. There are some trees along the road verges adjacent to the existing houses. A low stone wall and tree line are located adjacent to the R338 road and public footpath, within the open space for Lurgan Park. The visual effects from this receptor are encompassed in a verified photomontage (VP7).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude Views are expected to be largely filtered by existing vegetation or screened by topography or other buildings. The houses in Geata Na Mara on the eastern edge of the receptor group will have angled views of tree removal on the northern side of the road at Woodhaven. During construction, some machinery and works will be visible. The scope of works in this location will include the conversion from an existing roundabout into a junction, which will be partially screened from the neighbouring receptors at Lurgan Park and Geata Na Mara by the intervening vegetation, topography, and dwellings. The tree line at Lurgan Park will be retained in full, and additional planting has been proposed for Skerrit Junction, which will include trees, shrubs, and seasonal planting. New tree planting will be used to replace the trees removed at Woodhaven. In accordance with the methodology the magnitude of change will be **low** during construction and **negligible** during operation, improving to **positive** as new tree planting takes effect.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** to **positive** once operational.

R12 (north of the R338, Woodhaven)

A large group of detached residential buildings in the Woodhaven estate. The houses are separated from the R338 by a narrow grassy strip and a high wall and low stone wall with a metal railing on top. The houses closest to the road face directly onto the Proposed Development site, with those behind them having only angled views. The visual effects from this receptor are encompassed in a verified photomontage (VP8).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The houses facing onto the proposed route will have close range direct views of the site during construction, with the other houses having angled views only. The boundary wall will be removed and replaced in a closer alignment as part of the development. During construction, some machinery and works will be visible. The few trees within the Woodhaven estates will be retained, as will the existing trees on the southern section of the road. A row trees will be removed from the boundary of the mortuary and grounds of Merlin Park, east of Woodhaven, which will be replanted with a row of 8no. Birch 'Fastigiata' during construction. In accordance with the methodology the magnitude of change will be **medium** during construction due to the proximity to the proposed works, and **low** during operation, which will be improved to **positive** as new tree planting establishes and matures.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate to slight, negative** during construction and **short-term, slight, negative** to **positive** during operation.

R13 (south of R338)

A single detached house on a large plot of land, with mature trees along its eastern boundary. Primary views from the house are onto the R338 to the north.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The house has direct views of the Proposed Development site**.** During construction, temporary visual disturbance will occur. Eight trees will be removed along the Merlin Park entrance boundary, across the road from the residential receptor. The Merlin Park boundary is of high amenity value. However, approx. 16 new trees will be planted in their place at an advanced heavy standard size (min. 4.5m height). In accordance with the methodology the magnitude of change would be **medium** during construction due to the proximity of the dwelling to the Proposed Development works, and **low** during operation, reducing to **negligible** as replacement planting takes effect.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, moderate, negative** during construction and **short-term, slight, negative** during operation, improving to **imperceptible** over time.

R14 (south of R338, Lios an Uisce)

A group of residences south of the proposed route, separated from the R338 by a small green space and vegetated area. Primary views from the dwellings are onto these green areas and the immediately surrounding area, with the R338 in the background. There is dense mature vegetation between the R338 and the westernmost buildings. The visual effects from the pocket park at this receptor are encompassed in a verified photomontage (VP10).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The Proposed Development is partially screened from the Proposed Development by the intervening vegetation. Several trees will be removed across the road from the receptor group, in Merlin Park, with replacement tree planting to take place. In accordance with the methodology the magnitude of

change would be **low** during construction due to the partially screened works and **low** during operation, rising to **negligible** as replacement planting takes effect.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **short-term, slight, negative** during operation, improving to **imperceptible** over time.

R15 (south of R338, Rosshill Road)

A group of three detached residential buildings on the southern side of the R338, on Rosshill Road. The houses have high mature vegetation and trees along their boundaries and in the land between them and the Proposed Development.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The Proposed Development is entirely screened from view by the intervening vegetation, with glimpse through the access point between R338 and Rosshill Road. Views are not expected to occur from this receptor. Some visibility may occur between trees during the winter, when the existing broadleaved trees have no leaf. In accordance with the methodology the magnitude of change would be **negligible** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during construction and operational stages.

R16 (south of R921, north of R338)

A group of apartment blocks and dwellings south of the R921, separated from the road by a line of mature trees. Primary views from the dwellings are onto the surrounding streetscape.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The Proposed Development is mostly filtered from the Proposed Development by existing vegetation. Construction activities will be partially visible, filtered through existing vegetation, and largely experienced as angled views or glimpses through the tall deciduous vegetation. Limited tree removal is needed in this location. In accordance with the methodology the magnitude of change will be **low** during construction and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction, and **imperceptible** during operation.

R17 (south of R921, Duirling)

A group of terraced houses in the Duirling estate. The houses face away from the Proposed Development. Primary views are onto the surrounding streetscape. Between the Proposed Development and these houses is Castlegar GAA Club pitches, and a high wall with vegetation.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The Proposed Development is entirely screened from view by the intervening vegetation. Views will not be available from this receptor**.** In accordance with the methodology the magnitude of change would be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible**.

R18 (adjacent to Proposed Development, Durabhan)

A group of detached, semi-detached, and terraced houses in the Durabhan estate. These houses are adjacent to the proposed junction at the eastern end of the Proposed Development. The visual effects from this receptor are encompassed in a verified photomontage (VP13).

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude These dwellings are partially filtered from the Proposed Development by existing intervening vegetation. Views where available would be angled or glimpsed through vegetation and would be temporary during the construction phase. Three trees are due to be removed at the corner of the proposed junction. In accordance with the methodology the magnitude of change would be **low** during construction due to the proximity of the dwellings to the Proposed Development, and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

R19 (north of R921, Doughiska Road)

A detached house on a large plot of land, with good screening vegetation on all sides.

Sensitivity Receptors would be residents at home. Sensitivity is **high**.

Magnitude The Proposed Development is entirely screened from view by the intervening vegetation, including during winter when the trees are not in leaf. Views are not expected to be available from this receptor**.** In accordance with the methodology the magnitude of change would be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible**.

16.4.4.2 Community Receptors

Co1 (south of R338)

The Brothers of Charity Woodlands Campus is an educational facility on a large open campus, directly south of the R338. The campus has extensive woodland and tree planting and is largely set back from the road. This receptor group includes 3no. protected structures and monuments (RPS no. 8405, RPS no. 8406 and NMS no. GA094-03001). The protected structure and the existing Dublin Road are separated by a car park and an existing low concrete boundary wall. These structures and buildings are within the Woodlands Campus and although publicly accessible, are not attractions themselves. The visual assessment for this community group has considered its educational use only.

Sensitivity Receptors would be visitors and staff at the facility. Sensitivity is **low**.

Magnitude The buildings in the facility mainly look out over the surrounding green areas. Due to the intervening vegetation, any potential views of the site are mostly filtered when in alignment with the existing woodland. Approx. 7 trees will be removed, however will be replaced by approx. 14 new trees. In accordance with the methodology the magnitude of change would be **low** during construction and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

Co2 (south of R338)

Bon Secours Hospital, a church, and a hospice south of the R338. They are situated on a large plot of land, with the buildings set back from the R338. A large car park surrounds the hospital and hospice, with green areas and stone walls running along the boundaries. The church is situated south of the hospice.

Sensitivity Receptors would be staff, patients, and visitors to the facilities. Sensitivity is **low**.

Magnitude An existing treeline in the car park between the Proposed Development and the receptors is to be mostly retained, with 3 no. trees to be removed. The Proposed Development will be partially filtered by the existing intervening vegetation and boundary walls. During construction machinery will be visible. In accordance with the methodology the magnitude of change will be **low** during construction and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

Co3 (140m north of R338)

Saint James Cemetery, north of the R338. The cemetery is surrounded on three sides by housing, and to the east by Galwegians RFC. Stone walls surround the cemetery, as well as tall broadleaved trees.

Sensitivity Receptors would be visitors to the cemetery. Sensitivity is **medium**.

Magnitude The Proposed Development is entirely screened from view by the intervening buildings to the south. Views will not be available from this receptor**.** In accordance with the methodology the magnitude of change would be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

Co4 (north of R338)

Galwegians RFC contains two rugby pitches and a clubhouse north of them. The clubhouse is identified in the National Inventory of Architectural Heritage (NIAH no. 30409418). A stone wall runs along the southern boundary of the grounds. The clubhouse will be assessed as such due to its current use. RFC has recently been purchased for a new cemetery development by Galway City Council. Considering the grounds will continue to be visited by the community, the visual assessment has considered its current recreational use and the potential future use by mourners.

Sensitivity Receptors would be members and visitors to the club or cemetery. Sensitivity is **low to medium**.

Magnitude The Proposed Development will be partially visible from the grounds, with no screening vegetation available. During construction, machinery and the works will be partially visible over the stone boundary wall, which will take place immediately adjacent to this receptor. Once operational, there will be no change from the existing visual character. In accordance with the methodology the magnitude of change would be **low** during construction and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

Co5 (either side of the R338)

Gaelscoil Dara and the Garda Western Regional Headquarters south of the R338, and part of Atlantic Technological University Galway (ATU) on the north side of the road. Young trees are located along the southern boundary of the ATU campus which provides partial filtering. The Gaelscoil and ATU both have

open green spaces between them and the road, while the Garda Station is sited directly adjacent to the road. The visual effects from this receptor group are encompassed in two verified photomontages (VP5 and VP6).

Sensitivity Receptors would be staff, students, and visitors to the three sites. Sensitivity is **low**.

Magnitude During construction, machinery and the works will be visible from these receptors. Several trees will be removed to make way for the works, however replanting will occur within the ATU boundary and along the proposed grass verge surrounding the new bus stop. Once operational, the visual character will remain that of a road corridor, and the two existing bus stops will have been relocated within the same area. In accordance with the methodology the magnitude of change would be **medium to low** during construction and **negligible** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative to imperceptible** during construction and **imperceptible** during operation.

Co6 (north of R338)

A mortuary and grounds which form part of Merlin Park University Hospital. The existing buildings are set back from the proposed route and are intermittently screened by a line of trees along the boundary with the road. The visual effects from the southeast boundary of this receptor group are encompassed in a verified photomontage (VP9).

Sensitivity Receptors would be staff and visitors to the site. Sensitivity is **low**.

Magnitude The Proposed Development is partially screened from view by the intervening vegetation. The southern line of trees will be replaced by a new planting due to the proposed works**.** In accordance with the methodology the magnitude of change would be **medium to low** during construction and **low** during operation which will be reduced to **negligible** once the replacement planting establishes and matures.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative to imperceptible** during construction and **imperceptible** during operation.

Co7 (south of R338)

A church on the south side of the R338. The church is separated from the Proposed Development by an access road to the adjacent commercial premises, and a wall with a high hedgerow.

Sensitivity Receptors would be people attending the church. Sensitivity is **low**.

Magnitude The Proposed Development is partially filtered from view by the existing hedgerow, meaning views are only available from upstairs windows. During construction, machinery and works will be partially visible from these upstairs windows. Once operational, there will be no change to the existing visual character. In accordance with the methodology the magnitude of change would be **negligible** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

Co8 (north of R338)

Part of the Merlin Park University Hospital campus. The hospital is situated in the Merlin Woodlands and Meadows.

Sensitivity Receptors would be staff, patients, and visitors to the facility. Sensitivity is **low**.

Magnitude The Proposed Development is expected to be entirely screened from view by the intervening vegetation. This section of Merlin Park meadows is commonly utilised by the community, accessible from the car park east of Unit 4. Views from the hospital buildings are not expected to be available. Visibility from the lands south of the building will be densely screened by the existing hedgerow and tree vegetation between the Merlin Park grounds and road. In accordance with the methodology the magnitude of change would be **negligible to neutral** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

Co9 (south of R921)

Castlegar GAA Club contains two GAA pitches and a clubhouse to the east of them. Trees run along the northern side of the receptor, separating it from the road.

Sensitivity Receptors would be members and visitors to the club. Sensitivity is **low**.

Magnitude The Proposed Development will be mostly filtered by the existing dense tree lines and hedgerows. During construction, machinery and the works are expected to be fully screened but may be glimpsed through gaps in the vegetation or during winter when trees are not in leaf. In accordance with the methodology the magnitude of change would be **negligible** during construction and **neutral** during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

16.4.4.3 Commercial Receptors

C1 (80-300m west of Proposed Development)

Commercial buildings on the R338, between the western end of the Proposed Development and the Wellpark Road junction. The businesses include two hotels, a retail park, and a cinema.

Sensitivity Receptors would be staff and customers. Sensitivity is **low**.

Magnitude The buildings in the facility mainly look out over the surrounding streetscape. Most views of the site from the receptors, when available, will be angled and indirect. In accordance with the methodology the magnitude of change would be **negligible** during construction and operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **imperceptible** during both construction and operation.

C2 (north of R338)

Commercial buildings on the R338, including shops and car parking.

Sensitivity Receptors would be staff and visitors to the businesses. Sensitivity is **low**.

Magnitude The area around the businesses is almost entirely composed of hard landscaping, including car parking. The existing R338 is south of the receptor and is partially screened by a small group of trees and a hedge. This planting will be replaced in the same location with similar species. Construction activities will be visible during the construction phase. In accordance with the methodology, the magnitude of change during construction will be **medium to low** and during operation will be **neutral**.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

C3 (south of R338)

A dental practice south of the R338, with a small parking area and low rendered wall surrounding it.

Sensitivity Receptors would be staff and patients. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route, with no filtering provided by vegetation**.** Direct views of the construction works will be available within close proximity. Most trees in the area will be protected and retained, with tree removal and replacement occurring on the far side of the road to the receptor. In accordance with the methodology the magnitude of change will be **medium to low** during construction and **negligibl***e* during operation.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative to imperceptible** during construction and **imperceptible** during operation.

C4 (north of R338)

Connacht Hotel, with a car parking area separated from the R338 by a boundary stone wall, shrub and hedge planting, standalone trees to the south and a line of mature trees to the west.

Sensitivity Receptors would be staff and guests at the hotel. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route, with some filtering provided by vegetation in the parking area**.** Indirect views of the construction works will be available for rooms at the front of the hotel, through existing vegetation. A section of the existing wall will need to be removed during construction works, which will be replaced with a new wall with a finish to match the existing. Additional tree and shrub planting will be provided within the hotel boundary, which will further filter views of the road during operation. In accordance with the methodology the magnitude of change will be **medium** during construction and *low* to **negligible** during operation, with some **positive** impacts from proposed tree planting.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation, with **positive** effects once proposed tree planting takes effect.

C5 (south of R338)

Several businesses and car parking area south of the R338.

Sensitivity Receptors would be staff and customers. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route**.** Direct views of the construction works will be available. Two Lime trees in the car park will be removed to allow for the replacement of the existing retaining wall, to accommodate the Proposed Development. The felled trees will be replaced in a similar location with the same species. In accordance with the methodology the magnitude of change will be **medium** during construction and **low** during operation, reducing to **negligible** over time.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

C6 (north of R338)

Flannery's hotel, with a car parking area and the boundary with R338 composed of a low stone wall, shrub planting, grass, and some groups of mature deciduous trees.

Sensitivity Receptors would be staff and guests at the hotel. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route, with some filtering provided by vegetation in the hotel boundary**.** Views of the construction works will be available for rooms at the front of the hotel, through existing vegetation. A section of the existing wall will be removed during construction works and erected in a new location. Additional tree planting will be provided in the hotel boundary with the road, which will further filter views of the road during operation. In accordance with the methodology the magnitude of change will be **medium** during construction and **low to negligible** during operation, with some **positive** impacts from proposed tree planting.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation, with **positive** effects once proposed tree planting takes effect.

C7 (south of R338)

Several businesses and car parking area south of the R338.

Sensitivity Receptors would be staff and customers. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route**.** Direct views of the construction works will be available. Several trees facing the receptor across the road will be removed, however replacement planting will take place. In accordance with the methodology the magnitude of change will be **medium** during construction and **low** during operation, reducing to **negligible** over time.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

C8 (south of R338)

The Galway Crystal site, which is a large commercial site and car parking area.

Sensitivity Receptors would be staff and customers. Sensitivity is **low**.

Magnitude This receptor faces directly onto the proposed route**.** The existing R338 is located on a higher elevation to the existing receptors. Direct views of the construction works will be available, although slightly angled. The existing trees on the same side of the road will be retained in full. However, several trees facing the receptor across the road will be removed, and replaced following earth works. In accordance with the methodology the magnitude of change will be **medium** during construction and **low** during operation, reducing to **negligible** over time.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, slight, negative** during construction and **imperceptible** during operation.

16.4.4.4 Open Space Receptors

Open spaces in the area include the Merlin Woodlands and Merlin Meadows, green spaces along the R338 and in residential areas along it, and footpaths along the roadside. People walking in the area on footpaths and enjoying the Merlin Meadows and Woodlands sites are receptors. Significant effects are not expected on open spaces beyond 0.5km.

Sensitivity Receptors would be walkers on footpaths and visitors to Merlin Park Meadows. In accordance with the methodology their sensitivity is **medium to high**.

Magnitude The proposals will mostly not be visible once operational or will be similar to the existing road setup. During construction, the Proposed Development would be filtered or screened in many cases, leaving glimpses of the development only. Tree removal in several places, particularly along the R338 as it passes Merlin Meadows and Woodlands, will result in negative impacts. However, additional replanting is proposed

which will reduce this impact over time. In accordance with the methodology the magnitude of change would be **high** during construction, **high** in the immediate vicinity of proposed tree removals, grading out to **negligible** with distance and levels of intervening screening. Once proposed replanting has taken effect, operational impacts will reduce to **low** and **negligible** over time.

Effect In accordance with Table 16-2 and Table 16-5 the visual effect would therefore be **temporary, significant to moderate, negative** during construction, and **short-term, slight, negative** once operational, reducing to **imperceptible** over time as replanting takes effect.

16.4.4.5 Photomontages

Photomontages have been produced to indicate the location and scale of the proposal. See Figure 16.3 in Volume 3 of this EIAR for photomontage sheets and location plan.

As recommended by the GLVIA, the photography for the photomontages was undertaken in November-December, when the deciduous plants were not in leaf and were therefore providing minimum screening to the proposal.

The photomontages are verified and accurately illustrate the Proposed Development in the Operational Phase 5-7 years post completion of construction. They have been included to inform the reader of the impact to the views from specific locations and the scale of the Proposed Development. The assessment considered the photomontages along with the on-site observations.

Photomontage 1: Looking east along the R338, at the western end of the Proposed Development

This photomontage shows the view from west of the Proposed Development, south of the road, within the existing footpath around Lough Atalia, and in proximity to an ecologically sensitive landscape (SAC and SPA). The existing view shows a boundary stone wall in the foreground and background, as well as tree planting. The proposed view shows a small change in the footpath alignment in the background, which does not change the character of the view. The Proposed Development will be **imperceptible** from this location.

The expected visual impact has been assessed as **imperceptible**.

Photomontage 2: Looking east along the R338, south of The Connacht Hotel

This photomontage location includes the view from the receptor group R5, towards the east.

The existing view is from the south of R338, facing northeast towards Connacht Hotel (receptor C4). The existing footpaths are visible in the foreground and background, as well as the road lanes and markings. The stone wall and boundary vegetation for the Connacht Hotel is visible in the background.

The Proposed Development in this location includes the lane reallocation, new bicycle, and bus lanes, along with the new wall and tree planting along the hotel boundary. During construction there will be intrusion of views, but this will be temporary. The proposed view shows the removal of electricity poles from the foreground, and the addition of bicycle and bus lanes in the road corridor. The section of the boundary wall that will be replaced at Connacht Hotel includes the same finish as the existing, and the boundary vegetation in the background enhances the view.

The expected visual impact has been assessed as **imperceptible**, reducing over time as vegetation matures.

Photomontage 3: Glenina Heights, looking southeast

The photomontage location includes the expected view of the Proposed Development from Glenina Heights looking east-southeast (receptor R6). This includes the buffer green area with a line of trees between residential road and R338.

The existing view shows the residential road in the foreground, followed by the grassed isle with a tree line composed of trees of different maturity levels. The R338 road is visible in the background followed by the southern receptors and their low stone boundary wall on other side of road.

The proposed view shows the proposed placement of a cycle track and footpath inside the existing green space, with a reduction in the grassy area. Also shown is the existing and proposed tree planting which will further filter views of the road from the existing houses. New seasonal bulbs on the grass area will also enhance the view.

The expected visual impact has been assessed as **short-term, slight, negative**, improving to **imperceptible** as the proposed tree planting matures. The establishment of new planting will also provide a **positive** impact.

Photomontage 4: Belmont, looking south

The photomontage location includes the view from Belmont looking south. This represents the expected view from receptor group R8.

The existing view shows the estate road in the foreground, and a property boundary wall on the left. The centre of the view shows the existing grassy open space, with some trees in the background. A low stone wall separated this estate from the existing R338 road, screening it from view. Residential and commercial receptors are visible in the background, as are other trees, traffic lights and signage.

The proposed view shows the realignment of the entrance road into Belmont from the R338. This includes a reduction of the grassy area where the road turns towards the east, to access a revised junction. The removal of some trees and a section of the boundary wall in the background opens views to the junction and the road beyond. Other sections of the road will be replaced with a new stone wall to match the existing. New tree planting along the boundaries screens the road from this location. This space will include a change of the road location but will remain in visual character as a green space with an access road.

The expected visual impact has been assessed as **short-term, slight, negative**, improving to **positive** as the proposed tree planting matures.

Photomontage 5: ATU, looking west

The photomontage location shows the expected view of the Proposed Development from the existing Garda Western Regional Headquarters (receptor group Co5), looking west.

The existing view shows the existing R338 in the middle, with the boundary stone wall for the Gaelscoil Dara pitches on the left, and the boundary stone wall for ATU on the right. A bus stop is also visible in the middle ground on the left. The road corridor in this location includes two traffic lanes and one bus lane. Lighting columns are visible on both sides of road.

The proposed view shows the road strategically divided to include bicycle and bus lanes on both sides of the road. The bus stop on the left has also been relocated. The existing boundary wall to Gaelscoil Dara has been relocated to accommodate the widening of the road and new footpath location. The new wall includes the same stone finish as the existing wall. The boundary on the right for ATU has been relocated to accommodate the Proposed Development corridor. The existing Ash trees were removed and new Norway Maple ‘Columnare’ are shown in the same location, in combination with new trees within the ATU boundary. The bus stop on the left is framed by new tree planting on the new grass verges.

The character of the view will change from an existing carriageway with bus stops and boundary walls and vegetation, to a wider carriageway with bus lanes, cycle tracks, bus stops and boundary walls and vegetation.

The expected visual impact has been assessed as **temporary, slight, negative,** improving to **imperceptible** as the proposed tree planting matures on the proposed grass verges and within ATU.

Photomontage 6: Proposed Skerritt Junction from ATU campus

The photomontage location shows the expected view of the proposed Skerritt junction replacement from the existing roundabout at the Ballybane Road and Lurgan Park. The viewpoint is looking southeast from within the ATU grounds (receptor group Co5).

The existing view includes a grassed area, and some semi-mature trees planted within the ATU grounds in the foreground. This area is separated by the adjacent roundabout by a low stone wall. Given the higher elevation of the campus, the centre of the roundabout is the most visible from this location, with the road itself being screened by the low wall. The residential estates are visible in the background, partially screened by the existing tree line at Lurgan Park estate.

The proposed view shows the retention of the ATU boundary elements, with an addition of tree planting, which filters the Proposed Development from view in this location. The multi-stem trees proposed around the new junction are also visible from this location behind the campus boundary wall. The new junction is visible in the middle ground, screened by the new trees.

The expected visual impact has been assessed as **temporary, slight, negative**, improving to **imperceptible** as the proposed tree planting matures.

Photomontage 7: Proposed Skerritt Junction, from Lurgan Park estate

The photomontage location shows the expected view of the Proposed Development from Lurgan Park (residential receptor R11) looking north-west.

The existing view shows a sloped grassed open space with a tree line and boundary stone wall in the middle ground. The Garda Headquarters is visible in the background, filtered by the existing trees. The existing roundabout is not visible from this location.

The proposed view remains unchanged within the Lurgan Park estate. The proposed multi-stem planting is visible behind the boundary wall, which further screens the Proposed Development from view.

The expected visual impact has been assessed as **imperceptible**, improving to **positive** as the proposed tree planting matures.

Photomontage 8: Woodhaven, looking southeast

The photomontage location shows the expected view of the Proposed Development from Woodhaven (receptor group R12) looking southeast.

The existing view shows the local residential road and grassy open space, separated from the road by a high stone wall on the right and a low stone wall with steel railing in the centre. Some shrub vegetation is visible in the centre of the view, which is aligned with the access road into this estate, as well as a hedge and tree planting in the background on the left.

The proposed placement of the Proposed Development will require the removal and rebuild of the boundary wall along the R338, moving it closer to the houses in Woodhaven, as visible in the proposed view. The boundary wall will include the same finish as the existing one. New trees and hedge are shown in the grass section which provides screening to the Proposed Development. Some trees in the background have been removed, with some replanting occurring as part of the development. The character of the view will not change from that of a landscape buffer and stone boundary wall.

The expected visual impact has been assessed as **short-term, slight, negative**, improving to **imperceptible** to **positive** as the proposed tree planting matures.

Photomontage 9: Merlin Park entrance, looking east

The photomontage location shows the expected view of the Proposed Development from the Merlin Park University Hospital entrance (aligned with the boundary of receptor group Co6), looking east along the R338.

The existing view shows the existing R338 and the access road into Merlin Park University Hospital grounds. The existing dense tree line of the Merlin Meadows boundary is visible on the left, separated from the footpath by a low stone wall. The opposite side of the road, on the right, shows residential receptor R13 and the mature conifer tree line and concrete walls. The background shows some existing trees and buildings in the centre of the view.

The proposed view shows the revised Proposed Development corridor with a formal junction at the Merlin Park University Hospital entrance, and the addition of a bus lane and bicycle track on both sides of the road. There is no change to the R13 property boundary; however, there will be some tree removal on the Merlin Meadows side. The low stone wall will be removed in this location and reinstated further east, to ensure the protection of the existing trees. The boundary on the foreground will be a timber rail fence screened by native planting. A verge between the footpath and Merlin Meadows boundary will include several new trees to replace the ones felled.

The expected visual impact has been assessed as **temporary, slight, negative**, during operation, improving to **imperceptible** to as the proposed tree planting matures. The most effects will take place during construction, when the felling of some of the tree line and removal of the existing stone wall will take place, which will be mitigated by design with the inclusion of heavy standard trees within the same alignment. Once planting establishes and matures, the visual impact will be reduced and will improve to **imperceptible** over time.

Photomontage 10: Lios an Uisce

The photomontage location shows the expected view of the Proposed Development from the Lios an Uisce (receptor group R14) junction with the R338, looking northeast towards Merlin Meadows.

The existing view shows the junction at Lios an Uisce with R338. A stone wall covered in ivy and a dense tall tree line is visible at the Merlin Meadows boundary on the other side of the road to the north. The carriageway includes road markings, signage and traffic lights, and light columns on both sides.

The proposed view shows the widening of the road and associated lanes, including bicycle and bus. The middle concrete isle is replaced with markings, and the Merlin Meadows boundary wall has been relocated. The wall is screened by existing native shrub planting within a planted verge between wall and footpath. New trees are proposed Several trees have been removed along this boundary but the woodland itself in this location is retained. The proposed trees are visible along the Merlin Meadows boundary, on the inner and outer side of the stone wall. The proposed visual character is kept as that of a road, with additional active travel paths. The Merlin Meadows boundary vegetation is replanted throughout where tree planting was removed.

The expected visual impact has been assessed as **short-term, slight, negative** due to the changes in the existing vegetation; however, this is improved to **imperceptible** over time, as the proposed planting establishes and matures.

Photomontage 11: Merlin Park, looking south

The photomontage location shows the expected view of the Proposed Development from Merlin Meadows (receptor group Co8) looking south towards the Proposed Development.

The existing view shows the view from the car park adjacent to Unit 4 of the Merlin Park University Hospital. This location is also used as an entry point to the existing field in this view. The view includes a large grassland field, with a dense tree line and hedgerow in the background.

The proposed view shows the overall retention of the existing dense hedgerow and tree line. Some areas to the right and left show tree reduction. These locations include the replanting of trees felled, which fill the gaps created during construction and will provide screening over time. The character of the view will not change from a field with mature hedgerow and tree lines in the background.

The expected visual impact has been assessed as **imperceptible**.

Photomontage 12: Junction between R338 and R921

The photomontage location shows the expected view of the Proposed Development from southwest of the R338/R921 junction, looking northeast.

The existing view shows the road corridor adjacent to the R338/R921 junction and associated signage and traffic lights. The Merlin Meadows boundary includes a dense line of deciduous trees and hedgerow on the left. Views are mainly restricted within the visual corridor created by the trees lining the carriageway. Some filtered angled views of the higher grounds within the Merlin Meadows are allowed. The Rosshill Park Woods is visible in the background on the right.

The new footpath and bicycle lane encroaching onto the Merlin Meadows boundary, require the removal of segment of the existing tree line immediately west of the junction. This has been replaced by a new native hedgerow in front of the relocated boundary wall. Mid-range views to the inside of the Merlin Meadows Park are allowed. At the east of the junction, the footpath and cycle lane are redirected to the north of the existing tree line, to ensure the protection of the existing vegetation. New tree and shrub planting is proposed to replicate the visual boundary previously existing in the location.

Two new trees are shown on the southern side of the road, in front of the residential estate west of the junction.

The expected visual impact has been assessed as **short-term, slight, negative**. This will be reduced once the vegetation south of the new boundary wall alignment matures.

Photomontage 13: Eastern end of Proposed Development

The photomontage location shows the expected view of the eastern end of the Proposed Development from Durabhán looking northwest.

The existing view shows the existing junction, with the R338 road in this location showing a bus lane on the left, a middle concrete isle, and a bus stop on the right. There are some vertical elements in this location such as signage, and lighting columns. Each side of the road includes dense vegetation, with a tree line shown on the left and a hedgerow/shrub planting on the right. The background also includes tree lines along the Merlin Meadows southern boundary.

The proposed view shows the vegetation on the left side as fully retained, and the new verge is planted with grass and seasonal bulbs. There is a new bicycle track and footpath on the right, north of the road corridor. The junction also comprises new bicycle lanes. The vegetation loss on the right side of the view has been replaced by a new native hedgerow planting, which screens the new stone wall alignment from view. The rationalisation of the proposed vertical signage slightly declutters the view towards the trees in the mid-distance which remain unaffected by the Proposed Development.

The expected visual impact has been assessed as **short-term, slight, negative** which is expected to improve to **imperceptible** to **positive** over time as the proposed vegetation reaches maturity.

16.5 Mitigation and Monitoring Measures

This assessment identified one potential significant negative impact, as shown in Table 16-6 below.

Table 16-6 Summary of Significant Visual Effects

Receptor	Sensitivity	Magnitude		Visual Effects during Construction	Visual Effects during Operation	
		Construction	Operation		Year 1 to 10	> Year 10
Open Space Receptors						
Open Space Receptors	Medium to High	High	Low to Negligible	Temporary, **Significant** to Moderate, Negative	Short-term, slight, negative	Imperceptible

The Merlin Meadows boundary is of high amenity value and its retention was considered in the design process. Where the relocation of the existing boundary wall affects the existing boundary vegetation at Merlin Meadows, replacement planting has been proposed to mitigate visual effects by design. Some locations, such as the entrance to Merlin Park University Hospital, includes the replacement of the existing wall into a timber fence to ensure the retention and protection of the existing trees, The fence will be screened by proposed native shrub planting. Where there is the requirement for removal of existing mature and semi-mature trees, views are expected to be altered temporarily for the duration of construction stage and for a period following construction.

The proposed landscape design includes for additional mitigating planting. This is expected to reduce the impact during operation into **short-term, slight, negative**, improving to **imperceptible** as the proposed vegetation matures.

The proposed planting has allowed for species similar to those on site and to those removed and is specified to be planted at an advanced heavy-standard size. Drawing no. BCGDR-BTL-ENV_LA-XX-DR-CE-00006 includes the landscape proposals for the Merlin Park boundary at the R338 entrance. Table 16-7 below includes a summary of the proposed tree planting and specification at the Merlin Park entrance (refer to Planting Schedule, drawing no. BCGDR-BTL-ENV_LA-XX-DR-CE-00012).

Table 16-7 Proposed Tree Planting at Merlin Park entrance

Proposed Trees	
Species	**Girth / Form / Height**
Acer pseudoplatanus	20-25cm (Advanced Heavy Standard), /RB /min 5m in height
Aesculus hippocastanum	20-25cm (Advanced Heavy Standard), /RB /min 5m in height
Betula pendula	18-20cm (Advanced Heavy Standard), /RB /min 4.5m in height
Fagus sylvatica	20-25cm (Advanced Heavy Standard), /RB /min 5m in height
Pinus sylvestris	20-25cm (Advanced Heavy Standard), /RB or CG /min 5m in height
Prunus padus	18-20cm (Advanced Heavy Standard), /RB /min 4.5m in height
Quercus petraea	18-20cm (Advanced Heavy Standard), /RB /min 4.5m in height
Ulmus glabra	18-20cm (Advanced Heavy Standard), /RB /min 4.5m in height

It is recommended for the proposed trees to be planted along the Merlin Park boundary immediately after the felling of existing trees and in advance of construction works. This provides an immediate replacement between existing and proposed visual amenity and reduces the duration of impact. This should be carried out in any location along the Merlin Park boundary where changes in levels are not required.

The newly planted trees should be monitored by the appointed landscape contractor for their successful establishment. A 'no-dig' detail, as advised by the Arborist and Landscape Architect, should be implemented to all existing trees in proximity to new footpaths, to ensure the protection of the existing root system. Standard horticultural operations and other operations mentioned in the planting schedule must be adhered to.

No other significant negative impacts are expected from the Proposed Development.

16.6 Residual Impacts

16.6.1 Construction Phase

Following the implementation of the proposed mitigation the visual impact for the Merlin Park boundary will be as shown below in Table 16-8.

Table 16-8 Construction Phase Residual Effects

Receptor	Sensitivity	Magnitude		Visual Effects during Construction	Visual Effects during Operation	
		Construction	Operation		Year 1 to 10	> Year 10
Open Space Receptors						
Open Space Receptors	Medium to High	Medium to Low	Low to Negligible	Temporary, Moderate to Slight, Negative	Short-term, slight, negative	Imperceptible

By mitigating significant effects by planting advanced heavy-standard trees in advance of construction, the densely vegetated boundary at Merlin Meadows will remain as such, with a **Medium to Low** magnitude of change occurring during felling and replanting works. Considering the reduction of the duration of the works between removal and replanting, the visual effects will be reduced to **temporary, moderate to slight, negative** effects, which will improve to **imperceptible** over time.

For most of the other receptors, residual impacts during construction will be **temporary, slight, negative** to **imperceptible**. Construction impacts will be highest where receptors are closest to the proposed route, or where receptors look directly out over the road. However, these impacts will be typical of road works and road maintenance and will not be significant.

16.6.2 Operational Phase

Following the implementation of the mitigation of the significant impacts arising from the tree removal at the Merlin Park Meadows, visual impacts during the operational phase are also further reduced. Residual impacts are expected to be as shown in Table 16-5. Most residual impacts once the Proposed Development is operational will be **imperceptible** and will improve over time as the proposed tree planting along the route matures.

16.7 References

Environmental Protection Agency. *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.* 2022.

Transport Infrastructure Ireland. *Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects – Overarching Technical Document (PE-ENV-01101).* 2020.

Transport Infrastructure Ireland. *Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads - Standard (PE-ENV-01102).* 2020.

Landscape Institute and Institute of Environmental Management and Assessment. *Guidelines for Landscape and Visual Impact Assessment (GLVIA), 3rd ed.* 2013. Notes and Clarifications, August 2024.

Landscape Institute. *Technical Information Note 05/2017 (Revised 2018) on Townscape Character Assessment (TCA).* 2018.

Fáilte Ireland. *Guidelines for Treatment of Tourism in an Environmental Impact Statement.* 2011.

Landscape Institute. *Visual Representation of Development Proposals, Technical Guidance Note 06/19.* 2019 (currently under review).

Directives

Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, as amended, and Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the EIA Directive)

Planning and Development Act 2000, as amended.

Planning and Development Regulations 2001, as amended.

European Landscape Convention 2000, as amended.

Galway City Council Development Plan (GCDP), 2023-2029, Galway City Council (2023)

Galway City Biodiversity Action Plan 2014-24 (the plan in force at date of writing)

Galway Transport Strategy, Galway City Council (2016)

Galway Public Realm Strategy, Galway City Council (2019)

Department of Arts, Heritage and the Gaeltacht, Landscape Strategy for Ireland 2015-2025 (NLS).