The background is a vibrant yellow. It is decorated with several abstract shapes: a large teal teardrop shape in the upper right, a dark blue curved shape in the lower left, and various circular and semi-circular elements in teal and dark blue. Some of these shapes contain white circles. The overall style is modern and graphic.

Chapter 17
Landscape
(Townscape)
& Visual

Contents

17. Landscape (Townscape) & Visual	1
17.1 Introduction	1
17.2 Methodology	1
17.2.1 Study Area	1
17.2.2 Relevant Legislation, Policy and Guidelines	2
17.2.3 Data Collection and Collation	3
17.2.4 Appraisal Method for the Assessment of Impacts	4
17.3 Baseline Environment.....	13
17.3.1 City Context	13
17.3.2 Overview of Route of the Proposed Scheme	13
17.3.3 Landscape, Townscape and Visual Planning Policy	14
17.3.4 Townscape / Streetscape Character	15
17.4 Potential Impacts	17
17.4.1 Characteristics of the Proposed Scheme	17
17.4.2 'Do Nothing' Scenario.....	22
17.4.3 Construction Phase	22
17.4.4 Operational Phase	28
17.5 Mitigation and Monitoring Measures	34
17.5.1 Construction Phase	34
17.5.2 Operational Phase	37
17.6 Residual Impacts	42
17.6.1 Construction Phase	42
17.6.2 Operational Phase	43
17.7 Conclusion	44
17.8 References	46

17. Landscape (Townscape) & Visual

17.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Kimmage to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme).

During the Construction Phase, the potential landscape (townscape) and visual impacts associated with the development of the Proposed Scheme have been assessed. This included streetscape disturbance, impacts on property boundaries, removal of trees and vegetation, traffic issues and the general visual intrusion of construction activities due to utility diversions, road resurfacing and road realignments.

During the Operational Phase, the potential landscape (townscape) and visual impacts associated with changes to the physical layout of the street, alteration of views and the visual character and changes to the urban realm have been assessed.

The assessment has been carried out according to best practice and guidelines relating to landscape (townscape) and visual assessment, and in the context of similar large-scale infrastructural projects.

The aim of the Proposed Scheme when in operation is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The objectives of the Proposed Scheme are described in Chapter 1 (Introduction). The Proposed Scheme, which is described in Chapter 4 (Proposed Scheme Description), has been designed to meet these objectives. The specific objective applicable to this assessment is:

- Ensure that the urban realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and practicable.

The design of the Proposed Scheme 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 Scheme 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.

17.2 Methodology

17.2.1 Study Area

The Proposed Scheme will be approximately 3.7km in length and will commence on R817 Kimmage Road Lower at the junction with the R818 on Terenure Road West and Kimmage Road West, and R817 Fortfield Road. The Proposed Scheme will continue along R817 Kimmage Road Lower towards the City Centre, via the R137 on Harold's Cross Road, Clanbrassil Street Upper and Lower and New Street South. Priority for buses will be provided along the entire route, consisting primarily of dedicated bus lanes in both directions where feasible, with alternative measures proposed at particularly constrained locations such as much of R817 Kimmage Road Lower, Harold's Cross Park West and short sections of R137 Clanbrassil Street Upper and Lower in alternate directions. A complementary cycle route is also proposed to the west of the Proposed Scheme via quiet streets at the southern end of the Proposed Scheme.

Moreover, pedestrian facilities will be upgraded, and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrian experience. Examples of this include the proposed works at R817 Kimmage Road Lower and Sundrive Road, and at St. Patrick's Court.

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

The primary study area is a boundary-to-boundary road / street corridor along the Proposed Scheme, which incorporates the immediately adjoining landscapes, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape / townscape and visual planning considerations. This study area also extends, where required, to incorporate wider viewpoints to the Proposed Scheme (e.g. views along the Grand Canal).

17.2.2 Relevant Legislation, Policy and Guidelines

This assessment has been carried out with reference to the following legislation, policy and guidelines:

17.2.2.1 Legislation

- 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 (hereafter referred to as the Environmental Impact Assessment (EIA) Directive);
- Planning and Development Act 2000, as amended;
- Planning and Development Regulations 2001, as amended; and
- European Landscape Convention 2000.

17.2.2.2 Policy

- South Dublin Development Plan 2022–2028 (SDCC 2022);
- Dublin City Development Plan 2022-2028 (DCC 2022);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- Department of Transport (DoT) National Cycle Policy Framework (DoT 2009); and
- National Transport Authority (NTA) Greater Dublin Area Cycle Network Plan (NTA 2013).

17.2.2.3 Guidelines

- Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022);
- 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);
- Landscape Institute Technical Information Note 05/2017 (Revised 2018) on Townscape Character Assessment (hereafter referred to as the TCA) (Landscape Institute 2018);
- Department of Housing, Planning and Local Government (DHPLG) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (hereafter referred to as the GEIA) (DHPLG 2018); and
- Landscape Institute Technical Guidance Note 06/2019 on Visual Representation of Development Proposals (hereafter referred to as the VRDP) (Landscape Institute 2019).

While the EPA Guidelines (EPA 2022) provide a general methodology, impact ratings and assessment structure applicable across all environmental assessments, the GLVIA (Landscape Institute and IEMA 2013) provides specific guidance for landscape and visual impact assessments. The TCA (Landscape Institute 2018) is a resource for the application of landscape character assessment to townscapes. Therefore, in this Chapter, a combination of the approaches outlined in the EPA Guidelines (EPA 2022) and in the GLVIA, supported by the TCA and the professional experience and expertise of the assessor, is utilised in the landscape and visual assessment.

17.2.2.4 Key Definitions

The following key definitions are relevant to the methodology for the landscape and visual impact assessment:

Landscape: *'means an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors'* (Council of Europe 2000).

Townscape: *'the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces'* (Landscape Institute and IEMA 2013). Different combinations and spatial distribution of these elements create variations in townscape character. In this assessment 'Townscape' is used to describe built-up areas of a medium to large extents, generally equivalent to neighbourhood scale or larger.

Streetscape: *'The term 'streetscape' refers to the design quality of the street and its visual effect, particularly how the paved area (carriageway and footway) is laid out and treated.'* (CABE and ODPW 2002). Streetscape *'is a term used to describe the natural and built fabric of the street'* (Torbay Council 2004). Streetscape represents a smaller scale pattern or combination of elements and features than 'townscape' In this assessment 'streetscape' is used to define built up areas of largely public space within the confines of a street or road corridor.

Landscape Character Assessment: *'is the process of identifying and describing variation in the character of the landscape. It seeks to identify and explain the unique combination of elements and features (characteristics) that make landscapes distinctive'* (Natural England 2014).

Landscape Character Types: *'are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern'* (Natural England 2014).

Landscape Character Areas: *are single unique areas which are the discrete geographical areas of a particular landscape type. Each will have its own individual character and identity, even though it shares the same generic characteristics with other areas of the same type'* (Natural England 2014).

Landscape and Visual Impact Assessment: *'is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right, and on people's views and visual amenity'* (Landscape Institute and IEMA 2013).

Townscape Impact Assessment: identifies the changes to townscape character which would result from the Proposed Scheme and assesses the significance of those effects on the townscape as a resource (Landscape Institute 2018).

Visual Impact Assessment: is concerned with changes that arise in the composition of available views and the overall effect on the visual amenity of an area (Landscape Institute and IEMA 2013).

Landscape *impact* vs. landscape *effect*: *'Impact'* is defined as the action being taken, whilst *'effect'* is defined as result (change or changes) of that action (e.g. the 'impact' of the additional green space treatment where a roundabout has been converted to a signalised junction has a significant positive 'effect' on the character of the streetscape).

17.2.3 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, along the corridor of the Proposed Scheme, together with the selection and preparation of verified Photomontages of the Proposed Scheme in Figure 17.2 in Volume 3 of this EIAR.

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

- South Dublin Development Plan 2022–2028 (SDCC 2022);
- Dublin City Development Plan 2022-2028 (DCC 2022);
- Dublin City Tree Strategy 2016 - 2020 (DCC 2016b);

- Dublin City Parks Strategy 2019 - 2022 (DCC 2019);
- Historical and current mapping and aerial photography (e.g. Ordnance Survey Ireland (OSI), Google Earth, Google Maps);
- Mapping of the Proposed Scheme;
- General Arrangement and Landscape Design Drawings (refer to Volume 3 of this EIAR), including chainages referenced throughout this Chapter;
- Other reports and documents relating to the baseline environment, including other chapters of this EIAR, and in particular, Chapter 4 (Proposed Scheme Description), Chapter 5 (Construction), Chapter 12 (Biodiversity), Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage)
- Review of baseline information, including road infrastructure audits, arborist survey and impact assessment reports and drone survey imagery; and
- Review of contextual information relating to the development of the Proposed Scheme - Urban Realm Concept Designs (NTA 2020).

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

- Full walkover surveys of the route of the Proposed Scheme;
- Further field surveys to verify conditions at specific areas along the route of the Proposed Scheme; and
- Selection of locations for verified Photomontages of the Proposed Scheme.

The information collected during the desk study and field surveys has been collated and presented in Section 17.3 of this Chapter.

The publicly available datasets listed in Table 17.1 have been consulted in the analysis of the baseline environment. These were accessed in 2020 / 2021.

Table 17.1: Publicly Available Datasets (Accessed 2020 / 2021)

Source	Name	Description
Ordnance Survey Ireland (OSI)	Geohive	Current and historical mapping
OSI	Geohive	Historical aerial imagery
Google	Google Maps	Mapping and aerial imagery
Microsoft	Bing	Mapping and aerial imagery
EPA	EPA Maps	Environmental datasets
National Parks and Wildlife Service (NPWS)	NPWS Maps and Data	Datasets provides information on national parks, protected sites and nature reserves
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)

17.2.4 Appraisal Method for the Assessment of Impacts

As noted under Section 17.2.2.3, in preparing the landscape (townscape) and visual impact assessment this Chapter utilises a combination of approaches as outlined in the EPA Guidelines (EPA 2022) and in the GLVIA (Landscape Institute and IEMA 2013), supported by the TCA (Landscape Institute 2018) and the professional experience and expertise of the author.

The EPA Guidelines provide a generalised methodology suitable for guiding the range of environmental assessments that are carried out under the EIA process, whereas the GLVIA provides guidance that is specifically relevant to landscape and visual impact assessment. The GLVIA have been used in this assessment to inform the methodology in direct relation to assessing landscape and visual sensitivity,

magnitude of change and effects. In order to provide an assessment of effects which is comparable to other types of environmental assessment it is necessary to use the significance criteria specified in the EPA Guidelines. A matrix showing the relationship between sensitivity, magnitude and effect significance has been adapted from Figure 3.5 in the EPA Guidelines and is shown in Diagram 17.1. This matrix differs from the EPA Guidelines in that a 'very high' level of both magnitude and sensitivity has been provided, the intention of which is to create an extra degree of definition to help distinguish between impacts that would lead to either Significant, Very Significant and Profound levels of effect. In addition to predicting the significance of the impacts, EIA methodology (EPA 2022) requires that the quality of the impacts be classified as positive / beneficial, neutral, or negative / adverse.

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description). The landscape (townscape) and visual impact assessment has assessed the Proposed Scheme including the provision of the landscape design and urban realms elements.

17.2.4.1 Landscape, Townscape and Streetscape

Existing guidance requires that effects on townscape be assessed separately from the effects on views / visual amenity, although it is accepted that the two subjects are naturally connected.

Landscape for the purposes of the Directive 2014/52/EU and as defined in Section 17.2.2.4, is an overarching term relating to both rural and built-up (urban) areas. However, use of the term townscape as defined in Section 17.2.2.4, is considered appropriate where it relates to urban or built-up landscapes, such as those relevant to the baseline environment of the Proposed Scheme. For the purposes of this assessment 'townscape' will be used to refer to medium to large scale areas of built-up landscapes, generally equivalent to neighbourhood scale or larger.

In addition, the Proposed Scheme is a corridor-based scheme utilising primarily existing roads or streets within the existing developed urban or built environment. In this regard terms 'street' or 'streetscape', as defined in Section 17.2.2.4 and below are also important components of the baseline environment for the Proposed Scheme.

'Street' is defined as:

'a multi-functional space, providing enclosure and activity as well as movement. Its main functions are:

- *circulation, for vehicles and pedestrians*
- *access to buildings, and the provision of light and ventilation for buildings*
- *a route for utilities*
- *storage space, especially for vehicles*
- *public space for human interaction and sociability; everything from parades and protests to chance encounters*

Virtually all streets in urban areas perform all of these functions, and often the balance between them will vary along the length of the street. Ideally, all these facets of the street can successfully coexist, but all too often it is one function (especially the movement of vehicles) which has been allowed to dominate. Getting the balance right at the right place is critical because streets are the most important part of the public realm, and thus are fundamental to how we live together in towns and cities.' (CABE and ODPM 2002)

'Streetscape' is defined as:

'The term 'streetscape' refers to the design quality of the street and its visual effect, particularly how the paved area (carriageway and footway) is laid out and treated.' (CABE and ODPM 2002).

'[Streetscape] is a term used to describe the natural and built fabric of the street' (Torrey Council 2004).

'The main indicators of quality, which are the test of successful streetscape, can be listed under six headings:

- *Comfortable and safe for pedestrians and the disabled*
- *A street designed to accommodate all sorts of functions, not dominated by any one function*
- *Visually simple, and free of clutter. Regardless of whether a street is a straightforward or complex space, what matters is the simplicity and clarity of its paving, street furniture, lighting and landscaping*
- *Well cared for, and where utilities or ‘extraneous’ advertising are subordinate to all other street functions*
- *Sympathetic to local character and activity context, in design and detail; and*
- *Making appropriate ordered provision for access, deliveries and storage of vehicles (CABE and ODPM 2002).*

The importance of soft landscaping in the streetscape is emphasised in the Manual for Streets (DOT, 2007):

‘Planting adds value; it helps to soften the urban street-scene, creates visual and sensory interest, and improves the air quality and microclimate. It can also provide habitats for wildlife. The aromatic qualities or contrasting colours and textures of foliage are of value to all, and can assist the navigation of those with visual impairment. Flowers and fruit trees add seasonal variety. Planting can provide shade, shelter, privacy, spatial containment and separation. It can also be used to create buffer or security zones, visual barriers, or landmarks or gateway features. Vegetation can be used to limit forward visibility to help reduce vehicle speeds.’

As defined in Section 17.2.2.4 streetscape’ represents a smaller-scale pattern of elements and features compared to ‘townscape’ and is used to define built-up areas of largely public space within the confines of a street or road corridor. Therefore, this assessment refers to ‘townscape’ in describing the wider urban or built-up landscape, and to streetscape in describing the immediate landscape corridor of the Proposed Scheme.

17.2.4.2 Methodology for Assessment of Townscape Effects

Assessment of potential townscape effects involves:

- Classifying the sensitivity of the baseline environment of the townscape resource; and
- Describing and classifying the magnitude of change in the townscape resulting from the Proposed Scheme.

These factors are combined to provide a classification of significance of effects of the Proposed Scheme.

17.2.4.2.1 Methodology for Assessment of Townscape Sensitivity

The sensitivity of the townscape is a function of its existing land use, patterns and scale, enclosure, visual characteristics and value. The nature and scale of the Proposed Scheme is taken into account, as are trends of change i.e. ongoing changes in the environment and the relevant policy framework. Five categories are used to classify sensitivity, as set out in Table 17.2.

Table 17.2: Townscape Sensitivity

Sensitivity	Description
Very High	Areas where the townscape exhibits very strong, positive character with valued elements, features and characteristics that combine to give an experience of unity, richness and harmony. The townscape character is such that its capacity to accommodate change is very low. These attributes are recognised in policy or designations as being of national or international value and the principal management objective for the area is protection of the existing character from change.
High	Areas where the townscape exhibits strong, positive character with valued elements, features and characteristics. The townscape character is such that it has limited / low capacity to accommodate change. These attributes are recognised in policy or designations as being of national, regional or county value and the principal management objective for the area is the conservation of existing character.
Medium	Areas where the townscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong, or has evidence of alteration, degradation or erosion of elements and characteristics. The townscape character is such that there is some capacity for change. These areas may be recognised in policy at local or

Sensitivity	Description
	county level and the principal management objective may be to consolidate townscape character or facilitate appropriate, necessary change.
Low	Areas where the townscape has few valued elements, features or characteristics and the character is weak. The character is such that it has capacity for change; where development would make no significant change or would make a positive change. Such townscapes are generally unrecognised in policy and the principal management objective may be to facilitate change through development, repair, restoration or enhancement.
Negligible	Areas where the townscape exhibits negative character, with no valued elements, features or characteristics. The character is such that its capacity to accommodate change is high; where development would make no significant change or would make a positive change. Such townscapes include derelict industrial lands, as well as sites or areas that are designated for a particular type of development. The principal management objective for the area is to facilitate change in the townscape through development, repair or restoration.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.2.2 Methodology for Assessment of Magnitude of Change in the Townscape

Magnitude of change is a factor of the scale, extent and degree of change imposed on the townscape by the Proposed Scheme, with reference to its key elements, features and characteristics and the affected surrounding character areas (collectively termed 'townscape receptors'). Five categories are used to classify magnitude of change, as set out in Table 17.3.

Table 17.3: Magnitude of Townscape Change

Magnitude of Change	Description
Very High	Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the townscape, and / or introduction of large elements considered totally uncharacteristic in the context. Such development may result in a fundamental change in the character of the townscape and / or streetscape.
High	Change that is moderate to large in extent, resulting in major alteration to key elements, features or characteristics of the townscape, and / or introduction of large elements considered uncharacteristic in the context. Such development may result in a notable change to the character of the townscape and / or streetscape
Medium	Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the townscape, and / or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development may result in a moderate change to the character of the townscape and / or streetscape.
Low	Change that is moderate or limited in scale, resulting in minor alteration to key elements, features or characteristics of the townscape, and / or introduction of elements that are not uncharacteristic in the context. Such development results in minor change to the character of the townscape and / or streetscape.
Negligible	Change that is limited in scale, resulting in no alteration to key elements features or characteristics of the townscape, and / or introduction of elements that are characteristic of the context. Such development results in no change to the townscape character.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.2.3 Methodology for Assessment of Significance of Effects

To classify the significance of effects, the magnitude of change is measured against the sensitivity of the townscape based on Figure 3.5 in the EPA Guidelines (EPA 2022), as adapted and presented in Diagram 17.1. Details of the adaption from the guidelines is covered in Section 17.2.4.

Determining the significance of effects that are rational and justifiable is also based on the professional judgement, expertise and experience of the author.

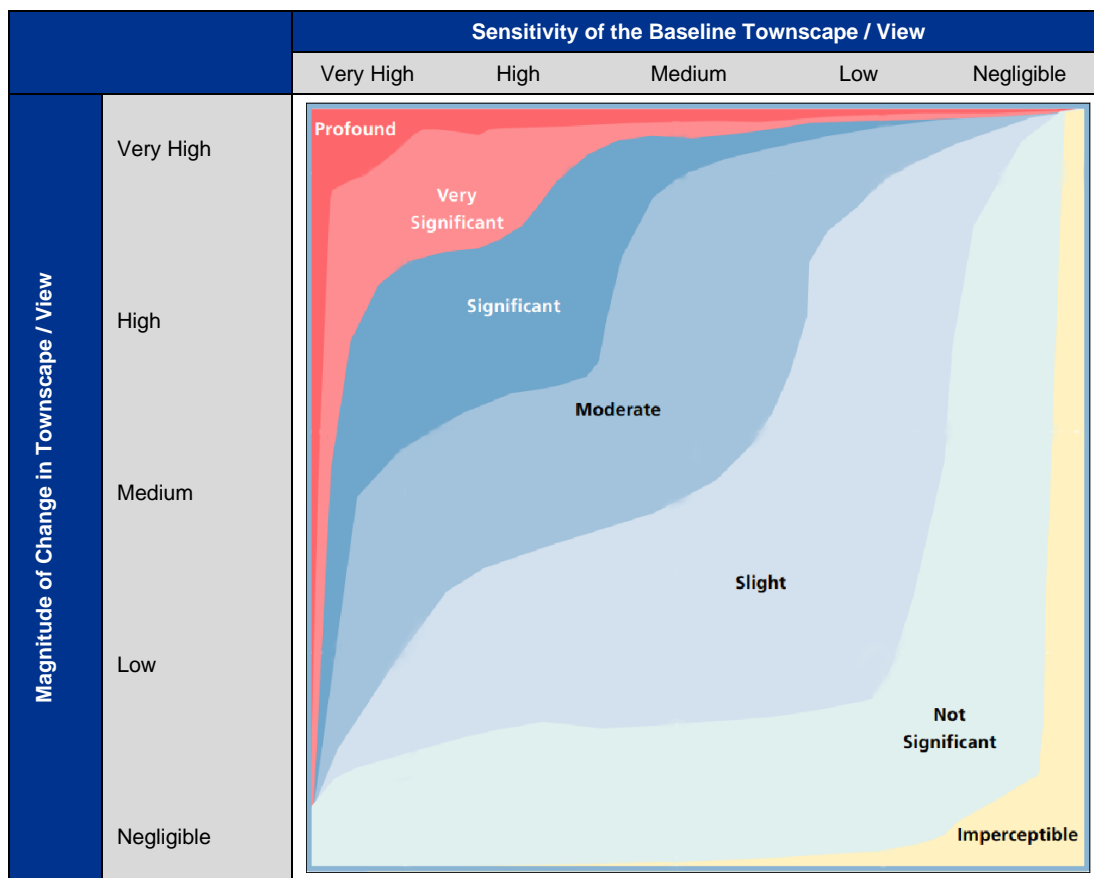


Diagram 17.1: Guide to the Classification of Significance of Townscape and Visual Effects; as adapted from EPA Guidelines (EPA 2022)

17.2.4.2.4 Quality, Duration and Frequency of Landscape and Visual Effects

Consideration of quality (i.e. positive, neutral, negative), duration (i.e. temporary (lasting up to 1 year); short-term (lasting 1 to 7 years); medium-term (lasting 7 to 15 years); long-term (lasting 15 to 60 years); or permanent (lasting over 60 years)) and the frequency of effects, is as described in Table 3.3 of the EPA Guidelines (EPA 2022).

17.2.4.2.5 Geographical Extents of Townscape and Visual Effects

The geographical area over which the landscape effects will be felt must also be considered. This is distinct from the size or scale of the effect – there may for example be moderate loss of landscape elements over a large geographical area, or a major addition affecting a very localised area. Where townscape or visual receptors cover a large geographical area, it is often necessary to describe the local effect and the overall effect separately. The terms 'local', 'locally' or 'localised' are used within this assessment to denote effects which occur within the relatively small area or section of a receptor in proximity to the Proposed Scheme. The term 'overall' is used to describe the effect on the receptor as a whole.

17.2.4.2.6 Significance and Quality of Landscape and Visual Effects

An effect assessed as being significant may also be either positive, neutral or negative. For example, the introduction of a new structure may represent a significant change with an associated significant effect. However, the significant effect may be: positive, in that the structure enhances the landscape / townscape or visual quality of the receiving environment; negative, in that it detracts from the receiving environment; or neutral, in that despite the significant change, any negative and positive aspects are balanced or cancelled. Significant neutral effects can occur over time, where a development or structure, which initially created a

significant change in the receiving environment, is increasingly accepted as part of the receiving landscape / townscape / view.

17.2.4.3 Views and Visual Amenity

As noted in Section 17.2.2.4, visual impact assessment is concerned with changes that arise in the composition of available views and the overall effect on the visual amenity of an area. This includes effects on protected and designated views as well as on the typical range of views from within the urban realm and private areas or properties. As such, the primary study area is a boundary-to-boundary road / street corridor along the Proposed Scheme, which takes in immediately adjoining landscapes, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape / townscape and visual planning considerations.

17.2.4.4 Methodology for Assessment of Visual Effects

Assessment of visual effects involves identifying a number of key / representative viewpoints in the baseline environment of the Proposed Scheme, and for each one of these:

- Classifying the viewpoint sensitivity; and
- Classifying the magnitude of change in the view.

These factors are combined to provide a classification of significance of the effects of the Proposed Scheme on each viewpoint.

17.2.4.4.1 Methodology for Assessment of Sensitivity of the Viewpoint / Visual Receptor.

Viewpoint sensitivity is a function of two main factors:

- Susceptibility of the visual receptor to change. The duration and frequency of exposure informs the susceptibility; a greater length of time or more frequent experience of views results in a receptor being more susceptible to changes in views. The level of awareness of people to views also affects susceptibility; people engaged in activities reliant on appreciation of views are of higher susceptibility than those focused on other activities. Visual receptors most susceptible to change include residents at home, people engaged in outdoor recreation focused on the landscape (e.g. park / walk users), or where the appreciation of views over the landscape are a key factor contributing to the quality of the activity. Visual receptors less susceptible to change include travellers on road, rail and other transport routes (unless on recognised scenic routes), people engaged in outdoor recreation where the surrounding landscape does not influence the experience, and people in their place of work or shopping. Visual receptors of moderate susceptibility include users of the streetscape such as non-recreational pedestrians and cyclists whose activity is not dependant on appreciation of the views but may have a greater awareness of the townscape by virtue of their slower speed and people engaged in outdoor recreation where the surrounding landscape does not influence the experience, and people in their place of work or shopping. Visual receptors least susceptible to change include travellers on road, rail and other transport routes generally travelling at speed (unless on recognised scenic routes); and
- Value attached to the view. This depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations which indicate a shared social value (e.g. scenic routes, protected views), or the view or setting being associated with a heritage asset, visitor attraction, place of congregation, or having some other cultural status.

Five categories are used to classify a viewpoint's sensitivity, as set out in Table 17.4.

Table 17.4: Categories of Viewpoint/Visual Receptor Sensitivity

Sensitivity	Description
Very High	Views or viewpoints (views towards or from a townscape feature or area) that are recognised in policy or otherwise designated as being of national value. Designed views which may be from or be directed towards a recognised heritage asset or other important designated feature, where a key management objective for the view is its protection from change. Visual receptors using national trails or nationally recognised public rights of way. Views recognised in art or literature may also be of very high value. The principal management objective for the view is its protection from changes which would affect the valued or designated features of the view.

Sensitivity	Description
High	Viewpoints or views that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (e.g. views from houses or outdoor recreation amenities focused on the townscape). The composition, character and quality of the view may be such that it is likely to have high value for people experiencing it and is consequently vulnerable to changes which may lower this value. The principal management objective for the view is its protection from change that reduces visual amenity.
Medium	Views that may not have features or characteristics that are of particular value, but have no major detracting elements, and which thus provide some visual amenity. These views may have capacity for appropriate change. Visual receptors may include people with a moderate susceptibility to change engaged in outdoor sports which do not rely on an appreciation of the surrounding landscape / townscape, or road users on minor routes passing through areas of valued townscape character. The principal management objective is to facilitate change to the composition that does not detract from visual amenity, or which enhances it.
Low	Views that have no features of appreciable value, and / or where the composition and character are such that there is little appreciable value in the view. Visual receptors include people involved in activities with no particular focus on the landscape. Visual receptors may include fast moving users of roads / rail through landscapes / townscapes which may or may not contain valued elements or characteristics. For such views the principal management objective is to facilitate change that does not detract from visual amenity or enhances it.
Negligible	Views that have no features of value or where the composition and character may be unsightly (e.g. in derelict landscapes). For such views the principal management objective is to facilitate change that repairs, restores or enhances visual amenity.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.4.2 Methodology for Assessment of Magnitude of change in the View / Viewpoint.

Classification of the magnitude of change takes into account the size or scale of the intrusion of the Proposed Scheme into the view (relative to the other elements and features in the composition (i.e. its relative visual dominance); the degree to which it contrasts or integrates with the other elements and the general character of the view; and the way in which the change will be experienced (e.g. in full view, partial or peripheral view, or in glimpses). It also takes into account the geographical extent of the change, as well as the duration and reversibility of the visual effects. Five categories are used to classify magnitude of visual change to a view, as set out Table 17.5.

Table 17.5: Categories of Magnitude of Visual Change

Magnitude	Description
Very High	Full or extensive intrusion of the development in the view, or partial intrusion that obstructs valued features or characteristics, or introduction of elements that are completely out of character in the context, to the extent that the development becomes dominant in the composition and defines the character of the view and the visual amenity.
High	Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.
Medium	Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity.
Low	Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.
Negligible	Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.

17.2.4.4.3 Methodology for Assessment of Significance of Visual Effects

As with townscape effects, classification of the significance of visual effects, involves measurement between the magnitude of change to the view and the sensitivity of the view / viewpoint, as set out in Diagram 17.1.

17.2.4.5 Quality of Effects

In addition to predicting the significance of the effects, EIA methodology (EPA 2022) requires that the quality of the effects be classified as positive / beneficial, neutral, or negative / adverse. For townscape to a degree, but particularly for visual effects, this will involve a degree of subjectivity. This is because townscape and visual amenity are perceived by people and are therefore subject to variations in the attitude and values, including aesthetic preferences of the receptor. One person's attitude to the Proposed Scheme may differ from another person's, and thus their response to the effects on the townscape or a view may vary.

Additionally, in certain situations there might be policy encouraging a particular development in an area, in which case the policy is effectively prescribing a degree of townscape and visual change. If the Proposed Scheme achieves the objective of the policy the resulting effect might be considered positive, even if existing townscape character or views are significantly altered. The classification of quality of townscape and visual effects seeks to take these variables into account and provide for a rational and robust assessment.

17.2.4.6 Presentation of Construction Effects

As required by the EIA Directive, the assessment should outline the temporary, short-term, medium-term and long-term, effects arising from the Proposed Scheme. Construction effects are described based on a cautionary principle, where effects are expected to be temporary (under 1 year in duration) but have reasonable potential to extend beyond this duration, due to unplanned schedule slippage, effects are described as Temporary / Short-Term. Also, it should be noted, in some cases, where a townscape section is described as experiencing a Temporary / Short-Term effect, this can result from sequential construction along the length of the section, and localised streetscape / visual receptors within that section may only experience temporary effects.

17.2.4.7 Presentation of Operational Effects

The design process of the Proposed Scheme has included integrated landscape measures to avoid, reduce or remediate landscape (townscape) and visual effects wherever practicable. The Proposed Scheme will become established and increasingly integrated within its landscape (townscape) setting over time, and the potential negative operational effects will be reduced. To illustrate this change in effects, potential operational effects are outlined for the beginning of the Operational Phase (up to 1 year Post-Construction Phase) and for the beginning of the Long-Term (at 15 years Post-Construction Phase). Predicted residual Operational Phase effects which have greater than moderate significance, at 15 years Post-Construction Phase, are also outlined.

The Operational Phase effects are presented as follows:

- Potential Operational Phase Effects (early stage - at 1 year post completion of the Construction Phase) (refer to Table 17.8);
- Potential Operational Phase Effects (comparison of effects at 1 year post completion and at 15 years post-Construction Phase) (refer to Table 17.10); and
- Predicted residual Operational Phase Effects (those effects above moderate significance at 15 years post-Construction Phase) (refer to Table 17.12).

17.2.4.8 Photomontage Methodology

The methodology for the preparation of Photomontages has regard to the VRDP (Landscape Institute 2019), and is further informed by experience in photomontage production. The Photomontages are prepared as accurate verified photo-realistic views (equivalent to Type 4 as set out in VRDP) (Landscape Institute 2019). The method follows five main steps:

- Photography;
- Survey;
- 3D Modelling and Camera Matching;
- Rendering and Finishing of Photomontages; and
- Presentation.

17.2.4.8.1 Photography

17.2.4.8.1.1 Conditions, Date and Time

Baseline photographs are clear and representative of the relevant context at each location. Wherever possible, photographs are taken with all key elements of the view clearly visible and unobscured by foreground obstructions, such as vehicular or pedestrian traffic, street furniture, trees, signage, etc. Photographs are up to date insofar as possible, and are taken in good clear weather conditions, without precipitation, excessive darkness or shade, or sun glare etc. The date and time of each photograph is recorded, together with camera and lens metadata.

17.2.4.8.1.2 Camera and Camera Set-Up

Baseline photographs have been taken using a digital single-reflex lens (SLR) camera with a full frame sensor. At each viewpoint the camera is positioned on a tripod with the lens 1.65m above ground level (the level of the average adult's eyes), directed at the site and levelled in the horizontal and vertical axes.

17.2.4.8.1.3 Lenses

Prime lenses (fixed focal length with no zoom function) have been used as this ensures that the image parameters for every photograph are the same and that all photographs taken with the same lens are comparable. A 24mm prime lens has been used for all views. This lens captures a horizontal field of view of 73° (degrees). This relatively wide field of view is preferred as it shows more of the landscape / townscape context in urban settings. For some viewpoints considering middle to distant intervention, a 50mm prime lens may have been used, capturing a 39° horizontal field of view.

17.2.4.8.1.4 Survey

The coordinates of each viewpoint / camera position, including the elevation have been measured accurately relative to the topographic survey of the corridor of the Proposed Scheme. For each viewpoint, the coordinates of several static objects or 'reference points' in the view (e.g. lamp posts, corners of buildings, etc.) have also been measured in a similar manner. The coordinates of the camera and 'reference points' are used later in the process to ensure that the direction of view of the camera in the 3D digital model matches that of the view of the photograph.

17.2.4.8.2 3D Modelling and Camera Matching

17.2.4.8.2.1 Creation of 3D Model

Drawings (roads, hard and soft landscape areas, etc.) have been used to generate a 3D digital model of the Proposed Scheme with sufficient detail for the viewpoint(s). The 3D digital model has then been exported to specialist software to allow for application of materials and textures to the model.

17.2.4.8.2.2 3D Camera Positions

The coordinates of the camera and 'reference points' for each view have been inserted into the 3D digital model, with information on the focal length of the lens and horizontal angle of coverage attributed to each camera / view, and the direction of each view is calculated and aligned so as to match the geometry of the original baseline photograph. Additionally, the date and time have been set to match that of the baseline photograph so as to ensure the sunlight and shadow projections in the renderings generated match those of the baseline photographs.

17.2.4.8.2.3 Rendering of 3D Model and Finishing Photomontages

For each view a high resolution render of the Proposed Scheme has been generated. This process allows for the creation of a realistic image of the 3D digital model, as seen from each camera / view position, with sunlight and shadow applied to the model. The render of the Proposed Scheme has then been inserted (or montaged) into the baseline photograph and the composite image edited to take away elements to be removed from the

existing baseline to create the photomontage of the Proposed Scheme. Some degree of photo-modelling / photo-manipulation is required in instances where foreground / middle-ground elements are removed (e.g. trees, plantings, etc.) thereby revealing backgrounds which are not captured in the baseline photograph. The intent is to provide a best-fit presentation which assists in illustrating the principal effects of the Proposed Scheme at a stage c. 10 to 15 years post completion of construction.

17.2.4.8.3 Presentation and Viewing

Individual photomontages are presented, in 'as existing' and 'as proposed' versions, on A3 pages in landscape format in Figure 17.2 in Volume 3 of this EIAR. For each photomontage, the viewpoint number, location description, and the date and time of photography have been provided on the page. Given that some views may be based on a wider angle of coverage than a 50mm prime lens, in these instances a further image is provided showing an A3 enlargement (centred on the Proposed Scheme) to equate to the coverage of a 50mm prime lens view. The 'as proposed' version of the photomontages present a representation of the Proposed Scheme approximately 10 to 15 years after completion of construction works.

17.3 Baseline Environment

17.3.1 City Context

The Proposed Scheme will be located in the south-west of Dublin City running north-east along R817 Kimmage Road Lower from the R818 Terenure Road West / R818 Kimmage Road West Junction via Harold's Cross and along the R137 Harold's Cross Road and R137 Clanbrassil Street towards St. Patrick's Cathedral in the south-west of the City Centre.

The Proposed Scheme is divided into three sections:

- Section 1 - Lower Kimmage Road from Kimmage Cross Roads to the Junction with Harold's Cross Road (Chainage (Ch.) 0000 to Ch.1945);
- Section 2 - Harold's Cross Road from Harold's Cross Park to Grand Canal (Ch.1945 to Ch.2700); and
- Section 3 - Clanbrassil Street Upper and Lower and New Street from the Grand Canal to the Patrick Street Junction (Ch.2700 to Ch.3750).

Provision of Traffic management / Quiet areas east and west of Corridor. A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

17.3.2 Overview of Route of the Proposed Scheme

The Proposed Scheme will be approximately 3.7km in length and will commence on R817 Kimmage Road Lower at the junction with the R818 on Terenure Road West and Kimmage Road West, and R817 Fortfield Road. The Proposed Scheme will continue along R817 Kimmage Road Lower towards the City Centre, via the R137 on Harold's Cross Road, Clanbrassil Street Upper and Lower and New Street South. Priority for buses will be provided along the entire route, consisting primarily of dedicated bus lanes in both directions where feasible, with alternative measures proposed at particularly constrained locations such as much of R817 Kimmage Road Lower, Harold's Cross Park West and short sections of R137 Clanbrassil Street Upper and Lower in alternate directions. A complementary cycle route is also proposed to the west of the Proposed Scheme via quiet streets at the southern end of the Proposed Scheme.

Moreover, pedestrian facilities will be upgraded, and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrian experience. Examples of this include the proposed works at R817 Kimmage Road Lower and Sundrive Road, and at St. Patrick's Court.

The Proposed Scheme will run from the outer residential suburbs of Kimmage and Harold's Cross through the inner city suburbs of the R811 South Circular Road and R137 Clanbrassil Street Upper and Lower to the south-west City Centre area around St. Patrick's Cathedral. The outer section of the Proposed Scheme will closely follow the corridor of the River Poddle, much of which has been culverted, but sections of which are still

exposed through the tree-lined open spaces of Poddle Park and Mount Argus Park. The Proposed Scheme will pass through the urban node of Harold's Cross, with its mixed-use streetscapes, historic public park and Mount Jerome Cemetery and its protected structures (Mount Jerome House; the mortuary chapel; the gate lodge and its gates, piers and original railings). The Proposed Scheme will follow the historic alignment of R137 Harold's Cross Road across the Grand Canal at Robert Emmet Bridge and on to the urban streetscape of R137 Clanbrassil Street Upper leading to the city landmark of St. Patrick's Cathedral.

The Proposed Scheme will include a wide variety of suburban and city landscape, townscape and visual features from streetscape boundary and urban realm features and parks to residential and mixed-use zonings, historic landscapes and boundaries, to biodiversity and heritage assets.

17.3.3 Landscape, Townscape and Visual Planning Policy

Landscape, townscape and visual planning policy is set out in the following sections with reference to the appropriate higher level county / city development plans, lower level local area plans and other documents, as appropriate.

17.3.3.1 South Dublin County Development Plan –2022 - 2028

The South Dublin City Development Plan 2022 – 2028 (DCC 2022) is the higher county level planning framework applicable to a very minor part of the Proposed Scheme comprising the western quadrant of the existing R818 / R817 Junction. There are no amenity, landscape or visual zonings or designations pertaining to this area of the Proposed Scheme.

17.3.3.2 Dublin City Development Plan –2022 - 2028

The Dublin City Development Plan 2022 - 2028 (DCC 2022) (hereafter referred to as the DCDP) is the higher county level planning framework applicable to all but part of the Kimmage Cross Roads at the southern end (start) of the Proposed Scheme.

Chapter 8 of the DCDP sets out policies relating to the provision of sustainable transport infrastructure. Relevant policies include:

- Policy SMTO8 – This aims *'To improve existing cycleways and bicycle priority measures and cycle parking infrastructure throughout the city and villages, and to create protected cycle lanes, where feasible.'*; and
- Policy SMTO9 – This aims *'To support the development of a connected cycling network in the City through the implementation of the NTA's Greater Dublin Area Cycle Network Plan, subject to environmental assessment and route feasibility.'*; and
- Policy SMT16 – This aims *'To prioritise the development of safe and connected walking and cycling facilities and prioritise a shift to active travel for people of all ages and abilities, in line with the city's mode share targets.'*

Chapter 10 'Green Infrastructure and Recreation' sets out policies in relation to the provision, importance, protection and enhancement of green infrastructure, landscape, parks and open spaces, rivers, canals and the coastline, biodiversity, trees and sport, recreation and play within the city. Figure 4-1 of the Dublin City Development Plan indicates a 'Key View and Prospect' north along R137 Clanbrassil Street Lower / New Street South towards St. Patrick's Cathedral. Figure 8-2 of the Dublin City Development Plan indicates that R137 Harold's Cross Road / Clanbrassil Street is one of the historic approaches to the City. The strategic green network as indicated on Figure 10-1 of the Dublin City Development Plan highlights the Grand Canal as a blue / green corridor. DCC has also prepared separate overarching strategies for the protection, management and improvement of trees and parks within the City.

Chapter 11 'Built Heritage and Archaeology' sets out policies relating to preservation, protection and improvement of built heritage, protected structures (Record of Protected Structures (RPS)), Architectural Conservation Areas (ACA) and Conservation Areas, trees in ACAs, zones of archaeological interest and industrial heritage, monuments and Dublin's cultural assets. There are a number of sites, buildings and features

of historic and heritage interest located along the corridor of the Proposed Scheme, including Conservation Areas at the Grand Canal Corridor and at the R137 New Street South / R110 Kevin Street Junction immediately south of St. Patrick's Cathedral.

There are a number of Residential Conservation Areas at R817 Kimmage Road Lower (Harold's Cross), R137 Clanbrassil Street Upper and Malpas Street. Protected structures are located at Mount Jerome Cemetery, along R137 Clanbrassil Street Lower and at Fumbally Lane. Policies in relation to archaeological and architectural heritage, including definitions of heritage features e.g. protected structures, as they relate to the Proposed Scheme are discussed in greater detail in Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) respectively of this EIAR.

The principal land use zonings to either side of the Proposed Scheme within the Dublin City area are:

- 'Objective Z1: To protect, provide and improve residential amenities';
- 'Objective Z9: To preserve, provide and improve recreational amenity and open space and ecosystem services', (e.g. Poddle Park, Mount Argus Park, Harold's Cross Park, Mount Jerome Cemetery and the Grand Canal); and
- 'Objective Z15: To protect and provide for community uses and social infrastructure' (e.g. Mount Argus, Our Lady's Hospice grounds / Mary Akenhead and St. Clare's School grounds).

Other land use zonings include:

- 'Objective Z2: To protect and / or improve the amenities of residential conservation area', (e.g. Poddle Park, Harold's Cross, R137 Clanbrassil Street Upper, Malpas Street);
- 'Objective Z3: To provide for and improve neighbourhood facilities' (e.g. R817 Kimmage Road Lower / Corrib Road Junction, R137 Harold's Cross Road (Greenmount and Grand Canal), and R137 Clanbrassil Street Upper / Lower and R811 South Circular Road); and
- 'Objective Z6: To provide for the creation and protection of enterprise and facilitate opportunities for employment creation' (e.g. R137 Harold's Cross Road / Grand Canal).

17.3.4 Townscape / Streetscape Character

The townscape and streetscape character of the Proposed Scheme is described in Table 17.6 with reference to landscape, townscape and visual characteristics, features, designations, and sensitivities. The key features are identified on Figures 17.1 in Volume 3 of this EIAR. Protected structures are generally described within groups e.g. a number of buildings lining a road but are noted individually where they form unique and prominent features in the townscape or streetscape, or form a less noticeable but intrinsic part of the fabric of the streetscape. Refer to Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) of this EIAR, for full details and definitions of protected structures.

Table 17.6: Analysis of Baseline Townscape and Visual Environment of the Proposed Scheme

Proposed Scheme Sections	Baseline Description	Baseline Sensitivity
Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road.	<p>Townscape Character: Outer predominantly two-storey residential suburb, with traditional urban village, with one and two-storey properties at Harold's Cross.</p> <p>Streetscape Character: Suburban road predominantly lined by two-storey terraces, most of redbrick or redbrick and render with established front gardens – some with driveways. Some semi-detached properties with single-storey terraces at R817 Kimmage Road Lower / Corrib Road and at Harold's Cross. Residential properties east of R817 Kimmage Road elevated above road, with stepped accesses. Some modern infill with larger recent apartment development at Mount Argus. Curved brick terrace at junction with Sundrive Road.</p> <p>Mix of property boundaries including some brick walls and piers, rendered walls, railings, stone copings and combination of same. Short sections of historic granite kerbs at Harold's Cross Park. Wide concrete footpaths to south, narrow approaching Harold's Cross, on-street car parking generally limited to areas of local services / front gates of Mount Argus. No street tree planting.</p> <p>Significant areas of open space – linked to corridor of River Poddle, Mount Argus and Harold's Cross Park – with stands of early mature and mature trees. Limited</p>	High

Proposed Scheme Sections	Baseline Description	Baseline Sensitivity
	<p>tree planting within property curtilage.</p> <p>The townscape has elements and characteristics likely to be perceived as high value including good quality open spaces and prominent heritage features. Architecture and streetscape are of a generally good standard and front gardens have mostly been retained and are well planted. The road corridor has a moderate influence on the townscape. Lack of street trees and planting reduces the susceptibility to road development. Susceptibility to the Proposed Scheme is medium.</p> <p>Key Townscape Features: Traditional road corridor through residential suburbs. Small sections of local services with outer city village and small city park at Harold's Cross. Established areas of open space with mature trees. Large city cemetery protected structures / features.</p> <p>Amenity Designations: Poddle Park, Mount Argus Park, Harold's Cross Park, Mount Jerome Cemetery. No ACAs or Conservation Areas.</p> <p>Tree Preservation Order (TPO): None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: None.</p> <p>Protected Structures (Selected): No. 8695: Mount Jerome Cemetery: Mount Jerome House; the mortuary chapel; the gate lodge and its gates, piers and original railings are key features in the streetscape. (Refer to Chapter 16 (Architectural Heritage) for full details of protected structures).</p> <p>Other: Attractive city park, with playground, brick kiosk (café), mature trees, metal railings and stone memorial cross at northern end.</p>	
<p>Harold's Cross Road from Harold's Cross Park to Grand Canal.</p>	<p>Townscape Character: Outer city suburbs. Mixed residential, office, commercial and with local retail uses.</p> <p>Streetscape Character: Major road corridor – historic city access route. Mix of traditional brick and render properties – some with small front gardens – enclosed with railings near Harold's Cross Park and modern mixed construction infill. Some terraces / properties to east elevated over road corridor with stepped accesses. Mix of local services, residential and office uses.</p> <p>Wide concrete footpaths, very limited on-street parking. Limited young street tree planting / limited tree planting within property curtilage.</p> <p>Areas of educational / institutional uses at Mount Argus, Our Lady's Hospice / Mary Akenhead to west of road, St. Clare's School to east.</p> <p>The townscape has certain valued elements, features or characteristics but the character is mixed and not particularly strong. Modern development has resulted in a degree of erosion of elements and characteristics. The existing road corridor has a strong influence on the character of the townscape. Susceptibility to the Proposed Scheme is medium.</p> <p>Key Townscape Features: Major outer City Centre urban street with mixed uses. Grand Canal Corridor. City village and public park at Poddle Park, Kimmage.</p> <p>Amenity Designations: Grand Canal open space and conservation area.</p> <p>TPO: None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: None.</p> <p>Protected Structures: None. (Refer to Chapter 16 (Architectural Heritage) for full details of protected structures).</p> <p>Other: Views east and west along Grand Canal from Robert Emmet Bridge. Carved limestone plaque with bust of Robert Emmet to eastern balustrade of bridge.</p>	<p>Medium</p>
<p>Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction</p>	<p>Townscape Character: Inner city suburbs. Residential with local retail, office and other mixed uses.</p> <p>Streetscape Character: Major city carriageway road – and historic city access route – which transitions to wide City Centre dual carriageway along R137 Clanbrassil Street Lower / New Street South approaching St. Patrick's Cathedral area.</p> <p>Traditionally of two and three-story brick faced properties with mix of commercial, local services and some residential uses – some with small mature gardens bounded by railings on R137 Clanbrassil Street Upper. Significant extent of modern three to six-storey infill developments north of R811 South Circular Road (Leonard's Corner). Some vacant plots.</p> <p>Sections of local service / retail streetscapes at R811 South Circular Road</p>	<p>Medium / High</p>

Proposed Scheme Sections	Baseline Description	Baseline Sensitivity
	<p>(Leonard's Corner), and junction with Lombard Street West. Small landscape / grass area at Greenville Place</p> <p>Young tree planting in median at northern end of R137 Clanbrassil Street Lower / New Street South and in some small private areas fronting residential properties. Few street trees. Historic light standards north from Lombard Street West. Stand of mature trees on island in R137 New Street South / R110 Kevin Street Upper Junction.</p> <p>The townscape has certain valued elements, features or characteristics but the character is mixed. Modern development has caused a degree of erosion of elements and characteristics; however, this development is of generally good standard and much of the historic character has been retained particularly towards the southern end of the section. The existing road corridor has a moderate influence on the character of the townscape and is occasionally softened by street tree planting. Susceptibility to the proposed development is medium.</p> <p>Key Townscape Features: Major city urban street with mixed uses, widened and redeveloped with modern buildings to north. Some original residential terraces with gardens and railings to south. Views to St Patrick's Cathedral at northern end.</p> <p>Amenity Designations: On island in R137 New Street South / R110 Kevin Street Upper Junction.</p> <p>Conservation Area at corner of R137 New Street South / R110 Kevin Street Upper.</p> <p>Residential Conservation Areas along R137 Clanbrassil Street Upper and at Malpas Street.</p> <p>TPO: None.</p> <p>Tree / Woodland Preservation Objectives: None</p> <p>Protected Views: Key View and Prospect north along R137 Clanbrassil Street Lower / New Street South towards St. Patrick's Cathedral.</p> <p>Protected Structures (Selected): Property Nos. 7 to 20 and 50 to 55 Clanbrassil Street Upper, corner of Fumbally Lane and (No. 5822) Granite base to the former public lavatories with the centrally-located cast-iron ventilator (on island in R137 New Street South / R110 Kevin Street Junction) are key features in the streetscape. (Refer to Chapter 16 (Architectural Heritage) for full details of Protected Structures).</p> <p>Other: N/A.</p>	

17.4 Potential Impacts

This section presents potential impacts that may occur due to the Proposed Scheme, in the absence of mitigation. This informs the need for mitigation or monitoring to be proposed (refer to Section 17.5). Predicted 'residual' impacts taking into account any proposed mitigation are presented in Section 17.6.

17.4.1 Characteristics of the Proposed Scheme

17.4.1.1 General

The key characteristics of the Proposed Scheme of particular relevance to the townscape and visual assessment are described in the following sections under separate headings for the Construction Phase and Operational Phase.

The description of the characteristics of the Proposed Scheme is based on the Proposed Scheme drawings and details in Volume 3 of this EIAR, including those within the Arboricultural Impact Assessment Report (Appendix A17.1 in Volume 4 of this EIAR).

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description) and a detailed description of the Construction Phase of the Proposed Scheme is provided in Chapter 5 (Construction).

17.4.1.2 Development of the Proposed Scheme Design

Consideration of the potential landscape (townscape) and visual impacts have been important in defining the Proposed Scheme design. Following initial assessment of impacts, availability of additional information, as well as public consultation, suggestions and recommendations from local residents, community groups and stakeholders, the scheme has undergone iterative design development with the aim of minimising potential negative impacts as far as practicable. This process has also helped define suitable improvements to the urban realm. The design changes are described in Section 3.4 of Chapter 3 (Consideration of Reasonable Alternatives).

The following are design changes that have been incorporated into the Proposed Scheme design, and which are applicable to this assessment, and have led to a reduction in predicted landscape and visual effects:

- The Emerging Preferred Route (EPR) had proposed removal of the existing median and street trees along Clanbrassil Street Lower and New Street South, but this has been avoided through refinement of the design. The streets along this section were widened to a dual carriageway with wide traffic lanes in the 1980's, and the footpaths are unusually wide (c. 4m to 5m) or wider in places. The Preferred Route Option generally provides for 3 metres wide bus and traffic lanes and as such there is surplus road width available, which allows for the retention of the median with the provision of cycle tracks segregated from the bus lanes that will encroach by 0.5m into the adjoining wide footpaths. This design refinement has allowed the retention of the median island and the street trees.
- There were two options for bus priority considered for Section 1. The assessment concluded that Option B for the southern bus gate to be located near Kimmage Cross Roads was the preferred option. Option B would not require encroachment to gardens, and the reduced traffic would allow scope to improve the streetscape.
- At the southern end of Kimmage Road Lower it had been proposed to provide a cycle track through Poddle Park towards the River Poddle Cycleway route. However, to reduce impact on this small public park, cycle tracks will instead be provided on the public roads outside of the park, which removed all impacts for the park;
- The junction of Mount Drummond Avenue on Harold's Cross Road will be narrowed with additional street trees and four more parking spaces provided, which will benefit pedestrian safety and comfort when crossing the side street, improve the street landscape, and provide a little more parking for the local community which is in short supply; and
- Access for Gordon's Fuels at the Grand Canal bridge on Clanbrassil Street Upper was modified to provide a shared laneway from the north beside the Mullen Scrap premises, instead of a new ramp beside the canal, which would have encroached into the premises to a much greater degree and reduce the operational yard area for the business, and potential for future development.

17.4.1.3 Construction Phase

The key characteristics of the Proposed Scheme of particular relevance to the landscape (townscape) and visual assessment during the Construction Phase, include:

- Amendment and adaption of the existing road network throughout, including surfacing, kerbs, footpaths, drainage, lighting, service / utility features, road markings, etc.;
- Amendment and adaption of existing junctions throughout, including surfacing, kerbs, footpaths, traffic controls, lighting, cycle facilities, road markings, etc.;
- Amendment and adaption of areas of existing verges, roadside and median tree planting and boundaries;
- Temporary and permanent land-take from properties along the Proposed Scheme; and
- Establishment / use of Construction Compounds.

17.4.1.3.1 Specific works on Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road:

- Works to provide a median island with new street trees on Kimmage Road Lower in the vicinity of the Corrib Road junction where there is a row of shops and local businesses (Ch.A340 to Ch.A520);
- Urban realm improvements with changes to junction layout and parking layout, changes to paving, and construction of planting areas at Kimmage village at the junction of Kimmage Road Lower and Sundrive Road / Larkfield Avenue (Ch.A900 to Ch.A1120);
- Works on an existing car park area (also Construction Compound K1) between Sundrive Road and Mount Argus Way for changes to car park layout for cycle access and new planting areas (Ch.H70000 to H70050));
- Land take of a portion of the area over the River Poddle as well as the car park area in front of Mount Argus Square; and
- Works to junctions of Kimmage Road Lower with Mount Argus View and Mount Argus Road with changes to layout, parking and provision of new planting areas (Ch.A1250 to Ch.A1300 and Ch.A1410 to Ch.1480); and
- Works on existing open space / road fronting Mount Argus Square / Mount Argus Way / Mount Argus View and within River Poddle corridor, for provision of a boardwalk structure at the 'Stone Boat' (Ch.H70050 to Ch.A70120).

17.4.1.3.2 Specific works on Harold's Cross Road from Harold's Cross Park to the Grand Canal:

- Works to footpaths along Harold's Cross Road for upgrade of paving (Ch.A1920 To Ch.A2440);
- At Our Lady's Hospice, Harold's Cross: construction of a permanent carpark, with loss of one existing tree (Ch.A2340 to Ch.A2350);
- Land take of a portion of gravel area with boundary railings for corridor widening at the front of Nos. 14 - 26 Harold's Cross Road (Focus Ireland housing), on the west side of Harold's Cross Road (Ch.2360 to Ch.2410). The existing trees at this location are to be retained;
- Land take of a portion of private gardens with established boundary walls, pedestrian entrance gates and stepped accesses, some with mature plantings for road widening at No. 33 to 61 on the east side of Harold's Cross Road. Four street trees will be removed at this section (Ch.2380 to Ch.2480). Two further street trees will be removed at Ch. 2550;
- Land take of a portion of the landscape area enclosed with brick wall and railings at Fottrell House Offices (i.e. Harmsworth Greenmount Office Park), on the west side of Harold's Cross Road for junction widening at Parnell Road / Grove Road with (Ch.2630 to Ch.2670);
- Substantial works at Robert Emmet Bridge over the Grand Canal, including changes to footpaths and construction of a new cycle / pedestrian bridge on the west side and a separate footbridge on the east side of bridge. The new bridges will require works on the banks of the Grand Canal, including construction of supporting piers. Two trees will be removed from the south-west corner of the bridge to allow works. (Ch.2670 to Ch.2730); and
- Changes to the road junction on either side of the Grand Canal and towpath connections to Robert Emmet Bridge. Two existing trees to be removed from the southwest side of the bridge on Parnell Road.

17.4.1.3.3 Specific works on Clanbrassil Street Upper and Lower and New Street from the Grand Canal to the Patrick Street Junction:

- Road widening with a new masonry faced retaining wall at No.29 to 32 Clanbrassil Street Upper and revised ramped access lane to Gordon's Fuels at No.32a on the north side of the Grand Canal, west of Robert Emmet Bridge (Ch.2700to Ch.2770); and
- Works located within existing road corridor, with four street trees to be removed along Clanbrassil Street Lower and New Street South between Garden Terrace and Kevin Street Upper (Ch.A2800 to Ch.A3700) (including the land take of the green space adjacent to St. Patrick's Court / Greenville Place and the car park opposite 62 Clanbrassil Street Lower (to accommodate a construction compound and proposed revised parking facilities respectively).

17.4.1.3.4 Construction Compound Areas

Construction Compounds are to be located:

- Construction Compound K1: to be located on the existing car park area off Sundrive Road (Ch.1100 – offline west);
- Construction Compound K2: to be located on existing landscape space inside the entrance to Our Lady's Hospice (Ch.2340); and
- Construction Compound K3: to be located on small landscape areas fronting St. Patrick's Court / Greenville Place on R137 Clanbrassil Street Lower (Ch.3170 to 3210).

17.4.1.4 Operational Phase

The key characteristics of the Proposed Scheme of particular relevance to the townscape and visual assessment during the Operational Phase, include:

- Permanent changes to property areas / boundaries along the Proposed Scheme;
- Changes to traffic movements along the Proposed Scheme and on adjoining roads where traffic management measures are proposed; and
- Changes in streetscape elements, including replacement / new street trees, the re-allocation of carriageway space, parking, provision of cycle and footpath facilities, signage, lighting, surfacing, road markings, etc. along the Proposed Scheme; and
- Long-term changes from loss of trees and other vegetation removed during the Construction Phase.

17.4.1.4.1 Kimmage Road Lower from / Kimmage Cross Roads to the junction with Harold's Cross Road

- Bus gates at each end of R817 Kimmage Road Lower to restrict through traffic for improved bus priority, which will significantly reduce the volume of traffic along the street;
- New cycleway provided along the corridor of the River Poddle, including boardwalk section over the river bank in the vicinity of the 'Stone Boat' at Mount Argus View (Ch.H70050 to H70120); and
- Changes in arrangement of traffic and cycleway flows around Harold's Cross Park.

The following key landscape measures are proposed in this section:

- Provision of new roadside tree planting and new carriageway median with new street tree planting on Kimmage Road Lower (Ch.A0 to Ch.0520);
- Improved urban realm with new concrete block paving and formalised parking spaces to front of commercial units on Kimmage Road Lower to either side of junction with Corrib road (Ch.A330 to Ch.A530);
- Improved urban realm with improved paving, new street tree planting and formalised parking Kimmage Road Lower approaching and surrounding the junction with Sundrive Road / Larkfield Avenue, subject to agreement with the property owners (Ch.0910 to Ch.1130);
- Provision of new tree planting within public car park off Sundrive Road (Ch.H70000 to H70050);
- New street tree and other planting at junction between Mount Argus View and R817 Kimmage Road Lower (Ch.1250 to Ch.1300); and
- New street tree planting at junction between Mount Argus Road and R137 Harold's Cross Road (Ch.1980 to Ch.2020).

17.4.1.4.2 Harold's Cross Road from Harold's Cross Park to the Grand Canal;

- Segregated cycle tracks within the widened road.

The following key landscape measures are proposed in this section:

- New tree planting and sections of improved paving to areas surrounding Harold's Cross Park to enhance the setting of historic buildings (Ch.A1920 to Ch.A2300);

- New tree planting in proposed carpark off entrance to Our Lady's Hospice (Ch.2320 to Ch.2350);
- New tree planting and sections of improved paving along Harold's Cross Road, and at the junction with Mount Drummond Avenue including new paving and improved pedestrian accessibility at junction with Grove Road (Ch.B10100 to Ch.A2650); and
- New / replacement tree planting along south side of Grand Canal (Ch.2650 to Ch.2700) and on R137 Clanbrassil Street Upper (Ch. 2780).

17.4.1.4.3 Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction;

- Alterations around Robert Emmet Bridge, with new cycle / pedestrian bridge on west side and provision of separate footbridge on east side, with widening of approach ramp to the north, and changes to traffic movement on the original bridge. New pedestrian / cycle bridge structures will partially obscure views of the east and west elevations of the existing Robert Emmet Bridge, but this impact is limited by use of glass barriers.

The following key landscape measures are proposed in this section:

- Introduction of new concrete where appropriate along Clanbrassil Street Upper, Clanbrassil Street Lower and New Street South Ch.2700 to Ch.A3730);
- Extension of the existing street tree planting in the median island on R137 Clanbrassil Street Lower (Ch.3230 to Ch.3730); and
- New tree planting and improved paving at St. Patricks Court (Ch.3170 to 3210).

17.4.1.4.4 General Landscape (Townscape) and Visual Measures

In addition to the above works, the following general landscape / townscape and visual measures are included within the Proposed Scheme:

- Where paving, existing trees, hedges, and/or plantings are removed from temporary acquisition areas, new planting and paving replacements will be provided as appropriate. Where practicable, new plants will be the same species to those removed. Replacement plant sizes will be those that are readily available and therefore, will be unlikely to match the maturity of plants removed (especially in the case of larger trees). However, where practicable, semi-mature trees will be used in the replanting works throughout the scheme. Where the same or similar species are provided, maturity similar to that of the existing can be achieved in time;
- New boundaries will be established on the setback line to match the existing boundary. The construction and provision of the new boundaries will take account of the location of existing trees, other plantings, gradients, drainage, property features and access arrangements so as to minimise additional indirect effects. Where practicable, existing railings, gates, cut stone walls and/or piers (or where appropriate, elements of same) to be removed will be reinstated on the new setback boundary line subject to discussion between the landowner and the NTA;
- The Proposed Scheme will provide for the planting of new semi-mature street trees to replace removed trees, where practicable, and for improvement of the streetscape environment. Species selected shall be appropriate to the urban street environment and to the characteristics of the specific location;
- Proposals for the treatment of the urban realm within the streetscape impacted by the Proposed Scheme will have regard to the existing character of the street or location, to emerging policies, objectives and proposals for the urban realm and to opportunities for mitigation of impact on the urban realm and the streetscape. Proposals will have regard to historic details and features, to the quality of existing and proposed materials, to the reduction of clutter, ease of legibility, and management and maintenance requirements;
- Landscape proposals will have regard to the recommendations of Chapter 12 (Biodiversity) in relation to opportunities for provision of biodiversity and of Chapter 13 (Water) in relation to opportunities for incorporation of Sustainable Urban Drainage Systems (SuDS);
- All aspects of the Proposed Scheme within public areas will revert to on-going management and maintenance in accordance with normal operational practices. This will include hard and soft landscape works and townscape measures, new and reinstated tree and other planting, and new and reinstated surfacing and paving, etc.; and

- Maintenance and monitoring of reinstatement and other works in private areas (e.g. temporary acquisition areas) will ensure that any defective materials or workmanship will be made good within a period of 12 months following completion of Construction Phase.

17.4.2 'Do Nothing' Scenario

With respect to Landscape (Townscape) and Visual, the 'Do Nothing' scenario means that the Proposed Scheme would not proceed and associated changes to the Landscape (Townscape) and Visual environment would not arise. Therefore, landscapes / townscapes and properties along the Proposed Scheme would not experience the negative impacts that are associated with the Proposed Scheme and their existing setting would experience little or no change in the short to Medium-Term. Nevertheless, given the suburban / urban context of the Proposed Scheme it is considered likely that the road corridors that would have formed part of Proposed Scheme will continue to experience pressure for reallocation of carriageway space and associated traffic movements in direct response to the increasing demand for alternative modes of transport (i.e. away from private car).

There would be a Neutral effect on the Landscape (Townscape) and Visual under the 'Do Nothing' scenario.

17.4.3 Construction Phase

The Construction Phase of the Proposed Scheme will give rise to temporary or short-term (1 to 2 years) townscape streetscape and visual impacts through the following:

- Site mobilisation and establishment, fencing and hoarding of Construction Compounds and works areas - including within private areas / gardens;
- Site demolition, including removal of boundaries, kerbs, verges, surfaces, landscape areas, trees and plantings – including boundary fences, walls and plantings within private areas / gardens;
- Site activity and visual disturbance from general construction works and the operation of construction machinery, both within the site and at the Construction Compounds;
- Construction works involving diversion of existing underground / overground services and utilities, provision of new services and utilities, drainage features and connections etc.;
- Site activity and construction works involved in the construction of new carriageways, kerbings, footpaths and cycleways, bus stops and signage, reinstatement of boundaries / provision of new boundaries and landscape reinstatement works / provision of new landscapes etc.; and
- Decommissioning of works areas and Construction Compounds.

A detailed description of the Construction Phase of the Proposed Scheme is provided in Chapter 5 (Construction).

17.4.3.1 Impact on Townscape and Streetscape Character

As set out in Section 17.1, the Proposed Scheme is sub-divided into three sections:

- Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road
- Harold's Cross Road from Harold's Cross Park to the Grand Canal; and
- Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction.

17.4.3.1.1 Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road

The baseline townscape is of high sensitivity and the construction of the Proposed Scheme will involve limited demolition, excavation, resurfacing and construction works along sections of kerbs, road carriageways, new road median, sections of footpaths, junctions, surfacing and parking, drainage features and utilities along the principal corridor of R137 Kimmage Road Lower. Construction Compound K1 will be located at an existing carpark off Sundrive Road.

The Proposed Scheme will include for the construction of a section of cycle / footpath and boardwalk along the River Poddle corridor at 'The Stone Boat' feature between Sundrive Road and Mount Argus Way. Construction works will also provide for minor traffic management at the junction of Ravensdale Park and Poddle Park for the quiet street cycle route along Poddle Park, Blarney Park, Sundrive Road, Mount Argus Square, Mount Argus Way and Mount Argus View.

The Proposed Scheme will include modifications to three existing junctions along Derravaragh Road at Corrib Road, Neagh Road and Mount Tallant Avenue reducing vehicle movements whilst constructing cycle gates. Works are also proposed to the junction between Kenilworth Park / Harold's Cross Road / Kenilworth Square North / Rathgar Avenue including a bus gate off Kenilworth Park East.

The construction works along R817 Kimmage Road Lower and related traffic management works will result in minor alterations to elements of the existing streetscape. The construction works will not alter the overall townscape character along this section of the Proposed Scheme, but the presence of construction activity will have an impact on streetscape. The magnitude of change in the baseline environment is medium.

The potential townscape / streetscape effect of the Construction Phase is assessed to be Negative, Moderate / Significant and Temporary / Short-Term.

17.4.3.1.2 Harold's Cross Road from Harold's Cross Park to the Grand Canal

The baseline townscape is of medium sensitivity and construction of the Proposed Scheme will involve substantial changes along the existing major carriageway. The Construction Phase will involve demolition, excavation and construction works to kerbs, road carriageways, footpaths, junctions, surfacing, parking, drainage features, utilities and the removal of a small number of street trees. Construction works will also involve the acquisition of portions of private gardens, private buffer landscape areas, with removal of existing boundary walls and railings, loss of a portion of existing gardens with associated plantings, impacts on access arrangements etc.

Construction Compound K2 is to be located on the landscape area inside the entrance to Our Lady's Hospice, with loss of open space and one tree. The compound area will be overlooked by residential properties within the hospice grounds. There will be a permanent change due to the conversion of this area of open space to an area of car parking following decommissioning of Construction Compound K2.

At the Grand Canal the Proposed Scheme will involve substantial works in the vicinity of Robert Emmet Bridge including changes to the existing carriageway over the bridge, construction of a new cycle / pedestrian bridge to the east and west of the bridge, removal of existing granite walls along R137 Clanbrassil Street Upper and the re-alignment of canal towpaths to tie-in, with removal of four trees.

The construction works will be extensive along the road corridor and will result in substantial alterations to elements of the existing streetscape, including at Robert Emmet Bridge over the Grand Canal. However, the construction works will not alter the existing townscape character along this section the Proposed Scheme but the presence of construction activity will have an impact on streetscape. The magnitude of change in the baseline environment is very high.

The potential townscape / streetscape effect of the Construction Phase is assessed to be Negative, Significant and Temporary / Short-Term.

17.4.3.1.3 Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction;

The baseline townscape is of medium / high sensitivity and the construction of the Proposed Scheme will involve changes across and along the majority of a part wide single / part dual carriageway urban road. The Construction Phase will involve mainly repairs to existing pavement, new segregated cycle tracks and revised road markings with minor construction / excavation work. Construction Compound K3, which will be small, is to be located on an existing part-grass / part-paved public space fronting St. Patrick's Court / Greenville Place along R137 Clanbrassil Street Lower.

The construction works will be wide-ranging along the road corridor and will result in substantial alterations to the existing streetscape character. The construction works will not alter the existing townscape character along this section of the Proposed Scheme, but the presence of construction activity will be an impact on streetscape. The magnitude of change in the baseline environment is medium.

The potential townscape / streetscape effect of the Construction Phase is assessed to be Negative, Moderate and Temporary / Short-Term.

17.4.3.2 Impact on Streetscape Elements and Visual Impacts

17.4.3.2.1 ACAs

There are no ACAs along the Proposed Scheme.

17.4.3.2.2 Conservation Areas

The Grand Canal and the corner of R137 New Street South / R110 Kevin Street Upper are identified as Conservation Areas. Sensitivity is very high.

The construction of the Proposed Scheme will result in substantial changes and alterations to Robert Emmet Bridge over the Grand Canal and to the immediate canal banks and towpaths. The works will affect localised views to and from Robert Emmet Bridge and the Grand Canal. The works will not detract views to and from the wider canal amenity. The magnitude of change in the baseline environment is low overall but locally very high.

The potential townscape / streetscape and visual effect of the Construction Phase on the Grand Canal Conservation Area will be Negative, Moderate / Locally Significant and Temporary / Short-Term.

The construction of the Proposed Scheme will result in minor changes the road corridor in the vicinity of New Street South / Kevin Street Upper Conservation Area. The works will not affect key characteristics or features of the Conservation Area. The magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Construction Phase on the New Street South / Kevin Street Upper Conservation Area is assessed to be Negative, Slight and Temporary.

17.4.3.2.3 Residential Conservation Areas

Residential Conservation Areas, which are located along R137 Clanbrassil Street Upper and Malpas Street, are of high sensitivity. The construction of the Proposed Scheme will not directly impact on the Residential Conservation Areas and works will be limited to the public road in these areas. The sensitivity is very high and the magnitude of change in the baseline environment is medium.

The potential townscape / streetscape and visual effect of the Construction Phase on Residential Conservation Areas is assessed to be Negative, Slight / Moderate and Temporary / Short-Term.

17.4.3.2.4 Protected Structures

A number of protected structures are located along the Proposed Scheme corridor. These include Mount Jerome and associated structures and features, and property Nos. 7 to 20 and Nos. 50 to 55 Clanbrassil Street Upper, the corner of Fumbally Lane, and the granite base to the former public lavatories with the centrally-located cast-iron ventilator (on an island at the R137 New Street South / R110 Kevin Street Junction). While located along the principal road corridor of the Proposed Scheme, there will be no direct effect on the properties or structures. The sensitivity is very high, and the magnitude of change is low. (Refer also to Chapter 16 (Architectural Heritage) for full details on protected structures).

The potential townscape / streetscape and visual effect of the Construction Phase on protected structures is assessed to be Negative, Slight / Moderate and Temporary / Short-Term.

17.4.3.2.5 Amenity Designations

A number of amenities (mainly open spaces, parks and the Grand Canal) are located along the Proposed Scheme corridor. These include areas of high sensitivity such as Poddle Park, the River Poddle corridor, Mount Argus Park, Harold's Cross Park and the Grand Canal corridor.

The construction of the Proposed Scheme will include relatively minor works outside of Poddle Park, and along the River Poddle corridor at The Stone Boat feature. The works, which include construction of an elevated cycle / pedestrian boardwalk / path along the corridor of the River Poddle at Mount Argus Way, will have direct effects on the landscape and visual setting of the areas along a short section of the River Poddle at Mount Argus Way. The works on the main corridor will also impact on the setting of these amenity areas. The sensitivity is high, and the magnitude of change is low / medium.

The potential townscape / streetscape and visual effect of the Construction Phase on these amenities is assessed to be Negative, Slight / Moderate and Temporary / Short-Term.

The construction of the Proposed Scheme will result in substantial changes and alterations to Robert Emmet Bridge over the amenity of the Grand Canal and to the immediate canal banks and towpaths. The works will detract from localised views to and from Robert Emmet Bridge and the Grand Canal and will impact directly on adjoining sections of the footpath / towpath. The works will not detract views to and from the wider canal amenity. The sensitivity is high and the magnitude of change in the baseline amenity is low overall but locally high.

The potential townscape / streetscape and visual effect of the Construction Phase on the Grand Canal amenity is assessed to be Negative, Slight / Locally Significant and Temporary / Short-Term.

While the construction of the Proposed Scheme will involve moderate works on the roads surrounding the highly sensitive Harold's Cross Park, they will not result in a direct impact in the characteristics or features of the park. Nevertheless, the works will be openly visible from the public park. The sensitivity is high, and the magnitude of change is medium.

The potential townscape / streetscape and visual effect of the Construction Phase on Harold's Cross Park is assessed to be Negative, Moderate and Temporary / Short-Term.

17.4.3.2.6 TPOs / Tree Preservation Objectives

There are no TPOs or tree preservation objectives pertaining to the construction works area of the Proposed Scheme.

17.4.3.2.7 Preserved Views / Scenic Views, etc.

At the northern end of the Proposed Scheme at R137 Clanbrassil Street Lower / New Street South towards St. Patrick's Cathedral. There will be construction works to the road corridor in the foreground of the view, and while the works will limit / disrupt the viewpoint, they will not impact on the sensitive characteristics of the view of St. Patrick's Cathedral. The sensitivity is very high, and the magnitude of change is low / medium.

The potential townscape / streetscape and visual effect of the Construction Phase on preserved views / scenic views is assessed to be Negative, Slight / Moderate and Temporary / Short-Term.

17.4.3.2.8 Properties

Construction of the Proposed Scheme will require land acquisition from 29 residential properties: a shared forecourt at Nos. 14 to 26 on the western side of Harold's Cross Road, Nos. 33 to 61 (odd numbers) on the eastern side of Harold's Cross Road, and No. 32A Clanbrassil Street Upper (residence adjacent to Gordon's Fuels). The houses (33 to 61) have mature established gardens with original boundary walls, entrance gates and stepped access paths. Construction works for widening of the road corridor will result in the removal of the existing boundaries including walls and entrance gates, portions of gardens, private property and associated plantings. The works will temporarily remove the railings and gravel area fronting Nos. 14 to 26 Harold's Cross

Road. Access to properties will be retained. Construction works adjacent to and within these private and adjoining public areas will be openly visible from these properties. No 32A Clanbrassil Street Upper will be completely demolished to allow construction of the access ramp to Gordon's Fuels. The sensitivity is high, and the magnitude of change is very high.

The potential townscape / streetscape and visual effect of the Construction Phase on these properties is assessed to be Negative, Very Significant and Temporary / Short-Term with the exception of No 32A which is Negative, Profound and Permanent.

Construction of the Proposed Scheme will require the acquisition from several non-residential properties: car park at Sundrive Road (Construction Compound K1); Our Lady's Hospice (Construction Compound K2); Fottrell House Offices; Nos. 3 to 15 Harold's Cross Road, and at No.32a Clanbrassil Street Upper (Gordon's Fuels), and at No.31 Clanbrassil Street Upper (Mullen Scrap). While some areas are hard standing, works will involve removal of grass areas at Our Lady's Hospice and at Fottrell House Offices. The sensitivity is high, and the magnitude of change is medium / high.

The potential townscape / streetscape and visual effect of the Construction Phase on these properties is assessed to be Negative, Significant / Very Significant and Temporary / Short-Term.

In addition to those properties directly impacted through acquisition (temporary and / or permanent) of private areas, construction of the Proposed Scheme will also result in visual impacts for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the provision of Construction Compounds, general disturbance, demolition, excavation and construction works within the public road corridor of the Proposed Scheme. Construction works will be openly visible from these properties. The sensitivity is medium / high, and the magnitude of change is medium.

The potential townscape and visual effect of the Construction Phase on these properties is assessed to be Negative, Moderate and Temporary / Short-Term.

17.4.3.2.9 Trees and Vegetation

Construction of the Proposed Scheme will require the limited removal of existing trees and other plantings at specific locations along the road corridor. These include trees along Harold's Cross Road (seven street trees) plus a single tree in an open space adjacent to the entrance to Our Lady's Hospice. Four young trees will be removed from areas around Robert Emmet Bridge. Four street trees will be removed from Clanbrassil Street Upper / Lower and New Street South. The sensitivity is medium / high, and the magnitude of change is low.

The potential townscape and visual effect of the Construction Phase on trees and plantings is assessed to be Negative, Slight and Short-Term.

The summary of the landscape and visual impact assessment for the Construction Phase of the Proposed Scheme is set out in Table 17.7.

Table 17.7: Summary of Predicted Construction Phase Impacts

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road For proposed changes see Section 17.4.3.1.1		High	Medium	Negative Moderate / Significant Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
	Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.3.1.2	Medium	Very High	Negative Significant Temporary / Short-Term
	Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.3.1.3	Medium / High	Medium	Negative Moderate Temporary / Short-Term
Streetscape Characteristics and Visual Effects				
ACAs	None	N/A	N/A	N/A
Conservation Areas	Grand Canal. For proposed changes see Section 17.4.3.2.2	Very High	Low Overall; and Very High Locally	Negative Moderate Overall; and Negative Significant Temporary / Short-Term Locally
	New Street South / Kevin Street Upper For proposed changes see Section 17.4.3.2.2	Very High	Low	Negative Slight Temporary
Residential Conservation Areas	Residential Conservation Areas are located along R137 Clanbrassil Street Upper and Malpas Street. For proposed changes see Section 17.4.3.2.3	High	Medium	Negative Slight / Moderate Temporary / Short-Term
Protected Structures (Selected)	For proposed changes see Section 17.4.3.2.4	Very High	Low	Negative Slight / Moderate Temporary / Short-Term
Amenity Designations	Poddle Park, the River Poddle corridor / the Stone Boat and Mount Argus Park. For proposed changes see Section 17.4.3.2.5	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
	Grand Canal. For proposed changes see Section 17.4.3.2.5	High	Low Overall; High Locally	Negative Slight Temporary / Short-Term Overall; and Significant Temporary / Short-Term Locally
	Harold's Cross Park. For proposed changes see Section 17.4.3.2.5	High	Medium	Negative Moderate Temporary / Short-Term
TPOs / Tree Protection Objectives	None	N/A	N/A	N/A

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	Very High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Properties	Part of residential property in temporary acquisition <ul style="list-style-type: none"> • Nos. 14 - 26 Harold's Cross Road, on west side of Harold's Cross Road; and • Nos. 33 to 61 on (odd numbers) east side of Harold's Cross Road (15 no.). For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Permanent
	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Properties not included in temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.3.2.8	Medium / High	Medium	Negative Moderate Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	Medium / High	Low	Negative Slight Short-Term

17.4.4 Operational Phase

The Operational Phase of the Proposed Scheme will give rise to townscape streetscape and visual effects through the following:

- Alterations in the physical and visual character of the corridor of the existing road / street;
- Changes in traffic, pedestrian and cycle movements;
- Modification of areas of private property / gardens / boundaries; and
- Adjustments to other areas / boundaries.

These effects may be temporary, short-term, medium-term, long-term or permanent.

While alterations in the road corridor and changes in traffic, pedestrian and cycle movements are features of the Proposed Scheme, it is not anticipated that these aspects in themselves will give rise to significant landscape, townscape or visual effects. Changes in road corridors, including in traffic signalisation, signage, and in

carriageway / parking allocation and traffic movements are a common and regular aspect of active road and traffic management for urban roads and streets. Therefore, these changes may be considered part and parcel of on-going or regular changes that may be expected to occur, and do occur, from time to time in any urban streetscape environment and such changes are considered as a low or negligible magnitude of change.

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

17.4.4.1 Impact on Townscape and Streetscape Character

As set out in Section 17.3.1, the Proposed Scheme is sub-divided into three sections:

- Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road;
- Harold's Cross Road from Harold's Cross Park to the Grand Canal; and
- Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction.

17.4.4.1.1 Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road

The baseline townscape is of high sensitivity and operation of the Proposed Scheme will involve modest changes to the existing road infrastructure. The Operational Phase will not alter the overall existing character along this section of the Proposed Scheme but there will be improvements in sections of streetscape which will become more pronounced over the long-term with the growth of new tree planting. At Kimmage, a new cycle way will be provided along existing streets, which will have traffic management and a section of new boardwalk along the River Poddle at the 'Stone Boat'. Additional traffic management measures will be provided along Derravaragh Road and at the junction of Harold's Cross Road / Kenilworth Park, Kenilworth Square North / Rathgar Avenue east of this section of Proposed Scheme. The magnitude of change in the baseline environment is low / medium.

The potential townscape / streetscape and visual effect of the Operational Phase on this section is assessed to be Positive, Slight / Moderate and Short-Term becoming Positive, Moderate, Long-Term.

17.4.4.1.2 Harold's Cross Road from Harold's Cross Park to the Grand Canal

The baseline townscape is of medium sensitivity and operation of the Proposed Scheme will involve some considerable changes where temporary and / or permanent acquisition of private gardens / lands are required, and at Grand Canal / Robert Emmet Bridge. Otherwise, the Operational Phase will not appreciably alter the existing townscape character along this section of the Proposed Scheme but there will be some localised improvements in streetscape which will become more pronounced over the long-term as the tree planting matures. The magnitude of change in the baseline environment is medium.

The potential townscape / streetscape and visual effect of the Operational Phase on this section is assessed to be Neutral, Moderate and Short-Term becoming Positive, Moderate and Long-Term.

17.4.4.1.3 Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction

The baseline townscape is of medium / high sensitivity and operation of the Proposed Scheme will involve modest changes along the existing major road infrastructure. The Operational Phase of the Proposed Scheme will not alter the townscape character along this section of the Proposed Scheme but there will be an improvement in the streetscape which will become more pronounced over the long-term as the tree planting matures. The magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Operational Phase on this section is assessed to be Positive, Slight and Short-Term becoming Positive, Moderate, Long-Term.

17.4.4.2 Impact on Streetscape Elements and Visual Impacts

17.4.4.2.1 ACAs

There are no ACAs along the Proposed Scheme corridor.

17.4.4.2.2 Conservation Areas

The Grand Canal and the corner of R137 New Street South / R110 Kevin Street Upper are identified as Conservation Areas.

The operation of the Proposed Scheme will result in substantial changes and alterations to Robert Emmet Bridge over the Grand Canal with the provision of new cycle and pedestrian structures to the east and west of the bridge and the loss of adjacent trees. The new structures will affect localised views to and from the bridge especially along the canal corridor but will not affect the wider canal designation. The new structures have been designed as structures independent from the existing bridge thereby retaining its historic integrity. The effects will be reduced over the long-term as replacement tree planting matures and the structures become increasingly accepted as part of the townscape. The sensitivity is very high and the magnitude of change in the baseline environment is low overall but locally high at the bridge.

The potential townscape / streetscape and visual impact of the Operational Phase on the Grand Canal Conservation Area is assessed to be Neutral, Slight, Short-Term for the overall designation, becoming Neutral, Imperceptible, Long-Term. For the local area around the proposals the effect is assessed to be Negative, Significant and Short-Term becoming Negative, Slight / Moderate, Long-term

The operation of the Proposed Scheme will result in minor changes the road corridor in the vicinity of the New Street South / Kevin Street Upper Conservation Area. The Proposed Scheme will not affect key characteristics or features of the Conservation Area. The sensitivity is very high and the magnitude of change in the baseline environment is negligible / low.

The potential townscape / streetscape and visual effect of the Operational Phase on the New Street South / Kevin Street Upper Conservation Area is assessed to be Neutral, Imperceptible and Short-Term becoming Neutral, Imperceptible and Long-Term.

17.4.4.2.3 Residential Conservation Areas

Residential Conservation Areas, which are located along R137 Clanbrassil Street Upper and Malpas Street, are of high sensitivity. The operation of the Proposed Scheme will not directly impact on the Residential Conservation Areas. The sensitivity is very high and the magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Operational Phase on Residential Conservation Areas is assessed to be Neutral, Imperceptible and Short-Term becoming Neutral, Imperceptible and Long-Term.

17.4.4.2.4 Protected Structures

A number of protected structures are located along the Proposed Scheme. These include Mount Jerome and associated structures and features, and property Nos. 7 to 20 and Nos. 50 to 55 Clanbrassil Street Upper, the corner of Fumbally Lane, and the granite base to the former public lavatories with the centrally-located cast-iron ventilator (on an island at R137 New Street South / R110 Kevin Street Junction). While located along the principal road corridor of the Proposed Scheme, there will be no direct operational effect on the properties or structures. The sensitivity is very high, and the magnitude of change is negligible / low. (Refer also to Chapter 16 (Architectural Heritage) for full details of protected structures).

The potential townscape / streetscape and visual effect of the Operational Phase on protected structures is assessed to be Neutral, Imperceptible and Short-Term becoming Neutral, Imperceptible and Long-Term.

17.4.4.2.5 Amenity Designations

A number of amenities (mainly open spaces, parks and the Grand Canal) are located along the Proposed Scheme corridor. These include areas of high sensitivity such as Poddle Park, the River Poddle corridor, Mount Argus Park, Harold's Cross Park and the Grand Canal corridor.

The Operational Phase of the Proposed Scheme will include relatively minor interventions in the provision of off-road cycle facilities and section of boardwalk along a section of the River Poddle corridor at the Stone Boat. The effect will become positive as new tree planting matures over the long-term. The sensitivity is high, and the magnitude of change is low / medium.

The potential townscape / streetscape and visual effect of the Operational Phase on these amenities is assessed to be Neutral, Slight / Moderate and Short-Term becoming Positive, Slight / Moderate, Long-Term.

The Operational Phase of the Proposed Scheme will result in substantial changes and alterations to Robert Emmet Bridge over the amenity of the Grand Canal and to the immediate canal banks and towpaths including loss of trees. The proposals will detract from localised views to and from the bridge and canal and will impact directly on adjoining sections of footpath / towpath. The proposals will not detract from views to and from the wider canal amenity. There will be an improvement to pedestrian and cycle access permeability through provision of the new bridges and, when combined with the growth of replacement planting, the negative effects will be negated over the long-term. The sensitivity is high and the magnitude of change in the baseline amenity is low overall and locally medium / high.

The potential townscape / streetscape and visual effect of the Operational Phase on the Grand Canal amenity is assessed to be Negative, Slight, Long-Term for the designation as a whole, and locally Negative, Moderate / Significant and Short-Term becoming Neutral, Moderate, Long-Term.

The Operational Phase of the Proposed Scheme will involve the existing roads surrounding the highly sensitive Harold's Cross Park. However, this will not result in a direct impact in the characteristics or features of the park, however, there will be a minor improvement to the setting with changes to surrounding urban realm including new tree planting which result in a positive effect over the long-term. The sensitivity is high, and the magnitude of change is low.

The potential townscape / streetscape and visual effect of the Operational Phase on Harold's Cross Park is assessed to be Neutral, Slight and Short-Term becoming Positive, Slight, Long-Term.

17.4.4.2.6 TPOs / Tree Preservation Objectives

There are no TPOs or tree preservation objectives pertaining to the operation of the Proposed Scheme.

17.4.4.2.7 Preserved Views / Scenic Views, etc.

At the northern end of the Proposed Scheme a key view and prospect is identified north along R137 Clanbrassil Street Lower / New Street South towards St. Patrick's Cathedral. The operation of the Proposed Scheme will not impact the sensitive characteristics of the view of St. Patrick's Cathedral. The sensitivity is very high and the magnitude of change is negligible.

The potential townscape / streetscape and visual effect of the Operational Phase on preserved views / scenic views is assessed to be Neutral, Imperceptible and Short-Term becoming Neutral, Imperceptible and Long-Term.

17.4.4.2.8 Properties

The Operational Phase of the Proposed Scheme will require permanent acquisition from 16 residential properties: Nos. 33 to 61 (odd numbers) east side of Harold's Cross Road and No. 32A Clanbrassil Street Upper (residence adjacent to Gordon's Fuels).

The loss of property / garden areas from the Nos. 33 to 61 Harold's Cross Road, albeit modest in area, will result in a permanently altered arrangement and reduced property area. Property boundaries and access will be reinstated. The sensitivity is high, and the magnitude of change is high.

The potential townscape / streetscape and visual effect of the Operational Phase on Nos. 33 to 61 Harold's Cross Road is assessed to be Negative, Significant and Short-Term becoming Negative, Moderate / Significant, Long-Term

There will be complete loss of 32A Clanbrassil Street Upper for provision of an access ramp to Gordan's Fuels. The sensitivity is high, and the magnitude of change is very high.

The potential townscape / streetscape and visual effect of the Operational Phase on 32A Clanbrassil Street Upper is assessed to be Negative, Profound and Permanent.

The Operational Phase of the Proposed Scheme will require permanent acquisition from several non-residential properties: car park at Sundrive Road (reinstated Construction Compound K1 area); Our Lady's Hospice (reinstated Construction Compound K2 area); entrance to St. Clare's Convent (access area); Fottrell House Offices (landscape area); 3 to 15 Harold's Cross Road (paved areas to frontage); and Gordon's Fuels. There will be a change from a grassed area to a car park at Our Lady's Hospice and a small permanent acquisition of landscape area will occur at Fottrell House Offices. The sensitivity is high, and the magnitude of change is medium.

The potential townscape / streetscape and visual effect of the Operational Phase on these properties is assessed to be Negative, Moderate and Short-Term becoming Negative, Slight / Moderate, Long-Term.

In addition to those properties directly effected through permanent acquisition of areas, the Operational Phase of the Proposed Scheme will also result in visual impacts for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the general change in the road corridor, urban realm and traffic patterns, as well as the introduction and growth over the long-term of planting, particularly tree planting. The sensitivity is medium / high, and the magnitude of change is low.

The potential townscape / streetscape and visual effect of the Operational Phase on these properties is assessed to be Neutral, Slight and Short-Term becoming Positive, Slight, Long-Term.

17.4.4.2.9 Trees and Vegetation

A number of trees will have been removed during the Construction Phase. The Operational Phase of the Proposed Scheme will not impact directly on additional trees. The Operational Phase also provides for additional street planting, with quantities in excess of those to be removed. The sensitivity is medium / high and the magnitude of change is low.

The potential townscape / streetscape and visual effect of the Operational Phase on trees and plantings is assessed to be Neutral, Slight and Short-Term becoming Positive, Slight / Moderate, Long-Term

The summary of the landscape and visual impact assessment for the Operation Phase of the Proposed Scheme is set out in Table 17.8

Table 17.8: Summary of Predicted Operational Phase Impacts (at 1 year post-Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
Kimmage Road Lower from Kimmage Cross Roads to the Junction with		High	Low / Medium	Positive

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Harold's Cross Road For proposed changes see Section 17.4.4.1.1				Slight / Moderate Short-Term
Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.4.1.2		Medium	Medium	Neutral Moderate Short-Term
Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.4.1.3		Medium / High	Low	Positive Slight Short-Term
Streetscape Characteristics and Visual Effects				
ACAs	None	N/A	N/A	N/A
Conservation Areas	Grand Canal. For proposed changes see Section 17.4.4.2.2	Very High	Low Overall; and High Locally	Neutral Slight Short-Term Overall; and Negative Significant Short-Term Locally
	R137 New Street South / R110 Kevin Street Upper For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Imperceptible Short-Term
Residential Conservation Areas	Residential Conservation Areas are located along R137 Clanbrassil Street Upper and Malpas Street. For proposed changes see Section 17.4.4.2.3	High	Low	Neutral Imperceptible Short-Term
Protected Structures (Selected)	For proposed changes see Section 17.4.4.2.4	Very High	Negligible / Low	Neutral Imperceptible Short-Term
Amenity Designations	Poddle Park, the River Poddle corridor / The Stone Boat and Mount Argus Park. For proposed changes see Section 17.4.4.2.5	High	Low / Medium	Neutral Slight / Moderate Short-Term
	Grand Canal. For proposed changes see Section 17.4.4.2.5	High	Low Overall; and Medium / High Locally	Negative Slight Short-Term Overall; and Negative Moderate / Significant Short-Term Locally
	Harold's Cross Park. For proposed changes see Section 17.4.4.2.5	High	Low	Neutral Slight Short-Term
TPOs / Tree Protection Objectives	None	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.4.2.7	Very High	Negligible	Neutral Imperceptible

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
				Short-Term
Properties	Part of residential property in permanent acquisition Nos. 33 to 61 on east side of Harold's Cross Road (15 no.). For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Short-Term
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Permanent
	Non-residential properties included in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium	Negative Moderate Short-Term
	Properties not included in permanent acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	Medium / High	Low	Neutral Slight Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	Medium / High	Low	Neutral Slight Short-Term

17.5 Mitigation and Monitoring Measures

This section describes mitigation and monitoring measures which are proposed to ameliorate, remediate or reduce significant landscape (townscape) and visual impacts from the Construction and Operational Phases wherever possible.

17.5.1 Construction Phase

A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities. A summary of predicted Construction Phase effects following the implementation of mitigation and monitoring measures is listed in Table 17.9.

- Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project-specific arboricultural methodology for such works, which will be prepared / approved by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans which are contained within Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR;
- Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with 'BS 3998:2010 Tree Work – Recommendations' (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist. For details of trees and vegetation to be removed, refer to the Tree Protection Plans within Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR and the Landscape General Arrangements (BCIDD-ROT-ENV_LA-0011_XX_00-DR-LL-9001 in Volume 3 of this EIAR). The Arboricultural Assessment prepared for the Proposed

Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for on-going monitoring of retained trees during the Operational Phase;;

- Where properties are subject to permanent and / or temporary acquisition (as listed in Section 17.4.3.2.8 and Section 17.4.4.2.8), an inventory of boundary details and accesses, planting, paving, and other features that may be disturbed or removed will be prepared by the appointed contractor prior to commencement of construction works; and
- Where properties are subject to permanent and / or temporary acquisition (as listed in Section 17.4.3.2.8 and Section 17.4.4.3.8), appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA. Where boundary features, gates, railings, archways of heritage importance (and which contribute to landscape value) are to be affected by the works, mitigation measures should follow those outlined in Chapter 16 (Architectural Heritage); and
- Appropriate access to amenities and public open spaces shall be maintained by the appointed contractor, where possible.

In addition to the above measures, construction works will be managed by the preparation of a Construction Environmental Management Plan (CEMP) - refer to Appendix A5.1 in Volume 4 of the EIAR). This provides the environmental management framework to be adhered during construction of the Proposed Scheme.

17.5.1.1 Summary of Construction Phase Impacts Post-Mitigation

A summary of the predicted Construction Phase townscape / streetscape and visual impacts, following the implementation of mitigation and monitoring measures is set out in Table 17.9.

Table 17.9: Summary of Predicted Construction Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road For proposed changes see Section 17.4.3.1.1	High	Medium	Negative Moderate / Significant Temporary / Short-Term
	Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.3.1.2	Medium	Very High	Negative Significant Temporary / Short-Term
	Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.3.1.3	Medium / High	Medium	Negative Moderate Temporary / Short-Term
Streetscape Characteristics and Visual Effects				
ACAs	None	N/A	N/A	N/A
Conservation Areas	Grand Canal. For proposed changes see Section 17.4.3.2.2	Very High	Low Overall; and Very High Locally	Negative Moderate Overall; and

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
				Locally Negative Significant Temporary / Short-Term
	New Street South / Kevin Street Upper For proposed changes see Section 17.4.3.2.2	Very High	Low	Negative Slight Temporary
Residential Conservation Areas	Residential Conservation Areas are located along R137 Clanbrassil Street Upper and Malpas Street. For proposed changes see Section 17.4.3.2.3	Very High	Medium	Negative Slight / Moderate Temporary / Short-Term
Protected Structures (Selected)	For proposed changes see Section 17.4.3.2.4	Very High	Low	Negative Slight / Moderate Temporary / Short-Term
Amenity Designations	Poddle Park, the River Poddle corridor / the Stone Boat and Mount Argus Park. For proposed changes see Section 17.4.3.2.5	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
	Grand Canal. For proposed changes see Section 17.4.3.2.5	High	Low Overall; and Locally High	Negative Slight Temporary / Short-Term Overall; and Negative Significant Temporary / Short-Term Locally
	Harold's Cross Park. For proposed changes see Section 17.4.3.2.5	High	Medium	Negative Moderate Temporary / Short-term
TPOs / Tree Protection Objectives	None	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	Very High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Properties	Part of residential property in temporary acquisition <ul style="list-style-type: none"> • Nos. 14 - 26 Harold's Cross Road, on west side of Harold's Cross Road; and • Nos. 33 to 61 on east side of Harold's Cross Road (15 no.) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Temporary / Short-Term
	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Properties not included in temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.3.2.8	Medium / High	Medium	Negative Moderate Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	Medium / High	Low	Negative Slight Short-Term

17.5.2 Operational Phase

The design process of the Proposed Scheme has considered the potential for negative landscape / townscape and visual effects. Opportunities to avoid, reduce or remediate these have been taken wherever practicable, and landscape measures are integrated within the design as far as possible. It should be noted, that wherever practicable, the Proposed Scheme proposes improvements of key locations of the townscape / streetscape, as described in Sections 17.4.1.4 and 17.4.4. Therefore, while no mitigation or monitoring measures are proposed for the Operational Phase, the scheme will become established and increasingly integrated within its landscape (townscape) setting, and the potential negative operational effects will be reduced. A comparative summary of Predicted Operational Phase effects, at both 1 year Post-Construction Phase and following establishment of landscape measures at 15 years Post-Construction Phase, is presented in Table 17.10.

However, it is acknowledged that in some cases mitigation of effects on townscape and visual characteristics is neither possible nor practicable – for example, it is not possible to provide landscape mitigation for the loss of land from private properties, or to provide mitigation for loss of mature trees in the short / medium-term.

17.5.2.1 Summary of Operational Phase Impacts Post-Mitigation

A summary of the predicted Operational Phase townscape / streetscape and visual impacts, following the implementation of mitigation and monitoring measures is set out in Table 17.10.

Table 17.10: Summary of Predicted Operational Phase Impacts (at 1 and 15 years post-Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post-construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Townscape and Streetscape Character					

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post-construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
	Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road For proposed changes see Section 17.4.4.1.1	High	Low / Medium	Positive Slight / Moderate Short-Term	Positive Moderate Long-Term
	Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.4.1.2	Medium	Medium	Neutral Moderate Short-Term	Positive Moderate Long-Term
	Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.4.1.3	Medium / High	Low	Positive Slight Short-Term	Positive Moderate Long-Term
Streetscape Characteristics and Visual Effects					
ACAs	None	N/A	N/A	N/A	N/A
Conservation Areas	Grand Canal. For proposed changes see Section 17.4.4.2.2	Very High	Low Overall; and High Locally	Neutral Slight Short-Term Overall; and Negative Significant Short-Term Locally	Neutral Imperceptible Long-Term Overall; and Negative Slight / Moderate Long-Term Locally
	R137 New Street South / R110 Kevin Street Upper For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Imperceptible Short-Term	Neutral Imperceptible Long-Term
Residential Conservation Areas	Residential Conservation Areas are located along R137 Clanbrassil Street Upper and Malpas Street. For proposed changes see Section 17.4.4.2.3	Very High	Low	Neutral Imperceptible Short-Term	Neutral Imperceptible Long-Term
Protected Structures (Selected)	For proposed changes see Section 17.4.4.2.4	Very High	Negligible / Low	Neutral Imperceptible Short-Term	Neutral Imperceptible Long-Term
Amenity Designations	Poddle Park, the River Poddle corridor / The Stone Boat and Mount Argus Park. For proposed changes see Section 17.4.4.2.5	High	Low / Medium	Neutral Slight / Moderate Short-Term	Positive Slight / Moderate Long-Term
	Grand Canal For proposed changes see Section 17.4.4.2.5	High	Low Overall; and Medium / High Locally	Negative Slight Short-Term Overall; and Negative Moderate / Significant Short-Term Locally	Negative Slight Long-Term Overall; and Neutral Moderate Long-Term Locally

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post-construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
	Harold's Cross Park. For proposed changes see Section 17.4.4.2.5	High	Low	Neutral Slight Short-Term	Positive Slight Long-Term
TPOs / Tree Protection Objectives	None	N/A	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.4.2.7	Very High	Negligible	Neutral Imperceptible Short-Term	Neutral Imperceptible Long-Term
Properties	Part of residential property in permanent acquisition Nos. 33 to 61 on east side of Harold's Cross Road (15 no.). For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Permanent	Negative Profound Permanent
	Non-residential properties included in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term
	Properties not included in permanent acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	Medium / High	Low	Neutral Slight Short-Term	Positive Slight Long-term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	Medium / High	Low	Neutral Slight Short-Term	Positive Slight / Moderate Long-Term

17.5.2.2 Review of Photomontages

Photomontages have been prepared from key or illustrative viewpoints to give an indication of changes and potential effects resulting from the Proposed Scheme during the Operational Phase after the implementation of the scheme. The proposed views are shown with well-established planting. This section describes the existing view available from the chosen viewpoint and the Proposed Scheme changes as illustrated in the photomontage. The Photomontages have been prepared in accordance with the methodology set out in Section 17.2.4.8 and are included in Appendix A17.2 in Volume 3 of this EIAR.

17.5.2.2.1 Photomontage View 2: River Poddle Corridor close to The Stone Boat

View 1: Existing

Figure 17.2.1.1 shows the existing view taken from the southern edge of Mount Argus Way, a local residential street, where it adjoins the banks of the River Poddle. Adjacent three-storey residential development and car parking is visible to the left at Mount Argus Way, and two-storey residences with back gardens at Mount Argus Close are seen on the opposite side of the river to the right. The river can be seen in the centre of the view,

contained within a narrow channel with a sloping grass bank to the nearest (northern) side and a tall concrete wall to the furthest (southern) side. The street is separated from the river channel by a metal bar railing. The view looks north-east along the river towards a small pedestrian bridge which connects Mount Argus Way to Mount Argus Close. Further down the river is a clump of mature deciduous trees spanning both sides of the channel. In the distance the Church of Mount Argus with its prominent bronze spire can be seen. The Stone Boat feature is located in the river channel behind / below the viewpoint and is not visible. There is an overall character of a green suburban-residential landscape and substantially modified minor river corridor.

View 2: As Proposed

Figure 17.2.1.2 shows the proposed view from the southern edge of Mount Argus Way. A new shared pedestrian and cycle path / boardwalk structure is shown cantilevered over the River Poddle channel and 'Stone Boat' feature. The structure is composed of metal mesh surface at grade with the existing street, with sloping metal railings and wooden handrail to the outer edge. Both the surface and the railing are visually permeable helping partially retain views and allowing users to experience views of the river and the Stone Boat feature (behind and below viewpoint to the south). There would be perceivable change in the character of the view and some loss of visual amenity through the reduced visibility / change in vegetated character of the river corridor.

17.5.2.2.2 Photomontage View 3: North along Harold's Cross Road from close to Harold's Cross Park

View 3: Existing

Figure 17.2.2.1 shows the existing view from Harold's Cross Road to the north of Harold's Cross Park looking northwards. The view shows a long straight section of road corridor composed of two central general traffic lanes and two outer bus lanes. Mid-twentieth century two-storey terraced housing is visible along the eastern side of the road forming the central focus of the view. These houses have retained their original front gardens and boundary walls, which add positively to the streetscape character. Housing on the western side of the road is outside of the field of view, but the front garden boundaries from the east extends of the frame. The streetscape contains a range of standard street features such as modern lighting poles, signage, pedestrian guardrails, and a modern bus shelter is located in the foreground to the left of the view. Street trees are visible on the eastern side of the road in the middle distance, and frequent trees within gardens and property curtilages along both sides of the road help to soften the scene. Robert Emmet Bridge over the Grand Canal can be seen in the distance, and buildings on the northern side of Grand Canal form the backdrop to the views at the end of the road. The character is one of an inner-city suburban residential street with some tree cover.

View 3: As Proposed

Figure 17.2.2.2 shows the proposed view from Harold's Cross Road to the north of Harold's Cross Park. The primary changes to the view include the widening of the road through the setting back of property boundaries on the eastern side of the road, with like-for-like replacement of boundary features for properties on both sides of the road and the introduction of cycle lanes to both sides of the road. The bus stop to the left of the view is removed with a new bus stop arrangement is located further along the road. The footpaths are resurfaced, and lighting columns undergo minor rearrangement. On the far side of the road a new roadside parking area is introduced, and four trees are lost. Three new trees are shown adjacent to the parking area which are of a size and form similar to the existing trees. There is no perceivable change to the character or visual amenity of the view.

17.5.2.2.3 Photomontage View 4: View east along Grand Canal towards Robert Emmet Bridge

View 4: Existing

Figure 17.2.3.1 shows the existing view from the edge of the Grand Canal looking east towards Robert Emmet Bridge. The view shows the bridge as the focal point of the scene with the Grand Canal in the foreground. This is a single arch bridge with prominent ornamental balustrade and thick rendered handrail terminating in rendered piers with ornamental lamp holders. The bridge is rendered in a light grey colour with masonry walls to the adjoining ramp parapets. In the foreground on the right side of the view is Parnell Road with a wide footpath and a grass bank which includes semi-mature tree planting that obscures the right-hand end of the bridge. Mixed residential and commercial buildings along Clanbrassil Street, Windsor Terrace and Harold's Cross Road

are prominent in the background. The single-storey residence at No.32A Clanbrassil Street Upper (at Gordon's Fuels) is visible above a dilapidated shiplap fence to the northern edge of the canal. The character is one of a canal corridor with a notable historic bridge within a mixed inner-city neighbourhood.

View 4: As Proposed

Figure 17.2.3.2 shows the proposed the edge of the Grand Canal looking east towards Robert Emmet Bridge. The primary changes in the view are the addition of a new cycle / pedestrian bridge to the near (western) side of the bridge, the raise in height and westward widening of the bridge ramp and abutment to the north, and removal of No.32A Clanbrassil Street Upper. The footpath to Parnell Road is reduced in width to allow an extended east-bound right-turn lane. The proposals will result in a change in the character and a reduction of the visual amenity through the partial screening of the existing historic bridge and through the introduction of a new modern bridge structure. However, the new bridge has a visually lightweight design and most features of significant value in the view will be retained and will remain visible e.g. tree planting, key features of the bridge (balustrade, piers and ornamental lighting columns).

17.5.2.2.4 Photomontage View 4b: View west along Grand Canal towards Robert Emmet Bridge

View 4b: Existing

Figure 17.2.4.1 shows the existing view from the edge of the Grand Canal looking west towards Robert Emmet Bridge. The view shows the bridge as the focal point of the scene with the Grand Canal in the foreground. This is a single arch bridge with prominent ornamental balustrade and thick rendered handrail terminating in rendered piers with ornamental lamp holders. The bridge is rendered in a light grey colour with masonry walls to the adjoining ramp parapets. The rear side of a limestone plaque and relief bust by Albert George Power is visible to the top of the bridge parapet. The bridge is a significant aesthetic landscape feature in the view. To the left of the view is Grove Road, a single carriage way road with two traffic lanes that joins Harold's Cross Road in the middle left of the view; the junction is conspicuous due to the traffic lights and the clutter from other vertical structures. The cycleway and pavement to the northern side of the road passes by the view on the left. To the left (southern) side of the canal is a Gas Networks Ireland service box painted in a light grey colour similar to the colour of the bridge. Mature and semi / mature trees are present along the sides of the canal and are features of landscape value in the view. The character is one of a canal corridor with a notable historic bridge and with substantial streets both adjacent and crossing within a mixed inner-city neighbourhood.

View 4b: As Proposed

Figure 17.2.4.2 shows the proposed view from the edge of the Grand Canal looking west towards Robert Emmet Bridge. The primary changes in the view are the addition of a new pedestrian bridge to the near (eastern) side of the bridge. The new bridge is composed of a simple steel deck supported by two branching steel columns, painted in a neutral light grey similar to the existing bridge, with glass parapets to the edge of the walkway. The new bridge deck obscures the top of the arch of Robert Emmett Bridge from this vantage, however, views of the ornamented balustrade and piers are retained by the use of the glass parapet. The proposals will result in a change in the character and a reduction of the visual amenity through the partial screening of the existing historic bridge and through the introduction of a new modern bridge structure. However, the new bridge has a visually lightweight design and most features of significant value in the view will be retained and will remain visible e.g. tree planting, key features of the bridge (balustrade, piers, relief bust and ornamental lighting columns).

17.5.2.2.5 View 5: View south towards Robert Emmet Bridge from Clanbrassil Street Upper

View 5: Existing

Figure 17.2.4.2 shows the proposed view from the western footpath on Clanbrassil Street Upper looking south towards Robert Emmett Bridge along the approach ramp to the bridge. The boundary to the ramp is a masonry wall with a rounded stone capping which changes to a rectangular capping closer to the bridge before meeting the ornamented bridge parapet. The ornamental balustrade and lighting standards of the bridge parapet are visible but are not visually prominent in the view. The road contains two traffic lanes with a narrow cycle lane to either side; a row of black bollards segregates the nearest (western) cycle path from the traffic flow. Tall

galvanised utilitarian lighting columns are prominent features of the streetscape. Mixed residential and commercial buildings along Clanbrassil Street, Grove Road, Parnell Road and Harold's Cross Road form the background to the view. The Grand Canal is barely visible to the right of the bridge and is only a minor element of the view, but semi-mature trees along its banks are prominent in the view helping to soften the streetscape. The character is one of a mixed inner-city neighbourhood with a busy two-lane road crossing a historic bridge.

View 5: As Proposed

Figure 17.2.4.2 shows the proposed view from the western footpath on Clanbrassil Street Upper looking south towards Robert Emmett Bridge along the approach ramp to the bridge. The primary changes in the view are: the creation of two bus lanes across the bridge, in addition to the existing two lanes, and removal of foot and cycle paths; the widening of the approach ramp to the Robert Emmett Bridge to the right (west) of the frame including provision of new foot / cycle paths and reinstatement of masonry boundary wall; and the addition of a new cycle / pedestrian bridge to the western side of the existing bridge with glass panel parapet. On the left (east) side of the view, part of the eastern parapet of the bridge has been removed to accommodate the entrance to a new pedestrian bridge on the eastern side, the glass panel parapet of which can be partly seen through this new opening. The addition of the eastern pedestrian bridge is not very apparent in the view. The proposals will result in a change of the character and a reduction in visual amenity of the view primarily due to the overall widening of the road from two to four lanes and the addition of the western pedestrian / cycle bridge. Key landscape features, such as the ornamented bridge parapets, masonry walls and cappings, and canal-side trees, will be preserved / reinstated and will remain visible.

17.6 Residual Impacts

17.6.1 Construction Phase

Mitigation of landscape (townscape) and visual impacts during the Construction Phase is focused on ensuring the protection of elements to be retained (e.g. mature trees) and providing for a degree of visual screening of particular aspects of the works. Construction Phase effects are temporary or short-term in nature and the proposed mitigation measures will be effective at ensuring adequate protection to features that are not identified for permanent removal as part of the works. However, it is acknowledged that for the most part effective Construction Phase mitigation for the majority of impacts on townscape and visual characteristics is not practicable – for example, during the Construction Phase it is not possible to mitigate for the impact of the removal of mature trees to facilitate works. Therefore, for the most part, significant construction stage effects remain unchanged in the post-mitigation and monitoring scenario as set out in Table 17.11.

Table 17.11: Summary of Construction Phase Significant Residual Impacts (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road For proposed changes see Section 17.4.3.1.1	High	Medium	Negative Moderate / Significant Temporary / Short-Term
	Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.3.1.2	Medium	Very High	Negative Significant Temporary / Short-Term
	Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.3.1.3	Medium / High	Medium	Negative Moderate Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts
Streetscape Characteristics and Visual Effects				
ACAs	None	N/A	N/A	N/A
Conservation Areas	Grand Canal. For proposed changes see Section 17.4.3.2.2	Very High	Low Overall; and Very High Locally	Negative Moderate Overall; and Significant Temporary / Short-Term Locally
Amenity Designations	Grand Canal. For proposed changes see Section 17.4.3.2.5	High	High Locally	Negative Significant Temporary / Short-Term Locally
	Harold's Cross Park. For proposed changes see Section 17.4.3.2.5	High	Medium	Negative Moderate Temporary / Short-Term
TPOs / Tree Protection Objectives	None	N/A	N/A	N/A
Properties	Part of residential property in temporary acquisition <ul style="list-style-type: none"> Nos. 14 - 26 Harold's Cross Road, on west side of Harold's Cross Road; and Nos. 33 to 61 on east side of Harold's Cross Road (15 no.). For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Permanent
	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Properties not included in temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.3.2.8	Medium / High	Medium	Negative Moderate Temporary / Short-Term

17.6.2 Operational Phase

Residual landscape / townscape and visual effects during the Operational Phase are further influenced by the on-going development, establishment and maturing of landscape / townscape and visual measures, as described in Section 17.5.2. A summary of residual Operational Phase Effects (rated moderate or greater) following establishment of landscape measures at 15 years Post-Construction Phase, is presented in Table 17.12.

Table 17.12: Summary of Operational Phase Significant Residual Impacts (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Townscape and Streetscape Character				
	Kimmage Road Lower from Kimmage Cross Roads to the Junction with Harold's Cross Road For proposed changes see Section 17.4.4.1.1	High	Low / Medium	Positive Moderate Long-Term
	Harold's Cross Road from Harold's Cross Park to the Grand Canal For proposed changes see Section 17.4.4.1.2	Medium	Medium	Positive Moderate Long-Term
	Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street Junction. For proposed changes see Section 17.4.4.1.3	Medium / High	Low	Positive Moderate Long-Term
Streetscape Characteristics and Visual Effects				
ACAs	None	N/A	N/A	N/A
Amenity Designations	Grand Canal. For proposed changes see Section 17.4.4.2.5	High	Medium / High Locally	Neutral Moderate Long-Term Locally
Properties	Part of residential property in permanent acquisition The Proposed Scheme will require part permanent acquisition of portions of private area / front gardens of the following residential properties (17no.): <ul style="list-style-type: none"> Nos. 14 - 26 Harold's Cross Road, on west side of Harold's Cross Road; Nos. 33 to 61 on east side of Harold's Cross Road (15 no.); and No. 32A Clanbrassil Street Upper (at Gordon's Fuels). For proposed changes see Section 17.4.4.2.8	High	High	Negative Moderate / Significant Long-Term
	No. 32A Clanbrassil Street Upper (at Gordon's Fuels) For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Profound Permanent

17.7 Conclusion

As described in Chapter 3 (Consideration of Reasonable Alternatives) of this EIAR and noted at Section 17.4.1.2 of this Chapter, the Proposed Scheme has been subject to an iterative design development process which has sought insofar as practicable to avoid or reduce negative impacts, including townscape and visual impacts. Nevertheless, the Proposed Scheme will give rise to some degree of townscape and visual effect, most notably during the Construction Phase. These impacts arise especially where there is temporary and / or permanent acquisition of lands associated with residential or other properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compound, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.

In the Operational Phase negative moderate / significant residual effects will remain for residential properties on Harold's Cross Road experiencing permanent land acquisition. A profound permanent effect will remain for the single removed residential property on Clanbrassil Street Upper. The changes at Emmett Bridge will impact on views of the bridge but will also provide enhanced pedestrian and cycle access, resulting in a moderate neutral residual effect on the amenity of Grand Canal. There will be overall positive effects for all sections of the scheme, as the Proposed Scheme provides for improvements in the urban realm, most notably through an upgraded and consistent paving scheme and new street tree planting, which will result in positive long-term effects for the townscape and visual character. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian / cycle connectivity.

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