Chapter 17
Landscape (Townscape) & Visual

Contents

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 Belfield / Blackrock 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 public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

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 has been incorporated where appropriate.

17.2 Methodology

17.2.1 Study Area

The Proposed Scheme which has a total length of approximately 8.3km is comprised of two main alignments in terms of the route it follows; namely the Blackrock to City Centre section and along Nutley Lane.

The Blackrock to City Centre section commences on the R113 at Temple Hill, approximately 80m to the north of the R827 Stradbrook Road, travels along the N31 Frascati Road, the R118 Rock Road / Merrion Road / Pembroke Road, the R816 Pembroke Road / Baggot Street Upper / Baggot Street Lower, turns onto Fitzwilliam Street Lower and terminates at the junction of Mount Street Upper / Merrion Square South / Merrion Square East.

The Nutley Lane section of the Proposed Scheme will commence at the tie-in with the signalised junction on the R138 Stillorgan Road on the southern end of Nutley Lane, travel along Nutley Lane and will terminate at the junction with the R118 Merrion Road.

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 River Dodder, Grand Canal).

17.2.2 Relevant Legislation, Policy and Guidelines

The assessment has been carried out with reference to the following legalisation, 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 (the 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

- Dublin City Development Plan 2016-2022 (DCC 2016a);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- Dún Laoghaire-Rathdown County Development Plan 2016-2022 (DLRCC 2016);
- dlr TREES: A tree strategy for Dún Laoghaire-Rathdown (DLRCC 2011);
- Blackrock Local Area Plan 2015-2021 (DLRCC 2015)
- 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) Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2017);
- EPA Draft Advice Notes for preparing Environmental Impact Statements (EPA 2015);
- 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 2017) 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 2017) and in the GLVIA (Landscape Institute and IEMA 2013), supported by the TCA (Landscape Institute 2018) 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' (European Landscape Convention 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 extent, 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' (Paving the Way, CABE 2002). Streetscape is a term used to describe the natural and built fabric of the street' (Torbay Streetscape Guidelines 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' (GVLIA) (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' (TCA) (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 the 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 Appendix A17.2 in Volume 4 of this EIAR.

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

- Dún Laoghaire-Rathdown County Development Plan 2016-2022 (DLRCC 2016)
- dlr TREES: A tree strategy for Dún Laoghaire-Rathdown 2011-2015 (DLRCC 2011);
- Blackrock Local Area Plan 2015-2021 (DLRCC 2015);
- Dublin City Development Plan 2016-2022 (DCC 2016a);
- 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, google earth, google maps);
- Mapping of the Proposed Scheme;
- General Arrangement 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, Tree Survey Plans and Arboricultural Impact Assessment Report, 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

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 provide 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 17.2.2.4 in preparing the landscape (townscape) and visual impact assessment, this Chapter utilises a combination of approaches as outlined in the EPA Guidelines (EPA 2017) 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 GLVIA provides guidance that is specifically relevant to landscape and visual impact assessment. GLVIA has 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 (EPA 2017) and is shown in Diagram 17.1 Landscape and Visual Impact Assessment Criteria (refer to Section 17.2.4.2.3). 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 effects, EIA methodology (EPA 2017) requires that the quality of the effects 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' and '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; and
- 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' (Torbay 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 (Department for Transport, 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, the term '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., on-going 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.

Sensitivity	Description
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 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 may result in a minor change to the character of the landscape 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 2017), 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 impacts that are rational and justifiable is also based on the professional judgement, expertise and experience of the author.

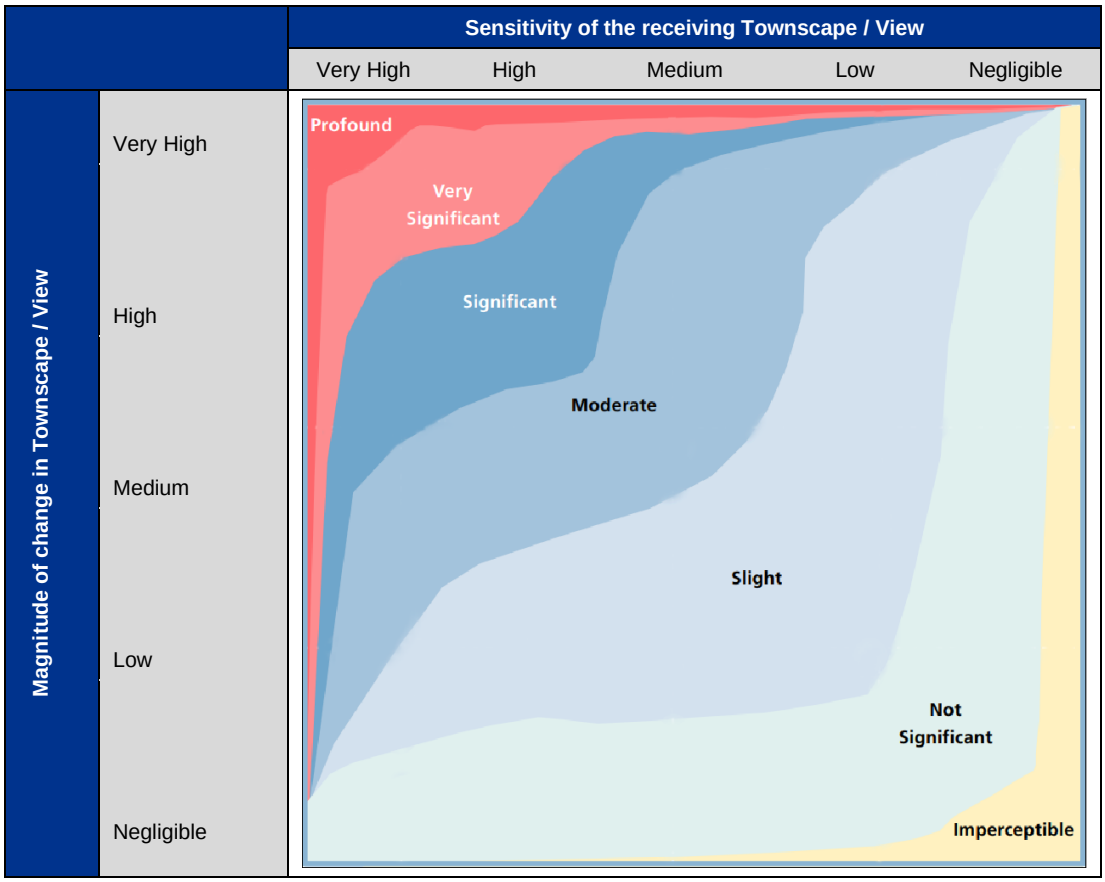

Diagram 17.1: Guide to Classification of Significance of Townscape and Visual Effects; as adapted from EPA Guidelines (EPA 2017)

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 one year); Short-Term (lasting one to seven years); Medium-Term (lasting seven to 15 years); Long-Term (lasting 15 to 60 years); or permanent (lasting over 60 years)) and frequency of effects, is as described in Table 3.3 of the EPA Guidelines (EPA 2017).

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.
As adapted from GLVIA (Landscape Institute and IEMA 2013)	

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 2017) 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 principal; 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 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-lens reflex (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. Generally, within an urban or suburban context, a 24mm prime lens has been used. This lens captures a horizontal field of view of 73°. 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.

17.2.4.8.2 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.

17.2.4.8.3 3D Modelling and Camera Matching

17.2.4.8.3.1 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.

17.2.4.8.3.2 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.

17.2.4.8.4 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.

17.2.4.8.5 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 that lens view.

17.3 Baseline Environment

17.3.1 City Context

The Proposed Scheme which has a total length of approximately 8.3km is comprised of two main alignments in terms of the route it follows; namely the Blackrock to City Centre section and along Nutley Lane.

The Blackrock to City Centre section commences on the R113 at Temple Hill, approximately 80m to the north of the R827 Stradbrook Road, travels along the N31 Frascati Road, the R118 Rock Road / Merrion Road / Pembroke Road, the R816 Pembroke Road / Baggot Street Upper / Baggot Street Lower, turns onto Fitzwilliam Street Lower and terminates at the junction of Mount Street Upper / Merrion Square South / Merrion Square East.

The Nutley Lane section of the Proposed Scheme will commence at the tie-in with the signalised junction on the R138 Stillorgan Road on the southern end of Nutley Lane, travel along Nutley Lane and will terminate at the junction with the R118 Merrion Road.

The Proposed Scheme is further divided into five sub-sections:

- Stradbrook Road to Booterstown Avenue;
- Booterstown Avenue to Nutley Lane;
- Merrion Road (Nutley Lane to Ballsbridge);
- Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street); and
- Nutley Lane (R138 to Merrion Road).

An overview of the Proposed Scheme is provided in Section 17.3.2 and 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 overall Proposed Scheme is approximately 8.3km long. The Blackrock to City Centre Section is approximately 7.4km and the Nutley Lane Section is approximately 0.9km.

The Proposed Scheme will pass Blackrock Village, the Frascati Centre, Blackrock Park, Booterstown Park, Booterstown Marsh (a nature reserve and pNHA), the Merrion Road / Strand Road (Merrion Gates) junction, St. Vincent's University Hospital, Merrion Shopping Centre, the RDS, Ballsbridge Village, crossing the River Dodder, Baggot Street, crossing the Grand Canal and terminates at Merrion Square. The Nutley Lane Section of the Proposed Scheme will pass the southern end of the RTÉ Campus, Elm Park Golf & Sports Club, St. Vincent's University Hospital and Merrion Shopping Centre.

The Proposed Scheme includes a wide variety of suburban and city landscape, townscape and visual features from streetscape boundary and urban realm features 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 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 Dún Laoghaire-Rathdown County Development Plan 2016 - 2022

The Dún Laoghaire-Rathdown County Development Plan 2016-2022 (DLRCC 2016) is the higher county level planning framework applicable to the southern extent of the Blackrock to City Centre Section of the Proposed Scheme.

Chapter 4 Green County Strategy, at Section 4.1, sets out policies relating to landscape, natural heritage and biodiversity. Policies in relation to natural heritage and biodiversity as they relate to the Proposed Scheme are discussed in greater detail in Chapter 12 (Biodiversity) of this EIAR.

In relation to landscape, sub-section 4.1.2 of Chapter 4 of the Development Plan sets out policies in relation to preservation of landscape character areas, conservation and enhancement of high amenity areas, protection and enjoyment of views and prospects. Objectives to preserve views are indicated along most of the eastern (coast) side of R118 Rock Road, including over Blackrock Park, Booterstown Park and Booterstown Marsh. An Architectural Conservation Areas (ACA) is located at Montpelier Place at the southern end of the Proposed Scheme. Candidate Architectural Conservation Areas (cACA) are located at the Friends (Quakers) Burial Ground, Blackrock Village Centre, Seafort Parade and Booterstown Avenue off the R118 Rock Road. There are no high amenity areas along the section of the Proposed Scheme covered by the Laoghaire-Rathdown County Development Plan (hereafter referred to as DLRCDP).

Chapter 4 Green County Strategy, at Section 4.2, sets out policies relating to open space and recreation including the protection of existing green infrastructure and development of new green infrastructure, the protection and provision of parks and open spaces, the preservation of trees and woodlands (supported by the objectives and policies of 'dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011-2015' (DLRCC 2011), greenway networks, sports and recreation facilities and play facilities. Elements of green infrastructure, parks and open spaces, including recreation and play, define a significant length of the eastern boundary of this section of the Proposed Scheme. This includes Blackrock Park, Booterstown Park, Booterstown Marsh and a small open space located at Newtown Avenue / Temple Hill Road.

Tree preservation objectives are common on stands of trees and woodlands along this section of the Proposed Scheme, including Leoville on Carysfort Avenue, the corner of Rock Hill and the N31 Frascati Road, at Lisalea Apartments Rock Road, on the former avenue to Ruby Lodge (now part of open space at Castledawson / Westfield), in the grounds of Blackrock Clinic and in the grounds of Blackrock College and Willow Park School. There are no Tree Preservation Orders (TPO) along the section of the Proposed Scheme covered by the DLRCDP.

Chapter 6 Built Heritage Strategy sets out policies relating to protection of archaeological and architectural heritage, including the Record of Monuments and Places (RMP), historic burial grounds, Record of Protected structures (RPS), National Inventory of Architectural Heritage (NIAH), nineteenth and twentieth century buildings, estates and features, historic street furniture, industrial heritage and Architectural Conservation Areas (ACA). There are many sites, buildings and features of historic and heritage interest, including protected structures, located along the section of the Proposed Scheme covered by the DLRCDP. As well as buildings, a number of entrance gates / features are also listed as protected structures, including the former entrance to St. Joseph's Blackrock (now St. Louise's Park), the entrance to Blackrock Park and the entrances to Blackrock College / Willow Park School. 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.

Chapter 8 Principles of Development sets out policies requiring that new development and redevelopment proposals in the County adhere to the principles of good urban design and contribute to the delivery of a 'sense of space', through the promotion of a high-quality built environment utilising considered design and development

standards. Policy UD3 requires that development proposals should contribute positively to an enhanced public realm and should demonstrate that the highest quality in public realm design is achieved. Policy UD7 promotes urban tree planting throughout the County in accordance with the provisions of 'dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011 – 2015' and to preserve existing trees where possible and appropriate.

Chapter 9 Specific Local Objectives includes Objective No.7: To develop Blackrock Park in accordance with a Masterplan approved by the Council and in relation to Booterstown Marsh, No.138: That no residential or commercial building development be permitted on this site, in recognition of its close proximity to Booterstown Marsh part of South Dublin Bay and River Tolka Estuary Special Protection Area (SPA) and also a proposed Natural Heritage Area (pNHA), and No. 139: To recognise that infrastructure pertaining to the National Gas Grid runs through this site.

The principal land use zonings to either side of the Proposed Scheme within the Dún Laoghaire-Rathdown County area are:

- 'Objective A: To protect and / or improve residential amenity'; and
- 'Objective F: To preserve and provide for open space with ancillary active recreational amenities'.

Other land use zonings to either side of the Proposed Scheme within the Dún Laoghaire-Rathdown County area are:

- 'Objective DC: To protect, provide for and/or improve mixed-use district centre facilities (Blackrock);
- 'Objective NC: To protect, provide for and/or improve mixed-use neighbourhood centre facilities' at Rock Road (at Rock Road northwest of Seafort Parade and at Booterstown Avenue Junction);
- 'Objective MH: To improve, encourage and facilitate the provision and expansion of medical / hospital uses and services' (Blackrock Clinic); and
- 'Objective E: To provide for economic development and employment' (small area at Rock Road).

17.3.3.1.1 Blackrock Local Area Plan 2015-2021

The Blackrock Local Area Plan (LAP) (DLRCC 2015) is a lower order plan relating to Blackrock Village and surrounding hinterland, which includes the southernmost section of the Blackrock to City Centre Section of the Proposed Scheme within Dún Laoghaire-Rathdown.

The LAP reiterates the amenity, landscape and visual considerations of the Development Plan and also provides additional detail in relation to Blackrock Park, which bounds a section of the Proposed Scheme north of Blackrock Village. The LAP notes that Blackrock Park is one of the five designated 'Flagship Parks' in the county and notes extensive views of the coast as one of its strengths. The LAP includes the following objectives in relation to Blackrock Park:

- BP1: It is an objective of the Council to provide improved access and circulation to and around Blackrock Park;
- BP2: It is an objective of the Council to improve the public realm and landscaping in the area of the Pavilion in Blackrock Park;
- BP3: It is an objective of the Council to explore renovation opportunities of the Pavilion structure having regard to its Protected Structure status;
- BP4: It is an objective of the Council to improve the public realm and facilities around the Bandstand and Playground within Blackrock Park;
- BP5: It is an objective of the Council to renovate the Bandstand having regard to its Protected Structure status; and
- BP6: It is an objective of the Council to upgrade the landscaping and public realm around the Pond and Amphitheatre area and to improve the hydrological environment of the Pond.

17.3.3.2 Dublin City Development Plan 2016 - 2022

The Dublin City Development Plan 2016 – 2022 (DCC 2016a) is the higher county level planning framework applicable to the majority of the Proposed Scheme.

Chapter 10 Green Infrastructure, Open Space 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 Dublin City. Figure 4 of the Development Plan indicates Key Views and Prospects north along Fitzwilliam Place and Street. Figure 12 of the Development Plan indicates that the Pembroke Road / Baggot Street Upper and Lower corridor is part of one of the historic approaches to Dublin City. The strategic green network as indicated on Figure 14 of the Development Plan highlights the River Dodder and the Grand Canal as blue / green corridors. Figure 15 identifies the Grand Canal as an 'Existing or Previously Proposed Green Route corridor' and Baggot Street Lower as a 'Proposed Green Route'. Dublin City Council has also prepared separate overarching strategies for the protection, management and improvement of Trees and Parks within Dublin City.

Chapter 11 Built Heritage and Culture sets out policies relating to preservation, protection and improvement of built heritage, Record of Protected structures (RPS), Architectural Conservation Areas (ACA) and Conservation Areas (CA), trees in ACAs, zones of archaeological interest and industrial heritage, monuments and Dublin's cultural assets (DCC 2016a). 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 along the River Dodder corridor, the Grand Canal and from Baggot Street Upper to Merrion Square. There are a significant number of Residential Conservation Areas along the Merrion Road and Pembroke Road. Likewise, there are a significant number of Protected structures along the Proposed Scheme and notably in streetscape from Pembroke Road through to Merrion Square. Policies in relation to archaeological and architectural heritage 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';
- 'Z2: To protect and / or improve the amenities of residential conservation areas';
- 'Z4: To provide for and improve mixed-services facilities' (Merrion Shopping Centre, Ballsbridge, and Baggot Street Upper);
- 'Z5: To consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity' (e.g., City Centre area);
- 'Z6: To provide for the creation and protection of enterprise and facilitate opportunities for employment creation' (Pembroke Road, Baggot Street Upper and Lower, Ballsbridge);
- 'Z9: To preserve, provide and improve recreational amenity and open space and open space network', (e.g., Elm Park Golf & Sports Club, Grand Canal, Merrion Square, St. Vincent's Park, Blackrock Park, Booterstown Park and Nature Reserve and small open spaces at Temple Hill, Merrion Gates, and Pembroke Road junctions);
- 'Z12: To ensure that existing environmental amenities are protected in the predominantly residential future use of these lands' (RTÉ Campus); and
- 'Z15: To protect and provide for institutional and community uses' (RDS).

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

Route Section of Proposed Scheme	Baseline Description	Baseline Sensitivity
Stradbrook Road to Booterstown Avenue (For baseline features refer to Figure 17.1, Sheets 1 to 4 of 12 in Volume 3 of this EIAR)	**Townscape Character:** Major road past outer suburban village and along coastal corridor with town / coastal parks. Overlooked by residential properties and large institutional sites. Primarily residential with major retail centre and local retail uses / services. **Streetscape Character:** Major road corridor – part new corridor past modern shopping centre, part historic city access route. Mix of local services, residential uses. Limited street tree planting but major open spaces and mature trees along substantial sections. Areas of educational / institutional uses at Blackrock Clinic, Blackrock College, Willow Park. **Key Townscape Features:** Part modern / part historic road corridor with mature public parks and educational facilities, period residential properties. **Amenity Designations:** Architectural Conservation Area at Montpelier Place; candidate Architectural Conservation Area at Friends (Quakers) Burial Ground, Seafort Parade and Blackrock Village. No conservation areas or residential conservation areas. Open space at Friends (Quakers) Burial Ground; at junction of Newtown Avenue and Temple Park Avenue; and at Blackrock Park to Booterstown Park. **Tree Preservation Order (TPO)**: None. **Tree / Woodland Preservation Objectives:** None. **Protected Views:** East over Blackrock Park from Rock Road. East over Booterstown Park from Rock Road. **Protected structures (Selected):** (No.508) Mount Temple; (No.1960) St. Theresa's Lodge; (No.298) Dunardagh Entrance Gates; (Nos. 107, 112 and 115) Blackrock Park House, Pavilion and Entrance Gates; (No.86) Phoenix Terrace; (No.36) Seafort Parade House; (No.99) Blackrock College Entrance Gates (and Chapel, Williamstown Castle and Castledawson House), (No.21) Willow Terrace House; (No.21) Willow Terrace Entrance Gates; (No.28) Willow Park School Entrance Gates (and House). (Refer to Chapter 16 (Architectural Heritage) for full details). **Other:** Attractive coastal parks at Blackrock and Booterstown.	Medium
Booterstown Avenue to Nutley Lane (For baseline features refer to Figure 17.1, Sheets 4 to 6 of 12 in Volume 3 of this EIAR)	Townscape Character: Major road through outer suburban areas close to coastal corridor with coastal nature park at southern end. Gradually enclosed by residential and mixed-use areas, including major institutional lands at hospital. Streetscape Character: Major road corridor – some sections with mature street tree planting. Mix of local services, residential uses and institutional lands. Large areas of educational / institutional uses at Telford Nursing Home and St. Vincent's University Hospital. Key Townscape Features: Part modern / part historic road corridor with tree-lined residential sections and major institutional land uses. Large modern apartment development at Elmpark Green. Amenity Designations: Architectural Conservation Area at Booterstown Avenue. No conservation areas. Residential conservation areas along sections of Merrion Road, north of Merrion Gates, at Estate Avenue and at the junction with Nutley Lane. Open space at Booterstown Marsh, and small landscape area at Merrion Gates. Tree Preservation Order (TPO): None. Tree / Woodland Preservation Objectives: None. Protected Views: East over Booterstown Park / Nature Reserve from the R118 Rock Road. Protected structures (Selected): (No.1891) Booterstown Youth Club; (No.11) Saint Michael's; (No.10) Glena; (No.8) Milestone; (No. 2) Trimleston Lodge; (Nos. 5088-5091) 147, 149, 151, 153 Merrion Road; (Nos. 5092-5094) 179, 181, 183 Merrion Road; (Refer to Chapter 16 (Architectural Heritage) for full details). Other: Coastal views and context at Booterstown. Historic Entrance Arches at Telford Nursing Home and at Bloomfield near St. Vincent's University Hospital.	High
Merrion Road (Nutley Lane to Ballsbridge) (For baseline features refer to Figure 17.1, Sheets 8 to 10 of 12 in Volume 3 of this EIAR)	**Townscape Character:** Outer city suburbs. Residential, with some embassies, hotel and major institutional land uses. **Streetscape Character:** Major road corridor – historic city access route. Mix of traditional brick and render properties with small front gardens – enclosed with railings. Mature street trees and trees and planting in properties. Major area of institutional use at RDS. **Key Townscape Features:** Major outer city tree-lined residential street with major institutional land use at RDS. **Amenity Designations:** No Architectural Conservation Areas or conservation areas. Residential Conservation Areas along Merrion Road from junction with Nutley Lane to Shrewsbury Road. No open space areas.	Very High

Route Section of Proposed Scheme	Baseline Description	Baseline Sensitivity
	Tree Preservation Order (TPO): None. **Tree / Woodland Preservation Objectives:** None. **Protected Views:** None. **Protected structures (Selected):** (No.5086) Clayton Hotel (former Masonic Female Orphan School) including former assembly hall; (No.5085) Royal Dublin Society complex, including boundary walls, railings, entrances; (No.5084) Former Pembroke Town Hall (now occupied by City of Dublin Vocational Education Board – CDETB). **Other:** Attractive mature tree-lined streetscape lined with period residential properties embassies and hotels with landmark RDS grounds at northern end.	
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) (For baseline features refer to Figure 17.1, Sheets 10 to 12 of 12 in Volume 3 of this EIAR)	**Townscape Character:** Inner city village and urban streetscape. **Streetscape Character:** Suburban and urban road lined by urban terraces. Some modern infill along Pembroke Road. 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. Some mature street tree planting. **Key Townscape Features:** Traditional historic road corridor through residential and city centre suburbs with historic outer city village and inner-city village. **Amenity Designations:** No Architectural Conservation Areas. Conservation areas along River Dodder corridor and from Baggot Street Upper to Merrion Square, including the Grand Canal corridor. Residential Conservation Areas at Elgin Road and along Pembroke Road from junction with Northumberland Road to Baggot Street Upper. Open space along the River Dodder and Grand Canal corridors and at Merrion Square. Small islands of open space in junction of Pembroke Road / Herbert Park / Elgin Road and Pembroke Road / Northumberland Road / Lansdowne Road. **Tree Preservation Order (TPO)**: None. **Tree/Woodland Preservation Objectives:** None. **Protected Views:** View north of Georgian Streetscape along Fitzwilliam Place / Street to Merrion Square. **Protected structures (Selected):** Extensive – at Ballsbridge Terrace, Elgin Road and lining the majority of the route corridor from Pembroke Road / Lansdowne Road Junction. (Refer to Chapter 16 (Architectural Heritage) for full details). **Other:** Attractive city suburb village node (Ballsbridge) on crossing of river corridor and urban village node (Baggot Street Upper) on widened section of street at landmark Royal City of Dublin Hospital. Attractive Georgian streetscapes.	Very High
Nutley Lane (R138 Stillorgan Road to R118 Merrion Road). (For baseline features refer to Figure 17.1, Sheets 6 to 7 of 12 in Volume 3 of this EIAR)	**Townscape Character:** Outer city suburbs. Mixed residential, amenity, institutional and with local retail uses. **Streetscape Character:** Single carriageway road corridor connecting major roads at the R118 Merrion Road and the R138 Stillorgan Road dual carriageway. Enclosed suburban road corridor. Major sports grounds at Elm Park Golf & Sports Club. Major campus at RTÉ, and hospital grounds at St. Vincent's University Hospital. Residential suburbs north side of road. Some young street trees. **Key Townscape Features:** Enclosed suburban road with mix of use – including large scale sites. **Amenity Designations:** No Architectural Conservation Areas, conservation areas or residential conservation areas. Amenity at Elm Park Golf & Sports Club. **Tree Preservation Order (TPO)**: None. **Tree / Woodland Preservation Objectives:** None. **Protected Views:** None. **Protected structures (Selected):** None (Refer to Chapter 16 (Architectural Heritage) for full details). **Other:** Landmark RTÉ Campus, St Vincent's University Hospital.	High

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 is 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 under Construction Phase and Operational Phase.

The description of the characteristics of the Proposed Scheme is based on the Proposed Scheme drawings 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 junction of the Rock Road and Mount Merrion Avenue has been reconfigured with the removal of the left-turn slip lanes and improved cycle facilities through a protected junction for cyclists, resulting in urban realm improvements;
- The gates, railings and piers forming the existing entrance to Blackrock College were proposed to be rotated on the axis of the westernmost pier to accommodate the realigning of the adjacent boundary, while preserving the symmetry of the protected entrance;
- At the junction of Elmpark Green Development on Merrion Road, the arrangement was revised to remove the proposed traffic island on the inbound arm, which removes the need for land take onto Landaff Terrace to the south;
- Changes to the layout on the Merrion Road inbound, immediately after the Merrion Gates (Strand Road) junction has removed the need for land acquisition from seven residential properties, the full demolition of another property and land acquisition from a commercial property. This reduction in the cross-section from four lanes to three, where the inbound bus lane is curtailed and signal controlled priority introduced over this short section, also results in the reduction in tree loss;
- At the access junction to St. Vincent's University Hospital from Merrion Road, the dedicated right-turn lane into Merrion Avenue has been removed in order to improve cyclist safety and reduce the necessary land acquisition;
- Along the Merrion Road, a three-lane option with back-to-back bus lanes and signal-controlled bus priority is proposed between Shrewsbury Road and Ailesbury Road to reduce the impacts on properties, resulting in a subsequent reduction in tree loss;
- Land acquisition from the Clayton Hotel Ballsbridge, Merrion Road is proposed to ensure that three large mature trees in the public footpath can be retained;
- At the Ballsbridge Junction, the Herbert Park arm was realigned to minimise the impact on adjacent properties and retain a number of existing trees east of the junction;
- On Pembroke Road there is no longer any permanent land take required within the Proposed Scheme as a result of a proposed Bus Gate which allows the reduction of the cross-section from four vehicular lanes to two vehicular lanes – as such, tree loss on Pembroke Road is reduced and there is no permanent impact on boundary walls / railings nor trees within private lands;
- Resolution of an issue with safety and operation of a current access/egress gate at the Waterloo Road end of the properties 1, 3, 5, 7, 9, and 11 Pembroke Road, which currently conflicts with the

existing stop line and pedestrian crossing on Pembroke Road. A design change is proposed which involves constructing a new access/egress gateway to/from the property onto Waterloo Road. This change results in reduced loss of open space at the properties;

- The cross-section of Baggot Street Upper is proposed to be adjusted to reduce the carriageway width and improve the urban realm;
- The Proposed Scheme retains the existing median on Baggot Street Lower, which was previously proposed to be removed, thereby retaining the existing trees and heritage lamp standards;
- The proposed road alignment along Nutley Lane was revised to retain the existing kerb line and on-street trees on the residential side and to introduce a right turn lane from Nutley Lane into St. Vincent's University Hospital (SVUH), with consideration for planning permission for the development of the National Maternity Hospital (NMH) at SVUH (granted by An Bord Pleanála). The continuation of the outbound bus lane on Nutley Lane has been curtailed on the south-west arm of the SVUH junction to remove the requirement for land acquisition from adjacent private residential properties; and
- Reduced cycle track widths (minimum of 1.5m) have been proposed along certain stretches of the Proposed Scheme to minimise tree loss. Also, where practicable, localised narrowing of the cycle track is proposed around certain trees to retain the trees.

17.4.1.3 Construction Phase

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

- Amendment and adaption of 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 acquisition from properties along the Proposed Scheme; and
- Establishment / use of Construction Compounds.

Other key characteristics along sections of the Proposed Scheme of particular relevance to the townscape and visual assessment during the Construction Phase are outlined in the following sections.

17.4.1.3.1 Stradbrook Road to Booterstown Avenue.

Modest works along R827 Stradbrook Road / Temple Road / N31 Frascati Road / R118 Rock Road (Ch. A000 to Ch. A2400), with temporary and permanent land acquisition from properties with associated impacts on established property boundaries, entrances, trees, planting and / or grounds at:

- Blackrock Park (Ch. A1320 to Ch. A1580), including boundary wall with retaining element;
- Landscape area to front of Frascati Centre (Ch. A1110 to Ch. A1150);
- Lios An Uisce, Rock Road;
- Glenalla, Rock Road;
- College House, 71/73 Rock Road;
- Blackrock Clinic (Ch. A1600 to Ch. A1720);
- Blackrock College, including granite plinth wall, railings, piers and reorientation of feature entrance (Ch. A1720 to Ch. A1950);
- Disused Public Carpark, Booterstown (Ch. A1940 to Ch. A2070);
- Willow Park School (Ch. A2190 to Ch. A2205); and
- Landing at 115 & 115B Rock Road.

17.4.1.3.2 Booterstown Avenue to Nutley Lane.

Modest works along R118 Rock Road and R118 Merrion Road to junction with Nutley Lane (Ch. A2400 to Ch. A4000), with temporary and permanent acquisition from properties with associated impacts on established property boundaries, entrances, trees, planting and / or grounds at:

- Lands along Merrion Road (north of Booterstown Marsh) (Ch. A2800 to Ch. A2990);
- Lands to the front of carpark and buildings including Merrion House (Ch. A2990 to Ch. A3140);
- Entrance to Elmpark Green development (Ch. A3070 to Ch. A3130);
- Lands at Telford Nursing Home, including temporary removal and permanent reorientation of granite arch and gates (Merrion Gates Archway) (Ch. A3410 to Ch. A3450);
- Lands at Elm Court Apartments (Ch. A3545 to Ch. A3585);
- Lands at odd Nos. 151 to 157 south side of Merrion Road (4no.);
- Lands at the former Gowan Motors car dealership and St. Vincent's University Hospital (Ch. A3685 to Ch. A3800);
- Lands adjacent to Carew House (Ch. A3740 to Ch. A3810); and
- Temporary removal, and permanent relocation of Bloomfield Arch (Ch. A3770).

17.4.1.3.3 Merrion Road (Nutley Lane to Ballsbridge)

Substantial works along R118 Merrion Road (Ch. A4000 to Ch. A5600) including the removal of some mature street trees, and temporary and permanent acquisition from residential and other properties, with associated impacts on established property boundaries, entrances, trees, planting and / or grounds as follows:

- Landscape areas fronting Merrion Shopping Centre (Ch. B790 to Ch. A4130);
- No. 85 Merrion Road;
- Entrance of Malton, 31-33 Merion Road (Ch. A4930 to Ch. A4945);
- Clayton Hotel Grounds, Merrion Road, including granite plinth wall and railings (Ch. A5070 to Ch. A5140); and
- Entrance to former AIB Centre, Merrion Road Ch. A5520 to Ch. A5530).

17.4.1.3.4 Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street).

Substantial works along Pembroke Road through Ballsbridge (Ch. A5600 to Ch. A6250), notably at the junction with Shelbourne Road / Herbert Park / Elgin Road, and with Lansdowne Road / Northumberland Road, including direct impact on mature street trees, landscape islands in junctions and with temporary and permanent acquisition from properties with associated impact on established property boundaries, entrances, trees, planting and / or grounds:

- CDETB Premises (Former Pembroke Town Hall), Ballsbridge, including granite plinth wall and railings (Ch. A5620 to Ch. A5660);
- Open space to side of No. 7 Ballsbridge Terrace including granite plinth wall and railings (Ch. A5800 to Ch. A5810);
- Areas to front of 1 & 11 Pembroke Road (Ch. A6660 to Ch. A6720);
- Area to front of 95 Baggot Street Lower;
- Landscape island in junction between Pembroke Road / Shelbourne Road / Herbert Park / Elgin Road (Ch. A5810 to Ch. A5880);
- Landscape island in junction between Pembroke Road / Lansdowne Road / Northumberland Road, including impact on kiosk (Ch. A6120 to Ch. A6240); and
- Moderate works along Pembroke Road from Ballsbridge to Grand Canal (Ch. A6250 to Ch. A6900), notably through Baggot Street Upper, including direct impact on some young street trees, as well as an upgrade to the existing ramped access to the Grand Canal walkway from the McCartney Bridge (also known as Macartney Bridge), to improve pedestrian access to the canal.

Modest works along Baggot Street Lower and Fitzwilliam Street Lower to Merrion Square (Ch. A6900 to Ch. A7331).

17.4.1.3.5 Nutley Lane (R138 Stillorgan Road to R118 Merrion Road)

Substantial works along Nutley Lane (Ch. B000 to Ch.B.800), including removal of street trees and temporary and permanent acquisition from the RTÉ Campus (including plot occupied by Eir), Elm Park Golf & Sports Club, St. Vincent's University Hospital, 118 Stillorgan Road with associated impact on established property boundaries, entrances, trees, planting and / or grounds.

17.4.1.3.6 Construction Compound

A Construction Compound is to be located on the existing (disused) Booterstown carpark area off the R118 Rock Road (Ch. A1950 to Ch. A2070).

17.4.1.4 Operation Phase

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

- Changes to traffic movements along the Proposed Scheme and on adjoining roads where traffic management measures are proposed; and
- Changes in streetscape elements, including allocation of carriageway space, provision of cycle and footpath facilities, signage, lighting, surfacing, road marking, etc. along the Proposed Scheme.

Other key characteristics along sections of the Proposed Scheme of particular relevance to the townscape and visual assessment during the Operational Phase, are outlined in the following sections:

17.4.1.4.1 Stradbrook Road to Booterstown Avenue (for baseline features refer to Figure 17.1, Sheets 1 to 4 of 12 in Volume 3 of this EIAR)

Modest changes along R827 Stradbrook Road to R118 Rock Road (Ch. A000 to Ch. A2400), with permanent acquisition from properties with associated effects on established property boundaries, entrances, trees, planting and / or grounds at:

- Blackrock Park (Ch. A1320 to Ch. A1580), including boundary wall with retaining element;
- Landscape area to front of Frascati Centre (Ch. A1110 to Ch. A1150);
- Lios An Uisce, Rock Road;
- Glenalla, Rock Road;
- College House, 71/73 Rock Road;
- Blackrock Clinic (Ch. A1600 to Ch. A1720);
- Blackrock College, including granite plinth wall, railings, piers and feature entrance (Ch. A1720 to Ch. A1950); and
- Disused Booterstown carpark area (Ch. A1950 to Ch. A2070).

The following key landscape measures are proposed in this section:

- Urban realm upgrades at the junction of Mount Merrion Avenue (Ch. A1200 to Ch. A1300);
- Urban realm upgrades at the junction of Rock Road and Booterstown Avenue (Ch. A2380 to Ch. A2430);
- Reinstatement of the boundary, planting and park features at Blackrock Park, and the provision of a quality urban realm scheme to the park entrance (Ch. A1320 to Ch. A1580);
- Reinstatement of the boundary at Blackrock Clinic (Ch. A1600 to Ch. A1720);
- Reinstatement of the boundary at Willow Park School (Ch. A2190 to Ch. A2205);

- Reinstatement of the existing boundary wall, railings and piers at Blackrock College, including appropriate tree planting to replace those removed (Ch. A1720 to Ch. A1950); and
- Reinstatement of the boundary and land at disused carpark, Booterstown (Ch. A1940 to Ch. A2070).

17.4.1.4.2 Booterstown Avenue to Nutley Lane (for baseline features refer to Figure 17.1, Sheets 4 to 6 of 12 in Volume 3 of this EIAR)

Modest changes along R118 Rock Road and R118 Merrion Road to the junction with Nutley Lane (Ch. A2400 to Ch. A4000), with permanent acquisition from properties with associated effects on established property boundaries, entrances, trees, planting and grounds at:

- Lands along Merrion Road (North of Booterstown Marsh) (Ch. A2800 to Ch. A2990);
- Lands to the front of the carpark and buildings at Merrion House (Ch. A2990 to Ch. A3140);
- Lands at Telford Nursing Home, including the granite arch and gates (Merrion Gates Archway) (Ch. A3410 to Ch. A3450);
- Lands at Elm Court Apartments (Ch. A3545 to Ch. A3585);
- Lands at Nos. 151, 153, 155 and 157 Merrion Road;
- Lands adjacent to Carew House (Ch. A3740 to Ch. A3810); and
- Lands at the former Gowan Motors Car Dealership (northwest of Herbert Avenue) and St. Vincent's University Hospital (Ch. A3685 to Ch. A3800).

The following key landscape measures are proposed in this section:

- Reinstatement of appropriate boundary at lands north of Booterstown Marsh (Ch. A2800 to Ch. A2990);
- Reinstatement of the building frontage at Merrion House (Ch. A2990 to Ch. A3140);
- Appropriate reinstatement of the arch and gates at Telford Nursing Home (Ch. A3410 to Ch. A3450);
- Provision of a quality urban realm scheme and enhancement of existing landscape areas at Merrion Gates (Ch. A3360 to Ch. A3470);
- Reinstatement of boundaries and plantings at Elm Court Apartments, and Nos. 151, 153, 155 and 157 Merrion Road (Estate Avenue) (Ch. A3550 to Ch. A3625);
- Reinstatement of boundaries at lands adjacent to Carew House (Ch. A3740 to Ch. A3810); and
- Reinstatement / local relocation of Bloomfield Arch within the urban realm of St. Vincent's University Hospital (Ch. A3940).

17.4.1.4.3 Merrion Road (Nutley Lane to Ballsbridge) (for baseline features refer to Figure 17.1, Sheets 8 to 10 of 12 in Volume 3 of this EIAR)

Changes to existing road corridor with permanent acquisition, loss of trees / plantings and set back of sections of existing boundary walls at properties:

- Landscape areas fronting Merrion Shopping Centre (Ch. B790 to Ch. A4130);
- No. 85 Merrion Road (Ch. A4130 to Ch. A4145);
- Clayton Hotel Grounds, Merrion Road (Ch. A5070 to Ch. A5140); and
- Pembroke Town Hall, Ballsbridge, including change of vehicle entrance and alteration of plinth wall and railings (Ch. A5610 to Ch. A5625).

The following key landscape measures are proposed in this section:

- Reinstatement of boundaries and plantings at No.85 Merrion Road and reinstatement of adjoining historic wall and entrance gates off Merrion View Avenue (Ch. A4130 to Ch. A4145);
- Planting of new street trees to replace those removed along Merrion Road (Ch. A4000 to Ch. A5700);
- Reinstatement of existing granite wall and railing at Clayton Hotel (Ch. A5070 to Ch. A5140);

- Appropriate and sympathetic provision of new vehicle entrance at the existing wall / railing at the CDETB premises (former Pembroke Town Hall) (Ch. A5610 to Ch. A5660); and
- An appropriate quality urban realm scheme at the Merrion Shopping centre, at the RDS and the CDETB premises (former Pembroke Town Hall (Ch. A5440 to Ch. A5660).

17.4.1.4.4 Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) (for baseline features refer to Figure 17.1, Sheets 10 to 12 of 12 in Volume 3 of this EIAR)

Substantial changes along Pembroke Road through Ballsbridge, notably at the junction with Shelbourne Road / Herbert Park / Elgin Road, and with Lansdowne Road / Northumberland Road, including direct effects on mature street trees, landscape islands in junctions and with temporary and permanent acquisition from properties with associated effects on established property boundaries, entrances, trees, planting and grounds:

- The CDETB premises (former Pembroke Town Hall), Ballsbridge, including a change of vehicle entrance and alteration of plinth wall and railings (Ch. A5620 to Ch. A5660);
- Open space to the side of No. 7 Ballsbridge Terrace, including the loss of open space and an impact on granite plinth wall and railings (Ch. A5800 to Ch. A5810);
- Reconfiguration of the landscape island in the junction between Pembroke Road / Shelbourne Road / Herbert Park / Elgin Road (Ch. A5810 to Ch. A5880);
- Reconfiguration of the landscape island in the junction between Pembroke Road / Lansdowne Road / Northumberland Road, including the relocation of a kiosk (Ch. A6120 to Ch. A6240);
- Substantial changes along Pembroke Road from Ballsbridge to Grand Canal (Ch. A6250 to Ch. A6900), notably through Baggot Street Upper; and
- Modest changes along Baggot Street Lower and Fitzwilliam Street to Merrion Square (Ch. A6900 to Ch. A7331).

The following key landscape measures proposed in this section are:

- Reinstatement of railings, features and kiosk at the junctions on Pembroke Road (Ch. A5810 to Ch. A6240);
- An upgrade to the existing ramped access to the Grand Canal walkway from the McCartney Bridge to improve pedestrian and cycle access to the canal (Ch. A6920 to Ch. A6940); and
- An appropriate quality urban realm scheme through Ballsbridge including islands in the junction with Herbert Park Road / Eglin Road and at the island in the junction with Lansdowne Road and Northumberland Road, and through Baggot Street Upper and bridge over Grand Canal. (Ch. A5750 to Ch. A7331).

17.4.1.4.5 Nutley Lane (R138 to Merrion Road) (for baseline features refer to Figure 17.1, Sheets 6 to 7 of 12 in Volume 3 of this EIAR)

Changes to the existing road corridor with substantial changes due to permanent acquisition from properties at:

- RTÉ Campus (including plot occupied by Eir);
- Elm Park Golf & Sports Club; and
- St. Vincent's University Hospital.

The appropriate reinstatement of boundaries at the RTÉ Campus, Elm Park Golf & Sports Club and St. Vincent's University Hospital, including replacement tree and screen planting. New fencing boundary wall, and planting treatments will be provided for St. Vincent's University Hospital and Elm Park Golf & Sports Club respectively.

17.4.1.4.6 General landscape / townscape and visual measures

In addition to the above specific measures, 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 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 urban context of the Proposed Scheme it is considered likely that the road corridor of the 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).

As such, there would be a Neutral effect on the Landscape (Townscape) and Visual impact 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 (one to two years) townscape streetscape and visual impact through the following:

- Site mobilisation and establishment, fencing and hoarding of Construction Compound 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 operation of construction machinery both within the site and at the Construction Compound;
- 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 construction of new carriageways, kerbings, footpaths and cycle tracks, bus stops and signage, reinstatement of boundaries / provision of new boundaries and landscape reinstatement works / provision of new landscape, etc.; and
- Decommissioning of works areas and the Construction Compound.

A detailed description of the construction 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 sections:

- Stradbrook Road to Booterstown Avenue;
- Booterstown Avenue to Nutley Lane;
- Merrion Road (Nutley Lane to Ballsbridge);
- Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street); and
- Nutley Lane (R138 to Merrion Road).

17.4.3.1.1 Stradbrook Road to Booterstown Avenue (for baseline features refer to Figure 17.1, Sheets 1 to 4 of 12 in Volume 3 of this EIAR)

The baseline townscape is of medium sensitivity and construction of the Proposed Scheme will involve demolition, excavation and construction works of sections of kerbs, carriageways, sections of footpaths, junctions, surfacing and parking areas, drainage features and utilities along but within the road corridor. These impacts are especially notable at Blackrock College, with a direct impact on the historic boundary railing and entrance, and notable at the open space at St. Vincent's Park and Blackrock Park. There will be land acquisition from a residential property (Lios an Uisce). The construction works will not alter the overall townscape character along this section of the Proposed Scheme; however, the works will involve substantial changes and activity which will detract from sections of streetscape character. The magnitude of change in the baseline environment is high / very high.

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

17.4.3.1.2 Booterstown Avenue to Nutley Lane (for baseline features refer to Figure 17.1, Sheets 4 to 6 of 12 in Volume 3 of this EIAR)

The baseline townscape is of high sensitivity and construction of the Proposed Scheme will involve demolition, excavation and construction works of sections of kerbs, carriageways, sections of footpaths, junctions, surfacing and parking areas, drainage features and utilities along the road corridor. Temporary and permanent acquisitions include direct impacts on Booterstown Marsh for carriageway widening and construction of a new wall, however, the marsh itself will not be directly impacted by the works. There will be land acquisition and direct impacts on the historic Stone Arch and Gates at Telford Nursing Home and the historic Bloomfield Arch (which will be relocated) at St. Vincent's University Hospital, as well as at five residential properties (Nos. 151 to 157 Merrion Road, odd numbers only; and Elm Court Apartments). The construction works will not alter the overall townscape character along this section of the Proposed Scheme. However, the works will involve substantial changes and activity which will detract from sections of streetscape character. The magnitude of change in the baseline environment is medium / 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 Merrion Road (Nutley Lane to Ballsbridge) (for baseline features refer to Figure 17.1, Sheets 1 to 4 of 12 in Volume 3 of this EIAR)

The baseline townscape is of very high sensitivity and the Proposed Scheme will involve substantial excavation and construction works to sections of kerbs, road carriageways, footpaths, junctions, surfacing and parking, drainage features including removal of some mature street trees. The Proposed Scheme involves substantial temporary and permanent acquisition from residential and other properties (including Clayton Hotel grounds), and will remove / relocate sections of historic boundary, entrances and mature trees and plantings. This element of works will result in considerable changes along the Proposed Scheme. The construction works will not alter the overall townscape character along this section of the Proposed Scheme. However, the works will involve substantial changes and activity which will detract from sections of streetscape character. 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 / Very Significant and Temporary / Short-Term.

17.4.3.1.4 Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) (for baseline features refer to Figure 17.1, Sheets 10 to 12 of 12 in Volume 3 of this EIAR)

The baseline townscape is of very high sensitivity and the Proposed Scheme will involve substantial excavation and construction works to sections of kerbs, road carriageways, footpaths, junctions, surfacing and parking, drainage features – especially from Ballsbridge Bridge to Lansdowne Road and along Baggot Street Upper. The Proposed Scheme involves substantial changes to the existing landscape islands at road junctions on Pembroke Road and temporary and permanent acquisition from properties at the junction with Herbert Park Road with associated removal of boundaries, trees and other plantings. This element of works will result in considerable changes along the Proposed Scheme. There will be land acquisition from residential properties (at 1 & 11 Pembroke Road) with changes in private amenity space and boundaries. The construction works will not alter the overall townscape character along this section of the Proposed Scheme; however, the works will involve substantial changes and activity which will detract from sections of streetscape character. The magnitude of change in the baseline environment is high / very high.

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

17.4.3.1.5 Nutley Lane (R138 to Merrion Road) (for baseline features refer to Figure 17.1, Sheets 6 to 7 of 12 in Volume 3 of this EIAR)

The baseline townscape is of high sensitivity. The Proposed Scheme will involve substantial excavation and construction works on sections of kerbs, road carriageways, footpaths, junctions, surfacing and parking, drainage features, and localised removal of street trees and planting including direct impact and removal of existing boundaries and plantings – often of mature screening value – at the RTÉ Campus, Elm Park Golf & Sports Club and St. Vincent's University Hospital. This element of works will result in considerable localised changes most notably within private properties / grounds. The construction works will not alter the overall townscape character along this section of the Proposed Scheme; however, the works will involve substantial changes and activity which will detract from sections of streetscape character. The magnitude of change in the baseline environment is high / very high.

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

17.4.3.2 Impact on Streetscape Elements and Visual Impacts

17.4.3.2.1 Architectural Conservation Areas

An Architectural Conservation Area (ACA) is located at Montpelier Place, while Candidate ACAs are located at Friends (Quakers) Burial Ground, Blackrock Village and Booterstown Avenue. Works will be carried out within the road adjoining these ACAs but will not impact on the features or sensitivities of the areas. Another Candidate ACA

is located at Seafront Avenue, close to the Proposed Scheme which, although it will experience no direct impacts, may experience minor visual impacts. The magnitude of change in the baseline environment for these ACAs / Candidate ACAs is low / medium.

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

17.4.3.2.2 Conservation Areas

Conservation Areas (CA) are limited to the River Dodder corridor at Ballsbridge and the City Centre-end of the Proposed Scheme from Baggot Street Upper to Merrion Square, including the Grand Canal corridor, namely: Dodder CA; Baggot Street Upper; Grand Canal CA; Baggot Street Lower CA; Merrion Square CA; and Fitzwilliam Street Lower CA.

The Proposed Scheme will not directly impact the Conservation Area at the River Dodder (where flood protection works are on-going). The magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Construction Phase on the River Dodder conservation area is assessed to be Negative, Slight and Temporary / Short-Term.

The construction of the Proposed Scheme will result in moderate changes along the road corridor from Baggot Street Upper to Merrion Square impacting on Baggot Street Upper, Grand Canal CA, Baggot Street Lower CA, Merrion Square CA, and Fitzwilliam Street Lower CA. These works along the existing road will be most pronounced along Baggot Street Upper, where kerb-lines are realigned, new paving laid, and some minor street trees removed, and at Grand Canal walkway where there will be an upgrade to the existing ramped access to McCartney Bridge. The magnitude of change in the baseline environment is high.

The potential townscape / streetscape and visual effect of the Construction Phase on the Conservation Areas from Baggot Street Upper to Merrion Square is assessed to be Negative, Significant and Temporary / Short-Term.

17.4.3.2.3 Residential Conservation Areas

Residential Conservation Areas are located along sections of Merrion Road, north of Merrion Gates, at Estate Avenue and from junction with Nutley Lane to Shrewsbury Road, at Elgin Road and along Pembroke Road from junction with Northumberland Road to Baggot Street Upper.

The construction of the Proposed Scheme will directly impact with temporary and permanent property acquisition on Nos.151, 153, 155 and 157 (4no.) at Estate Avenue / Merrion Road, and on No.85 and adjoining historic wall and entrance gate (former avenue) Merrion Road. There are impacts on garden boundaries, entrances, gardens, loss of trees and other plantings. The buildings will not be impacted. The Proposed Scheme will also involve substantial works to the public road, including some mature street tree removal in Residential Conservation Areas. The magnitude of change in the baseline environment is high / very high.

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

17.4.3.2.4 Protected Structures

A number of protected structures are located along the outer sections of the Proposed Scheme, and a significant number of properties and streetscapes of protected structures frame the Proposed Scheme from Pembroke Road through to Merrion Square. The Proposed Scheme will result in direct impact on the boundary railings of Williamstown Castle / Castledawson (a protected structure) and on the associated entrance gates (protected structure); on Nos. 151 and 153 Merrion Road (Estate Avenue); the Clayton Hotel grounds and the CDETB premises (former Pembroke Town Hall). Impacts are on garden boundaries, including granite walls and railings, entrances, gardens, loss of trees and other plantings. Other than the entrance gates, boundary walls and railings, the main buildings will not be impacted. The magnitude of change is high / very high. (Refer to Chapter 16 (Architectural Heritage) for full details).

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

17.4.3.2.5 Amenity Designations

A number of amenities are located along the Proposed Scheme. These include Blackrock and Booterstown parks, Booterstown Marsh, the River Dodder and Grand Canal corridors, Elm Park Golf & Sports Club, and smaller open spaces at St. Vincent's Park, Merrion Gates and in junction islands on Pembroke Road.

The construction of the Proposed Scheme will have direct impacts with temporary and permanent land-take on Blackrock Park, on lands north of Booterstown Marsh, and at Elm Park Golf & Sports Club, and on smaller open spaces at Merrion Gates and on landscape spaces in junction islands on Pembroke Road. The land acquisition will impact on roadside boundaries, trees and other plantings and the amenity of these areas, especially at Blackrock Park and Elm Park Golf & Sports Club. The magnitude of change is very high.

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

17.4.3.2.6 Tree Preservation Orders / Tree Preservation Objectives

There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.

17.4.3.2.7 Preserved Views / Scenic Views, etc.

There are specific preserved views east over Blackrock Park and Booterstown Park / Nature Reserve from R118 Rock Road. The construction of the Proposed Scheme will have direct effects due to temporary and permanent land-take on Blackrock Park and on lands at the northern end of Booterstown Marsh. The magnitude of change is high / very high.

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

17.4.3.2.8 Properties

Construction of the Proposed Scheme will require the temporary acquisition from 12 no. residential properties:

- Lios An Uisce, 1 Rock Road, Blackrock;
- Entrance at Castledawson estate, Sion Hill;
- Elm Court Apartments, Merrion Road;
- 157 Merrion Road;
- 155 Merrion Road;
- 153 Merrion Road;
- 151 Merrion Road;
- 85 Merrion Road;
- Entrance at Malton, 31-33 Merrion Road;
- 1 Pembroke Road;
- 11 Pembroke Road; and
- 118 Stillorgan Road.

The houses / apartments have mature, established gardens with boundary railings / walls, entrances / gates and associated lawns and plantings. Construction works will result in the removal of the existing boundaries including walls and entrance gates, portions of gardens, private property and associated plantings. Access to properties for the landowner's owners/occupiers will be maintained in so far as reasonably practicable. Also, emergency vehicle access will be maintained. Construction works adjacent to and within these private and adjoining public areas will be openly visible from these properties. The magnitude of change is very high.

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

Construction of the Proposed Scheme will require the acquisition from a number of non-residential properties including the removal and setback of boundaries, changes to areas of landscape, and loss of trees:

- Blackrock Clinic;
- Blackrock College;
- Merrion House;
- Grounds to East of Rock Road;
- Elm Park Golf & Sports Club;
- Raidió Teilifís Éireann (RTÉ), Donnybrook;
- Eir Exchange, Nutley Lane;
- St. Vincent's University Hospital; and
- Telford Nursing Home.

The magnitude of change is very high. The potential townscape / streetscape and visual effect of the Construction Phase on these non-residential properties is assessed to be Negative Very Significant and Short-Term.

Construction of the Proposed Scheme will require the acquisition from a number of non-residential properties including the removal and setback of boundaries, and / or changes to areas of landscape and hard surfacing:

- Kiosk at Pembroke Road - relocation
- Clayton Hotel, Ballsbridge;
- The Merrion Shopping Centre;
- 143 Merrion Road (formerly Gowan Motors);
- College House, 71/73 Rock Road;
- Entrance to Former AIB Centre, Merrion Road;
- Glenalla, Rock Road;
- Landing/Entrance to Elmpark Green Development;
- Landing at 115 and 115B, Rock Road;
- Landscape area to front of Frascati Centre;
- Railway Level Crossing, Merrion Gates;
- Gas Networks Ireland Above-ground installation (Top of Old Bloomfield Avenue & Entrance Gates);
- McCartney Bridge, Baggot Street Upper/Lower
- 95 Baggot Street Lower;
- Willow Park School; and
- CDETB premises (former Pembroke Town Hall).

The magnitude of change is high. The potential townscape / streetscape and visual effect of the Construction Phase on these non-residential properties is assessed to be Negative, Significant and Short-Term.

In addition to those properties directly effected through acquisition (temporary and / or permanent) of private areas, construction of the Proposed Scheme will also result in visual effects for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Effects 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 magnitude of change is high.

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

17.4.3.2.9 Trees

Construction of the Proposed Scheme will require the removal of existing trees and other plantings at specific locations along the route of the Proposed Scheme. These include trees and plantings at Blackrock Park, along lands north of Booterstown Marsh, along Merrion Road, along Pembroke Road to Northumberland Road, at Baggot Street Upper, at the RTÉ Campus, Elm Park Golf & Sports Club, along Nutley Lane, at St. Vincent's University Hospital. The upgrade to the existing ramped access to the Grand Canal walkway from the McCartney Bridge will not result in tree loss. The magnitude of change is high.

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

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

Table 17.7: Summary of Potential Construction Phase Impacts

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
Townscape and Streetscape Character				
Stradbrook Road to Booterstown Avenue For proposed changes see Section 17.4.3.1.1		Medium	High / Very High	Negative Very Significant Temporary / Short-Term
Booterstown Avenue to Nutley Lane For proposed changes see Section 17.4.3.1.2		High	Medium / High	Negative Significant Temporary / Short-Term
Merrion Road (Nutley Lane to Ballsbridge) For proposed changes see Section 17.4.3.1.3		Very High	Very High	Negative Significant / Very Significant Temporary / Short-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) For proposed changes see Section 17.4.3.1.4		Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Nutley Lane (R138 to Merrion Road) For proposed changes see Section 17.4.3.1.5		High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term
Streetscape Characteristics and Visual Effects				
Architectural Conservation Areas	For proposed changes see Section 17.4.3.2.1	Very High	Low / Medium	Negative Slight Temporary / Short-Term
Conservation Areas	For proposed changes see Section 17.4.3.2.2	High	High	Negative Significant Temporary / Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	High / Very High	Negative Very Significant Temporary / Short-Term
Protected structures (Selected)	For proposed changes see Section 17.4.3.2.4	Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Amenity Designations	For proposed changes see Section	High	Very High	Negative Very Significant

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
	17.4.3.2.5			Temporary / Short-Term
Tree Preservation Orders / tree Protection Objectives	For proposed changes see Section 17.4.3.2.6	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	High / Very High	Negative Very Significant Temporary / Short-Term
Properties	**Part of residential property in temporary acquisition** For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with loss of trees For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with no loss of trees For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
	Properties along, fronting and viewing the Proposed Scheme not included in temporary acquisition. For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	High	High	Negative Significant 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 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.

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 five sub-sections:

- Stradbrook Road to Booterstown Avenue;
- Booterstown Avenue to Nutley Lane;
- Merrion Road (Nutley Lane to Ballsbridge);
- Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street); and
- Nutley Lane (R138 to Merrion Road).

17.4.4.1.1 Stradbrook Road to Booterstown Avenue

The Operational Phase of the Proposed Scheme will involve mainly modest changes along sections of the existing road corridor, which will not generally alter the townscape. However, substantial reinstatement works are required at Blackrock College and Blackrock Park which will notably alter the streetscape character in the vicinity. There will be negative effects remaining from the loss of mature trees in the Construction Phase, even where there is replacement tree planting. Although replacement street trees will be specified to a considerable size ('extra-heavy' size; approximately 3-5m tall), given the smaller size and reduced maturity in relation to the large mature trees to be removed, these will take many years into the long-term to reach a state where they provide an equivalent contribution to the streetscape. The magnitude of change is medium across the overall section, but locally high at Blackrock College and Park.

The potential townscape / streetscape effect of the Operational Phase is assessed to be Negative, Moderate Overall, Locally Significant and Short-Term, becoming Negative, Slight / Moderate Overall, Locally Significant and Long-Term.

17.4.4.1.2 Booterstown Avenue to Nutley Lane

The Operational Phase of the Proposed Scheme will involve appreciable changes along the existing road corridor, most notably at Telford Nursing Home entrance Arch and Bloomfield Arch and where permanent acquisition impacts residential properties close to Merrion Gates. There will be continued effects from the removal of 30no. mature trees at the northern boundary of Booterstown nature reserve during the Construction Phase. The changes will not alter the overall townscape character, however, there will be a notable impact on some areas of streetscape character along this section of the Proposed Scheme. There will be negative effects remaining from the loss of mature trees in the Construction Phase, even where there is replacement tree planting. Although replacement street trees will be specified to a considerable size ('extra-heavy' size; approximately 3-5m tall), given the smaller size and reduced maturity in relation to the large mature trees to be removed, these will take many years into the long-term to reach a state where they provide an equivalent contribution to the streetscape. The magnitude of change in the baseline environment is medium.

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

17.4.4.1.3 Merrion Road (Nutley Lane to Ballsbridge)

The Operational Phase of the Proposed Scheme will involve substantial changes along the corridor of the Proposed Scheme, especially at No.85 and adjoining historic avenue on Merrion Road and at the CDETB premises (former Pembroke Town Hall), Ballsbridge, where a new vehicular access is provided through the granite wall and railing. The changes, including loss of mature street trees and impact on property boundaries, will not alter the overall townscape character, however, there will be a substantial impact on some areas of streetscape character along this section of the Proposed Scheme. There will be negative effects remaining from the loss of mature trees in the Construction Phase, even where there is replacement tree planting. Although replacement street trees will be specified to a considerable size ('extra-heavy' size; approximately 3-5m tall), given the smaller size and reduced maturity in relation to the large mature trees to be removed, these will take many years into the long-term to reach a state where they provide an equivalent contribution to the streetscape. The magnitude of change is medium.

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

17.4.4.1.4 Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street)

The Operational Phase of the Proposed Scheme will involve substantial changes along the corridor of the Proposed Scheme particularly along Pembroke Road and Baggot Street Upper. The changes will not alter the overall townscape, however, there will be a notable positive effect on some areas of streetscape character along this section of the Proposed Scheme with improved junction layouts, new planting, paving and street trees, most notably at Baggot Street Upper and to a lesser extent on Baggot Street Lower, Pembroke Road and Fitzwilliam Street, and at Grand Canal where there will be improved ramped access to McCartney Bridge. The magnitude of change is medium.

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

17.4.4.1.5 Nutley Lane (R138 to Merrion Road)

The Operational Phase of the Proposed Scheme will involve substantial changes to the existing road corridor, and to boundaries at the RTÉ Campus, Elm Park Golf & Sports Club and St. Vincent's University Hospital including substantial loss of trees with and replacement of boundaries and some replacement planting. The changes will not alter the overall townscape character, however, there will be a substantial impact on some areas of streetscape character along this section of the Proposed Scheme. There will be negative effects remaining from the loss of mature trees in the Construction Phase, even where there is replacement tree planting. Although replacement street trees will be specified to a considerable size ('extra-heavy' size; approximately 3-5m tall), given the smaller size and reduced maturity in relation to the large mature trees to be removed, these will take many years into the long-term to reach a state where they provide an equivalent contribution to the streetscape. The magnitude of change is medium.

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

17.4.4.2 Impact on Streetscape Elements and Visual Impacts

17.4.4.2.1 Architectural Conservation Areas

An ACA is located at Montpelier Place and candidate ACAs are located at Friends (Quakers) Burial Ground), Blackrock Village, Seafront Parade and Booterstown Avenue. The Operational Phase of the Proposed Scheme will not impact on these areas. The magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Operational Phase on ACAs is assessed to be Neutral, Not Significant and Short-Term which will remain the same into the Long-Term.

17.4.4.2.2 Conservation Areas

Conservation areas are limited to the River Dodder corridor at Ballsbridge and the City Centre-end of the Proposed Scheme from Baggot Street Upper to Merrion Square, including the Grand Canal corridor. The Operational Phase of the Proposed Scheme will not impact the conservation area at the River Dodder (where flood protection works are ongoing).

The Operational Phase of the Proposed Scheme will result in changes along the road corridor from Baggot Street Upper to Merrion Square, most notably along Baggot Street Upper. The magnitude of change in the baseline environment is low.

The potential townscape / streetscape and visual effect of the Operational Phase on the Baggot Street Upper to Merrion Square conservation area is assessed to be Negative, Not Significant and Short-Term which will continue into the Long-Term.

17.4.4.2.3 Residential Conservation Areas

Residential Conservation Areas are located along sections of Merrion Road, north of Merrion Gates, at Estate Avenue and from the junction with Nutley Lane to Shrewsbury Road, at Elgin Road and along Pembroke Road from junction with Northumberland Road to Baggot Street Upper.

The Operational Phase of the Proposed Scheme will require permanent property acquisition from Nos.151 to 157 (4no.) at Estate Avenue / Merrion Road; and on No.85 and the adjoining historic wall and entrance gate (former avenue) Merrion Road. The changes will include setback of boundaries and loss of trees, including street trees. The buildings will not be affected. The magnitude of change in the baseline environment is medium / high.

The potential townscape / streetscape and visual effect of the Operational Phase on residential conservation areas is assessed to be Negative, Significant and Short-Term, becoming Negative, Moderate / Significant, Long-Term.

17.4.4.2.4 Protected Structures

A number of Protected structures are located along the outer sections of the Proposed Scheme, and a significant number of properties and streetscapes of protected structures frame the Proposed Scheme from Pembroke Road through to Merrion Square. The Proposed Scheme will result in direct impacts on the boundary railings of Williamstown Castle / Castledawson (a protected structure) and on the associated entrance gates (protected structure); on Nos. 151 and 153 Merrion Road (Estate Avenue); the Clayton Hotel grounds and the CDETB premises (former Pembroke Town Hall). The changes will include setback of boundaries, entrances, loss of trees / plantings and loss of property. In the case of the CDETB premises (former Pembroke Town Hall), the changes involve relocation of vehicular access along granite wall / railing boundary. The magnitude of change is high. (Refer also to Chapter 16 (Architectural Heritage) for full details).

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

17.4.4.2.5 Amenity Designations

A number of amenities are located along the Proposed Scheme. These include Blackrock and Booterstown Parks, Booterstown Marsh, the River Dodder and Grand Canal corridors, Elm Park Golf & Sports Club, and smaller open spaces at St. Vincent's Park, Merrion Gates, and in junction islands on Pembroke Road.

The Operational Phase of the Proposed Scheme will have direct impacts with permanent land-take on Blackrock Park, on lands north of Booterstown Marsh, on Elm Park Golf & Sports Club, as well as on smaller open spaces at Merrion Gates and on landscape spaces in junction islands on Pembroke Road. The land acquisition will impact on roadside boundaries, trees and other plantings and the amenity of these areas, especially at Blackrock Park and Elm Park Golf & Sports Club. The magnitude of change is high.

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

17.4.4.2.6 Tree Preservation Orders / Tree Preservation Objectives

There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.

17.4.4.2.7 Preserved Views / Scenic Views, etc.

There are specific preserved views East over Blackrock Park and Booterstown Park / Nature Reserve from R118 Rock Road. In general, the operation of the Proposed Scheme will have minimal effects following reinstatement of boundaries. Some loss of amenity area and loss of trees / vegetation will remain but will be reduced over time with replacement planting. The magnitude of change is low.

The potential townscape / streetscape and visual effect of the Operational Phase on these views is assessed to be Negative, Slight and Short-Term, becoming Neutral, Not-Significant, Slight, Long-Term.

17.4.4.2.8 Properties

The Proposed Scheme will require the permanent acquisition from 7 no. residential properties. The properties have mature established gardens with boundary railings / walls, entrances / gates and associated lawns and plantings:

- Lios An Uisce, 1 Rock Road;
- Elm Court Apartments, Merrion Road;
- 157 Merrion Road;
- 155 Merrion Road;
- 153 Merrion Road;
- 151 Merrion Road; and
- No. 85 Merrion Road (and adjoining historic access lane).

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

The Operational Phase of the Proposed Scheme will require the permanent acquisition from a number of non-residential properties, with continued effects from trees lost in the Construction Phase. Replacement boundaries, together with replacement plantings, and tree planting where appropriate and practicable, will reduce these effects over the long-term:

- Blackrock Clinic;
- Blackrock College.
- Elm Park Golf & Sports Club;
- Merrion House;
- Raidió Teilifís Éireann (RTÉ);
- Eir Exchange, Nutley Lane;
- Grounds to East of Rock Road;
- St. Vincent's University Hospital; and
- Telford Nursing Home.

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

The Operational Phase of the Proposed Scheme will require the permanent acquisition from a number of non-residential properties, which experienced no loss of trees in the Construction Phase:

- 143 Merrion Road (former Gowan Motors);
- Clayton Hotel, Ballsbridge;
- College House, 71/73 Rock Road.
- Landing/Entrance to Elmpark Green Development;
- Glenalla, Rock Road;
- Kiosk at Pembroke Road;
- Landscape areas to front of Frascati Centre;
- The Merrion Shopping Centre;
- Gas Networks Ireland Above-ground installation (Top of Old Bloomfield Avenue & Entrance Gates); and

- Willow Park School.

The magnitude of change is medium. The potential townscape / streetscape and visual effect of the Operational Phase on these properties is assessed 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 effects for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Effects will arise from the general change in the road corridor, urban realm and traffic patterns. 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 Neutral, Not-Significant / Slight, Long-Term.

17.4.4.2.9 Trees

A substantial 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 but there will be continued loss. There will be substantial replanting of trees which will reduce effects over the long term as they mature. The magnitude of change is medium.

The potential townscape and visual effect of the Operational Phase on trees and plantings is assessed to be Negative, Moderate and Long-Term.

The summary of the landscape and visual effect assessment for the Operational Phase, at 1-year post completion of the Construction Phase of the Proposed Scheme is set out in Table 17.8.

17.4.4.2.10 Potential Benefits

With the landscape measures incorporated into the design of the Proposed Scheme there is potential for a beneficial effect to the fabric and character of the receiving landscape / townscape. Measures include for improvements to the streetscape in several locations along the Proposed Scheme. These include new or improved footpath and cycle routes, improved or more visually appealing hard surfacing, street furniture and planting. These will result in minor localised improvements to streetscape character across the scheme, such as at junctions with improved pedestrian and cycle access and provision of new planting areas, trees and high quality paving. There will also be a notable positive improvement to townscape character along the section of scheme from Ballsbridge to Merrion Square due to streetscape improvements from Pembroke Road through to Fitzwilliam Street. Over the long-term, the negative effects associated with the removal of mature trees along many sections of the scheme will reduce with the growth of replacement planting. The summary of the landscape and visual effect assessment at the early stage of the Operational Phase, (at 1-year post completion of the Construction Phase), of the Proposed Scheme is set out in Table 17.8. Operational effects following the establishment of proposed planting at 15-year post completion of the Construction Phase are shown in Table 17.10.

Table 17.8: Summary of Potential Operational Phase Impacts (at 1 year post completion of the Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
Townscape and Streetscape Character				
Stradbrook Road to Booterstown Avenue	For proposed changes see Section 17.4.4.1.1	Medium	Medium (Locally high at Blackrock College / Park)	Negative Moderate Overall (Locally Significant at Blackrock College / Park) Long-Term
Booterstown Avenue to Nutley Lane	For proposed changes see Section 17.4.4.1.2	High	Medium	Negative Moderate Long-Term
Merrion Road (Nutley Lane to Ballsbridge)		Very High	Medium	Negative

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
For proposed changes see Section 17.4.4.1.3				Moderate / Significant Long-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) For proposed changes see Section 17.4.4.1.4		Very High	Medium	Positive Moderate Long-Term
Nutley Lane (R138 to Merrion Road) For proposed changes see Section 17.4.1.2.5		High	Medium	Negative Moderate Long-Term
Streetscape Characteristics and Visual Effects				
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.4.2.1	Very High	Low	Neutral Not Significant Long-Term
Conservation Areas	For proposed changes see Section 17.4.4.2.2	High	Low	Neutral Not Significant Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	High	Medium / High	Negative Significant Long-Term
Protected structures (Selected)	For proposed changes see Section 17.4.4.2.4	Very High	High	Negative Significant Long-Term
Amenity Designations	For proposed changes see Section 17.4.4.2.5	High	High	Negative Significant Long-Term
Tree Preservation Orders / tree Protection Objectives	For proposed changes see Section 17.4.4.2.6	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.4.2.7	High	Low	Neutral Slight Long-Term
Properties	**Part of residential property in permanent acquisition** For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Long-Term
	Non-residential properties included in permanent acquisition with loss of trees For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Long-Term
	Non-residential properties included in permanent acquisition with no loss of trees For proposed changes see Section 17.4.4.2.8	High	Medium	Negative Moderate Long-Term
	Properties along, fronting and viewing the Proposed Scheme not included in permanent acquisition. For proposed changes see Section 17.4.4.2.8	High	Low	Neutral Slight Long-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	High	Medium	Negative Moderate Long-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 British Standard Institution (BSI) British Standard (BS) 5837:2012 'Trees in relation to in relation to design, demolition and construction. Recommendations'. Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, prepared / approved by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans which are contained within the Arboricultural Impact Assessment documents (BCIDC-ARP-ENV_LA-0014_XX_00-RP-ES-0001 and BCIDC-ARP-ENV_LA-0015_XX_00-RP-ES-0001, Appendix A17.1 in Volume 4 of this EIAR);
- Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. This is of particular note where mature trees are a prominent and valuable asset within the urban realm such as within the grounds of Blackrock Park, Blackrock College, along Merrion Road, Pembroke Road, Baggot Street Upper and Lower, the RTÉ Campus, Elm Park Golf & Sports Club, and St. Vincent's University Hospital and where mature trees are within private properties along 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 Tree Protection Plans which are contained within the Arboricultural Impact Assessment documents (BCIDC-ARP-ENV_LA-0014_XX_00-RP-ES-0001 and BCIDC-ARP-ENV_LA-0015_XX_00-RP-ES-0001; Appendix A17.1 in Volume 4 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) especially Blackrock Park, Blackrock Clinic, Blackrock College, Nos. 85, 151 to 157 (odd numbers) and Elm Court Apartments (Merrion Road), Elm Park Golf & Sports Club and St. Vincent's University Hospital) 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;
- 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; especially Blackrock Park, Blackrock Clinic, Blackrock College, Nos. 85, 151 to 157 (odd numbers) and Elm Court Apartments (Merrion Road), Elm Park Golf & Sports Club and St. Vincent's University Hospital) appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, for continued access during construction, 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 including Blackrock Park and Elm Park Golf & Sports Club shall be maintained by the appointed contractor.

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.

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 & Quality of Townscape / Streetscape / Visual Effects / Effects
Townscape and Streetscape Character				
Stradbrook Road to Booterstown Avenue	For proposed changes see Section 17.4.3.1.1	Medium	High / Very High	Negative Very Significant Temporary / Short-Term
Booterstown Avenue to Nutley Lane	For proposed changes see Section 17.4.3.1.2	High	Medium / High	Negative Significant Temporary / Short-Term
Merrion Road (Nutley Lane to Ballsbridge)	For proposed changes see Section 17.4.3.1.3	Very High	Very High	Negative Significant / Very Significant Temporary / Short-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street)	For proposed changes see Section 17.4.3.1.4	Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Nutley Lane (R138 to Merrion Road)	For proposed changes see Section 17.4.3.1.5	High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term
Streetscape Characteristics and Visual Effects				
Architectural Conservation Areas (	For proposed changes see Section 17.4.3.2.1	Very High	Low / Medium	Negative Slight Temporary / Short-Term
Conservation Areas	For proposed changes see Section 17.4.3.2.2	High	High	Negative Significant Temporary / Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	High / Very High	Negative Very Significant Temporary / Short-Term
Protected structures	(Refer also to Chapter 16 (Architectural Heritage) for full details). For proposed changes see Section 17.4.3.2.4	Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Amenity Designations	For proposed changes see Section 17.4.3.2.5	High	Very High	Negative Very Significant Temporary / Short-Term
Tree Preservation Orders / tree	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme. For proposed changes see Section	N/A	N/A	N/A

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
Protection Objectives	17.4.3.2.6			
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	High / Very High	Negative Very Significant Temporary / Short-Term
Properties	**Part of residential property in temporary acquisition** For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with loss of trees For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with no loss of trees For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
	Properties along, fronting and viewing the Proposed Scheme not included in temporary acquisition. For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
Trees and Vegetation	. For proposed changes see Section 17.4.3.2.9	High	High	Negative Significant 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.

It is acknowledged that in some case 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.

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 & Quality of Townscape / Streetscape / Visual Effects / Effects (at 1 year post-construction)	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Townscape and Streetscape Character					
Stradbrook Road to Booterstown Avenue For proposed changes see Section 17.4.4.1.1		Medium	Medium (Locally high at Blackrock College / Park)	Negative Moderate Overall (Locally Significant at Blackrock College / Park) Short-Term	Negative Slight/Moderate Overall (Locally Moderate / Significant at Blackrock College / Park) Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects (at 1 year post-construction)	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Booterstown Avenue to Nutley Lane For proposed changes see Section 17.4.4.1.2		High	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term
Merrion Road (Nutley Lane to Ballsbridge) For proposed changes see Section 17.4.4.1.3		Very High	Medium	Negative Moderate / Significant Short-Term	Negative Moderate Long-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) For proposed changes see Section 17.4.4.1.4		Very High	Medium	Positive Moderate Short-Term	Positive Moderate / Significant Long-Term
Nutley Lane (R138 to Merrion Road) For proposed changes see Section 17.4.1.2.5		High	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term
Streetscape Characteristics and Visual Effects					
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.4.2.1	Very High	Low	Neutral Not Significant Short-Term	Neutral Not Significant Long-Term
Conservation Areas	For proposed changes see Section 17.4.4.2.2	High	Low	Neutral Not Significant Short-Term	Neutral Not Significant Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	High	Medium / High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term
Protected structures (Selected)	For proposed changes see Section 17.4.4.2.4	Very High	High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term
Amenity Designations	For proposed changes see Section 17.4.4.2.5	High	High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term
Tree Preservation Orders / tree Protection Objectives	For proposed changes see Section 17.4.4.2.6	N/A	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.4.2.7	High	Low	Neutral Slight Short-Term	Neutral Not Significant / Slight Long-Term
Properties	**Part of residential property in permanent acquisition** For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects (at 1 year post-construction)	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
	Non-residential properties included in permanent acquisition with loss of trees For proposed changes see Section 17.4.4.2.8	High	High	Negative Significant Short-Term	Negative Moderate / Significant Long-Term
	Non-residential properties included in permanent acquisition with no loss of trees For proposed changes see Section 17.4.4.2.8	High	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term
	Properties along, fronting and viewing the Proposed Scheme not included in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Low	Neutral Slight Short-Term	Neutral Not Significant / Slight Long-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	High	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term

17.5.2.1 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 proposed planting at approximately 10 to 15 years post-completion of the Construction Phase. The existing view available from the chosen viewpoint and the Proposed Scheme changes as illustrated in the photomontage are described. The Photomontages have been prepared in accordance with the methodology set out in Section 17.2.4.5 and are included in Figure 17.2 in Volume 3 of this EIAR.

17.5.2.1.1 Photomontage View 1 View from Rock Road at Blackrock Park

17.5.2.1.1 View 1: Existing

Figure 17.2.1.1 shows the existing view from Rock Road at Blackrock Park looking north. To the left is the junction with Ben Inagh Park and the gable elevation of a row of brick-built terraced residences with a rendered boundary wall. To the right is the boundary of Blackrock Park with a low ashlar wall with regular capped piers. Mature trees within the park define the extents of the view. The character is of a minor road corridor / residential street with significant mature trees to the adjacent park.

17.5.2.1.2 View 1: As Proposed

Figure 17.2.1.2 shows the proposed view from Rock Road at Blackrock Park looking north. The primary changes are the widening of the road corridor, the introduction of segregated cycle tracks to both sides of the road and the loss of mature trees within the park. There are improvements to the street scape in the form of a new grass verge to the left foreground, new stone paving across the junction with Ben Inagh Park and new street trees along the right-hand side of the road. There is predicted to be a substantial negative change to the character from loss of trees and a notable negative change to visual amenity of the view, although this would be lessened over the long-term through establishment of the proposed trees.

17.5.2.1.3 Photomontage View 2 View from Rock Road at Emmet Square

View 2: Existing

Figure 17.2.2.1 shows the existing view from Rock Road at Emmett Square looking northwest. To the right the view is framed by two-storey residential properties along Rock Road / Emmett Square. To the left side of the road in the centre of the view is a landscape area to the north side of the entrance to Blackrock Clinic with several mature trees and a prominent sign. Further along the left side of the road is a tall masonry wall to adjacent housing and more mature trees within Blackrock College which form the background to the view. The character is of a minor road corridor / residential street with significant mature trees to Blackrock Clinic and Blackrock College.

View 2: As Proposed

Figure 17.2.2.2 shows the proposed view from Rock Road at Emmett Square looking northwest. The primary changes are the widening of the road to the west, the setting back of boundaries and the removal of a mature tree from the open space at Blackrock Clinic. A segregated cycle track is introduced to both sides of the road and there are improvements to the street scape in the form of a new ornamental planting area to the right foreground, new stone paving across the junction with Emmett Square and new street trees along the left-hand side of the road. There is predicted to be a minor negative change to the character of the view from loss of the tree but no appreciable loss of visual amenity, especially over the long-term through establishment of the proposed trees.

17.5.2.1.4 Photomontage View 3 View from Rock Road at Castledawson Avenue

View 3: Existing

Figure 17.2.3.1 shows the existing view from Rock Road at Castledawson Avenue looking west. The focus of the view is the boundary wall and ornate railing for Blackrock College and mature trees behind within the grounds. On the right side of the road are terraced brick-built residences framing the view. The character is of a minor road corridor / residential street with significant historic boundary and mature trees to Blackrock College.

View 3: As Proposed

Figure 17.2.3.2 shows the proposed view from Rock Road at Castledawson Avenue looking west. The primary changes are widening of the road and setback of the college boundary and the introduction of segregated cycle tracks to both sides of the road. There are improvements to the streetscape in the form of a new ornamental planting area to the right foreground, new stone paving across the junction with Castledawson Avenue and new street trees along the left-hand side of the road. Some young trees are lost and replaced in the view. There is predicted to be no appreciable change to character or visual amenity of the view.

17.5.2.1.5 Photomontage View 4 View from Rock Road at Blackrock College

View 4: Existing

Figure 17.2.4.1 shows the existing view from Rock Road at Blackrock College looking southeast. The focal point of the view is the ornamental boundary railings and entrance to Blackrock College on the right side of the road. Residential and commercial properties along the left side of the road frame the view to the left. Numerous trees

within Blackrock College form prominent features in the view. The character is of a road corridor / mixed-use street with substantial mature trees and a monumental historic gateway and boundary to Blackrock college.

View 4: As Proposed

Figure 17.2.4.2 shows the proposed view from Rock Road at Blackrock College looking southeast. The primary changes are the setting back of the college boundary and gateway and the introduction of segregated cycle tracks to each side of the road. There is the planting of new street trees on the right-hand side of the road, and loss and replacement of young trees. There is predicted to be no appreciable change to character or visual amenity of the view.

17.5.2.1.6 Photomontage View 5 View from Rock Road at Trimleston Avenue

View 5: Existing

Figure 17.2.5.1 shows the existing view from Rock Road at Trimleston Avenue looking north. On the left is the entrance to Trimleston Avenue with a clump of mature trees and shrubby vegetation behind to the boundary of an adjacent residential property. On the right side of the road is a row of mature trees along the edge of the road within a vacant plot bounded by a low masonry wall. The character is of a major road junction with well-treed boundaries to each side.

View 5: As Proposed

Figure 17.2.5.2 shows the proposed view from Rock Road at Trimleston Avenue looking north. The primary changes are the widening of the road, changes to the junction layout, the introduction of segregated cycle tracks to both sides of the road and around the junction, and removal of trees along the edge of the right side of the road. Trees within the residential property are not affected. There would be a notable negative change to the character and visual amenity of the view.

17.5.2.1.7 Photomontage View 6 View from Merrion Road at Strand Road

View 6: Existing

Figure 17.2.6.1 shows the existing view from Merrion Road at Strand Road looking northwest. The view is centred on the junction of the two roads, and a historic arched gateway and mature trees to the grounds of Telford Nursing Home are a focal point on the far-left side of the junction. In the right foreground is grass verge and median separating lanes on Merrion Road, and further along the road are tall mature street trees to each side. On the far side of Strand Road is a small landscape area containing a group of cordyline trees. The character is of a major suburban road junction with a notable historic gateway and prominent tree planting.

View 6: As Proposed

Figure 17.2.6.2 shows the proposed view from Merrion Road at Strand Road looking northwest. The primary changes are the widening of the road to the west, the setback of the boundary and arched gateway to the nursing home, the removal of street trees along the road and the cordyline trees to the far side of Strand Road. There is also the introduction of segregated cycle tracks to all sides of the junction and an extension of the grass verge / median in the foreground. There is predicted to be a notable negative change to the character and visual amenity of the view primarily due to loss of mature street trees.

17.5.2.1.8 Photomontage View 7 View from Merrion Road at Elm Court

View 7: Existing

Figure 17.2.7.1 shows the existing view from Merrion Road at Elm Court looking northwest. Historic residential properties with front gardens are present along the road but are mainly screened by street trees and garden vegetation; There are substantial mature street trees to each side of the road and there is a moderate level of vegetation visible within gardens. There is a bus shelter and a grass verge to the left side of the road. The

character is of a minor road corridor / residential suburban street with substantial tree cover from mature street trees.

View 7: As Proposed

Figure 17.2.7.2 shows the proposed view from Merrion Road at Elm Court looking northwest. The primary changes are the widening of the road and the removal of a number of large street trees. There is the introduction of new segregated cycle tracks to each side of the road and a bus stop is removed from the left side of the road. There is predicted to be a substantial negative change to the character and visual amenity of the view.

17.5.2.1.9 Photomontage View 8 View from Merrion Road at Merrion View Avenue

View 8: Existing

Figure 17.2.8.1 shows the existing view from Merrion Road at Merrion View Avenue looking south. The road is enclosed by large mature street trees to both sides which largely screen views of the adjacent residential properties, and the Merrion Shopping Centre, although No. 12 Merrion View Avenue is clearly visible on the junction of the two roads to the right of the view. A bus stop is present in the left foreground. The character is of a minor road corridor / suburban residential street with mature street trees dominating the streetscape.

View 8: As Proposed

Figure 17.2.8.2 shows the proposed view from Merrion Road at Merrion View Avenue looking south. The primary changes are the widening of the road, the introduction of a segregated cycle track to both sides of the road and the removal of mature street trees within the view. The Merrion Shopping Centre has become visible on the right side of the road. New street trees are planted along the road and trees to gardens are retained. There is a substantial negative change to the character and visual amenity of the view.

17.5.2.1.10 Photomontage View 9 View from Merrion Road near Shrewsbury Road

View 9: Existing

Figure 17.2.9.1 shows the existing view from Merrion Road near Shrewsbury Road looking northwest. The road is enclosed by mature trees within the adjacent private property gardens and by a mixture of mature and semi-mature street trees to both sides of the road. A grand entrance with wall mounted railings (to nos. 31-33 Merrion Road) is visible to the left of the view. The character is of a minor road corridor / suburban residential street with prominent street trees and mature trees to gardens.

View 9: As Proposed

Figure 17.2.9.2 shows the proposed view from Merrion Road near Shrewsbury Road looking northwest. The primary changes are the introduction of cycle tracks to both sides of the road and removal of street trees. There is no loss of trees from private property and replacement street trees are planted. There is predicted to be a notable negative change to the character and visual amenity of the view.

17.5.2.1.11 Photomontage View 10 View from Merrion Road at Clayton Hotel

View 10: Existing

Figure 17.2.10.1 shows the existing view from Merrion Road at Clayton Hotel looking northwest. The view is heavily screened by mature street trees along the left side of the road. The boundary of the hotel and other development is visible along the edge of the road however the buildings are not clearly visible. The character is of a minor road corridor / suburban street with prominent street trees.

View 10: As Proposed

Figure 17.2.10.2 shows the proposed view from Merrion Road at Clayton Hotel looking northwest. The primary changes are the introduction of segregated cycle tracks and removal of one mature street tree to the left side of the view with the subsequent increase in visibility of the hotel building. Segregated cycle tracks are introduced to both sides of the road. There is predicted to be a notable change in character and a minor loss of visual amenity of the view.

17.5.2.1.12 Photomontage View 11 View from Anglesea Road

View 11: Existing

Figure 17.2.11.1 shows the existing view from Anglesea Road looking northeast. The view is focused on the CDETB premises (former Pembroke Town Hall), on the east side of the road, which is bounded by an ornate railing to a low masonry wall with a gated pedestrian entrance. A large mature lime tree is present on the footpath to the front of the CDETB premises. A historic commercial building is present in the background on Merrion Road. The character is of a suburban street with a notable historic town hall building and prominent mature street tree.

View 11: As Proposed

Figure 17.2.11.2 shows the proposed view from Anglesea Road looking northeast. The primary changes are the introduction of a two-way cycle track to the near (west) side of the road, the creation of a new vehicular entrance into the CDETB grounds and necessary removal of the pedestrian entrance and a section of ornate railing boundary. The mature street tree is retained. Footpaths are resurfaced with concrete block paving. There is predicted to be no negative change to the character or visual amenity of the view.

17.5.2.1.13 Photomontage View 12 View from Merrion Road at Anglesea Road

View 12: Existing

Figure 17.2.12.1 shows the existing view from Merrion Road at Anglesea Road looking east. The view is framed on the left by commercial buildings and to the right by the CDETB premises (former Pembroke Town Hall) and RDS buildings further along the road. There are a small number of mature street trees in the middle ground to both sides of the road. A traffic island is present in the centre of the view within the junction layout. The character is of a major suburban road junction with historic civic buildings and a few prominent street trees.

View 12: As Proposed

Figure 17.2.12.2 shows the proposed view from Merrion Road at Anglesea Road looking east. The primary changes are to the junction layout with some loss of footpath width to accommodate new cycle tracks to both sides of the road. There is no loss of the major trees within the middle ground of the view. A small, planted median is introduced. There is predicted to be a minor enhancement to the character and visual amenity of the view.

17.5.2.1.14 Photomontage View 13 View from Merrion Road at Shelbourne Road

View 13: Existing

Figure 17.2.13.1 shows the existing view from Merrion Road at Shelbourne Road looking north. The view is focused on the junction and on buildings on the corners of the junction. Large mature street trees along Merrion Road and various two storey commercial developments along the north side of Merrion Road and along Shelbourne Road form the background of the view. The character is of a major suburban road / commercial street junction with wide carriageways divided by a paved median / traffic islands, and with some prominent mature street trees.

View 13: As Proposed

Figure 17.2.13.2 shows the proposed view from Merrion Road at Shelbourne Road looking north. The primary changes are the rearrangement of the junction layout, the narrowing of the road corridor, removal of a mature street tree on the northwest corner of the junction, and the introduction of segregated cycle lanes to all sides of

the junction and along Merrion Road and Shelbourne Road. Footpaths are widened and resurfaced with concrete paving units and there is new planting introduced to the northeast corner of the junction. Despite the loss of the mature tree there is predicted to be a minor positive change to the character and visual amenity of the view, which would become more pronounced over time as the replacement planting matures.

17.5.2.1.15 Photomontage View 14 View from Pembroke Road at Herbert Park

View 14: Existing

Figure 17.2.14.1 shows the existing view from Pembroke Road at Herbert Park / Elgin Road junction looking south. The view is focused on a row of semi-mature trees within a landscaped area adjacent to No. 7 Ballsbridge Terrace along the east side of road, which are separated from the road by a low wall and railing boundary. On the right side of the view there is a landscape island to the junction enclosed by two road sections of Herbert Park and a section of Elgin Road, with a grassed area which is centred around a semi-mature tree and circular flower bed. The character is of minor road adjoining a larger suburban road corridor with ample landscaped areas and well-established tree planting.

View 14: As Proposed

Figure 17.2.14.2 shows the proposed view from Pembroke Road at Herbert Park / Elgin Road junction looking south. The primary changes in the view are widening of the Herbert Park Road from one lane to three, and the loss of a portion of the landscaped area and the boundary to the left side of the road. Trees from the left of the road are removed. The footpath to the landscape island is extended outwards towards the viewpoint and there is a change of surface from concrete slab to concrete paving, as well as changes to the layout of the planted areas on the island with new areas of ornamental planting. There is predicted to be a notable but neutral change to the character and visual amenity of the view.

17.5.2.1.16 Photomontage View 15 View from Pembroke Road at Northumberland Road

View 15: Existing

Figure 17.2.15.1 shows the existing view from Pembroke Road at Northumberland Road looking northeast. The focus of the view is the junction between the two roads with a small traffic island in the foreground with galvanised pedestrian guardrails. A small octagonal kiosk and a clump of mature trees is located in a large landscape island in the junction, and established trees are located within the curtilage of large residential buildings on the south side of the junction partly screening the buildings. Beyond this is the vista down Northumberland Road which is lined with mature street trees. The character is of a major urban road junction with substantial tree planting to all sides.

View 15: As Proposed

Figure 17.2.15.2 shows the proposed view from Pembroke Road at Northumberland Road looking northeast. The primary changes are layout changes to the junction, landscape layout of the large traffic island and removal of the small traffic island. New landscaped areas and tree planting are introduced on the south side of the junction and the kiosk is moved to the right. New cycle tracks / lanes are included around the junction and along both roads. There is predicted to be no appreciable change to character or visual amenity.

17.5.2.1.17 Photomontage View 16 View from Pembroke Road at Wellington Road

View 16: Existing

Figure 17.2.16.1 shows the existing view from Pembroke Road at Wellington Road looking east down the Pembroke Road. On the left side of the road is a three-storey row of historic terraced residences and several mature street trees which, along with mature trees in private curtilages on the right side of the road, form very prominent features in the view. Footpaths are surfaced with poured concrete slabs. The character is of a wide suburban residential road with substantial mature trees.

View 16: As Proposed

Figure 17.2.16.2 shows the proposed view from Pembroke Road at Wellington Road looking east down the Pembroke Road. The primary changes are the introduction of a segregated cycle track to each side of the road, the narrowing of the road, the introduction of formalised parking bays with block paving and new sections of planted verge. The footpaths are resurfaced with paving blocks. There is no visible loss of existing trees and new street trees are introduced. There is predicted to be a minor positive change in character and to the visual amenity of the view.

17.5.2.1.18 Photomontage View 17 View from Baggot Street Upper at Waterloo Road

View 17: Existing

Figure 17.2.17.1 shows the existing view from Baggot Street Upper at Waterloo Road looking northwest. The road is bordered by 4 to 5 storey commercial buildings of a mix of ages including some prominent historic properties to the right side of the road. There are a number of mainly small street trees along the road in the foreground with larger trees in the background further along the street. Footpaths are surfaced with poured concrete slabs. The character is of a major urban street with prominent historic commercial properties and moderate amounts of street trees of various ages.

View 17 – Proposal

Figure 17.2.17.2 shows the proposed view from Baggot Street Upper at Waterloo Road looking northwest. The primary changes are the narrowing of the road corridor, the introduction of segregated cycle lanes to both sides of the road and the removal of existing young street trees and planting of new street trees. Footpaths are widened and resurfaced in natural stone paving and car parking is removed. There is predicted to be a minor positive change in the character and visual amenity of the view.

17.5.2.1.19 Photomontage View 18 View from Baggot Street Lower at Herbert Street

View 18: Existing

Figure 17.2.18.1 shows the existing view from Baggot Street Lower at Herbert Street looking southeast. There is a row of four storey Georgian terraced residences on the left side of the view, and on the right is a modern office building with prominent glazed frontages. There are semi-mature street trees to the central median and mature trees in a small open space to the right side of the road. A tall ornamental double lamp standard is in the centre of the view in the median. The character is of a major urban road / mixed-use urban street with moderate numbers of street trees.

View 18: As Proposed

Figure 17.2.18.2 shows the proposed view from Baggot Street Lower at Herbert Street looking southeast. The primary changes are the narrowing of the road corridor, the widening of the footpaths to the left side of the road and the introduction of a segregated cycle track to each side of the road. Footpaths are changed from poured concrete surfacing to concrete paving blocks. There is predicted to be no change to character but a minor positive change to visual amenity.

17.5.2.1.20 Photomontage View 19 View from Nutley Lane at Nutley Park

View 19: Existing

Figure 17.2.19.1 shows the existing view from Nutley Lane at Nutley Park looking west. The junction and elements on the far side within the grounds of the RTÉ Campus are the main focus of the view. The campus grounds are separated from the road by a low masonry wall and there are a number of mature trees along the boundary and within the grounds. On the left side of the view is the corner of the adjacent residential property bounded by a low wall and fence. There is a small tree within the garden area and some young street trees further along on the left side of Nutley Lane. A large telecommunications mast is present in the background. The character is of a minor

road junction with a moderate amount of tree cover to surrounding areas including minor street trees further along the road.

View 19: As Proposed

Figure 17.2.19.2 shows the proposed view Nutley Lane at Nutley Park looking west. The primary changes are the widening of the road corridor to the right (west) side, the setting back of the campus boundary, the removal of large conifer trees within the grounds of the campus, and the introduction of a two-way cycle track to the near (east) side of Nutley Lane. The surfacing to the entrance to Nutley Park, in the foreground, is changed from bitmac to concrete paving blocks. There is predicted to be a minor but neutral change in the character and visual amenity of the view.

17.5.2.1.21 Photomontage View 20: View from Nutley Lane at Elm Park Golf & Sports Club

View 20: Existing

Figure 17.2.20.1 shows the existing view from Nutley Lane adjacent to Elm Park Golf & Sports Club looking northeast. The road is heavily enclosed by small trees along the street to the left and by tall mature trees to the right along the edge of the sports club grounds. A bus stop with shelter is on the far side of the road in the centre of the view. The character is of a minor suburban road corridor with a high level of enclosure from adjacent trees.

View 20: As Proposed

Figure 17.2.20.2 shows the proposed view from Nutley Lane adjacent to Elm Park Golf & Sports Club looking northeast. The primary changes are the widening of the road to the east side, the removal of the mature trees within the sports club grounds and the setting back of the boundary. A replacement boundary wall with climbing vegetation on the roadside and new internal hedgerow is planted along the edge of the sports club / golf club and a two-way cycle track is introduced on the far side of the road. A small street tree is removed from the left side of the road in the foreground. There is predicted to be a substantial negative change to the character and visual amenity of the view.

17.5.2.1.22 Photomontage View 21: View from Nutley Lane at St. Vincent's University Hospital

View 21: Existing

Figure 17.2.21.1 shows the existing view from Nutley Lane at St. Vincent's University Hospital looking south. The view is focused on the left side of the road which is bordered by a number of large conifers, a mesh fence and a tall hedge to the boundary of the adjacent hospital grounds. There is a bus stop further along on the left side of the road. On the right side of the road in the foreground there is a narrow grass verge with young tree planting. On the far right of the view are garden boundary walls to adjacent properties. The character is of a minor road corridor with adjacent mature trees, small street trees and bounding hedges.

View 21: As Proposed

Figure 17.2.21.2 shows the proposed view from Nutley Lane at St. Vincent's University Hospital looking south. The primary changes are the widening of the road to the left and the removal of the large conifers, hedges and setback of the boundary. A new fence and hedgerow would be introduced along the boundary. There is predicted to be a notable negative impact on character and visual amenity of the view.

17.5.2.1.23 Photomontage View 22: View from Nutley Lane at Nutley Avenue

View 22: Existing

Figure 17.2.22.1 shows the existing view from Nutley Lane at Nutley Avenue looking east. The focus of the view is semi-mature street tree planting and a tall hedge boundary to a multi-storey carpark along the south side of Nutley Lane. Two semi-mature street trees are also present on the left (north) side of the road. Surrounding buildings are largely screened. The entrance to Nutley Avenue is seen on the left foreground. The character is of

a minor road corridor junction / suburban street with moderately sized street trees and a hedge providing screening and softening the streetscape.

View 22: As Proposed

Figure 17.2.22.2 shows the proposed view from Nutley Lane at Nutley Avenue looking east. The primary changes are the removal of the street trees, widening of the road corridor, introduction of cycle tracks and the removal and setback of the boundary hedgerow. New street trees are introduced to the street in the distance and on the far left foreground. The entrance to Nutley Avenue is paved with concrete paving blocks as an informal crossing point. The multistorey carpark to the right and buildings further along the road are revealed as screening trees are removed. There is predicted to be a substantial negative change to the character and visual amenity of the view.

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 Predicted Construction Phase Residual Effects (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
Townscape and Streetscape Character				
Stradbrook Road to Booterstown Avenue	For proposed changes see Section 17.4.3.1.1	Medium	High / Very High	Negative Very Significant Temporary / Short-Term
Booterstown Avenue to Nutley Lane	For proposed changes see Section 17.4.3.1.2	High	Medium / High	Negative Significant Temporary / Short-Term
Merrion Road (Nutley Lane to Ballsbridge)	For proposed changes see Section 17.4.3.1.3	Very High	Very High	Negative Significant / Very Significant Temporary / Short-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street)	For proposed changes see Section 17.4.3.1.4	Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Nutley Lane (R138 to Merrion Road)	For proposed changes see Section 17.4.3.1.5	High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term
Streetscape Characteristics and Visual Effects				
Conservation Areas	For proposed changes see Section 17.4.3.2.2	High	High	Negative Significant Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	High / Very High	Negative Very Significant Temporary / Short-Term
Protected structures	For proposed changes see Section 17.4.3.2.4	Very High	High / Very High	Negative Very Significant Temporary / Short-Term
Amenity Designations	For proposed changes see Section 17.4.3.2.5	High	Very High	Negative Very Significant Temporary / Short-Term
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	High / Very High	Negative Very Significant Temporary / Short-Term
Properties	**Part of residential property in temporary acquisition** For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with loss of trees For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
	Non-residential properties included in temporary acquisition with no loss of trees For proposed changes see Section 17.4.3.2.8	High	High	Negative 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	High	High	Negative Significant Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	High	High	Negative Significant 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 Predicted Operational Phase Residual Impacts (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Townscape and Streetscape Character				
Stradbrook Road to Booterstown Avenue For proposed changes see Section 17.4.4.2.1		Medium	Medium (Locally high at Blackrock College / Park)	Negative Slight / Moderate Overall (Locally Moderate / Significant at Blackrock College / Park) Long-Term
Booterstown Avenue to Nutley Lane For proposed changes see Section 17.4.4.2.2		High	Medium	Negative Slight / Moderate Long-Term
Merrion Road (Nutley Lane to Ballsbridge) For proposed changes see Section 17.4.4.2.3		Very High	Medium	Negative Moderate Long-Term
Ballsbridge to Merrion Square (Pembroke Road, Baggot Street and Fitzwilliam Street) For proposed changes see Section 17.4.4.1.4		Very High	Medium	Positive Moderate / Significant Long-Term
Nutley Lane (R138 to Merrion Road) For proposed changes see Section 17.4.1.2.5		High	Medium	Negative Slight / Moderate Long-Term
Streetscape Characteristics and Visual Effects				
Residential Conservation Areas	For proposed changes see Section 17.4.4.3.3	High	Medium / High	Negative Moderate / Significant Long-Term
Protected structures	For proposed changes see Section 17.4.4.3.4	Very High	High	Negative Moderate / Significant Long-Term
Amenity Designations	For proposed changes see Section 17.4.4.3.5	High	High	Negative Moderate / Significant Long-Term
Properties	**Part of residential property in permanent and / or temporary acquisition** For proposed changes see Section 17.4.4.3.8	High	High	Negative Moderate / Significant Long-Term
	Non-residential properties included in permanent acquisition For proposed changes see Section 17.4.4.3.8	High	High	Negative Moderate / Significant Long-Term
	Non-residential properties included in permanent acquisition with no loss of trees For proposed changes see Section 17.4.4.3.8	High	Medium	Negative Slight / Moderate Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Trees and Vegetation	For proposed changes see Section 17.4.4.3.9	High	Low	Negative Slight / Moderate Long-Term

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 residual effects will remain for properties experiencing permanent land acquisition and in the loss of trees along all sections of the Proposed Scheme, excluding the section from Ballsbridge to Merrion Square. However, the Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian / cycle connectivity. Likewise, the Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character in areas such as Pembroke Road, Baggot Street and Fitzwilliam Street.

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