



Chapter 16
Architectural Heritage

Contents

16. Architectural Heritage	1
16.1 Introduction	1
16.2 Methodology	1
16.2.1 Definitions	1
16.2.2 Approach	3
16.2.3 Study Area	4
16.2.4 Relevant Guidelines, Policy and Legislation	4
16.2.5 Data Collection and Collation	6
16.2.6 Assessment Methodology	7
16.2.7 Appraisal Method for the Assessment of Sensitivity	7
16.3 Baseline Environment.....	13
16.3.1 Results and Analysis	14
16.4 Potential Impacts	27
16.4.1 Characteristics of the Proposed Scheme	27
16.4.2 'Do Nothing' Scenario.....	28
16.4.3 Construction Phase	28
16.4.4 Operational Phase	35
16.5 Mitigation and Monitoring Measures	39
16.5.1 Construction Phase	39
16.5.2 Operational Phase.....	45
16.6 Residual Impacts	46
16.6.1 Construction Phase	46
16.6.2 Operational Phase.....	47
16.7 References	48

16. Architectural Heritage

16.1 Introduction

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

During the Construction Phase, the potential architectural heritage impacts associated with the development of the Proposed Scheme have been assessed. This includes impacts on the boundary treatments of protected structures and other architectural heritage features including street furniture and historic paving, as a result of land take, road resurfacing and road realignments.

During the Operational Phase, the potential architectural heritage impacts associated with changes to the physical layout of the street as a result of road resurfacing and road realignments, the installation of new street furniture, including bus shelters and cantilever signal poles, changes to the urban realm and the impact on character and setting and vistas of architectural heritage features and streetscapes have been assessed.

The assessment has been carried out according to best practice and guidelines relating to architectural heritage 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 design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts, where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. In addition, feedback received from the comprehensive consultation programme undertaken throughout the option selection and design development process have been incorporated, where appropriate.

16.2 Methodology

This study determines from existing records and on-site observations, the nature of the architectural heritage resource within the footprint of the Proposed Scheme. The methodology was designed to provide a full understanding of the potential impact on architectural heritage assets and on the character of historic urban streetscapes and landscapes.

16.2.1 Definitions

In order to assess and present the findings of this study, the following definitions are employed. Heritage is a broad term used to describe archaeological, architectural, artistic, technical, social, scientific and cultural heritage features. Broadly speaking, it includes:

16.2.1.1 Architectural Heritage

The architectural heritage includes buildings and structures, their contents and settings and designed landscapes and demesnes which are of artistic, technical, social scientific and cultural interest. The architectural heritage also includes street furniture, statuary, paving, and structures associated with the industrial heritage and vernacular heritage.

Architectural heritage generally applies to structures, buildings, streetscapes or landscapes which postdate Anno Domini (AD) 1700 but can include structures of archaeological interest and structures which predate AD 1700.

Article 1 of the Convention for the Protection of the Architectural Heritage of Europe (also known as the Grenada Convention) (Council of Europe 1985) defines architectural heritage as:

'Monuments: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings';

'Groups of buildings: homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest which are sufficiently coherent to form topographically definable units'; and

'Sites: the combined works of man and nature, being areas, which are partially built upon and sufficiently distinctive and homogeneous to be topographically definable and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest'.

Architectural heritage assets are a finite resource which individually display a high level of architectural, artistic or technical craftsmanship and collectively contribute to the character and sense of place of our towns, villages and the city of Dublin.

Nationally, sites of architectural heritage interest are subject to statutory protection. Section 10 (2)(f) and Section 51 of the Planning and Development Act 2000 (as amended) (hereafter referred to as the Planning and Development Act), places a statutory obligation on local authorities to include sites of architectural heritage in their development plans and objectives for the protection of structures, or parts of structures, which are of special architectural heritage interest. The principal mechanism for the protection of these structures is through their inclusion on the Record of Protected Structures (RPS) in the relevant city or county development plan. Protected structures are defined in Section 2 of the Planning and Development Act as:

'(a) a structure, or

(b) a specified part of a structure, which is included in a record of protected structures, and, where that record so indicates, includes any specified feature which is within the attendant grounds of the structure and which would not otherwise be included in this definition'.

A structure is defined in Section 2 of the Planning and Development Act as:

'any building, structure, excavation, or other thing constructed or made on, in or under any land, or any part of a structure so defined, and.... in relation to a protected structure or proposed protected structure, includes -

(i) the interior of the structure,

(ii) the land lying within the curtilage of the structure,

(iii) any other structures lying within that curtilage and their interiors, and

(iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii)'.

Section 51 of the Planning and Development Act defines protected structures as:

'...structures, or parts of structures, which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest....'.

Where sites are designated or protected architectural heritage assets, they are addressed in this Chapter under Section 16.3.1.3.

The Planning and Development Act also introduced Architectural Conservation Areas (ACA). An ACA is a place, area, group of structures or townscape that is of special architectural, historical, archaeological, technical, social, cultural, or scientific interest, or that contributes to the appreciation of a protected structure or group of protected structures. A list of ACAs and objectives for ACAs are also contained in the relevant city or county development plans. ACAs are outlined in Section 16.3.1.4.

Architectural heritage may also be afforded protection under other county or city development plan objectives including Conservation Areas which are indicated in the Dublin City Council (DCC) Dublin City Development Plan

2022 - 2028 (hereafter referred to as the Dublin City Development Plan) (DCC 2022) zoning maps as red hatched areas or may be protected under specific objectives for the protection of streetscapes, street furniture, paving treatments and industrial heritage. Red hatched Conservation Areas are addressed in Section 16.3.1.5.

Architectural heritage assets may also be included in other official inventories. These inventories include the National Inventory of Architectural Heritage (NIAH) Building and Garden Surveys for Dublin City (NIAH 2020a; NIAH 2020b) and the Dublin City Industrial Heritage Record (DCIHR) (DCC 2003 to 2009). In considering additions to the RPS, local authorities have recourse to the NIAH which provides a source of guidance on the significance of buildings in their respective areas. While these inventories do not afford statutory protection in themselves, they do recognise the heritage value of individual heritage assets or landscapes and are used to identify heritage assets for protection. NIAH buildings or structures which have not been protected are dealt with under Section 16.3.1.6. Designed landscapes are addressed under Section 16.3.1.7. Upstanding industrial heritage sites are addressed under Section 16.3.1.8. Those sites which may survive below-ground are assessed in Chapter 15 (Archaeological & Cultural Heritage) as potential archaeological sites. Other buildings or structures of architectural heritage interest are addressed in Section 16.3.1.9.

16.2.1.2 Archaeological Heritage

Archaeological heritage is dealt with in Chapter 15 (Archaeological & Cultural Heritage). However, archaeological heritage may also be of architectural interest. Where an archaeological site includes upstanding remains which are also of architectural interest, they are assessed in Section 16.3.1.2.

16.2.1.3 Cultural Heritage

Cultural heritage, which is closely related, is defined in the Environmental Protection Agency's (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022). It includes tangible heritage such as archaeology, architectural heritage, settlements, buildings and structures and designed landscapes, in addition to placenames and intangible heritage such as folklore, traditions and traditional practices. Cultural heritage also contributes to cultural identity and sense of place. Where cultural heritage assets are of interest from an archaeological, historical, or cultural interest perspective, these are assessed in Chapter 15 (Archaeological & Cultural Heritage). Those aspects of cultural heritage which are specifically of architectural interest, such as statuary and street furniture, are dealt with in this Chapter under Section 16.3.1.10.

16.2.2 Approach

The assessment determines, as far as reasonably possible from existing records, the nature, extent and significance of the historic environment / architectural heritage resource in and within the vicinity of the Proposed Scheme using appropriate methods of study (Historic England 2015). These comprised a desk study of published and unpublished documentary and cartographic sources, supported by field inspections, followed by mapping of the assets and determining the impact of the Proposed Scheme.

Both Historic England and Historic Environment Scotland guidelines (Historic England 2015, 2017, 2019) (Historic Environment Scotland 2005, 2016, 2020) refer to the Chartered Institute for Archaeologists (CIfA) for what a desk based assessment should consist of. The Standards and Guidance for Historic Environment Desk-Based Assessment (CIfA 2014a), state that a desk-based assessment consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their significance and the character of the study area, including appropriate consideration of the settings of heritage assets. Similarly, the National Roads Authority (NRA) Guidelines for the Assessment of Architectural Heritage Impacts of National Road Schemes (hereafter referred to as the NRA Architectural Guidelines) (NRA 2005a) state that the architectural heritage consultant will need to consult all available sources of architectural heritage information as part of the desk study including county development plans, existing architectural and archaeological inventories such as the RPS, the Record of Monuments and Places (RMP) and NIAH, the Irish Architectural Archive and where NIAH or RPS information is incomplete or unavailable, the architectural heritage consultant will need to rely on other existing documented records including books, published articles, historic maps and aerial photographs of the study area.

The study involved detailed interrogation of the archaeological, historical and architectural nature of the baseline environment of the Proposed Scheme. This comprises information from the United Nations Educational, Scientific

and Cultural Organization (UNESCO) World Heritage Sites, the RMP (Dúchas 1998), Sites and Monuments Record (SMR) (National Monuments Service (NMS 2020a and 2020b), as National Monuments in state care, guardianship or subject to Preservation Orders (NMS 2009; NMS 2019), the Dublin City Development Plan (DCC 2022), including the RPS and ACA, the NIAH Building and Garden Surveys (NIAH 2020a and 2020b), and the DCIHR (DCC 2003 to 2009). Cartographic and aerial photographs of the study area were also consulted (OSI 2020a; UCD 2020; Google 2020) including the Project Mapper. More detailed information was obtained from local historical, architectural and documentary records. A full list of the publications which were consulted is included in the Section 16.7.

Field inspections were carried out along the length of the Proposed Scheme between May 2020 and May 2021 with the aim of identifying any known architectural heritage sites and previously unrecorded features.

This leads to the following:

- Determining the nature and significance of known architectural heritage sites that may be affected by the Proposed Scheme;
- Determining the impact upon the setting of known architectural heritage sites in the surrounding area; and
- Identifying mitigation measures based upon the results of the above research.

The evaluation of impacts upon the extant architectural heritage undertaken to complete the architectural heritage assessment presented in this Chapter is based on a number of distinct actions which enabled the potential significance and sensitivity of the built environment to be established. These allowed the likely and significant impacts to be determined, and mitigation measures to be proposed as appropriate.

16.2.3 Study Area

Based on the NRA Architectural Guidelines (NRA 2005a) and the NRA Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (hereafter referred to as the NRA Archaeological Guidelines) (NRA 2005b), the study area for architectural heritage was defined as an area extending 50m in all directions from the Proposed Scheme boundary. Architectural heritage features or receptors within the corridor were then identified first in the desk study and then through field surveys. Both the study area and the locations of all identified architectural heritage features are illustrated in Figure 16.1 in Volume 3 of this EIAR.

The NRA Architectural Guidelines also state that the consultant should use professional judgement in deciding where the 'study corridor' should be extended in respect of the chosen route to take into account features beyond the 50m limit which may be directly or indirectly impacted by the Proposed Scheme. The study area, therefore, includes demesne landscapes and parks whose principal features are located outside of the study area, but whose historic or current boundaries or settings extend into it. It can also include ACAs, Conservation Areas, garden cemeteries, and groups or complexes of institutional, religious, industrial or residential buildings where there is likely to be a direct physical impact on architectural heritage features or an indirect visual impact.

The study area also includes the junctions of roads and streets which will converge on, or lead off from the Proposed Scheme where there may be a direct impact resulting from urban realm, landscaping, paving or road works to the junction. These works may have a direct impact on architectural heritage features such as historic street furniture or surface treatments, or where there may be a visual impact on the setting, streetscape or vistas of protected structures, Conservation Areas and ACAs, designed landscapes or other architectural heritage features.

16.2.4 Relevant Guidelines, Policy and Legislation

The study has been carried out in accordance with the NRA Architectural Guidelines (NRA 2005a) and the EPA Guidelines (EPA 2022). The assessment has also been undertaken with regard to the relevant legislation, standards and guidelines for Environmental Impact Assessment (EIA) and the architectural heritage including:

- National Monuments Acts 1930 to 2014;
- Planning and Development Act (as amended);
- The Heritage Act, 1995 (as amended);

- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999;
- The Planning and Development Act Regulations 2001 (as amended);
- EPA Guidelines (EPA 2022);
- Environmental Impact Assessment of Projects: Guidance on the Preparation of the Environmental Impacts Assessment Report (European Commission 2017);
- Department of Housing Planning and Local Government (DHPLG) Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment (DHPLG 2018a);
- Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment;
- 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;
- S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018; and
- Circular Letter: PL 05/2018 Transposition into Planning Law of Directive 2014/52/EU (DHPLG 2018b).

In light of the legislative protection afforded to the architectural and landscape heritage resource, this assessment considers the various categories of special interest and significance as defined by the statutory architectural heritage guidelines. The architectural heritage assessment is guided by the provisions of the relevant statutory instruments and relevant guidelines for the protection of the architectural heritage including:

- The Dublin City Development Plan (DCC 2022);
- The North Lotts and Grand Canal Dock Strategic Development Zone (SDZ) (DCC 2014a);
- Poolbeg West Strategic Development Zone (SDZ) (DCC 2019b);
- Department of Arts, Heritage and the Gaeltacht (DAHG) Architectural Heritage Protection: Guidelines for Planning Authorities (DAHG 2011);
- Department of Arts, Heritage, Gaeltacht and the Islands (DAHGI) Framework and Principles for the Protection of the Archaeological Heritage (DAHGI 1999);
- International Council of Monuments and Sites (ICOMOS) International Charters including:
 - The Florence Charter on Historic Gardens (ICOMOS 1981);
 - Charter for The Conservation of Historic Towns and Urban Areas, Washington Charter (ICOMOS United States 1987);
 - Charter for the Protection and Management of Archaeological Heritage (ICOMOS Australia 1990);
 - Charter on the Built Vernacular Heritage (ICOMOS 1999a);
 - International Cultural Tourism Charter, Managing Tourism at Places of Heritage Significance (ICOMOS 1999b);
 - Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (ICOMOS 2005);
 - Charter on Cultural Routes (ICOMOS 2008);
 - The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (also known as the 'Ename Charter') (ICOMOS Australia 2008);
 - The Valetta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas (ICOMOS 2011);
 - Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes (also known as the Dublin Principles), ICOMOS and The International Committee for the Conservation of the Industrial Heritage (TICCIH) (ICOMOS and TICCIH 2011);
 - Salalah Guidelines for the Management of Public Archaeological Sites, 2017 (ICOMOS 2017a); and
 - Document on Historic Urban Public Parks (ICOMOS 2017b).

- Convention for the Protection of the Architectural Heritage of Europe (hereafter referred to as the Granada Convention) (Council of Europe 1985);
- Green Paper on the Urban Environment (European Commission 1990);
- European Convention on the Protection of the Archaeological Heritage (revised) (Council of Europe 1992);
- European Landscape Convention (Council of Europe 2000);
- Framework Convention on the Value of Cultural Heritage for Society (Council of Europe 2005); and
- The Heritage Ireland 2030 (Plan) (Government of Ireland, 2022).

In order to assess the potential impact of the proposal the following sources were also consulted or reviewed:

- Project Ireland 2040 National Planning Framework (hereafter referred to as the NPF) (DHPLG 2018c);
- The Eastern and Midlands Regional Assembly (EMRA) Regional Spatial and Economic Strategy (hereafter referred to as the RSES) 2019 - 2031 (EMRA 2019); and
- Department of Transport, Tourism and Sport (DTTAS) The Design Manual for Urban Roads and Streets (DTTAS 2019).

16.2.5 Data Collection and Collation

A detailed evaluation of the architectural heritage resources took place. Research has been undertaken in three phases:

- i. Desk-based study including review of all available relevant and published and unpublished documentary archaeological, architectural, historical and cartographic sources. The desk study involved detailed analysis of the architectural and historical background of the Proposed Scheme study area. This comprised analysis of information from the RMP (Dúchas 1998), SMR (NMS 2020 and 2020b, data downloaded 01.04.21) and National Monuments in state care, guardianship or subject to Preservation Orders for County Dublin (NMS 2009 and 2019); the Dublin City Development Plan 2022 to 2028 (DCC 2022) including the Record of Protected Structures (RPS); the NIAH Building and Garden Surveys (NIAH 2020a and 2020b, data downloaded 25.03.2021); the DCIHR (DCC 2003 to 2009), cartographic records and aerial photographs of the study area held by the Ordnance Survey of Ireland (OSI 2020a and OSI 2020b), Trinity College Dublin (TCD 2020 and Petty 1656 to 1658), University College Dublin (UCD 2020), Royal Irish Academy (Clarke 2002, Goodbody 2014, and Lennon & Simms 2008), Dublin City Archive (DCC 2020), and Google Maps including Google street view (Google 2020) and the dedicated Project Mapper service. More detailed information was obtained from local historical, architectural and documentary records. These were assessed either from the Irish Architectural Archive (IAA 2020a and IAA 2020b), the National Library (NLI 2020), the National Archive (NAI 2020), the Valuations Office (VO 2020), the Archives of the Irish Railway Record Society (IRRS 2020), the Military Archive (DOD 2020), the Representative Church Body Library (CI 2020) and the local studies collections in Dublin Public Libraries (2020a and 2020b), Dublin City Archives (DCC 2020) Dublin Port Archives (DPC 2020) and South County Dublin Libraries (SDCC 2020b and 2020c) and from online resources. A full list of the websites and publications which were consulted is included in Section 16.7;
- ii. As mentioned previously, field inspections were carried out along the length of the Proposed Scheme between May 2020 and May 2021 with the aim of identifying any known architectural heritage sites and previously unrecorded features and within the footprint of the Proposed Scheme; and
- iii. The locations for all architectural assets identified in the course of the assessment have been mapped and are shown on Figure 16.1 in Volume 3 of this EIAR. This includes the following assets (and the typical format in which they appear):
 - RMP / SMR sites - (e.g. DU018-020564);
 - RPS – (marked with a yellow square);
 - National Inventory of Architectural Heritage (NIAH) – (e.g. NIAH 50020466);
 - NIAH Garden Survey – (e.g. NIAH 2429); and
 - Architectural Heritage Sites – (e.g. CBC0016BTH035).

16.2.6 Assessment Methodology

This assessment methodology has regard to the EPA Guidelines assessment criteria (EPA 2022), the NRA Architectural Guidelines (NRA 2005a) and the NRA Archaeological Guidelines (NRA 2005b). In undertaking this assessment, regard was also had to other relevant assessments including archaeology and cultural heritage and landscape and visual, which are outlined in Chapter 15 (Archaeological & Cultural heritage) and Chapter 17 (Landscape (Townscape) & Visual), respectively. The impact assessment was carried out by:

- Determining and rating the sensitivity of baseline features within the baseline environment;
- A review of the Proposed Scheme drawings, in order to identify the locations of potential impacts both direct and indirect; and
- Determining the nature, magnitude, duration and extent of these impacts.

Architectural heritage buildings, features and landscapes are a non-renewable resource and such assets are generally considered to be location sensitive. In this context, any change to their environment either directly through construction activity or indirectly could adversely affect these sites, their settings or vistas of these sites.

16.2.7 Appraisal Method for the Assessment of Sensitivity

In accordance with EPA Guidelines (EPA 2022), the context, character, significance and sensitivity of each architectural heritage asset requires evaluation, and the significance of the impact is then determined by considering the significance / sensitivity of the asset and the predicted magnitude of the impact.

In accordance with the NRA Architectural Guidelines (NRA 2005a) and the NRA Archaeological Guidelines (NRA 2005b), the significance criteria used to evaluate an architectural heritage building, feature, streetscape or landscape takes into account the character and integrity of the asset and any available data regarding it. This can be ascertained by looking at the following criteria cited in the NRA Archaeological Guidelines:

- The existing status (level of protection);
- Condition or preservation;
- Documentation or historical significance;
- Group value;
- Rarity;
- Visibility in the landscape; and
- Fragility or vulnerability.

While these criteria contribute to the significance of a feature they should not be treated as definitive (refer to Table 16.1). These criteria are indicators which contribute to a wider judgement based on the individual circumstances of these architectural heritage assets.

Table 16.1: Explanation of Heritage Asset Assessment Criteria Significance

Criteria	Explanation
Existing Status	The level of statutory protection associated with an architectural heritage building or asset is an important consideration. Other non-statutory designations such NIAH or industrial heritage designations are also factored
Condition/ Preservation / Integrity	The survival of an architectural heritage building or asset is an important consideration and should be assessed in relation to its present condition and surviving features. Well-preserved sites should be highlighted, this assessment can only be based on a field inspection.
Documentation / Data	The significance of an architectural heritage building or asset may be enhanced by the existence of records of previous investigations or contemporary documentation supported by written evidence or historic maps. Sites with a definite historical association or an example of a notable event or person should be highlighted.
Group Value / Character	The value of a single an architectural heritage building or asset may be greatly enhanced by its association with related buildings or structures or with buildings from different periods which indicate continuity of settlement any specific area. In some cases, it may be preferable to protect the complete group, including associated and adjacent land, rather than to protect buildings or structures within that group.
Rarity / Character	The rarity of some an architectural heritage building types can be a central factor affecting response strategies for development, whatever the condition of the individual feature. It is important to recognize sites that have a limited distribution.
Visibility in the Landscape / Character / Integrity	architectural heritage buildings or assets that are highly visible in the landscape or streetscape and may be the focus of a vista contribute to the amenity and character of an area have a heightened physical presence. The inter-visibility between architectural heritage buildings may also be explored in this category.
Fragility/ Vulnerability / Integrity	It is important to assess the level of threat to an architectural heritage buildings or assets from erosion, natural degradation, agricultural activity, land clearance, neglect, careless treatment or development.
Amenity Value / Character	Regard should be taken of the existing and potential amenity value of a an archaeological / cultural heritage asset.

In assessing the significance of architectural heritage buildings, or structures, designed landscapes, demesne and formal gardens and parks, regard was also had to the criteria set out in the NIAH Handbook (NIAH 2017) and the NIAH Garden Survey Project Methodology (NIAH 2020c). These were of particular relevance when assessing undesignated architectural heritage buildings, structures or sites.

An evaluation of the sensitivity of each architectural heritage site was undertaken on a four-point scale of high, medium, low, and negligible based on professional judgement and guided by the criteria presented in Table 16.2. These criteria were developed based on the guideline, policy and legislation identified in Section 16.2.4.

Table 16.2: Criteria to Inform the Assessment of Sensitivity of Architectural Heritage Sites

Sensitivity	Criteria
High	<p>World Heritage Sites (including Nominated Sites)</p> <p>National Monuments in the State's ownership or guardianship or subject to preservation orders or temporary preservation orders</p> <p>Recorded Monuments which based on one or more of the characteristics of Existing Status, Condition / Preservation, Documentation/Historical Significance, Group Value, Rarity, Visibility in the Landscape, Fragility / Vulnerability and Amenity Value; are in the professional judgement of the architectural heritage specialist of International or National Importance</p> <p>Protected structures assessed by the NIAH to be of International or National Importance or protected structures which while not assessed by the NIAH based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist:</p> <ul style="list-style-type: none"> • Are of sufficient architectural heritage importance to be to be considered in an international context and are exceptional and be compared to and contrasted with the finest architectural heritage in other countries; or • Make a significant contribution to the architectural heritage of Ireland and be considered to be of great architectural heritage significance in an Irish context <p>ACAs which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist</p> <ul style="list-style-type: none"> • Are of sufficient architectural heritage importance to be to be considered in an international context and are exceptional and be compared to and contrasted with the finest architectural heritage in other countries; or • Make a significant contribution to the architectural heritage of Ireland and be considered to be of great architectural heritage significance in an Irish context; or • Contribute to the appreciation of protected structures assessed to be of High Sensitivity <p>Previously unrecorded architectural heritage sites which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist</p>

Sensitivity	Criteria
	<ul style="list-style-type: none"> Are of sufficient architectural heritage importance to be to be considered in an international context and are exceptional and be compared to and contrasted with the finest architectural heritage in other countries; or Make a significant contribution to the architectural heritage of Ireland and be considered to be of great architectural heritage significance in an Irish context. <p>Designed landscapes with outstanding or high artistic, historic, horticultural, architectural, archaeological, scenic interest</p>
Medium	<p>Protected structures assessed by the NIAH to be of Regional Importance or protected structures which while not assessed by the NIAH based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist make a significant contribution to the architectural heritage to the region in which they are located</p> <p>Recorded Monuments which based on one or more of the characteristics of Existing Status, Condition/Preservation, Documentation/Historical Significance, Group Value, Rarity, Visibility in the Landscape, Fragility/Vulnerability and Amenity Value in the professional judgement of the architectural heritage specialist are of Regional Importance</p> <p>ACAs which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist:</p> <ul style="list-style-type: none"> Make significant contribution to the architectural heritage of their region; or Contribute to the appreciation of protected structures assessed to be of Medium Sensitivity. <p>Previously unrecorded architectural heritage sites which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist make a significant contribution to the architectural heritage of their region</p> <p>Designed landscapes with good artistic, historic, horticultural, architectural, archaeological, scenic interest</p> <p>Previously unrecorded architectural heritage sites which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist make a significant contribution to the architectural heritage of local area in which they are located and which retain much of their historic fabric and character</p>
Low	<p>Architectural heritage sites assessed by the NIAH to be of Local Importance.</p> <p>Previously unrecorded architectural heritage sites which based on their Architectural, Historical, Archaeological, Artistic, Cultural, Scientific, Social or Technical interest in the professional judgement of the architectural heritage specialist, make a contribution to the architectural heritage of local area in which they are located</p> <p>Designed landscapes with limited artistic, historic, horticultural, architectural, archaeological, scenic interest</p>
Negligible	<p>Architectural heritage sites assessed by the NIAH to be of Record Only importance</p> <p>Previously unrecorded architectural heritage sites or designed landscapes with limited Architectural, Historical, horticultural, Archaeological, Artistic, Cultural, Scientific, Social or Technical or scenic interest or where their heritage interest has been significantly compromised</p>

16.2.7.1 Types of Impacts

Potential impacts on the baseline architectural heritage environment can be classified in three categories:

- Direct physical impacts;
- Indirect physical impacts; and
- Visual impacts or impacts on setting or surroundings of the architectural heritage asset (i.e. the surroundings in which a heritage asset can be experienced (Historic England 2017)).

Direct physical impacts are impacts resulting from the design of the Proposed Scheme. Typically, these activities are related to construction works, and in this case, include the removal or alteration of features including property boundaries and items of street furniture.

Indirect physical impacts describe processes, triggered by development activity, that lead to the degradation of architectural heritage assets, and include the potential for damage of sensitive fabric inside or on the Proposed Scheme boundary. Other environmental factors such as noise, light or air quality can be relevant in some cases.

Visual impacts or impacts on the setting of architectural heritage sites are associated with changes to the character of the landscape that arise from the insertion of the Proposed Scheme into the existing context in such a way that it affects (positively or negatively) the heritage significance of the architectural heritage site. Such impacts may be encountered at all stages in the life cycle of a development, but they are only likely to be considered significant during the Operational Phase of the Proposed Scheme. See also Chapter 17 (Landscape (Townscape) & Visual) which assesses the potential for visual impact.

The types of likely impacts are described using the terminology presented in Table 3.4 of the EPA Guidelines (EPA 2022), which is also included in Table 1.4 of Chapter 1 (Introduction):

- **Cumulative Impact:** The addition of many small impacts to create one larger, more significant, impact;

- Do Nothing Impact: The environment as it would be in the future should no development of any kind be carried out;
- Indeterminable Impact: When the full consequences of a change in the environment cannot be described;
- Irreversible Impact: When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost;
- Residual Impact: The degree of environmental change that will occur after the proposed mitigation measures have taken impact;
- ‘Worst-case’ Impact: The impacts arising from a development in the case where mitigation measures substantially fail; and
- Indirect or Secondary Impacts: Impacts arise off site or are caused by other parties that are not under the control of the development. Impacts which are caused by the interaction of impacts, or by associated or off site projects.

16.2.7.2 Quality of Impacts

The quality of likely impacts were described using the terminology presented in Table 3.4 of the EPA Guidelines (EPA 2022), which is also included in Table 1.4 of Chapter 1 (Introduction):

Impacts on the architectural heritage are assessed in terms of their quality (i.e. positive, negative, neutral):

- Negative Impact: A change that will detract from, reduce the quality of, diminishes the architectural or landscape character and amenities of, permanently alter or remove an architectural heritage feature from the landscape;
- Neutral Impact: A change that does not affect the architectural heritage, no effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error; and
- Positive Impact: A change which protects or enhances quality of the architectural heritage environment or improves the architectural heritage feature, it’s setting or the landscape character and amenities.

16.2.7.3 Duration of Impacts

Impacts on the architectural heritage resource may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to be considered significant during the Construction and Operational Phase of the development. The extent of effects describes the size of the area, the number of sites, and the proportion of sites affected by an effect. The context describes whether the extent, duration, or frequency will conform or contrast with established baseline conditions. Table 16.3 outlines the duration of effects. Temporary effects lasting from one year or less will often be less concerning than a long-term and permanent effects, depending on their severity.

Table 16.3: Duration and Frequency of Effects

Duration	Description
Momentary	Effects lasting from seconds to minutes.
Brief	Effects lasting less than a day
Temporary	Effects lasting less than one year
Short-term	Effects lasting one to seven years
Medium-term	Effects lasting seven to fifteen years
Long-term	Effects lasting fifteen to sixty years
Permanent	Effects lasting over sixty years

16.2.7.4 Magnitude of Impact

When assessing the impact magnitude, the following criteria need to be considered:

- Extent – size, scale and spatial distributions of the impact;
- Duration – period of time over which the impact will occur;
- Frequency – how often the impact will occur; and

- Context – how will the extent, duration and frequency contrast with the accepted baseline conditions (see Table 16.1)

The description of impact also included an assessment of magnitude of impact without mitigation. This was assessed on a four-point scale of High, Medium, Low and Negligible, to align with the EPA Guidelines (EPA 2022), as outlined in Table 16.4.

Table 16.4: Magnitude of Impact on Architectural Heritage Sites

Magnitude	Description
Negative	
High	Complete loss or damage to the characteristics or interests of an architectural heritage site or designed landscape such that its sensitivity is completely obliterated. Such impacts are more than likely to be permanent.
Medium	Loss or damage to the characteristics or interests of an architectural heritage site or a designed landscape such that its sensitivity is substantially altered. Such impacts are likely to be permanent
Low	Minor loss or damage to the characteristics or interests of an architectural heritage site or a designed landscape such that its sensitivity is slightly altered. Such impacts may be permanent but may also be reversible and temporary or short term in duration.
Negligible	Very minor loss or damage to the characteristics or interests of an architectural heritage or a designed landscape site such that its sensitivity is not noticeably altered. Such impacts may be permanent but are more than likely to be reversible and temporary or short term in duration
Positive	
Negligible	Very minor benefits or positive additions to the characteristics or interests of an architectural heritage site or a designed landscape (for example through improvements or restoration) such that its sensitivity is not noticeably altered. Such impacts may be permanent but are more than likely to be reversible and temporary or short term in duration
Low	Minor benefits or positive additions to the characteristics or interests of an architectural heritage site or a designed landscape (for example through improvements or restoration) such that its sensitivity is slightly altered. Such impacts may be permanent but may also be reversible and temporary or short term in duration.
Medium	Significant benefits or positive additions to the characteristics or interests of an architectural heritage site or a designed landscape (for example through improvements or restoration) such that its sensitivity is substantially altered. Such impacts are likely to be permanent
High	Very Significant benefits or positive additions to the characteristics or interests of an architectural heritage site or a designed landscape (for example through improvements or restoration) such that its sensitivity is substantially altered. Such impacts are likely to be permanent

16.2.7.5 Significance of Impact

The significance of impact without mitigation was determined as a combination of the sensitivity of an architectural heritage site or a designed landscape and the magnitude of impact. The impact significance was then assessed on a seven-point scale of Profound, Very Significant, Significant, Moderate, Slight, Not Significant, and Imperceptible using professional judgement informed by the matrix illustrated in Diagram 16.1. The descriptions of the Significance and Duration of Impacts presented in Table 16.3 and Table 16.5 were used as an additional guide to professional judgement.

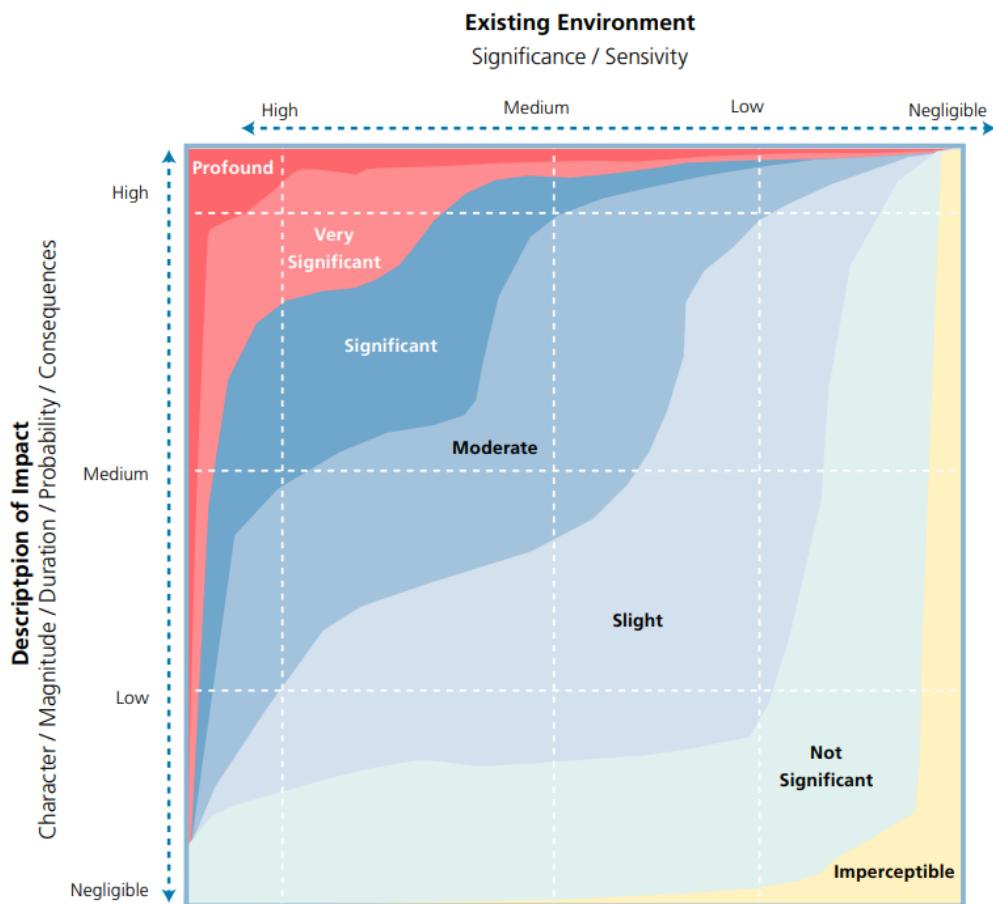


Diagram 16.1: Matrix to Inform the Assessment of Impact Significance (EPA 2022)

Table 16.5: Significance of Impacts (EPA 2022)

Characteristic	Description
Imperceptible	An effect capable of measurement but without significant or noticeable consequences.
Not Significant	An effect which causes noticeable changes in the character of the architectural heritage feature, landscape or visual environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the architectural heritage feature, landscape or streetscape without affecting its sensitivities. This is where the changes are not significant or where they do not directly impact or affect an architectural heritage feature, landscape or streetscape within or adjoining the development site
Moderate	A moderate effect arises where a change to the site is proposed, which although noticeable, is not such that the architectural heritage or landscape integrity of the site is compromised, where it is reversible or where the change can be mitigated by either by protection or preservation in situ or by reinstatement. It may also be an effect that alters the character of the landscape or visual environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, Magnitude, duration or intensity alters an important or sensitive aspect of the architectural heritage feature, landscape or streetscape. An impact like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about the architectural heritage feature, landscape or streetscape.
Very Significant	An effect which, by its character, Magnitude, duration or intensity significantly alters most of a sensitive aspect of the architectural heritage feature, landscape or streetscape.
Profound	An effect which obliterates sensitive the architectural heritage feature, landscape or streetscape. This Applies where mitigation would be unlikely to remove adverse effects. It is reserved for adverse, negative effects only. These effects arise when an architectural heritage or landscape feature is completely and irreversibly destroyed by a proposed development

Appropriate mitigation was then identified and the residual magnitude of impact and residual significance of impact (i.e. the magnitude of impact and significance of impact with mitigation in place) assessed. The results of this assessment are presented in Section 16.5.

16.3 Baseline Environment

The Proposed Scheme will be located to the east of Dublin City Centre, running along the north and south quays from Talbot Memorial Bridge to Tom Clarke Bridge and continuing east along the south Liffey Quays to R131 East Link / Pigeon House Road / Sean Moore Road Roundabout, and also south through Ringsend Park to R802 Beach Road at Sandymount.

This Section should be read with reference to Appendix A16.1 Historical Background and Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The Proposed Scheme will traverse the baronies, parishes and townlands listed in Table 16.6. The pre-historic, early historic and medieval development of the baseline environment are dealt with in Chapter 15 (Archaeological & Cultural Heritage). The periods in relation to the architectural heritage of the baseline environment are described below.

From its starting point, just east of the Custom House, the Proposed Scheme will run through part the historic city of Dublin, represented by Custom House Quay and North Wall Quay on the north side of the River Liffey, and by City Quay and Sir John Rogerson's Quay on the south side.

This section of the study area forms part of the former industrial Docklands, which was developed following a land reclamation scheme initiated in the late 17th century, with the construction of warehouses and stores beginning in earnest following the building of the Custom House (DCC RPS 2096) a century later. Navigation of the mouth of the River Liffey was a challenge to the early development of Dublin from its inception. Land reclamation activities date back to the Anglo Normans at Wood Quay, which was followed by a series of ambitious engineering proposals developed to address the problems of silting in the harbour through the 17th and 18th centuries.

What is now North Wall Quay was constructed by the Ballast Office by 1717, following the completion of the Great South Wall and Poolbeg Lighthouse. Sir John Rogerson's Quay was completed as far as the mouth of the River Dodder by 1720. On both sides of the river, gridded streets or lots were laid out behind these quay walls. The completion of the South Bull Wall and the Custom House (DCC RPS 2096) in 1791 consolidated the eastward expansion of the city. The construction of the canals, and later the railway, alongside improved port facilities supported the industrialisation of the docks area.

The area around the quays developed with extensive warehousing in the nineteenth century, ensuring the docklands remained an important commercial and trading hub until the mid-20th century when the port was moved eastwards to its present location along with the introduction of roll-on-roll-off shipping techniques, the old port declined. The establishment of the Irish Financial Services Centre (IFSC) in the 1980s and the Dublin Docklands Development Authority in 1997 led to the rapid transformation of the docklands area in the early years of the 21st century.

The majority of the built heritage along the quays is 19th century and largely consist of warehouses such as those surviving at Custom House Quay (i.e. CHQ) (DCC RPS 2094), 82 North Wall Quay (DCC RPS 5842), No. 2 Sir John Rogerson's Quay (DCC RPS 7543) and the Tropical Fruit Company (DCC RPS 7548), depots such as the former CIE Goods Depot (DCC RPS 5836) and shipping offices, B&I Steam Packet Offices (DCC RPS 7547), all of which are of industrial as well as architectural heritage interest. The Custom House (DCC RPS 2096) which is of International Importance lies to the west of the Proposed Scheme.

There are also features associated with the quays including the quay walls (DU018-020564, DCC RPS 8829, DU018-020479, DU018-020201 and DCC RPS 8808), camp-shire warehouses (BJ Marine NIAH 50020466-7) and machinery, the Royal Canal Scherzer Bridges (DCC RPS 912), George's Dock Scherzer Bridges (DCC RPS 896), the Diving Bell (DCC RPS 7542) and embedded rails on North Wall Quay and Sir John Rogerson's Quay (CBC0016BTH029 and CBC0016BTH033), the Royal and Grand Canals, and the railways, including the Railway Station building on North Wall Quay (DCC RPS 5836), the former British Rail Hotel (DCC RPS 5838), and the Point Depot (DCC RPS 5843).

The second section of the Proposed Scheme lies south of the River Liffey (and Dublin Port) and east of the River Dodder and encompasses part of the urban residential villages of Ringsend and Irishtown.

Ringsend was built on an outlying gravel ridge as a fishing outpost of Dublin, separated from the city by the confluence of the River Liffey and River Dodder. In the 17th and 18th century, Ringsend was a prosperous and

busy village though it was prone to flooding until the completion of the South Bull Wall in 1756, with the original timbers replaced with Dalkey Granite in 1795. Ringsend was finally connected to Dublin via an embankment along the mouth of the River Dodder also around this period.

Industrial decline resulted in the decline of Ringsend in the early 19th century leading to severe overcrowding and unsanitary conditions. This was addressed through the provision of artisan dwellings in the 20th century. Some fine examples of these survive in the study area, including Pembroke Cottages (CBC0016BTH016) and the cottages on Pigeon House Road (CBC0016BTH019) which were built by the Pembroke Estate, and the more substantial two storey dwellings on Cambridge Avenue (CBC0016BTH036), St Patrick's Villas (CBC0016BTH021), St Brendan's Terrace (CBC0016BTH023), Strasburg Terrace (CBC0016BTH024) and Chapel Avenue (CBC0016BTH026). While St. Brendan's Cottages (CBC0016BTH022) have a more vernacular character, terraces such as Bayview (CBC0016BTH028) and Bayview Terrace (CBC0016BTH020) have a restrained Victorian style.

Table 16.6: Baronies, Parishes and Townlands

Section	Barony	Parish	Townland
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Dublin	St Thomas's	Dublin City North
		Donnybrook (St Mark's)	Dublin City South
Tom Clarke East Link Bridge to Sean Moore Road	Dublin	Donnybrook (St Mark's)	Ringsend
			Irishtown
			South Lotts

16.3.1 Results and Analysis

This Section contains a summary of the architectural heritage assets in the receiving environment of the Proposed Scheme which have been grouped into the following categories:

- Section 16.3.1.1: World Heritage Sites;
- Section 16.3.1.2: Architectural Sites of Archaeological Significance;
- Section 16.3.1.3: Protected Structures;
- Section 16.3.1.4: Architectural Conservation Areas;
- Section 16.3.1.5: Conservation Areas;
- Section 16.3.1.6: NIAH Structures;
- Section 16.3.1.7: Designed Landscapes;
- Section 16.3.1.8: Industrial Heritage Sites;
- Section 16.3.1.9: Other Structures of Built Heritage Interest; and
- Section 16.3.1.10: Street Furniture

Further information on architectural heritage assets is provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

Architectural Heritage Features are identified using existing designations where available, from the RMP (Dúchas 1998), SMR (NMS 2020a and 2020b), National Monument numbers for National Monuments in state care or guardianship and Preservation Order numbers for monuments subject to Preservation Orders for County Dublin (NMS 2009 and 2019), the RPS number within the Dublin City Development Plan 2022 tot 2028 (DCC 2022) and the NIAH Building and Garden Surveys (NIAH 2020a; NIAH 2020b).

Where a feature is included in two more of these lists, the highest designation has been used here to refer to it. A national monument or a recorded monument, for example Sir John Rogerson's Quay, which is also a protected structure, and is included in the NIAH, will be referred to using the RMP identifier (DU018-020201) rather than the DCC RPS or NIAH references) in the ID column of the tables below and in the associated Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

Where features are identified that are not included in any of the above inventories, they have been given a unique ID or architectural heritage (BTH) identifier. The BTH sites are labelled using an identification number (e.g. BTH001 is shown as CBC0016BTH001, BTH002 is CBC0016BTH002, etc.).

Items of street furniture are labelled using an identification number of the Proposed Scheme, followed by the PB identification number for post boxes, LP for lamp posts or MS for mile stones or boundary markers (e.g. PB001 is shown as CBC0016PB001, LP002 is CBC0016LP002, and MS003 is CBC0016MS003). All other items of street furniture are labelled using a BTH identifier.

The locations for all architectural assets identified in the course of the assessment from a number of sources have been mapped and are shown on Figure 16.1 in Volume 3 of this EIAR. This includes the following assets (and the typical format in which they appear):

- RMP / SMR sites (e.g. DU018-020564);
- RPS (marked with a yellow square);
- NIAH (e.g. NIAH 50020466);
- NIAH Garden Survey (e.g. NIAH 2429); and
- Architectural Heritage Sites (e.g. CBC0016BTH035).

Where available, descriptions and appraisals from the NIAH have been relied upon and are provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR in an abridged form. Where the inventory was incomplete (on the date of access (25 March 2021)) descriptions of the relevant structures are given in a format similar to those given in the NIAH. Where new features are identified which have not included in existing inventories, their significance has been assessed using the methodology contained in the NIAH Handbook (NIAH 2017).

16.3.1.1 World Heritage Sites

UNESCO World Heritage Sites are architectural heritage sites of acknowledged International Importance or sites that contribute significantly to international research objectives. The Historic City of Dublin is on the UNESCO World Heritage tentative list (ref. 5523), which is an inventory of properties each state party intends to consider for nomination. The Georgian City Plan under consideration survives largely intact and is bounded to the north and south by the canals, to the west by the Phoenix Park, and to the east by the sea (Permanent Delegation of Ireland to the OECD and UNESCO 2010). Dublin City is considered under the headings of authenticity, integrity and justification of its outstanding universal value. Though built on an earlier medieval settlement, still evident in the street pattern in the Liberties and north of the Liffey at Oxmantown and through the survival of medieval buildings such as Cathedrals, Churches, Dublin Castle and the City Walls, the significance of the streetscape and buildings is attributed to the development of Dublin after the Restoration in 1660, when the city became the second imperial capital, after London, of the British Empire. There was a major development and expansion in the Georgian period (1714 to 1830). Much of this development took place as part of the development of the Jervis and Gardiner Estates on the north side of the River Liffey and the Meath, Aungier and Fitzwilliam Estates on the south side, through the development of civic, institutional and religious buildings, and through investment in infrastructure such as Dublin Port, the City Quays, Canals, Railways and Urban Realm works. This has given Dublin the institutional buildings, terraces and infrastructure, urban plan which substantially survives today. Sites of International Importance are of High sensitivity.

DCC's policies relating to the World Heritage Nomination can be found in The Dublin City Development Plan 2022 to 2028 (DCC 2022). Policy BHA29 states that it is the policy of DCC:

'To support and pursue a World Heritage nomination for the Historic City of Dublin, in partnership with the Department of Housing, Heritage and Local Government'.

The study area intersects with the Historic City of Dublin along the Liffey Quays from Custom House Quay to the Royal Canal, and from City Quay to Britain Quay. The Custom House (DCC RPS 2096), which is one of Dublin's most important Georgian buildings, is just inside the study area to the west. However, no works are proposed in close proximity to this feature. The building, which was begun in 1781, was designed by James Gandon, and is of International importance. The Portland stone south elevation, on the river side, was intended as the building's principal facade. There are significant views of it from the study area, along the north and south quays. The CHQ

(DCC RPS 2094) is rated the most impressive late-Georgian industrial building in Dublin (NIAH 2020a). It is of National Importance, and High Sensitivity.

The quays themselves, including Custom House Quay, North Wall Quay, City Quay and Sir John Rogerson's Quay have a varied character, with only isolated Georgian terraced buildings surviving at 4-5 and 34-35 Sir John Rogerson's Quay (DCC RPS 7544-5 and 7549-50). The surviving Georgian buildings are of Regional importance and Medium Sensitivity.

16.3.1.2 Architectural Heritage Sites of Archaeological Significance

Although archaeological heritage is dealt with in Chapter 15 (Archaeological & Cultural Heritage), five sites were identified in the receiving environment, which are included in the RMP, but which also form part of the architectural heritage.

Three of the sites are also included in DCC's RPS. These are North Wall Quay (DU018-020564, RPS 5835), Sir John Rogerson's Quay (DU018-020201, RPS 7542) and the sea wall on York Road (DU018-066, DCC RPS 6979). Further details on their built heritage interest are provided in Table 16.7.

Four of the sites are also included in the NIAH (North Wall Quay, Sir John Rogerson's Quay (also listed above), George's Quay (DU018-020458, RPS 8841, NIAH 50020257) and City Quay (DU018-020479, NIAH 50020258), where they are rated of Regional Importance for reasons of architectural, social and technical interest.

DCC's policies relating to Recorded and National Monuments can be found in The Dublin City Development Plan 2022 to 2028 (DCC 2022). Policy BHA26 states that it is the policy of DCC:

'1. To protect and preserve Monuments and Places listed on the statutory Record of Monuments and Places (RMP) as established under Section 12 of the National Monuments (Amendment) Act 1994 which have been identified in the Record of Monuments and Places and the Historic Environment Viewer (www.archaeology.ie).

2. To protect archaeological material in situ by ensuring that only minimal impact on archaeological layers is allowed, by way of re-use of standing buildings, the construction of light buildings, low impact foundation design, or the omission of basements (except in exceptional circumstances) in the Monuments and Places listed on the statutory Record of Monuments and Places (RMP) as established under Section 12 of the National Monuments (Amendment) Act 1994.

3. To seek the preservation in situ (or where this is not possible or appropriate, as a minimum, preservation by record) of all archaeological monuments included in the Record of Monuments and Places; all wrecks and associated objects over 100 years old and of previously unknown sites, features and objects of archaeological interest that become revealed through development activity. In respect of decision making on development proposals affecting sites listed in the Record of Monuments and Places, the council will have regard to the advice and/or recommendations of the Department of Housing, Heritage and Local Government.

4. Development proposals within the Record of Monuments and Places (RMP) as established under Section 12 of the National Monuments (Amendment) Act 1994, notification of sites over 0.5 hectares size with potential underwater impacts and of sites listed in the Dublin City Industrial Heritage Record, will be subject to consultation with the City Archaeologist and archaeological assessment prior to a planning application being lodged.

5. To preserve known burial grounds and disused historic graveyards. Where disturbance of ancient or historic human remains is unavoidable, they will be excavated according to best archaeological practice and reburied or permanently curated.

6. Preserve the character, setting, and amenity of upstanding and below ground town wall defences'.

Policy BHA019: Built Heritage and Archaeology, states that it is the policy of DCC:

'To provide for the protection, preservation and promotion of built heritage, including architectural heritage, archaeological heritage and underwater heritage, and support the in situ presentation and interpretation of archaeological finds within new developments

A more detailed description relating to each Recorded Monument is contained in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. They are shown on Figure 16.1 in Volume 3 of this EIAR.

16.3.1.3 Protected Structures

The importance of the architectural heritage is enshrined in Section 10 of the Planning and Development Acts, which place a statutory obligation on local authorities to include in their development plan objectives for the protection of structures, or parts of structures, which are of special interest. The principal mechanism for the protection of these structures is through their inclusion on the RPS.

DCC's policies relating to Protected Structures can be found in the Dublin City Development Plan 2022 to 2028 (DCC 2022). Policy BHA2 of the Dublin City Development Plan (DCC 2022) states that it is the policy of DCC:

- 'That development will conserve and enhance protected structures and their curtilage and will:*
- (a) Ensure that any development proposals to protected structures, their curtilage and setting shall have regard to the Architectural Heritage Protection Guidelines for Planning Authorities (2011) published by the Department of Culture, Heritage and the Gaeltacht.*
 - (b) Protect structures included on the RPS from any works that would negatively impact their special character and appearance.*
 - (c) Ensure that works are carried out in line with best conservation practice as advised by a suitably qualified person with expertise in architectural conservation.*
 - (d) Ensure that any development, modification, alteration, or extension affecting a protected structure and/or its setting is sensitively sited and designed, and is appropriate in terms of the proposed scale, mass, height, density, layout and materials.*
 - (e) Ensure that the form and structural integrity of the protected structure is retained in any redevelopment and ensure that new development does not adversely impact the curtilage or the special character of the protected structure.*
 - (f) Protect and retain important elements of built heritage including historic gardens, stone walls, entrance gates and piers and any other associated curtilage features.*
 - (g) Ensure historic landscapes, gardens and trees (in good condition) associated with protected structures are protected from inappropriate development'.*

A review of the RPS of the Dublin City Development Plan (DCC 2022) indicates that there are 30 protected structures, or groups of protected structures (RPS sites) within the study area of the Proposed Scheme. Of these, all but three are also listed in the NIAH. They are rated of Regional and National Importance and are of Medium to High Sensitivity. They are listed in Table 16.7 with further information provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. Their locations are shown on Figure 16.1 in Volume 3 of this EIAR.

Table 16.7: Protected Structures (RPS)

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	DCC RPS 8829	Custom House Quay	Quay c.1790	Regional (NIAH), Medium Sensitivity
	DCC RPS 896	Custom House Docks Scherzer bridges, Custom House Quay	Pair of Scherzer Bridges, 1911-12	Regional (NIAH), Medium Sensitivity
	DCC RPS 3173	Custom House Quay, George's Dock	Limestone Lock c.1820	Regional (NIAH), Medium Sensitivity
	DCC RPS 2094	Custom House Docks	Warehouse, c.1820 CHQ - Stack A (whole), stack C (vaults) warehouse	National (NIAH), High Sensitivity
	DU018-020564	North Wall Quay	Quay, c.1800	Regional (NIAH), Medium Sensitivity

Section	ID	Location	Description	Significance and Sensitivity
	DCC RPS 912	Royal Canal Scherzer bridges, North Wall Quay	Pair of Scherzer Bridges, c.1935	Regional (NIAH), Medium Sensitivity
	DCC RPS 5836	CIE Goods Depot, North Wall Quay	North Wall Railway Station, c.1900	Regional (NIAH), Medium Sensitivity
	DCC RPS 5837	Store / Warehouse, North Wall Quay	Warehouse, c.1850	Regional (NIAH), Medium Sensitivity
	DCC RPS 5838	58-59 North Wall Quay	British Rail Hotel (CIE Offices), c.1885	Regional (NIAH), Medium Sensitivity
	DCC RPS 5840	73 North Wall Quay	Commercial building, Richford Motors, 1862	Regional (NIAH), Medium Sensitivity
	DCC RPS 5841	81 North Wall Quay	House (public house), c.1880 Granite lined coal chutes to basement in the pavement in front	Regional (NIAH), Medium Sensitivity
	DCC RPS 5842	82 North Wall Quay	Warehouse, c.1900	Regional (NIAH), Medium Sensitivity
	DCC RPS 5843	3 Arena, North Wall Quay	Former train depot, 1878, extended 2008	Regional (NIAH), Medium Sensitivity
	DU018-020458	George's Quay	Quay, c.1810	Regional (NIAH), Medium Sensitivity
	DU018-020479	City Quay	Quay, c.1810	Regional (NIAH), Medium Sensitivity
	DCC RPS 1853	9 City Quay	Presbytery, 1914	Regional (NIAH), Medium Sensitivity
	DCC RPS 1854	10-12 City Quay	St. Mary's Church, 1863	Regional (NIAH), Medium Sensitivity
	DCC RPS 1855-6	21-22 City Quay	Stone facade, c.1880	Regional (NIAH), Medium Sensitivity
	DU018-020201	Sir John Rogerson's Quay	Quay, c.1870	Regional (NIAH), Medium Sensitivity
	DCC RPS 7543	2 Sir John Rogerson's Quay	Warehouse (facade only), 1913-14	Regional (NIAH), Medium Sensitivity
	DCC RPS 7544-5	4-5 Sir John Rogerson's Quay	Houses, c.1825	Regional (NIAH), Medium Sensitivity
	DCC RPS 7546	14-15 Sir John Rogerson's Quay	Mill (offices - Columbia Mills) c.1890	Regional (NIAH), Medium Sensitivity
	DCC RPS 7547	20-24 Sir John Rogerson's Quay	Offices (B&I Steam Packet Company), c.1905	Regional (NIAH), Medium Sensitivity
	DCC RPS 7548	30-32 Sir John Rogerson's Quay	Warehouse (Tropical Fruit Co.) c.1890	Regional (NIAH), Medium Sensitivity
	DCC RPS 7549-50	35-36 Sir John Rogerson's Quay	House (public house - The Ferryman) c.1820 Coal chutes to basement in the pavement in front	Regional (NIAH), Medium Sensitivity
	DCC RPS 7542	Sir John Rogerson's Quay	Diving Bell, c.1870	Regional (NIAH), Medium Sensitivity
	DCC RPS 8808	Britain Quay	Quay, c.1870	Regional, Medium Sensitivity
	Talbot Memorial Bridge to Tom Clarke East Link Bridge	DCC RPS 7376	103 Ringsend Park	Fountain, c.1930
DU018-066		Pigeon House Road	Sea Wall, c.1795	Regional, Medium Sensitivity
DCC RPS 6782		70 Pigeon House Road	House, c.1860	Regional, Medium Sensitivity

16.3.1.4 Architectural Conservation Areas (ACAs)

An ACA is a place, area, group of structures or townscape that is of special architectural, historical, archaeological, technical, social, cultural, or scientific interest, or that contributes to the appreciation of a protected structure or group of protected structures.

A review of the Dublin City Development Plan 2022 to 2028 (DCC 2022) indicates that there are no ACAs located in the study area.

16.3.1.5 Conservation Areas

Conservation Areas are areas which, while not to be confused with ACAs, do afford some protection to the architectural heritage under the Dublin City Development Plan 2022 to 2028 (DCC 2022), specifically under Policy BHA9:

'To protect the special interest and character of all Dublin's Conservation Areas – identified under Z8 and Z2 zoning objectives and denoted by red line conservation hatching on the zoning maps. Development within or affecting a Conservation Area must contribute positively to its character and distinctiveness and take opportunities to protect and enhance the character and appearance of the area and its setting, wherever possible. Enhancement opportunities may include:

- 1. Replacement or improvement of any building, feature or element which detracts from the character of the area or its setting.*
- 2. Re-instatement of missing architectural detail or important features.*
- 3. Improvement of open spaces and the wider public realm and reinstatement of historic routes and characteristic plot patterns.*
- 4. Contemporary architecture of exceptional design quality, which is in harmony with the Conservation Area.*
- 6. Retention of buildings and features that contribute to the overall character and integrity of the Conservation Area.*

Changes of use will be acceptable where in compliance with the zoning objectives and where they make a positive contribution to the character, function and appearance of the Conservation Area and its setting. The Council will consider the contribution of existing uses to the special interest of an area when assessing change of use applications, and will promote compatible uses which ensure future long-term viability'.

Policy BHA10 states:

'There is a presumption against the demolition or substantial loss of a structure that positively contributes to the character of a Conservation Area, except in exceptional circumstances where such loss would also contribute to a significant public benefit'.

A review of the Dublin City Development Plan indicates that the majority of the study area is designated as a CA. The Liffey Quays Conservation Area follows the River Liffey along the north and south quays. This Conservation Area intersects with two others: the Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Areas at the mouth of the River Dodder where they converge. See Table 16.8 and the following sections for further details.

Table 16.8: Conservation Areas (CAs)

Section	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	The Conservation Area follows the Liffey Quays along the north and south of the river, and includes North Wall Quay, Custom House Quay, George's Quay, City Quay, Sir John Rogerson's Quay and Britain Quay.	Regional, Medium Sensitivity
	Royal Canal Conservation Area	The Conservation Area follows the course of the Royal Canal and intersects with the Liffey Quays Conservation Area on North Wall Quay	Regional, Medium Sensitivity
	Dodder Valley and Grand Canal Conservation Areas	CAs follow the course of the Dodder River and the Grand Canal and converge with the Liffey Quays Conservation Area between Britain Quay and Ringsend.	Regional,

Section	Location	Description	Significance and Sensitivity
			Medium Sensitivity

16.3.1.5.1 The Liffey Quays Conservation Area

This Conservation Area follows the Liffey Quays along the north and south banks of the River Liffey. It overlaps with the study area along Custom House Quay, North Wall Quay, George's Quay, City Quay, Sir John Rogerson's Quay and Britain Quay. At the west end of the study area, the Conservation Area is extended to include the CHQ, George's Dock and the Custom House. The Conservation Area is characterised by historic and industrial Docklands, fronting gridded streets or Lotts behind, and historically supported by canal and rail links. The building stock includes significant eighteenth-century institutional and industrial set piece buildings, with commercial and residential terraces juxtaposed against 19th century warehousing, low-rise 20th century housing and modern office buildings. The Liffey Quays Conservation Area is of Regional Importance and Medium Sensitivity.

Twenty-four of the protected structures listed in Table 16.7 are also located in the CA, with an additional 10 NIAH structures or groups of structures (Table 16.9), three features of industrial heritage interest (Table 16.10), one other building of built heritage interest (Table 16.11), two groups of lamp posts (Table 16.12), two statues (Table 16.13) and six areas of paving or surface treatments (Table 16.14) of architectural heritage significance identified which fall within both the study area and the CA.

16.3.1.5.2 Royal Canal Conservation Area

The Royal Canal Conservation Area follows the course of the Royal Canal, its tow paths and associated walks. It intersects with the study area, and with the Liffey Quays CA, at the Sea Lock and Guild Street, including the Convention Centre. The Royal Canal Conservation Area is of Regional Importance and Medium Sensitivity.

One protected structure (Scherzer Bridges DCC RPS 912 of Medium Sensitivity) and one industrial heritage site (Royal Canal Sea Lock CBC0016BTH007 of Medium Sensitivity) were identified which fall within both the study area and the Royal Canal CA. The Conservation Area terminates at North Wall Quay (DU018-020564) which is of Medium Sensitivity and is included in the RMP, RPS and NIAH, where the Samuel Beckett Bridge (NIAH 50010010, of Low Sensitivity) crosses the River Liffey.

16.3.1.5.3 Dodder Valley and Grand Canal Conservation Areas

These CAs follow the course of the River Dodder and the Grand Canal, converging at Grand Canal Basin and meeting the Liffey Quays Conservation Area between Britain Quay and Ringsend. The Dodder Valley and Grand Canal CAs are of Regional Importance and Medium Sensitivity.

One feature of industrial heritage interest which is included in the DCIHR was identified which lies within the study area and the CA. This is a boat slip on York Road (CBC0016BTH015). It is of Medium Sensitivity. Two further features of built heritage interest were identified. These are quay walls on York Road (CBC0016BTH038) and Britain Quay (DCC RPS 8808). The quay walls on York Road are not protected or included in any identified existing inventories but are of architectural and technical interest. They are Medium Sensitivity structures.

16.3.1.6 National Inventory of Architectural Heritage (NIAH) Structures

In considering additions to the RPS, local authorities have recourse to the NIAH which provides a source of guidance on the significance of buildings in their respective areas. Inclusion within the NIAH in of itself does not confer statutory protection.

DCC's policies relating to NIAH structures can be found in the Dublin City Development Plan 2022 to 2028 (DCC 2022). Policy BHA4 of the Dublin City Development states:

'To have regard to the National Inventory of Architectural Heritage (NIAH) rating of a structure and any associated Ministerial Recommendation in the assessment of planning applications'.

Policy BHA5 States

‘That there is a presumption against the demolition or substantial loss of any building or other structure assigned a ‘Regional’ rating or higher by the National Inventory of Architectural Heritage (NIAH), unless it is clearly justified in a written conservation assessment that the building has no special interest and is not suitable for addition to the City Council’s Record of Protected Structures (RPS); having regard to the provisions of Section 51, Part IV of the Planning and Development Act, 2000 (as amended) and the Architectural Heritage Protection Guidelines for Planning Authorities (2011).’

A review of the NIAH Building Survey for the study area (NIAH 2020a) has shown that, in addition to the recorded monuments and protected structures identified in Section 16.3.1.2 and Section 16.3.1.3, there are nine NIAH structures, or groups of structures in the study area of the Proposed Scheme. They are rated of Record-Only and Regional Importance by the NIAH, though two of the listed buildings (i.e. 94 North Wall Quay (NIAH 50011168); and 3 Sir John Rogerson’s Quay (NIAH 50020471)) have been demolished subsequent to their inclusion in the NIAH.

The upstanding structures are of Low to Medium Sensitivity, while the buildings which have been demolished are of Negligible Sensitivity. A list of the identified NIAH sites is provided in Table 16.9, with further details of the structures given in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. Their locations shown on Figure 16.1 in Volume 3 of this EIAR.

Table 16.9: National Inventory of Architectural Heritage (NIAH) Structures

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	NIAH 50010002	Custom House Quay	Famine memorial, 1997	Regional (NIAH), Medium Sensitivity
	NIAH 50010005	Custom House Quay, George’s Dock	Rectangular stone wet dock, built 1821	Regional (NIAH), Medium Sensitivity
	NIAH 50010006	Custom House Quay, George’s Dock	Pair of winches c.1830	Regional (NIAH), Medium Sensitivity
	NIAH 50011219	Custom House Quay, George’s Dock	Triumphal Arch, 1813, relocated 1998	Regional (NIAH), Medium Sensitivity
	NIAH 50010010	Samuel Beckett Bridge	Bridge, 2009	Record Only (NIAH), Low Sensitivity
	NIAH 50011185	Castleforbes Rd, North Wall Quay	Electricity (ESB) sub-station, c.1900	Regional (NIAH), Medium Sensitivity
	NIAH 50011168	94 North Wall Quay	Industrial building c.1880 (now demolished)	Regional (NIAH), Negligible Sensitivity
	NIAH 50020471	3 Sir John Rogerson’s Quay	Offices (now demolished)	Regional (NIAH), Negligible Sensitivity
	NIAH 50020466-7	81 Sir John Rogerson’s Quay	Warehouses (B.J. Marine), c.1880	Regional (NIAH), Medium Sensitivity

16.3.1.7 Designed Landscapes

A number of sources were reviewed in order to define the nature and extent of designed landscapes in the study area of the Proposed Scheme. These included the historic Ordnance Survey Ireland (OSI) mapping and aerial photographs (OSI 2020a, Google 2020); the NIAH Garden Survey for Dublin (NIAH 2020b); pre-Ordnance Survey maps including John Rocque’s Map of the City of Dublin (Rocque 1756), Rocque’s ‘An actual survey of the County of Dublin’ (Rocque 1760), Rocque and Scale’s Map of the City of Dublin (Rocque and Scalé 1773), Taylor and Skinner’s ‘Maps of the Roads of Ireland’ (Taylor and Skinner 1777), Taylor’s ‘Map of the environs of Dublin’ (Taylor 1816), Duncan’s ‘Map of the County of Dublin’ (Duncan 1821). Modern and historic aerial photographs were also referenced.

The landscapes are shown as shaded ‘demesne’ landscapes or as having formally laid grounds on the first, second, third or fourth edition OS mapping (OSI 1843 - 1844, OSI 1847, OSI 1864 - 1890, OSI 1909 - 1911 and OSI 1940-1961). A demesne was a parcel of land retained by a landlord farmer, for the use of the house. They were intended to represent a natural parkland setting for the house, a practice that became fashionable from the latter part of the 18th century. The landscapes, which can vary greatly in size, often possess specific features,

such as long driveways, gate lodges, stately entrances, walled gardens, bodies of water and belts, avenues and clumps of deciduous and specimen trees.

Designed landscapes also include public parks, the Georgian squares of Dublin, garden cemeteries and nature reserves where they are demonstrably man made and landscaped.

DCC's policies relating to landscapes primarily relate to urban designed landscapes and can be found in the Dublin City Development Plan 2022 to 2028 (DCC 2022). Objective BHA2 states that it is the objective of DCC:

'That development will conserve and enhance protected structures and their curtilage and will: (g) Ensure historic landscapes, gardens and trees (in good condition) associated with protected structures are protected from inappropriate development'.

Policy BHA4 of the Dublin City Development states:

'To have regard to the National Inventory of Architectural Heritage (NIAH) [which includes the garden inventory]...and any associated Ministerial Recommendation in the assessment of planning applications'.

The landscapes identified in the NIAH Garden Survey (NIAH 2020b) for Dublin, are not given a significance rating by the NIAH.

There were no designed landscapes identified within the study area of the Proposed Scheme.

16.3.1.8 Industrial Heritage Sites

In addition to the structures noted above included on in the RMP, RPS and NIAH, sites of architectural heritage significance may be included in the DCIHR (DCC 2003 to 2009). Inclusion in the record in itself does not confer protection to the sites, but it recognises their potential historic, industrial, architectural or archaeological interest.

DCC's policies relating to Industrial Heritage can be found in the Dublin City Development Plan 2022 to 2028 (DCC 2022). Objective BHA08 states that it is the Objective of DCC:

'To identify and protect further sites of industrial heritage; to categorise, prioritise and, where appropriate, add to the RPS'.

Policy BHA12 states that it is the policy of DCC:

'To promote an awareness of Dublin's industrial, military and maritime, canal-side (including lock-keepers' dwellings, locks and graving docks), rail, and rural (vernacular) heritage'.

Policy BHA16 states that it is the policy of DCC:

'To have regard to the city's industrial heritage and Dublin City Industrial Heritage Record (DCIHR) in the preparation of Local Area Plans and the assessment of planning applications. To review the DCIHR in accordance with Ministerial Recommendations arising from the National Inventory of Architectural Heritage (NIAH) survey of Dublin City'.

Policy BHA17 states that it is the policy of DCC:

'To support and promote a strategy for the protection and restoration of the industrial heritage of the city's waterways, canals and rivers, including retaining features such as walls, weirs, millraces, and the graving dock structures at Ringsend'.

Policy BHA26 states that it is the policy of DCC:

4. Development proposals within the Record of Monuments and Places (RMP) as established under Section 12 of the National Monuments (Amendment) Act 1994, notification of sites over 0.5 hectares size with potential underwater impacts and of sites listed in the Dublin City Industrial Heritage Record (DCIHR), will be subject to consultation with the City Archaeologist and archaeological assessment prior to a planning application being lodged'.

Three sites of industrial heritage interest were identified in the study area which are included in DCIHR. They are listed in Table 16.10 and described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. They have been assessed using the assessment methodology in the NIAH Handbook (NIAH 2017). They are of Local and Regional Importance, and of Low and Medium Sensitivity. Their locations are shown on Figure 16.1 in Volume 3 of this EIAR.

The DCIHR sites which no longer exhibit above ground remains are dealt with in Chapter 15 (Archaeological & Cultural Heritage).

Table 16.10: Industrial Heritage Sites

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	CBC0016BTH007	Guild Street, North Wall Quay	Royal Canal Sea Lock, c.1790	Regional, Medium Sensitivity
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH015	York Road, Ringsend	Boat slip, c.1920	Local, Low Sensitivity
	CBC0016BTH035	Pigeon House Road	Syphon House, c.1900	Regional, Medium Sensitivity

16.3.1.9 Other Structures of Architectural Heritage Interest

In addition to the structures included in the RMP, the RPS, NIAH and the DCIHR, 17 structures or groups of structures were identified along the Proposed Scheme which, while they are not included in existing inventories, they are of architectural, historical or industrial interest. These structures were identified through field inspections and are listed in Table 16.11 and described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

The descriptions of these structures are based on information obtained from field inspections and they have been dated through architectural and local historical sources, the Irish Architectural Archive (IAA 2020a) and a review of first, second, third or fourth edition OS mapping (OSI 1843 - 1844, OSI 1847, OSI 1864 - 1890, OSI 1909 - 1911 and OSI 1940-1961). They are shown on Figure 16.1 in Volume 3 of this EIAR.

Some structures are afforded protection where they are located in CAs or where they are within the curtilage of a protected structure. These structures, though not officially designated, have been assessed here using the assessment methodology contained in the NIAH Handbook (NIAH 2017). These structures range from Local to Regional Importance and are of Low to Medium Sensitivity.

DCC's policies relating to other buildings or structures of architectural heritage interest can be found in the Dublin City Development Plan 2022 to 2028 (DCC 2022). Policy BHA6 states that it is the policy of DCC:

'That there will be a presumption against the demolition or substantial loss of any building or other structure which appears on historic maps up to and including the Ordnance Survey of Dublin City, 1847. A conservation report shall be submitted with the application and there will be a presumption against the demolition or substantial loss of the building or structure, unless demonstrated in the submitted conservation report this it has little or no special interest or merit having regard to the provisions of the Architectural Heritage Protection Guidelines for Planning Authorities (2011).'

Policy BHA11 states that it is the policy of DCC:

- (a) To retain, where appropriate, and encourage the rehabilitation and suitable adaptive reuse of existing older buildings/structures/features which make a positive contribution to the character and appearance of the area and streetscape, in preference to their demolition and redevelopment.
- (b) Encourage the retention and/or reinstatement of original fabric of our historic building stock such as windows, doors, roof coverings, shopfronts (including signage and associated features), pub fronts and other significant features.
- (c) Ensure that appropriate materials are used to carry out any repairs to the historic fabric'.

Policy BHA15 states that it is the policy of DCC:

- (a) To encourage the appropriate development of exemplar twentieth century buildings and structures

to ensure their character is not compromised.

(b) To encourage the retention and reinstatement of internal and external features, that contribute to the character of exemplar twentieth century buildings, such as roofscapes, boundary treatments, fenestration pattern, materials, and other features, fixtures and fittings (including furniture and art work), considered worthy of retention’.

Objective BHAO6 states that it is the objective of DCC:

‘To identify and protect exemplar buildings of the twentieth century; to categorise, prioritise, and, where appropriate, add to the Record of Protected Structures (RPS); to produce guidelines and offer advice for protection and appropriate refurbishment of such structures’.

Table 16.11: Other Structures of Heritage Significance

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	CBC0016BTH013	1-4 City Quay	Commercial buildings, c.1910 Granite lined coal chutes to basement in the pavement in front	Local, Low Sensitivity
	CBC0016BTH038	Quay Wall, York Road	Quay wall, c.1790	Regional, Medium Sensitivity
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH016	Pembroke Cottages	Cottages c.1890	Regional, Medium Sensitivity
	CBC0016BTH017	Mission Hall	Community Hall, c.1895	Local, Low Sensitivity
	CBC0016BTH018	12 York Rd	House (offices) c.1860	Local, Low Sensitivity
	CBC0016BTH019	1-44 Pigeon House Road and 45-103 Ringsend Park	Cottages, c.1900	Regional, Medium Sensitivity
	CBC0016BTH020	46-51 Pigeon House Road, Bayview Terrace	Houses, c.1870	Local, Low Sensitivity
	CBC0016BTH036	1-10 Cambridge Avenue,	Houses, c.1900	Local, Low Sensitivity
	CBC0016BTH037	62, 63 Pigeon House Road,	Houses, c.1900	Local, Low Sensitivity
	CBC0016BTH025	Ringsend Park	Park, c.1905	Regional, Medium Sensitivity
	CBC0016BTH021	St Patrick’s Villas	Houses, c.1920	Local, Low Sensitivity
	CBC0016BTH022	St Brendan’s Cottages	Cottages	Regional, Medium Sensitivity
	CBC0016BTH023	St Brendan’s Terrace (Deignam’s Cottages)	Houses, c.1900	Regional, Medium Sensitivity
	CBC0016BTH024	1-4 Strasburg Terrace	Cottages, c.1860	Regional, Medium Sensitivity
	CBC0016BTH026	Chapel Avenue (numbers 2,4,5,6,7,8,9 and 11)	Houses, c.1900	Local, Low Sensitivity
	CBC0016BTH027	1-2 Seaview, Pembroke Street	Houses, c.1880	Regional, Medium Sensitivity
	CBC0016BTH028	1-10 Bayview, Pembroke Street	Houses, c.1890	Local, Low Sensitivity

16.3.1.10 Street Furniture

Historic street furniture, paving and surface treatments contribute significantly to the character of the streetscapes in the study area. They are protected under the policies and objectives of the Dublin City Development Plan 2022-2018 (DCC 2022). With regard to Historic Ground Surfaces, Street Furniture and Public Realm, Policy BHA18 states that it is the policy of DCC:

'(a) To protect, conserve and retain in situ historic elements of significance in the public realm including milestones, jostle stones, city ward stones, bollards, coal hole covers, gratings, boot scrapers, cast iron basement lights, street skylights and prisms, water troughs, street furniture, post boxes, lampposts, railings and historic ground surfaces including stone kerbs, pavement flags and setts, and to promote conservation best practice and high standards for design, materials and workmanship in public realm improvements within areas of historic character, having regard to the national Advice Series on Paving: The Conservation of Historic Ground Surfaces (2015).

'(b) To maintain schedules of stone setts, historic kerbing and historic pavers/flags, and associated features in the public realm, to be protected, conserved or reintroduced (Appendix 6), and to update and review these schedules during the period of this development plan'.

With regard to Historic Street Furniture and the RPS, Policy BHA19 states that it is the policy of DCC:

'To maintain a schedule of features in the public realm identified for protection in Appendix 6 whilst also having regard to recommendations for additions to the RPS made by the Minister for such structures under Section 53 of the Planning and Development Act, 2000 (as amended)'.

With regard to Ghost Heritage Signs, Policy BHA20 states that it is the policy of DCC:

'To seek the retention and maintenance of heritage signs and advertising through the city, where appropriate'.

16.3.1.10.1 Post boxes

No post boxes of architectural heritage interest were identified in the study area.

16.3.1.10.2 Lamp Posts

A total of 33 lamp posts were identified as being of architectural heritage significance. They were identified through field inspection. Further information on lamp post types was obtained through the NIAH building survey for Dublin (NIAH 2020a), and by referring to Antique Pavement: an illustrated guide to Dublin's Street Furniture (O'Connell 1975), Public Lighting Installations: the Dublin Collection (Cornwall 2020a and 2020b), Archiseek (Archiseek 2020b), Built Dublin (Cassidy 2020b and 2020c), Dublin Street Lamps (Stiff 2020), Through streets broad and narrow: A history of Dublin trams (Corcoran 2008), and the Dublin Inquirer (Neylon 2020).

Thirty-one Straight-Stem Scotch Standards were identified between Samuel Beckett Bridge and Talbot Memorial Bridge. In addition to these standards, two historic bases were identified on the east side of Talbot Memorial Bridge. These lamp posts have had their heads changed but retain moulded ironwork with cover plates complete with Dublin City crests.

A list of the identified lamp posts is included in Table 16.12. They are described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. Their locations are shown on Figure 16.1 in Volume 3 of this EIAR.

The lamps are not protected or included in any existing inventories but fall within the Liffey Quays Conservation Area which is of Medium Sensitivity (see Table 16.8). The lamp posts make a positive contribution to the character and special interest of the Liffey Quays. They have been assessed using the assessment methodology in the NIAH Handbook (NIAH 2017). They are of Regional or Local Importance and of Low to Medium Sensitivity (depending on their completeness and condition).

Table 16.12: Lamp Posts

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	CBC0016LP001	North Wall Quay, Custom House Quay	31 Scotch Standards, with shamrock motif along North Wall Quay	Regional, Medium Sensitivity
	CBC0016LP003	Talbot Memorial Bridge	2 no. antique light standard bases, heads have been replaced	Local, Low Sensitivity

16.3.1.10.3 Statuary and Miscellaneous Street Furniture

Statuary or statues and other items of street furniture were identified through field inspection and through the RPS in the Dublin City Development Plan (DCC 2022). Further information was obtained through the NIAH building survey for Dublin (NIAH 2020a), and referring to The Antique Pavement: an illustrated guide to Dublin's Street Furniture (O'Connell 1975), Archiseek (Archiseek 2020a), Built Dublin (Cassidy 2020a), Dublin Public Libraries (2020b), The Dublin City Archive Blog (DCC 2019c), the Dublin Inquirer (Maguire 2018, Dublin Inquirer 2020), Broadsheet (Broadsheet 2019), The Journal (Mulvaney 2019), Milestones and Boundary Markers, South Co. Dublin (Wilson 2020), Irish War Memorials (Pegum 2020) and the Religious Statuary (O'Mahony 2015). Resources on memorials or statuary were also consulted and are included in Section 16.7.

A list of the identified assets is included in Table 16.13 and described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The descriptions are based on information obtained from site inspections. They are shown on Figure 16.1 in Volume 3 of this EIAR.

These structures are of Regional Importance and Medium Sensitivity. These ratings are based on the ratings that have been applied by the NIAH to similar items of street furniture located elsewhere in Dublin or they have been assessed using the assessment methodology contained in the NIAH Handbook (NIAH 2017).

In addition to the Famine Memorial on Custom House Quay, which is included in the NIAH (NIAH 50010002) and described above, three features of architectural heritage significance were identified in the study area by way of a field inspection.

Table 16.13: Statuary and Miscellaneous Street Furniture

Section	ID	Location	Class / Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	CBC0016BTH012	Talbot Memorial Bridge	Statue: Matt Talbot by James Power, erected 1988 Free standing limestone statue on concrete base with bronze plaque	Regional, Medium Sensitivity
	CBC0016BTH014	City Quay	Statue: The Linesman by Dony MacManus, erected c.1999	Regional, Medium Sensitivity
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH040	Thorncastle Street	Vent Pipe, erected 1909,	Regional, Medium Sensitivity

16.3.1.10.4 Paving and Surface Treatments

Paving and surface treatments were identified through field inspections. Further information was obtained from The Antique Pavement: an illustrated guide to Dublin's Street Furniture (O'Connell 1975), Paving: the conservation of historic ground surfaces (McLoughlin 2017), Historic Street Surfaces Study (DCC 2009), Inventory of Historic Street Paving and Furniture (Dublin Civic Trust 2004), Dublin Public Libraries (2020a), Archiseek (Archiseek 2020a), the NIAH building survey for Dublin (NIAH 2020a), Built Dublin (Cassidy 2020a), History, Art & Architecture, Dublin & abroad (Henderson 2020) and Dublin's Coal Holes and Coal Cellars (Peel L. 2020).

Paving and surface treatments of architectural heritage value were identified at six locations, as indicated in Table 16.14 and described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The descriptions are based on information obtained from field inspections. Their locations are shown on Figure 16.1 in Volume 3 of this EIAR.

The surface treatments have been assessed using the assessment methodology outlined in the NIAH Handbook (NIAH 2017). They range from Local to Regional Importance and are of Low to Medium Sensitivity. Those of Local Importance are generally isolated or are incomplete sections of granite kerb, where their contribution to the character of the streets in which they are situated has been undermined by poor survival. Modern cobbles and or a mix of modern and recycled old cobbles are of Local Importance and Low Sensitivity, as although they contribute positively to the streetscape, the original patina of age has been lost. Kerbs, where they survive intact, or are associated with other surface treatments such as cobbles, granite paving, coal holes, cellar hatches, or are

located in CAs or streets with large numbers of protected structures are of Regional Importance and Medium Sensitivity, as they contribute to the character of the streetscape.

At four of the identified locations, street surface features are included in the NIAH's description of the associated quays or wharfs (North Wall Quay DU018020564 and NIAH 50010011; Custom House Quay NIAH 50060555; City Quay DU018-020479 and NIAH 50020258; and Sir John Rogerson's Quay DU018-020201 and NIAH 50020465), though in all cases the historic fabric has been integrated into modern and recently refurbished paving designs. Historic rail tracks and tram lines have been retained on parts of North Wall Quay and Sir John Rogerson's Quay (CBC0016BTH029 and CBC0016BTH033). These features and ground surface treatments are of Regional Importance and Medium Sensitivity.

There are also narrow granite kerbs (CBC0016BTH030) at the Royal Canal Scherzer Bridges (DCC RPS 912), which are of Regional Importance and Medium Sensitivity and sett stones lining the pavement (CBC0016BTH034) in front of 30-32 Sir John Rogerson's Quay (DCC RPS 7548) which are a mix of recycled old cobbles and modern cobbles, but contribute to the architectural character of the study area and are of Regional Importance and Medium Sensitivity.

Table 16.14: Paving and Surface Treatments

Section	ID	Location	Description	Significance and Sensitivity
Talbot Memorial Bridge to Tom Clarke East Link Bridge	CBC0016BTH031	Custom House Quay	Granite blocks lining the quays with mixed cobbled, granite, sandstone and resin-bonded gravel.	Regional (NIAH), Medium Sensitivity
	CBC0016BTH030	North Wall Quay	Granite kerbs associated with the Scherzer Bridge	Regional (NIAH), Medium Sensitivity
	CBC0016BTH029	North Wall Quay	Quay c.1800, mixed cobbled, granite, sandstone and resin-bonded gravel, remains of old railway tracks. Steps and ramps with granite boundary stones to road side.	Regional (NIAH), Medium Sensitivity
	CBC0016BTH032	City Quay	Quays, c.1810, granite quay steps.	Regional (NIAH), Medium Sensitivity
	CBC0016BTH033	Sir John Rogerson's Quay	Quay walls, stone setts, steps	Regional (NIAH), Medium Sensitivity
	CBC0016BTH034	30-32 Sir John Rogerson's Quay	Setts in front of the Tropical Fruit Co. They were laid as part of the Beckett Bridge Project and contain both modern and recycled setts	Local, Low Sensitivity

16.4 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 16.5). Predicted 'residual' impacts taking into account any proposed mitigation is presented in Section 16.6.

16.4.1 Characteristics of the Proposed Scheme

The key characteristics of the Proposed Scheme of particular relevance to the architectural heritage assessment are divided between the Construction Phase and the Operational Phase and are described in Section 16.4.3 and Section 16.4.4.

A detailed description of the Proposed Scheme and construction activities are provided in Chapter 4 (Proposed Scheme Description) and Chapter 5 (Construction).

16.4.2 'Do Nothing' Scenario

In the Do Nothing scenario, the Proposed Scheme would not be implemented and there would be no adverse effect on architectural heritage structures, buildings, boundary walls, street furniture and surfaces. Most of the architectural heritage features identified in this study are outside the site of the Proposed Scheme and their future existence would not be affected by a decision to do nothing. Such features as have been identified within the Proposed Scheme boundary would remain in place.

The predicted impact of the 'Do Nothing' scenario is Neutral.

16.4.3 Construction Phase

Direct Construction Phase impacts are anticipated where the Proposed Scheme requires alteration to sensitive fabric including alterations to historic quay walls, alterations to docks and locks for the construction of new bridges and boardwalks; the repositioning of the existing Scherzer Bridges; alteration of the historic sea wall; and the repositioning of items of historic street furniture and surface treatments to accommodate new cycle and pedestrian routes. Where historic fabric is required to be removed, repositioned or irreversibly altered, it is anticipated that the duration of impact will be permanent.

Indirect physical Construction Phase impacts are anticipated where sensitive buildings, boundaries or features provide a physical boundary to the Proposed Scheme, or where they are located within the Proposed Scheme boundary. There is potential for damage of sensitive fabric during construction. It is anticipated that the duration of the indirect physical Construction Phase impacts will be temporary.

Indirect visual impacts are anticipated where construction activities will adversely impact on the setting of the identified sites, buildings and features. It is anticipated that the duration of the Construction Phase visual impacts will be temporary. See also Chapter 17 (Landscape (Townscape) & Visual) which assesses the potential for visual impact.

The identified Construction Phase impacts are described and assessed below and summarised in Table 16.15. No Very Significant or Profound impacts are anticipated as a result of the Proposed Scheme. Where Moderate or Significant Negative impacts are identified, mitigation is identified in Section 16.5.

16.4.3.1 Protected Structures

Thirty protected structures or groups of protected structures were identified in the study area, as outlined in Section 16.3.1.3 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

Direct Construction Phase impacts are anticipated, affecting seven of the identified Protected Structures. These are as follows.

The Scherzer Bridges, which span George's Dock (DCC RPS 896), will be relocated and a new fixed four-lane road bridge will be constructed. The Scherzer Bridges will be moved apart and turned 180 degrees where they will accommodate pedestrians and cyclists crossing the entrance channel to the dock. The rotation of the Scherzer Bridges is necessary due to the space constraint imposed by the Trinity College Dublin (TCD) Stack B Building on the west of George's Dock, and in order to allow the inner bridge to operate. The Scherzer Bridges which span George's Dock are of Medium Sensitivity. These bridges are not suited to the current heavy traffic loads which are putting them at risk of damage. Relocation and reorientation from their original positions will reduce the risk of damage from traffic, which is positive, the magnitude of which is low. The proposal will however change the relationship between the structures, and the relationship between the Scherzer Bridges and the dock and quay. There is also a risk of damage during dis-assembly, transportation, storage and reinstatement. This will have a negative impact, the magnitude of which Medium. The potential Construction Phase impact of the relocation of the Scherzer Bridges at George's Dock will be Negative, Moderate and Permanent.

The relocation and reorientation of the George's Dock Scherzer Bridges and the construction of a new bridge will also have an impact on the quay walls to the lock at George's Dock (DCC RPS 3173) and the associated replacement road bridge. The quay wall is of Medium Sensitivity. The alterations will involve the removal of a

small section of historic and original fabric which will have a negative impact, the magnitude of which is Medium. The potential Construction Phase impact will be Negative, Moderate and Permanent. There will be an indirect visual impact on the Liffey Quays Conservation Area which is assessed in Section 16.4.4.2.

The Scherzer Bridges (DCC RPS 912) spanning the Royal Canal will be moved apart, and a new fixed deck four-lane road bridge will be constructed between them. The decks of the new and repositioned Scherzer Bridges will be raised 835mm above the existing ground level, to allow for unimpeded navigation of the canal below, and ground levels will be altered along the quays on approach. The bridge structures will be reinstated where they will accommodate pedestrians and cyclists crossing the canal entrance. The side walls of the Sea Lock (CBC0016BTH007) will be repaired where they were altered (c.1930) to accommodate the Scherzer Bridges. Existing granite kerbs (CBC0016BTH030), a pair of now-defunct lock-gate winches and a section of rubble walling on approach to the inner bridge will also be repositioned. The Scherzer Bridges spanning the Royal Canal are of Medium Sensitivity. As with the Scherzer Bridges which span George's Dock (DCC RPS 896), these bridges are not suited to the current heavy traffic loads which are putting them at risk of damage. Relocation from their original positions will also reduce the risk of damage from traffic which is positive. The proposal will however change the relationship between the structures, and the relationship between the Scherzer Bridges, the dock and quay. This will have a negative impact. The proposed relocation of the defunct winches, the rubble approach wall and the granite kerbs will also have a negative impact such that the sensitivity of the bridge and environs is substantially altered. When these impacts are factored, it is anticipated that the magnitude will be Medium. The potential Construction Phase impact of the relocation of the Scherzer Bridges at the Royal Canal will be Negative, Moderate and Permanent.

On Custom House Quay (DCC RPS 8829), which is of Medium Sensitivity, a new pedestrian boardwalk is proposed immediately adjoining the former DCC Docklands offices between Sean O'Casey Bridge and just east of Commons Street. This will require alterations of the existing quay wall. The alterations are as follows:

- The insertion of steel beams above coping stone level;
- Fixing steel plates onto the face of the wall with anchors fixed through; and
- The provision of mini-pile foundations with a concrete cap counterweight and blinding concrete behind the quay wall.

The magnitude of impact is medium. The potential Construction Phase impact on Custom House Quay (DCC RPS 8829) will be Negative, Moderate and Long-Term.

The proposed tree planting, bus stops and cycle tracks along North Wall Quay (RMP DU018-020564) will impact on the existing paving design, and on existing embedded rail tracks (CBC0016BTH029) particularly at the eastern end of North Wall Quay. The paving design and historic embedded rail tracks are within the curtilage of, and contribute to the historic and industrial character of, the quays. They are of Medium Sensitivity. Their removal will have a negative impact, the magnitude of which is High. The potential Construction Phase impact will be Negative, Significant and Permanent.

There is an existing cycle track along Sir John Rogerson's Quay (DU018-020201) as far as Forbes Street where only minor works are proposed. Beyond this junction, to the east, the Proposed Scheme will include new bus stops on the quayside, and upgrades of the existing cycle track and paving works. The existing paving and historic rail tracks (CBC0016BTH033) are within the curtilage of, and contribute to the historic industrial character of, Sir John Rogerson's Quay. They are of Medium Sensitivity. The proposed cycle track and paving works, particularly at the east end of Sir John Rogerson's Quay will result in the removal of a section of the existing rail track and cobbles in this location. Their removal will have a negative impact, the magnitude of which is High. The potential Construction Phase impact will be Negative, Significant and Permanent.

On Britain Quay (DCC RPS 8808), the proposed Dodder Public Transport Opening Bridge (DPTOB) over the mouth of the River Dodder will require alteration of the quay wall. The quay is of Medium Sensitivity. The proposed level of the bridge deck is above the existing ground level to minimise the disruption to historic fabric, but a short section of the capping stones (approximately 19m) will be removed. The magnitude of impact is Medium. The potential Construction Phase impact will be Negative, Moderate and Permanent. The DPTOB will also have a visual impact on the Liffey Quays, Dodder Valley and Grand Canal CAs, which is assessed in Section 16.4.4.2.

A short section of the sea wall (DU018-066), visible at the very end of Thorncastle Street will be directly impacted as a result of the proposed DPTOB, while to the west of the rowing club on York Road, the quay wall next to the River Dodder (CBC0016BTH038) will also be impacted by the removal of a section of it to accommodate the tying in of existing and proposed cycle and footpaths over the DPTOB, as well as the existing Tom Clarke East Link Bridge. The sea wall is of Medium Sensitivity, while the sensitivity of the quay wall at Thorncastle Street is also of Medium Sensitivity. The magnitude of impact is Medium. The potential Construction Phase impact will be Negative, Moderate and Permanent.

Indirect physical Construction Phase impacts are anticipated in all locations where a protected structure fronts onto, shares a boundary with, or is within the Proposed Scheme boundary. There is potential for accidental damage of sensitive fabric during construction. The magnitude of impact would be Medium.

One location was identified where a High Sensitivity structure shares a boundary with the Proposed Scheme. This is the CHQ (Stack A) Building (DCC RPS 2094). Due to the sensitivity of the building, the potential Construction Phase impact will be Negative, Significant and Temporary.

A boardwalk is proposed to be added to North Wall Quay (DU018-020564), at the junction of North Wall Quay and Excise Walk. The quay is of Medium Sensitivity. The structure has been designed to avoid the historic fabric. The proposed deck is above the level of the existing capping stones, supported from underneath and behind them by stainless steel anchors (similar to those used on the existing Bachelor's Walk boardwalk). While the proposed boardwalk will not require direct alteration of historic fabric, there is the potential for damage of historic fabric during construction. The potential Construction Phase impact will be Negative, Moderate and Temporary.

Nine locations were identified where a protected structure or group of protected structures of Medium Sensitivity are within the Proposed Scheme boundary, and these could be indirectly impacted (it is noted that some of these are also directly impacted as outlined above). There are:

- Six quays – Custom House Quay (DCC RPS 8829), North Wall Quay (DU018-020564), George's Quay (DU018-020458), City Quay (DU018-020479), Sir John Rogerson's Quay (DU018-020201) and Britain Quay (DCC RPS 8808);
- The two sets of Scherzer Bridges, one set at George's Dock (DCC RPS 896) and the other set at the Royal Canal (DCC RPS 912); and
- The sea wall on York Road (DU018-066).

Sixteen further locations were identified where a protected structure of Medium Sensitivity shares a boundary with the Proposed Scheme, or fronts directly onto it, namely:

- CIE Goods Depot, North Wall Quay (DCC RPS 5836);
- Store / Warehouse, North Wall Quay (DCC RPS 5837);
- 58-59 North Wall Quay (DCC RPS 5838);
- 73 North Wall Quay (DCC RPS 5840);
- 81 North Wall Quay (DCC RPS 5841);
- 82 North Wall Quay (DCC RPS 5842);
- 3Arena, North Wall Quay (DCC RPS 5843);
- 9 City Quay (DCC RPS 1853);
- 10-12 City Quay (DCC RPS 1854),
- 21-22 City Quay (DCC RPS 1855-56);
- 2 Sir John Rogerson's Quay (DCC RPS 7543);
- 4-5 Sir John Rogerson's Quay (DCC RPS 7544-5);
- 14-15 Sir John Rogerson's Quay (DCC RPS 7546);
- 20-24 Sir John Rogerson's Quay (DCC RPS 7547);
- 30-32 Sir John Rogerson's Quay (DCC RPS 7548); and
- 35-36 Sir John Rogerson's Quay (DCC RPS 7549-50).

The remaining three identified protected structures of Medium Sensitivity include the Diving Bell, 103 Ringsend Park and 70 Pigeon House Road (DCC RPS 7542, DCC RPS 7376 and DCC RPS 6782) which are in the study area but will not be directly impacted by the Proposed Scheme.

Taking account of the sensitivity of these sites, the potential Construction Phase impact on these 25 protected structures will be Negative, Moderate and Temporary.

16.4.3.2 Conservation Areas

16.4.3.2.1 Liffey Quays Conservation Area

The Liffey Quays Conservation Area is of Medium Sensitivity, it overlaps with the study area along Custom House Quay, North Wall Quay, George's Quay, City Quay, Sir John Rogerson's Quay and Britain Quay.

Direct and indirect Construction Phase impacts are anticipated on the Liffey Quays Conservation Area. Eight features were identified within the Conservation Area, which it is anticipated, will be directly impacted during the Construction Phase. They are:

- Seven protected structures including the Scherzer Bridges at George's Dock (DCC RPS 896), associated quay walls at the lock on George's Dock (DCC RPS 3173) and Royal Canal (DCC RPS 912), Custom House Quay (DCC RPS 8829), North Wall Quay (DU018-020564), Sir John Rogerson's Quay (DU018-020201) and Britain Quay (DCC RPS 8808); and
- One group of lamp posts (CBC0016LP001).

The identified features are of Medium Sensitivity. The anticipated impacts on the individual features are assessed in Section 16.4.3.1, Section 16.4.3.3, 16.4.3.4 and Section 16.4.3.5. Regarding the identified direct impacts, it is anticipated that the Proposed Scheme will have a negative impact on the Liffey Quays Conservation Area, the magnitude of which is Medium. The potential direct Construction Phase impact on the Liffey Quays Conservation Area will be Negative, Moderate and Permanent.

Indirect impacts are anticipated where the construction works will have an adverse visual impact on the Conservation Area during the Construction Phase. The Proposed Scheme includes the relocation of two bridges in the Conservation Area (i.e. both pairs of Scherzer Bridges), and the construction of one bridge on the south-east boundary of it, crossing the River Dodder (i.e. the DPTOB). Two new sections of boardwalk will also be provided along North Wall Quay and Custom House Quay respectively. The extent, scale and nature of the construction work will have a High impact on the Conservation Area. The potential indirect Construction Phase impact on the Liffey Quays Conservation Area will be Negative, Significant and Short-Term.

16.4.3.2.2 Royal Canal Conservation Area

The Royal Canal Conservation Area is of Medium Sensitivity. It intersects with the study area, and with the Liffey Quays Conservation Area, at the Sea Lock at the junction of Guild Street and North Wall Quay.

Direct and indirect visual Construction Phase impacts are anticipated on the Royal Canal Conservation Area. Two features were identified which will be directly impacted during the Construction Phase. They are the Royal Canal Scherzer Bridges (DCC RPS 912), which are protected structures of Medium Sensitivity, and the Royal Canal Sea Lock (CBC0016BTH007), which is recognised through inclusion in the DCIHR, and which is also of Medium Sensitivity. The anticipated impacts on the individual features are assessed in Section 16.4.3.1 and Section 16.4.3.4. Regarding the identified direct impacts, it is anticipated that the impact of the Proposed Scheme on the Royal Canal Conservation Area will have a negative impact, the magnitude of which is Medium. The potential direct Construction Phase impact on the Royal Canal Conservation Area will be Negative, Moderate and Permanent.

Indirect impacts are anticipated where the construction works will have an adverse visual impact on the Conservation Area during the Construction Phase. The Proposed Scheme includes the relocation of the historic Scherzer Bridges at the mouth of the Royal Canal as well as the construction of the replacement carriageway bridge in the Conservation Area, and some minor alteration of the fabric of the sea lock. The extent, scale and nature of the construction work will have a negative impact on the Conservation Area, the magnitude of which will

be Medium. The potential indirect Construction Phase impact on the Royal Canal Conservation Area will be Negative, Moderate and Short-Term.

16.4.3.2.3 Dodder Valley and Grand Canal Conservation Areas

The Dodder Valley and Grand Canal Conservation Areas are of Medium Sensitivity. They converge at Grand Canal Dock and meet the Liffey Quays Conservation Area between Britain Quay and Ringsend.

Direct and indirect Construction Phase impacts are anticipated on the Dodder Valley and Grand Canal. A protected structure and feature of built heritage interest, the sea and quay walls on York Road (RMP DU018-066, CBC0016BTH038) both of which are of Medium Sensitivity, were identified in a Conservation Area. It is anticipated that these will be directly impacted by the construction of the DPTOB. The anticipated impacts on the individual features are assessed in Section 16.4.3.1 and Section 16.4.3.4. With regard to the identified direct impacts, it is anticipated that the impact of the Proposed Scheme on the Dodder Valley and Grand Canal Conservation Areas will have a negative impact, the magnitude of which is Medium. The potential direct Construction Phase impact on the Dodder Valley and Grand Canal Conservation Area will be Negative, Moderate and Permanent.

Indirect visual impacts are anticipated where the construction works will have an adverse visual impact on the Conservation Area during the Construction Phase. The Proposed Scheme includes the construction of a new bridge in the Conservation Area (i.e. the DPTOB), and the relocation of the existing rowing club to new premises on the boundary of it (i.e. St. Patrick's Rowing Club (SPRC)). The extent, scale and nature of the construction work will have a negative impact on the Conservation Area, the magnitude of which will be Medium. The potential indirect Construction Phase impact on the Dodder Valley and Grand Canal Conservation Area will be Negative, Moderate and Short-Term.

16.4.3.3 NIAH Structures

Nine NIAH structures or groups of structures were identified in the study area, as outlined in Table 16.9 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

One location was identified where a direct impact on the fabric of an NIAH structure is anticipated during the Construction Phase. This is the famine memorial (NIAH 50010002), which is of Medium Sensitivity, and which will be temporarily removed to safe storage in order to protect it during the Construction Phase. There is the potential for loss or accidental damage of the memorial sculptures during their removal, storage and reinstatement. The magnitude of impact would be High. The potential Construction Phase impact will be Negative, Significant and Temporary.

Indirect physical Construction Phase impacts are anticipated in all locations where an NIAH structure fronts onto, shares a boundary with, or is within the Proposed Scheme boundary. There is the potential for damage of sensitive fabric during construction. The magnitude of impact would be Medium. Three locations were identified where an NIAH structure of Medium sensitivity, fronts onto the boundary of the Proposed Scheme and therefore there is the potential for accidental damage of sensitive fabric. These are the Triumphal Arch (NIAH 50011219), ESB substations (NIAH 50011185) and the Campshire warehouses (NIAH 50020466). The potential impact during the Construction Phase will be Negative, Moderate and Temporary.

16.4.3.4 Other Structures of Architectural Heritage Interest

Eight other structures of architectural heritage interest were identified in the study area which are of Medium Sensitivity and a further nine which are of Low Sensitivity. They are identified in Table 16.11 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

One location was identified where there will be a direct impact on the fabric of a structure of architectural heritage interest during the Construction Phase. Construction of the DPTOB includes land reclamation to the north of the existing quay wall, (CBC0016BTH038), visible at the very end of Thorncastle Street. A short section of quay wall will be incorporated in land reclamation. The works will include the construction of retaining structures in front of the existing walls. The historic fabric will be retained in position but the retaining structures will obscure them from view. The quay wall is of Medium Sensitivity. These interventions will have a negative impact, the magnitude of

which is Medium. The potential direct Construction Phase impact on the existing quay wall at this location will be Negative, Moderate and Permanent.

Indirect physical Construction Phase impacts are anticipated in all locations where a structure fronts onto, shares a boundary with, or is within the Proposed Scheme boundary. There is the potential for damage of sensitive fabric during the Construction Phase. The magnitude of impact would be Medium.

Two Medium Sensitivity structures of built-heritage interest share a boundary with the Proposed Scheme boundary (Ringsend Park (CBC0016BTH025) and 1-2 Seaview (CBC0016BTH027)), and two other structures of Medium Sensitivity were identified which front directly onto it (Pembroke Cottages (CBC0016BTH016) and 1-44 Pigeon House Road (CBC0016BTH019)). Taking account of the sensitivity of these features, the potential direct Construction Phase impact will be Negative, Moderate and Temporary.

Five further locations were identified where a structure of low sensitivity shares a boundary to the Proposed Scheme or which fronts directly onto it, namely: 1-4 City Quay (CBC0016BTH013), Mission Hall (CBC0016BTH017), 12 York Road (CBC0016BTH018), 46-51 Pigeon House Road, Bayview Terrace (CBC0016BTH020), and 62-63 Pigeon House Road (CBC0016BTH037). They are identified in Table 16.11, and described in more detail in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. Taking account of the sensitivity of these sites, the potential indirect Construction Phase impact will be Negative, Slight and Temporary.

16.4.3.5 Street Furniture

Items of street furniture of architectural heritage interest are identified in Section 16.3.1.10, and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR.

16.4.3.5.1 Lamp Posts

One group of lamp posts of Medium Sensitivity was identified in the study area. They are 9m straight-stem Scotch Standards located along North Wall Quay and Custom House Quay (CBC0016LP001). Direct and indirect Construction Phase impacts are anticipated on these features:

- Twelve of the lamps which line Custom House and North Wall Quays require slight repositioning to accommodate altered carriage and cycle track widths. There is potential for damage to the lamp posts during their removal, transportation, storage and reinstatement. The magnitude of impact would be high. The potential Construction Phase impact is Negative, Significant and Temporary; and
- The remaining lamps will be retained in position. There is also potential for damage of these lamps during construction. The magnitude of impact would be medium. The potential Construction Phase impact is Negative, Moderate and Temporary.

16.4.3.5.2 Paving and Surface Treatments

Paving and surface treatments of architectural heritage value were identified at six locations in the study area as listed in Table 16.14.

Direct Construction Phase impacts on paving and surface treatments which are associated with protected structures are anticipated at three locations. These are:

- Narrow granite kerbs (CBC0016BTH030), at the Royal Canal Scherzer Bridges (DCC RPS 912);
- Historic surfaces and embedded rail tracks (CBC0016BTH029) along North Wall Quay (DU018-020564); and
- Historic surfaces and embedded rail tracks (CBC0016BTH033) along Sir John Rogerson's Quay (DU018-020201).

The anticipated impact on these features is assessed with the impacts on the associated protected structures under Section 16.4.3.1.

Indirect physical Construction Phase impacts are anticipated where there is the potential for damage to sensitive fabric during construction. In addition to the three locations identified above where direct Construction Phase impacts are anticipated, three additional areas of significant paving or surface treatments were identified in the study area which are of Medium Sensitivity. These are paving on Custom House Quay (CBC0016BTH031); paving on City Quay (CBC0016BTH032); and paving in front of 30-32 Sir John Rogerson's Quay (CBC0016BTH034). The magnitude of impact is Medium. The potential Construction Phase impact will be Negative, Moderate and Temporary.

16.4.3.6 Summary of Potential Construction Phase Impacts

Table 16.15: Summary of Potential Construction Phase Impacts

Section	Assessment Topic	Feature significance and sensitivity	Impact magnitude	Impact Significance
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
			High	Indirect, Negative, Significant and Short-Term
	DCC RPS 8829 Custom House Quay	Regional Importance, Medium Sensitivity	Medium	Direct Negative, Moderate and Long-Term
	NIAH 50010002 Famine Memorial	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Temporary
	DCC RPS 896 George's Dock Scherzer Bridges	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
	DCC RPS 3173 George's Dock, side walls	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
	DCC RPS 2094 CHQ - Stack A, Custom House Docks	National Importance, High Sensitivity	Medium	Indirect, Negative, Significant and Temporary
	CBC0016LP001 12 Lamp posts, North Wall and Custom House Quay	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Temporary
	CBC0016LP001 19 Lamp posts, North Wall and Custom House Quay (retained)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary
	DCC RPS 912 Royal Canal Scherzer Bridges	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
	CBC0016BTH007 Sea Lock, Royal Canal	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
	CBC0016BTH030 Narrow granite kerb stones	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
	Royal Canal Conservation Area	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
			Medium	Indirect, Negative, Moderate and Short-Term
	RMP DU018-020564 North Wall Quay (at Excise Walk)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary
	RMP DU018-020564 North Wall Quay	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Permanent
	CBC0016BTH029 Paving and embedded rails on North Wall Quay	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Permanent
	DU018-020201 Sir John Rogerson's Quay	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Permanent
	CBC0016BTH033 Paving and tramlines on Sir John Rogerson's Quay	Regional Importance, Medium Sensitivity	High	Direct, Negative, Significant and Permanent
	Dodder Valley and Grand Canal Conservation Area	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
Medium			Indirect, Negative, Moderate and Short-Term	
DCC RPS 8808 Britain Quay	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent	
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH038 Quay Wall, Thorncastle Street	Regional Importance, Medium Sensitivity	Medium	Direct, Negative, Moderate and Permanent
			DU018-066 Sea Wall, York Road	Regional Importance, Medium Sensitivity
Protected Structures within all Sections	Protected Structures (25 locations)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary

Section	Assessment Topic	Feature significance and sensitivity	Impact magnitude	Impact Significance
(See Appendix A16.2 and for feature identification)				
NIAH Structures within all Sections (See Appendix A16.2 Table 16.9 for feature identification)	NIAH Structures (three locations)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary
Other Structures within all Sections (See Appendix A16.2 and Table 16.11 for feature identification)	Other structures of Built-Heritage Interest (four locations)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary
	Other structures of Built-Heritage Interest (five locations)	Local Importance Low Sensitivity	Medium	Indirect Negative, Slight and Temporary
Paving and Ground surface Treatments (See Appendix A16.2 and Table 16.14 for feature identification)	CBC0016BTH031, CBC0016BTH032 CBC0016BTH034 Paving and Surface Treatments (three locations)	Regional Importance, Medium Sensitivity	Medium	Indirect, Negative, Moderate and Temporary

16.4.4 Operational Phase

The characteristics of the Proposed Scheme of particular relevance to the architectural heritage assessment during the Operational Phase, are the existence of new road carriageway bridges at George's Dock, the Royal Canal and over the River Dodder which will have a visual impact on the settings of sensitive features and sites. Additionally, there are alterations to bus stop locations, particularly where these include the location of new and old shelters, or the alteration to the urban realm including the existence of new trees, and the removal of trees which may also be impacted.

The proposed improvements to the urban realm, and the resulting reduction in vehicular traffic will generally have a positive effect on the historic environment and the character of the streetscapes along the Proposed Scheme.

The identified Operational Phase impacts are described below and summarised in Table 16.16. No Very Significant or Profound impacts are anticipated during the Operational Phase of the Proposed Scheme. Chapter 17 (Landscape (Townscape) & Visual) should also be consulted regarding potential visual impacts during the Operational Phase.

16.4.4.1 Protected Structures

On Custom House Quay (DCC RPS 8829) and on North Wall Quay (RMP DU018-020564), which are both of Medium Sensitivity, new pedestrian boardwalks are proposed, with one immediately adjoining the former DCC Docklands offices between Sean O'Casey Bridge and just east of Commons Street, and the second at the junction of North Wall Quay and Excise Walk, to accommodate pedestrian movement around buildings. The structures have been designed to avoid impacts to the historic fabric in as much as is possible, but they will partially obscure the quays from view during the Operational Phase. The magnitude of impact is Low. The potential Operational Phase impact on these features will be Negative, Slight and Long-Term.

It is anticipated that the proposed new trees along the quayside of North Wall Quay will have a positive impact on the settings of the protected structures that front onto it, the magnitude of which is Low. These are:

- The 3 Arena (DCC RPS 5843);
- 82 North Wall Quay (DCC RPS 5842);
- 81 North Wall Quay (DCC RPS 5841);
- 73 North Wall Quay (DCC RPS 5840);
- 58-59 North Wall Quay (DCC RPS 5838); and
- 48-57 North Wall Quay (DCC RPS 5836).

The potential Operational Phase impact on these features will be Positive, Slight and Long-Term.

It is anticipated that the proposed bus shelters along the quay side will have a neutral impact on the protected structures noted above, the magnitude of which is Low. Therefore, the potential Operational Phase impact will be Neutral and Long-Term.

16.4.4.2 Conservation Areas

16.4.4.2.1 The Liffey Quays Conservation Area

The Liffey Quays Conservation Area is of Medium Sensitivity. The following proposed alterations are identified which are anticipated to have an indirect visual impact on the character and setting of the Liffey Quays Conservation Area during the Operational Phase of the Proposed Scheme:

- The relocation of the Scherzer Bridges will have a negative impact, the magnitude of which is Low since they are being reinstated as landmark structures on the quays, close to their existing positions;
- The proposed boardwalks at Custom House Quay and North Wall Quay are in line with other boardwalk developments along the north quays. They are new structures which will require alteration of historic fabric and / or will partially obscure the view of it. They would have a negative impact, the magnitude of which is Low;
- The proposed new trees along the quayside of North Wall Quay would have a positive impact on the setting of the Conservation Area, the magnitude of which is Low;
- The alteration of the existing paving at the east end of North Wall Quay and Sir John Rogerson's Quay includes the loss of historic fabric including embedded rail track which would have a negative impact on the historic and industrial character of the Conservation Area, the magnitude of which is Low; and
- The construction of the DPTOB across the mouth of the River Dodder with associated land reclamation at Ringsend, would have a negative visual impact on the historic character of Britain Quay and York Road Quay, and would alter the historic navigation and access routes between the docks, and the rivers. The magnitude of impact would be Medium.

The potential Operational Phase impact on the Liffey Quays Conservation Area will be Negative, Moderate and Long-Term.

16.4.4.2.2 The Royal Canal Conservation Area

The Royal Canal Conservation Area is of Medium Sensitivity. The Royal Canal Conservation Area will be impacted by the construction of a bridge over the canal, the alterations to the existing ground levels on approach along the quays, as well as the relocation of the existing Scherzer Bridges. It is anticipated that the proposed alterations would have a negative impact on the character of the historic industrial landscape. The potential Operational Phase impact will be Negative, Moderate and Long-Term.

16.4.4.2.3 The Dodder Valley and Grand Canal Conservation Areas

The setting of the Dodder Valley and Grand Canal Conservation Areas will be impacted by the construction of the DPTOB across the mouth of the River Dodder, linking Sir John Rogerson's Quay to Ringsend. The construction of the bridge will require removal of a small section of the quay wall at Britain Quay. The proposed bridge will alter the access to Grand Canal Basin as well as the river. The land reclamation on the Ringsend side will obscure the historic fabric of the quay wall on York Road from view. It is anticipated that the proposed alterations would have a negative impact on the character of the historic industrial landscape. It is anticipated that these alterations would have a negative impact on the Conservation Areas, the magnitude of which is Medium. The potential Operational Phase impact will be Negative, Moderate and Long-Term.

16.4.4.3 NIAH Structures

Three locations were identified where an NIAH structure will be impacted during the Operational Phase of the Proposed Scheme. These are:

- The setting of the limestone lock (DCC RPS 3173) and associated winches (NIAH 50010006) on Custom House Quay will be impacted by the relocation and reorientation of the inner Scherzer Bridge. The features are of Medium Sensitivity. The magnitude of impact is Low. The potential Operational Phase impact will be Negative, Slight and Long-Term; and
- The setting of the Triumphal Arch (NIAH 50011219) will be impacted by the relocation and reorientation of the inner Scherzer Bridge. The arch is a Medium Sensitivity structure. It has been previously relocated from its original position on Amiens Street. The magnitude of impact is Low. The potential Operational Phase impact will be Negative, Slight and Long-Term.

16.4.4.4 Other Structures of Architectural Heritage Interest

Three sites of industrial or other heritage significance were identified in the study area, two of which will be impacted during the Operational Phase of the Proposed Scheme. These are:

- The setting of the Sea Lock on Guild Street (CBC0016BTH007), which is a Medium Sensitivity structure, will be negatively impacted by the construction of the new road bridge, the alteration of the existing ground levels, the relocation of the Royal Canal Scherzer Bridges (DCC RPS 912) and the repositioning of existing winches and rubble walls. The magnitude of impact is High. The potential Operational Phase impact will be Negative, Significant and Long-Term; and
- The setting of the boat slip on York Road (CBC0016BTH015) will be negatively impacted by the operation of the DPTOB over the mouth of the River Dodder. The slip is of Low Sensitivity. The proposal includes for the replacement of the rowing club house and a new jetty. The magnitude of impact is Low. The potential Operational Phase impact will be Negative, Not Significant and Long-Term.

16.4.4.5 Summary of Potential Operational Phase Impacts

Table 16.16: Summary of Potential Operational Phase Impacts

Section	Assessment Topic	Feature Sensitivity	Impact Magnitude	Impact Significance
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	Medium	Medium	Negative, Moderate and Long-Term
	DCC RPS 8829 Custom House Quay	Medium	Low	Negative, Slight and Long-Term
	DCC RPS 3173 and NIAH 50010006 limestone lock and associated winches in Custom House Quay	Medium	Low	Negative, Slight and Long-Term
	Triumphal Arch NIAH 50011219	Medium	Low	Negative, Slight and Long-Term
	RMP DU018-020564 North Wall Quay	Medium	Low	Negative, Slight and Long-Term
	3 Arena (DCC RPS 5843), 82 North Wall Quay (DCC RPS 5842), 81 North Wall Quay (DCC RPS 5841), 73 North Wall Quay (DCC RPS 5840) 58-59 North Wall Quay (DCC RPS 5838) and 48-57 North Wall Quay (DCC RPS 5836).	Medium	Low	Positive, Slight and Long-Term
	Bus shelters in the setting of protected structures to North Wall Quay	Medium	Low	Neutral and Long-Term
	Royal Canal Conservation Area	Medium	Medium	Negative, Moderate and Long-Term

Section	Assessment Topic	Feature Sensitivity	Impact Magnitude	Impact Significance
	CBC0016BTH007 Sea Lock, Guild Street	Medium	High	Negative, Significant and Long-Term
	Dodder Valley and Grand Canal Conservation Areas	Medium	Medium	Negative, Moderate and Long-Term
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH015 Boat Slip, York Road	Low	low	Negative, Not Significant and Long-Term

16.5 Mitigation and Monitoring Measures

16.5.1 Construction Phase

Proposed mitigation measures for architectural heritage features are outlined in this Section and detailed in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The methodology has been prepared in accordance with the Department of Arts, Heritage and the Gaeltacht (DAHG) Architectural Heritage Protection: Guidelines for Planning Authorities (DAHG 2011) and Paving: the conservation of historic ground surfaces (McLoughlin 2017). A summary of Construction Phase impacts following the implementation of mitigation measures is provided in Table 16.17.

As for the impact assessment, the proposed mitigation is divided into Construction and Operational Phases and is set out following the structure of Section 16.3, with mitigation for protected structures provided first, where relevant, followed by NIAH structures, designed landscapes, other structures of built-heritage significance and street furniture. Within these categories, the assessment is further organised geographically, starting at the City Centre end of the Proposed Scheme and working towards Ringsend and Irishtown.

16.5.1.1 Protected Structures

Seven locations were identified where the Proposed Scheme will directly impact on sensitive fabric associated with a protected structure. These are as follows.

The Scherzer Bridges spanning George's Dock (DCC RPS 896) will be relocated and a new fixed four-lane road bridge will be constructed by the appointed contractor. The bridges will be moved apart and turned 180 degrees. At George's Dock, the existing quay walls (DCC RPS 3173) will require alteration to accommodate the repositioned Scherzer Bridges (DCC RPS 896) and the associated replacement road carriageway bridge. The alterations will involve the removal of a small section of historic and original fabric. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. The architectural heritage specialist will oversee the protection, labelling, safe storage, repair and reinstatement of the bridges, the affected kerbs, winches, and historic masonry. The affected quay walls (DCC RPS 3173) fabric will be made available by the appointed contractor to the local authority for salvage or reuse. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With the implementation of mitigation, the magnitude of impact would be Low. The predicted residual impact will be Negative, Slight and Permanent.

The Scherzer Bridges (DCC RPS 912) spanning the Royal Canal at Guild Street will be moved apart, and a new fixed four-lane road bridge will be constructed between them. The deck of the new bridge will be raised approximately 835mm above the existing ground level, to allow for unimpeded navigation of the canal below, and ground levels will be altered along the quays on approach. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. Further pre-construction surveying, condition assessments and recording of the structures prior to their careful dismantling is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. This is to inform the repair, interpretation and subsequent reassembly of the Scherzer Bridges. The architectural heritage specialist will oversee the protection, labelling, safe storage, repair and reinstatement of the bridges, the affected kerbs (CBC0016BTH030), winches, and historic masonry. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The side walls at the Royal Canal (BTH0016BTH007) will be repaired where they were previously altered to accommodate the Scherzer Bridges, and the structures will be restored to working order in their new positions where they will accommodate pedestrians and cyclists crossing the canal. A pair of now-defunct lock-gate winches and a section of rubble walling on approach to the inner bridge will also be repositioned. These measures will preserve the bridges in the long-term and will also highlight their industrial heritage significance. It is anticipated that the repair and interpretation of the fabric will have a positive impact. With the implementation of mitigation, the magnitude of impact is Low. The predicted residual impact will be Negative, Slight and Permanent.

A pedestrian boardwalk will be added to Custom House Quay (DCC RPS 8829) between Sean O'Casey Bridge and just east of Commons Street by the appointed contractor. The pre-mitigation Construction Phase impact will be Negative, Moderate and Long-Term. The architectural heritage specialist engaged by the appointed contractor

will oversee the recording of the existing masonry in position prior to the works (at low tide) and protection of the surrounding fabric. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With the implementation of mitigation, the magnitude of impact is Low. The predicted residual impact will be Negative, Slight and Long-Term.

The removal of embedded rail tracks (CBC0017BTH029) at the east end of North Wall Quay (DU018-020564), and on the east end of Sir John Rogerson's Quay (CBC0016BTH033 and DU018-020201) will result in the loss of historic fabric. The pre-mitigation Construction Phase impact will be Negative, Significant and Permanent. The architectural heritage specialist will oversee the recording of the existing fabric in position prior to its careful removal. The rails and any historic paving stones will be made available by the appointed contractor to the local authority for possible reuse on the quays. With the implementation of mitigation, the magnitude of impact is Low. The predicted residual impact will be Negative, Slight and Permanent.

The quay wall on Britain Quay (DCC RPS 8808) will be altered to accommodate the DPTOB over the mouth of the River Dodder by the appointed contractor. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. Mitigation has been embedded in the Proposed Scheme design through the proposal to raise the deck of the bridge, minimising the disruption required to the historic fabric. However, a short section of the quay wall (approximately 19m) will be removed to accommodate the bridge structure. The architectural heritage specialist will oversee the recording of the existing masonry in position prior to the works (at low tide) and protection of the surrounding fabric. The affected masonry shall be salvaged for use within the proposed landscaping design by the appointed contractor, where practicable, or offered to the local authority. Consolidation or repair of surrounding masonry will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With the implementation of mitigation, the magnitude of impact is Low. The predicted residual impact will be Negative, Slight and Permanent.

A short section of the sea wall (DU018-066), visible at the very end of Thorncastle Street will be incorporated in land reclamation to accommodate the DPTOB by the appointed contractor. A section of wall to the east of the St. Patrick's Rowing Club (SPRC) on York Road will also be removed to accommodate the tying-in of existing and proposed cycle tracks and footpaths over the new DPTOB. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. The architectural heritage specialist engaged by the appointed contractor will oversee the recording of the existing masonry in position prior to the works and protection of the surrounding fabric. Sections of sea wall which will be incorporated in the land reclamation will be retained in-situ, though buried. Masonry which is removed will be salvaged for reuse in consolidating the retained sea wall. Consolidation or repair of surrounding masonry will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With the implementation of mitigation, the magnitude of impact is Low. The predicted residual impact will be Negative, Slight and Permanent.

Indirect physical Construction Phase impacts are anticipated where there is the potential for damage to be caused to sensitive fabric associated with protected structures, inside or on the boundary of the Proposed Scheme, during the Construction Phase.

One location was identified where a High Sensitivity protected structure shares a boundary with the Proposed Scheme. This is the CHQ (Stack A Building) (DCC RPS 2094). Due to the sensitivity of the structure, the pre-mitigation Construction Phase impact will be Negative, Significant and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

North Wall Quay (RMP DU018-020564) is of Medium Sensitivity. At the junction of Excise Walk, there is the potential for damage of historic fabric during the Construction Phase. The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The structure has been designed to avoid the historic fabric. The proposed deck is above the level of the existing capping stones, supported from underneath and behind by

stainless steel anchors. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

Nine locations were identified where a protected structure or group of protected structures of Medium Sensitivity are within the Proposed Scheme boundary, namely:

- Six quays of Custom House Quay (DCC RPS 8829), North Wall Quay (DU018-020564), George's Quay (DU018-020458), City Quay (DU018-020479), Sir John Rogerson's Quay (DU018-020201) and Britain Quay (DCC RPS 8808);
- The two sets of Scherzer Bridges, one set at George's Dock (DCC RPS 896) and the other set at the Royal Canal (DCC RPS 912); and
- The sea wall on York Road (DU018-066).

Sixteen further locations were identified where a protected structure of Medium Sensitivity shares a boundary with the Proposed Scheme, or fronts directly onto it, namely:

- CIE Goods Depot, North Wall Quay (DCC RPS 5836);
- Store / Warehouse, North Wall Quay (DCC RPS 5837);
- 58-59 North Wall Quay (DCC RPS 5838);
- 73 North Wall Quay (DCC RPS 5840);
- 81 North Wall Quay (DCC RPS 5841);
- 82 North Wall Quay (DCC RPS 5842);
- 3Arena, North Wall Quay (DCC RPS 5843);
- 9 City Quay (DCC RPS 1853);
- 10-12 City Quay (DCC RPS 1854),
- 21-22 City Quay (DCC RPS 1855-56);
- 2 Sir John Rogerson's Quay (DCC RPS 7543);
- 4-5 Sir John Rogerson's Quay (DCC RPS 7544-5);
- 14-15 Sir John Rogerson's Quay (DCC RPS 7546);
- 20-24 Sir John Rogerson's Quay (DCC RPS 7547);
- 30-32 Sir John Rogerson's Quay (DCC RPS 7548); and
- 35-36 Sir John Rogerson's Quay (DCC RPS 7549-50).

The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

16.5.1.2 Conservation Areas

16.5.1.2.1 Liffey Quays Conservation Area

Direct impacts are anticipated to seven protected structures and one group of heritage lamp-posts located in the Conservation Area. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. Mitigation for the protection of identified features within the Liffey Quays Conservation Area is provided on a feature specific basis in Section 16.5.1. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Low. The predicted residual impact will be Negative, Slight and Permanent.

16.5.1.2.2 Royal Canal Conservation Area

Direct impacts are anticipated to one protected structure and one other structure of built-heritage interest. The pre-mitigation impact will be Negative, Moderate and Permanent. Mitigation for the protection of identified features within the Royal Canal Conservation Area is provided on a feature specific basis in Section 16.5.1. With mitigation,

it is anticipated that the magnitude of impact would reduce from Medium to Low. The predicted residual impact will be Negative, Slight and Permanent.

16.5.1.2.3 Grand Canal and Dodder Valley Conservation Areas

Direct impacts are anticipated to two other structures of built-heritage interest. The pre-mitigation impact will be Negative, Moderate and Long-Term. Mitigation for the protection of identified features within the Grand Canal and Dodder Valley Conservation Area is provided on a feature specific basis in Section 16.5.1. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Low. The predicted residual impact will be Negative, Slight and Permanent.

16.5.1.2.4 Conservation Areas (Indirect Impacts)

Significant negative indirect impacts are anticipated on all the Conservation Areas where the construction works will have an adverse visual impact during the Construction Phase. The extent, scale and nature of the construction work will have a High impact on the Conservation Areas though it is anticipated that this will be for the duration of the construction works only. The predicted Construction Phase impact will be Negative, Significant and Short-Term. No mitigation is proposed for the indirect impacts.

16.5.1.3 NIAH Structures

One location was identified where a direct impact on the fabric of an NIAH structure is anticipated during the Construction Phase. The famine memorial (NIAH 50010002), which is of Medium Sensitivity, will be temporarily removed to safe storage in order to protect it during the Construction Phase. The pre-mitigation Construction Phase impact will be Negative, Significant and Temporary. The architectural heritage specialist will oversee the recording of the feature in position prior to the works, the labelling of the affected fabric prior to its careful dismantling and removal to safe storage, and their reinstatement in their existing positions subsequent to the works. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the magnitude of impact is reduced from High to Low. The predicted residual impact will be Negative, Slight and Temporary.

Indirect physical Construction Phase impacts are anticipated where there is the potential for damage to be caused to sensitive fabric associated with NIAH structures, inside or on the boundary of the Proposed Scheme, during construction. Three locations were identified where a NIAH structure of Medium Sensitivity fronts onto the boundary of the Proposed Scheme. The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. With mitigation, the predicted residual impact will be Negative, Not Significant and Temporary.

16.5.1.4 Other Structures of Architectural Heritage Interest

One location was identified where there will be a direct impact on the fabric of a structure of architectural heritage interest during the Construction Phase.

Construction of the DPTOB includes land reclamation to the north of the existing quay wall, (CBC0016BTH038), visible at the very end of Thorncastle Street. A short section of quay wall will be incorporated in land reclamation and will be obscured from view. The pre-mitigation Construction Phase impact will be Negative, Moderate and Permanent. The architectural heritage specialist will oversee the recording of the existing masonry in position prior to the works (at low tide) and protection of the fabric for the duration of the construction works. Sections which will be incorporated in the land reclamation will be retained in-situ, though buried. With mitigation, the magnitude of impact is reduced from High to Low. The predicted residual impact will be Negative, Slight and Permanent.

Indirect physical Construction Phase impacts are anticipated in all locations where a structure fronts onto, shares a boundary with, or is within the Proposed Scheme boundary. There is the potential for damage of sensitive fabric

during the Construction Phase. Two Medium Sensitivity structures of built-heritage interest share a boundary with the Proposed Scheme (i.e. Ringsend Park (CBC0016BTH025) and 1-2 Seaview (CBC0016BTH027)), and two other structures of Medium Sensitivity were identified which front directly onto it (i.e. Pembroke Cottages (CBC0016BTH016) and 1-44 Pigeon House Road (CBC0016BTH019)). The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

Five further locations were identified where a structure of Low Sensitivity shares a boundary to the Proposed Scheme, or which fronts directly onto it, namely: 1-4 City Quay (CBC0016BTH013), Mission Hall (CBC0016BTH017), 12 York Road (CBC0016BTH018), 46-51 Pigeon House Road, Bayview Terrace (CBC0016BTH020), and 62-63 Pigeon House Road (CBC0016BTH037). The pre-mitigation Construction Phase impact will be Negative, Slight and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

16.5.1.5 Street Furniture

16.5.1.5.1 Lamp Posts

Two locations were identified where lamp posts of architectural heritage significance may be impacted by the Proposed Scheme:

- Twelve existing lamp-posts along Custom House Quay and North Wall Quay (CBC0016LP001) will be repositioned. There is the potential for damage during the taking down, transport, storage and reassembly of the lamps. The pre-mitigation Construction Phase impact will be Negative, Significant and Temporary. The architectural heritage specialist will oversee the recording of the lamp-posts in position prior to the works, the labelling of the affected fabric prior to its careful removal to safe storage, and their reinstatement in new positions by the appointed contractor. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from High to Low. The predicted residual impact will be Negative, Slight and Temporary; and
- The remaining identified lamp posts will be retained in position. There is the potential for these lamp-posts to be indirectly impacted, by damage during construction. The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring prior to, and during the Construction Phase. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A.16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

16.5.1.5.2 Paving and Surface Treatments

Three locations were identified where paving, or surface treatments of Medium Sensitivity may be indirectly impacted by the Proposed Scheme. These are paving on Custom House Quay (CBC0016BTH031), paving on City Quay (CBC0016BTH032) and paving in front of 30-32 Sir John Rogerson's Quay (CBC0016BTH034). The pre-mitigation Construction Phase impact will be Negative, Moderate and Temporary. The architectural heritage specialist will oversee the recording, protection and monitoring prior to, and during the Construction Phase. Works to historic fabric will be carried out by the appointed contractor in accordance with the methodology provided in Appendix A.16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, it is anticipated that the magnitude of impact would reduce from Medium to Negligible. The predicted residual impact will be Negative, Not Significant and Temporary.

16.5.1.6 Summary of Predicted Construction Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Table 16.17: Predicted Construction Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Section	Assessment Topic	Potential impact (Pre-Mitigation)	Predicted Residual Impact
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
		Indirect, Negative, Significant and Short-Term	Indirect, Negative, Significant and Short-Term
	DCC RPS 8829 Custom House Quay	Direct, Negative, Moderate and Long-Term	Direct, Negative, Slight and Long-Term
	NIAH 50010002 Famine Memorial	Direct, Negative, Significant and Temporary	Direct, Negative, Slight and Temporary
	DCC RPS 896 George's Dock Scherzer Bridges	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	DCC RPS 3173 George's Dock, side walls	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	DCC RPS 2094 CHQ - Stack A, Custom House Docks	Indirect, Negative, Significant and Temporary	Indirect, Negative, Not Significant and Temporary
	CBC0016LP001 12 Lamp posts, North Wall and Custom House Quay (relocated)	Direct, Negative, Significant and Temporary	Direct, Negative, Slight and Temporary
	CBC0016LP001 19 Lamp posts, North Wall and Custom House Quay (retained)	Indirect, Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary
	DCC RPS 912 Royal Canal Scherzer Bridges and	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	CBC0016BTH007 Sea Lock, Royal Canal	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	CBC0016BTH030 Narrow granite kerb stones Royal Canal Scherzer Bridges	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	Royal Canal Conservation Area	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
		Indirect, Negative, Moderate and Short-Term	Indirect, Negative, Moderate and Short-Term
	RMP DU018-020564 North Wall Quay (boardwalk at Excise Walk)	Indirect, Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary
	RMP DU018-020564 North Wall Quay	Direct, Negative, Significant and Permanent	Direct, Negative, Slight and Permanent
	CBC0016BTH029 Paving and embedded rails at the east end of North Wall Quay	Direct, Negative, Significant and Permanent	Direct, Negative, Slight and Permanent
	DU018-020201 Sir John Rogerson's Quay	Direct, Negative, Significant and Permanent	Direct, Negative, Slight and Permanent
	CBC0016BTH033 Paving and tramlines at east end Sir John Rogerson's Quay	Direct, Negative, Significant and Permanent	Direct, Negative, Slight and Permanent
	Dodder Valley and Grand Canal Conservation Area	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
Indirect, Negative, Moderate and Short-Term		Indirect, Negative, Moderate and Short-Term	
DCC RPS 8808 Britain Quay	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent	

Section	Assessment Topic	Potential impact (Pre-Mitigation)	Predicted Residual Impact
Tom Clarke East Link Bridge to Sean Moore Road	CBC0016BTH038 Quay Wall, Thorncastle Street	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
	DU018-066 Sea Wall, York Road	Direct, Negative, Moderate and Permanent	Direct, Negative, Slight and Permanent
Protected Structures within all Sections (See Appendix A16.2 and for feature identification)	Protected Structures (25 locations)	Indirect, Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary
NIAH Structures within all Sections (See Appendix A16.2 Table 16.9 for feature identification)	NIAH Structures (three locations)	Indirect, Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary
Other Structures within all Sections (See Appendix A16.2 and Table 16.11 for feature identification)	Other structures of Built-Heritage Interest (four locations)	Indirect, Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary
	Other structures of Built-Heritage Interest (five locations)	Indirect Negative, Slight and Temporary	Indirect, Negative, Not Significant and Temporary
Paving and Ground surface Treatments (See Appendix A16.2 and Table 16.14 for feature identification)	CBC0016BTH031, CBC0016BTH032 CBC0016BTH034 Paving and Surface Treatments (three locations)	Indirect Negative, Moderate and Temporary	Indirect, Negative, Not Significant and Temporary

16.5.2 Operational Phase

Mitigation measures, to mitigate the indirect Operational Phase impacts of the Proposed Scheme have been inherently included during the design development. These include an analysis of existing and proposed bus stops, bus shelters and signal pole locations to avoid impacting on the settings of identified sites, buildings and features. Given that no significant Operational Phase impacts are anticipated during the Operational Phase, no mitigation measures are required during the Operational Phase

16.5.2.1 Conservation Areas

There are three distinct character areas in the Conservation Area, all of which will be impacted during the Operational Phase of the Proposed Scheme.

The Liffey Quays Conservation Area will be impacted by the alterations to the quay side on the east sides of North Wall Quay and Sir John Rogerson's Quay. The alterations to the historic paving and the removal of tram rails to accommodate the proposed bus stops and cycle tracks will result in a loss of historic fabric that will have a negative impact. The construction of pedestrian boardwalks on Custom House Quay and North Wall Quay will obscure the upper part of the quay walls in these locations. The DPTOB across the mouth of the River Dodder will require removal of part of the historic fabric of Sir John Rogerson's Quay and will have a visual impact on the setting of the Conservation Area. The negative impact on the character of the Conservation Area will be reduced by the retention or reinstatement of existing paving and proposed new paving. The industrial character will also be maintained by the reinstatement and preservation of the Scherzer Bridges close to their existing locations. The new locations will reduce the risk of damage from passing traffic also. The proposed tree planting will have a positive impact on North Wall Quay and Sir John Rogerson's Quay, and on the setting of the protected structures which front onto the quays. These works will reduce the magnitude of impact to Low. The predicted residual impact will be Negative, Slight and Long-Term.

The proposed stone paving will have a positive impact on the Royal Canal Conservation Area as will the reinstatement of the Scherzer Bridges and proposed trees at the Convention Centre, and the proposed and retained trees between Excise Walk and the Samuel Beckett Bridge. These measures will reduce the magnitude of impact to Low. The predicted residual impact will be Negative, Slight and Long-Term.

The setting of the Dodder Valley and Grand Canal Conservation Areas will be impacted by the construction of the DPTOB across the mouth of the River Dodder, linking Sir John Rogerson’s Quay to Ringsend. The construction of the bridge will require the removal of a small section of the quay wall at Britain Quay. The land reclamation on the Ringsend side will obscure the historic fabric of the sea wall (DU018-066) on Thorncastle Street from view, but it will remain in-situ. As mentioned above, in relation to the directly adjoining Liffey Quays Conservation Area, the negative impact on the character of the Conservation Area will be reduced by the retention or reinstatement of existing paving and proposed new paving on Britain Quay. The proposed paving on the Ringsend side will integrate Thorncastle Street and York Road, continuing the landscaping from Britain Quay. These measures will reduce the magnitude of impact to Low. The predicted residual impact will be Negative, Slight and Long-Term.

16.5.2.2 Other Structures of Built Heritage Interest

Two locations were identified where another structure of built heritage interest will be impacted during the Operational Phase of the Proposed Scheme. Neither structure is protected, though both are recognised through inclusion in DCIHR.

The Royal Canal Sea Lock on Guild Street (CBC0016BTH007) will be impacted by the positioning of the fixed bridge over the canal. To facilitate a new carriageway bridge, the Scherzer Bridges will be relocated, the ground levels will be raised and existing winches, which are now defunct but formerly operated the lock, will be relocated close to their existing positions. The setting of the lock will be impacted by the repositioning of the Scherzer Bridges and by the changes in ground level. The impact will be mitigated by the reinstatement of key heritage features, albeit close to their current positions. The masonry side walls of the lock will also be repaired and restored where the Scherzer Bridges are removed, reducing the magnitude to Low. The predicted residual impact will be Negative, Slight and Long-Term.

16.5.2.3 Summary of Predicted Operation Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Table 16.18: Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Section	Assessment Topic	Predicted impact (pre-mitigation)	Predicted Residual Impact
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	Negative, Moderate and Long-Term	Negative, Slight and Long-Term
	Royal Canal Conservation Area	Negative, Moderate and Long-Term	Negative, Slight and Long-Term
	CBC0016BTH007 Sea Lock, Guild Street	Negative, Significant and Long-Term	Negative, Slight and Long-Term
	Dodder Valley and Grand Canal CA	Negative, Moderate and Long-Term	Negative, Slight and Long-Term

16.6 Residual Impacts

Residual impacts are described in the EPA Guidelines as the final or intended effects, or the ‘environmental costs’ that will occur after the proposed mitigation measures have been implemented or taken effect (EPA 2022).

16.6.1 Construction Phase

It is anticipated that there will be significant residual impacts at three locations as a result of the Construction Phase of the Proposed Scheme. They are described in Section 16.5.1 and summarised in Table 16.19.

Significant negative indirect impacts are anticipated on the Liffey Quays Conservation Area, Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Areas where the construction works will have an adverse visual impact during the Construction Phase. The extent, scale and nature of the construction work will have a high impact on the Conservation Areas though it is anticipated that this will be for the duration of the construction works only. The predicted residual Construction Phase impact will be Negative, Significant and Short-Term.

Table 16.19: Construction Phase Predicted Residual Impacts

Section	Assessment Topic	Predicted Residual Impact
Talbot Memorial Bridge to Tom Clarke East Link Bridge	Liffey Quays Conservation Area	Indirect, Negative, Significant and Short-Term
	Royal Canal Conservation Area	Indirect, Negative, Significant and Short-Term
	Dodder Valley and Grand Canal Conservation Area	Indirect, Negative, Significant and Short-Term

16.6.2 Operational Phase

There are no significant negative residual impacts anticipated during the Operational Phase of the Proposed Scheme.

16.7 References

- Archiseek (2020a) Architecture and Buildings of Co. Dublin [Online]. Available from <https://archiseek.com/category/buildings/ireland-buildings/leinster/dublin-buildings/>
- Archiseek (2020b) Dublin Street Lighting [Online]. Available from <https://archiseek.com/discussion/topic/dublin-street-lighting/>
- Ball, F.E. (1903), A history of County Dublin, Volume 2: Donnybrook, Booterstown, St. Bartholomew, St. Mark, Taney, St. Peter, and Rathfarnham. Printed at the University Press for the Royal Society of Antiquaries of Ireland, Dublin.
- Bence-Jones, M. (1988), A guide to Irish country houses, Rev. edn, Constable, London.
- Bennett, D. (2005). The Encyclopaedia of Dublin, Revised and expand edition, Gill & Macmillan, Dublin.
- Bielenberg A (1998) "Entrepreneurship, Power and Public Opinion in Ireland; The Career of William Martin Murphy", in *Chronicon 2*, no. 6: 1–35, Cork, Ireland,
- Brady, J. and Simms, A. (eds) 2001 Dublin through space and time (c. 900-1900). Dublin.
- Broadsheet (2019) Milestones [Online]. Available from broadsheet.ie/2019/04/01/milestones/
- Brooking, C. (1728). Map of the City and Suburbs of Dublin. Reproduced in Dublin Part 2, 1610 to 1756 (Irish Historic Towns Atlas, no. 19), 2008, Dublin, Royal Irish Academy. Map number 12
- Byron, S. (1782) 'A Plan of Dublin' printed for William Wilson in the gentleman's and citizen's almanack
- Campbell. T (1811) 'City of Dublin'
- Carrig Conservation Ltd & McMahon, M. (2011) Dublin Historic Industry Database, Geological Survey of Ireland
- Casey, C. (2005). Dublin: The City Within the Grand and Royal Canals and the Circular Road, with the Phoenix Park, Pevsner Architectural Guides: Buildings of Ireland Vol. 3. Yale University Press.
- Cassidy, L. (2020a) Built Dublin [Online]. Available from builtdublin.com
- Cassidy, L. (2020b) Shamrock lamp post, Cambridge Road, Rathmines, Dublin 6 [Online]. Available from <http://builtdublin.com/shamrock-lamp-post-cambridge-road-rathmines-dublin-6/>
- Cassidy, L. (2020c) Lamp post, College Street, Dublin 2 [Online]. Available from builtdublin.com/lamp-post-college-street-dublin-2/
- Church of Ireland (2020) Representative Church Body Library [Online]. Available online <https://www.ireland.anglican.org/about/rcb-library/catalogues>
- Clarke, H. B. (1978). Dublin c. 840 to c.1540, the medieval town in the modern city. Map prepared by Friends of Medieval Dublin.
- Clarke, H. B. (2002). Dublin: Part I, to 1610, Irish Historic Town Atlas , No. 11. Royal Irish Academy.
- Cooke, J. (1822). Cooke's royal map of Dublin. Reproduced in Dublin Part 3, 1756 to 1847 (Irish Historic Town Atlas, no. 26), 2014, Dublin, Royal Irish Academy. Map number 20 [Online]. Available from oldmapsonline.org/map/ntm/33920
- Corcoran, M. (2005) 'Our Good Health: A History of Dublin's Waste and Drainage' p.11-1, Dublin City Council and Four Courts Press
- Corcoran, M. (2008). Through streets broad and narrow: A history of Dublin trams. Ian Allen
- Cornwall, S. (2020a) Public Lighting Installations [Online]. Available from simoncornwell.com/lighting/install/index.htm
- Cornwall, S. (2020b) Public Lighting Installations: The Dublin Collection [Online]. Available from simoncornwell.com/lighting/install/dublin1/index.htm
- De Courcy, J. W. 1996 The Liffey in Dublin. Dublin
- De Gomme. B (1673) City and Suburbs of Dublin from Kilmainham to Ringsend
- Dean, J.A.K. (2016). The Gate Lodges of Leinster: a gazetteer. Wordwell

- DeGomme, B. (1673). The City and Suburbs of Dublin from Kilmainham to Ringsend. Reproduced in Dublin Part 2, 1610 to 1756 (Irish Historic Towns Atlas, no. 19), 2008, Dublin, Royal Irish Academy. Map number 6
- Department of Defence and Irish Defence Forces (2020) Military Archives Maps, Plans & Drawings, image database and Air Corps Aerial Photographic collections [Online]. Available from mpdsearch.militaryarchives.ie
- Dineley, T. (1681) Map of Dublin
- Dublin City Council (DCC) (2003 to 2009) Dublin City Industrial Heritage Record. Dublin City Council. [Online]. Available online from heritagemaps.ie/WebApps/DublinCountyHeritage/index.html
- DCC (2009) Historic Street Surfaces Study
- DCC (2012) 'Your City Your Space: Dublin City Public Realm Strategy'
- DCC (2015) Luas cross city heritage works Information Newsletter.
- DCC (2019). 'How many miles to', Dublin City Council Libraries and Archives blog entry on Milestones [Online]. Available from dublincity.ie/story/how-many-miles
- DCC (2020) Dublin City Archives Collections [Online]. Available from dublincity.ie/main-menu-services-recreation-culture-dublin-city-public-libraries-and-archive-heritage-and-histo-39
- DCC (2022) The Dublin City Development Plan 2022-2028, Dublin City Council
- Dublin City Paving Board: Minute Books, vol. 1 and 2 (1774 -1776), Dublin City Archive: PB/Mins/1.
- Dublin Civic Trust (2004) Inventory of Historic Street Paving and Furniture. Dublin Civic Trust.
- Dublin Civic Trust (2012) Survey of Gable-Fronted Houses and Other Early Buildings of Dublin City. Dublin Civic Trust.
- Dublin Inquirer (2020) Some of the Milestones in the Dublin Area [Online]. Available from [google.com/maps/d/u/0/viewer?mid=1rYxTdw4QIY_65EhMGTZvYXGJkeDDi3M4&ll=53.33572294843232%2C-6.302291666666637&z=11](https://www.google.com/maps/d/u/0/viewer?mid=1rYxTdw4QIY_65EhMGTZvYXGJkeDDi3M4&ll=53.33572294843232%2C-6.302291666666637&z=11)
- Dublin Port Company (2020) Dublin Port Archives [Online]. Available from <https://dublinportarchive.com>
- Dublin Public Libraries (1988), Some Eminent Dubliners, Dublin Corporation Public Libraries, Dublin.
- Dublin Public Libraries (2020a) Coalhole Covers [Online]. Available from <http://www.askaboutireland.ie/reading-room/history-heritage/architecture/historic-architectural-fe/coalhole-covers/>
- Dublin Public Libraries (2020b) Sewer Vents [Online]. Available from <http://www.askaboutireland.ie/reading-room/history-heritage/architecture/historic-architectural-fe/sewer-vents/>
- Dúchas, the Heritage Service (1998) Record of Monuments and Places manuals and maps for County Dublin. Archaeological Survey of Ireland.
- Duncan, W. (1821). 'Map of the County of Dublin' [Online]. Available from sdblincoco.maps.arcgis.com/apps/webappviewer/index.html?id=e0c5595b033341dea7661e248d2e9ee9//
- Faden, W (1797) A Plan of the City of Dublin
- Ferguson, S. (2009). The Irish Post Box: Silent servant and Symbol of the State. An Post
- Fiontar, Dublin City University, and Department of Culture, Heritage and the Gaeltacht (2020) Placenames Database of Ireland created by [Online]. Available from logainm.ie/en/
- Galavan, S. (2017) Dublin's bourgeois homes: building the Victorian suburbs, 1850 to 1901, 1st edn, Routledge, London.
- Goodbody, R. (2014). Dublin, part III, 1756 to 1847 Irish Historic Town Atlas, No. 26. Royal Irish Academy
- Google (2020) Google aerial and Street View mapping [Online]. Available from <https://www.google.ie/maps/@53.3058879,-6.206626,14z?hl=en-GB>
- Government of Ireland (2022). The Heritage Ireland 2030 (Plan). Available from: <https://www.gov.ie/en/publication/778b8-heritage-ireland-2030/>
- Griffith, R. (1850 to 1854) Primary Valuation of Rateable Property in Ireland County and town maps of Dublin [Online]. Available from <http://www.askaboutireland.ie/griffith-valuation/index.xml?action=placeSearch>

- Gwynn, A. and Handcock, R. N. (1998). *Medieval Religious Houses, Ireland*. Irish Academic Press.
- Healy, E., O'Flaherty, G. & Moriarty, C. (1988) *The Book of the Liffey: from source to the sea*, Wolfhound, Dublin.
- Henderson, A. Q (2020) *History, Art & Architecture, Dublin & abroad* [Online]. Available from arranqhenderson.com
- Herbert, L. (1836) *The Engineer's and Mechanic's Encyclopaedia*
- Hone, J. M., Fewer, M., & Craig, M. J. (2002). *The new neighbourhood of Dublin*, A & A Farmar, Dublin.
- Irish Architectural Archive (IAA) (2020a) *Dictionary of Irish Architects* [Online]. Available from www.dia.ie
- IAA (2020b) *The Irish Architectural Archive Catalogue Architects* [Online]. Available from <http://iarc.cloudapp.net>
- Irish Railway Record Society (IRRS)(2020) *The Archives of the Irish Railway Record Society Archive* [Online]. Available online from <http://irishrailarchives.ie/archives/>
- Joyce, P.W., 1913. *Irish Names of Places*.
- Joyce, W. S. J. (1912). *The neighbourhood of Dublin*. Dublin: Hughes & Hughes. Reprinted Hughes & Hughes
- Kelly, T. & Carden, S. 2013, *The streets of Dublin 1910 to 1911: Alderman Thomas Kelly*; edited by Sheila Carden ; illustrations by David Rowe, Dublin Civic Trust, Dublin.
- Keogh, D (1998). *Jews in Twentieth-century Ireland*.
- Killanin, Lord. & Duignan, M.V., 1989. *The Shell Guide to Ireland*. Edbury Press, London.
- Lennon, C., & Simms, A. (2008). *Dublin part II, 1610 to 1756*, Irish Historic Town Atlas, No. 19. Royal Irish Academy
- Lewis, S., 1937. *A Topographical Dictionary of Ireland*. 2 Vols. Lewis & Co., London.
- London Illustrated News, (1846) 'City of Dublin'
- M'Cready, C.T. (1892), *Dublin street names: dated and explained*, Carraig Books, Blackrock, Co. Dublin, republished 1987
- Maguire, J. (2018). *Brushing Up: Road Signs from a Horse-Drawn Era*, Dublin Inquirer, 30th May 2018 [Online]. Available from dublininquirer.com/2018/05/30/brushing-up-road-signs-from-a-horse-drawn-era
- McCormack, J. (2000), *A Story of Dublin*, Mentor Books
- McCullough, N. (1989) *Dublin, an Urban History*
- Mulvaney, A. (2019) *Double Take: The redundant Dublin plaques that once held a very important role*, The Journal [Online]. Available from thejournal.ie/gpo-milestone-markers-4460111-Jan2019/
- National Archives of Ireland (2020) *National Archives of Ireland Catalogue* [Online]. Available online <https://www.nationalarchives.ie>
- National Folklore Archives (2020) *Manuscript, Schools and Photographic Collections* [Online]. Available from <https://www.duchas.ie/en>
- National Inventory of Architectural Heritage (NIAH) (2020a) *Built Heritage Survey*, Department of Culture Heritage and the Gaeltacht [Online]. Available online from webgis.archaeology.ie/historicenvironment/
- NIAH (2020b) *Garden Survey*, Department of Culture Heritage and the Gaeltacht [Online]. Available online from buildingsofireland.ie/buildings-search/
- NIAH (2020c) *Garden Survey Resources*, Department of Culture Heritage and the Gaeltacht [Online]. Available from buildingsofireland.ie/resources/
- National Library of Ireland (NLI 2020) *National Library of Ireland Online Catalogue* [Online]. Available online from <http://catalogue.nli.ie>
- National Monuments Service (NMS) (2009) *National Monuments in State Care: Ownership & Guardianship for County Dublin*, 4th March 2009, National Monuments Service, Department of Environment, Heritage and Local Government.

- NMS (2019) Preservation Orders June 2019, National Monuments Service, Department of Culture Heritage and the Gaeltacht
- NMS (2020a) Archaeological Survey of Ireland Sites and Monuments Record Database [Online]. Available online from webgis.archaeology.ie/historicenvironment/
- NMS (2020b) National Monuments Archive Unit, *National Monuments Service, Department of Housing, Local Government and Heritage, Custom House Dublin*
- Neylon, L. (2020) As Dublin's Historic Street Lamps Disappear, Some Worry the City Is Losing Its Character, *Dublin Inquirer*, 1st July 2020 [Online]. Available from <https://dublininquirer.com/2020/07/01/as-dublin-s-historic-street-lamps-disappear-some-worry-the-city-is-losing-its-character>
- O'Connell, D. (1975). *The Antique Pavement: an illustrated guide to Dublin's Street Furniture*. An Taisce
- O'Donovan, J., O'Curry, E., Herity, M., & Ordnance Survey Ireland (2001). *Ordnance Survey letters Dublin: Letters containing information relative to the antiquities of the County of Dublin collected during the progress of the Ordnance Survey in 1837*. Dublin: Four Masters Press.
- O'Mahony, E. (2015) 'Religious and secular places: understanding the changing geographies of religion in Ireland', thesis submitted in fulfilment of the requirements of the Ph.D. degree, Department of Geography, Faculty of Social Sciences, National University of Ireland Maynooth
- Open Street Map Ireland (2020) Irish Townlands [Online]. Available from www.townlands.ie
- Ordnance Survey Ireland (OSI) (1843-1844) The first edition 6 inch (1:10,560) Ordnance Survey Map of Dublin, published between 1843 and 1844 [Online]. Available from map.geohive.ie/mapviewer.html
- OSI (1847) The Ordnance Survey 1:1056 Map of City of Dublin, published 1847 [Online]. Available from <https://digital.ucd.ie/maps/explorer/>
- OSI (1864 - 1890) The Ordnance Survey second edition 1:1056 maps of the of Co. Dublin, published between 1860s - 1890s [Online]. Available from <https://digital.ucd.ie/maps/explorer/>
- OSI (1909- 1911) The Ordnance Survey third edition 25-inch (1:2,500) maps of Co. Dublin published between 1909 and 1911 [Online]. Available from map.geohive.ie/mapviewer.html
- OSI (1940-1961) The Ordnance Survey fourth edition 6 inch (1:10,560) maps of Co. Dublin published between 1940 and 1961 [Online]. Available from map.geohive.ie/mapviewer.html
- OSI (1940-1961) The Ordnance Survey fourth edition 6 inch (1:10,560) maps of Co. Dublin published between 1940 and 1961 [Online]. Available from map.geohive.ie/mapviewer.html
- OSI (2020a). Historical maps and aerial imagery [Online]. Available from map.geohive.ie/mapviewer.html
- OSI (2020b). National Townland and Historical Map Viewer [Online]. Available from geohive.maps.arcgis.com/apps/webappviewer/index.html?id=9def898f708b47f19a8d8b7088a100c4
- Pavía, S., & Bolton, J. (2000). *Stone, brick and mortar: historical use, decay and conservation of building materials in Ireland*.
- Pearse Street Library: Dublin City Paving Board: Minute Books, vol. 1. PB/Mins/1. 6 June 1774- 26 Jan 1776,
- Pearse Street Library: Dublin City Paving Board: Minute Books, vol. 2. PB/Mins/1. 2 Feb 1776 – 20 December 1776
- Pearson, P. (2000) *The Heart of Dublin: resurgence of an Historic City*
- Peel, L. (2020) Dublin's Coal Holes and Coal Cellars, September 27, 2020 [Online]. Available from <https://lornapeel.com/2020/09/27/coal/>
- Pegum, M. (2020). Irish War Memorials [Online]. Available from www.irishwarmemorials.ie
- Permanent Delegation of Ireland to the OECD and UNESCO (2010) UNESCO World Heritage Site Tentative List: The Historic City of Dublin [Online]. Available from <https://whc.unesco.org/en/tentativelists/5523/>
- Petty, W. (1655–56) Down Survey County Barony and Parish maps of the County of Dublin [Online]. Available from <http://downsurvey.tcd.ie/down-survey-maps.php>
- Phillips, T. (1685). *Exact survey of the City of Dublin and part of the Harbour*. Reproduced in *Dublin Part 2, 1610 to 1756 (Irish Historic Towns Atlas, no. 19)*, 2008, Dublin, Royal Irish Academy. Map number 10

Pool, R. and Cash, J. (1780). A plan of Dublin. Printed in Pool and Cash's Views of the most remarkable public buildings, monuments and other edifices in the city of Dublin [Online]. Available from archive.org/stream/viewsofmostremar00pool#page/n5/mode/2up

Roberts T.S (1817) watercolour of the Customs House

Rocque, J. (1756). An exact survey of the city and suburbs of Dublin. Reproduced on a single sheet in Dublin Part 2, 1610 to 1756 (Irish Historic Towns Atlas, no. 19), 2008, Dublin, Royal Irish Academy. Map number 16 [Online]. Available from heritagemaps.ie/WebApps/DublinCountyHeritage/index.html

Rocque, J. (1760). 'An actual survey of the County of Dublin' [Online]. Available from <http://sdublincoco.maps.arcgis.com/apps/webappviewer/index.html?id=e0c5595b033341dea7661e248d2e9ee9/>

Rocque, J. and Scalé, B (1773). An Accurate Survey of the City and Suburbs of Dublin / by Mr. Rocque with Additions, and Improvements by Mr Bernard Scalé [Online]. Available from gallica.bnf.fr/ark:/12148/btv1b53119647z.r=rocque%20dublin

Rothery, S. (1991). Ireland and the new architecture, 1900 to 1940, Lilliput Press, Dublin.

Rowley, E. (2019). Housing, architecture and the edge condition: Dublin is building, 1935 to 1975, 1st edn, Routledge, London.

Rynne, C. (2006) Industrial Ireland 1750 to 1930: An Archaeology. Cork: The Collins Press.

Sheridan, E. 2001 'Designing the capital city, Dublin c. 1660-1810'. In Brady, J. and Simms, A. (eds) Dublin through space and time (c.900-1900). Dublin.

Simington, Robert C. (1945) The Civil Survey A.D. 1654-56 Vol VII, County of Dublin, Dublin: The Stationery Office,

Smith (1846). 'City of Dublin' published with the Illustrated London News. Reproduced in Dublin Part 3, 1756 to 1847 (Irish Historic Town Atlas, no. 26), 2014, Dublin, Royal Irish Academy. Plate number 10 [Online]. Available from collections.lib.uwm.edu/digital/collection/agdm/id/20582/

South Dublin County Council (SDCC) (2020a) South Dublin Historical Mapping: Mapping South Dublin County in Time [Online]. Available from sdublincoco.maps.arcgis.com/apps/webappviewer/index.html?id=e0c5595b033341dea7661e248d2e9ee9/

SDCC (2020b) Source digital archive of local studies material relating to South Dublin County, [Online]. Available from <http://source.southdublinlibraries.ie>

SDCC (2020c) South Dublin County Public Art [Online]. Available from <http://www.southdublin.ie/artsworks/index.aspx>

Speed, J. (1610a) Map of Dublin [Online]. Available from commons.wikimedia.org/wiki/File:Dublin_in_1610_-_reprint_of_1896.jpg

Speed, J. (1610b) Map of the Province of Leinster and Munster [Online]. Available from ptfs-oireachtas.s3.amazonaws.com/DriveF/Data/Library3/Library1/DCA00103.pdf

Stiff, N. (2020). Dublin Street Lamps [Online]. Available from normanstiff.com/streetgaslamps.html

Taylor, G. and Skinner, A. (1777). Maps of the Roads of Ireland, surveyed 1777 [Online]. Available from swilson.info/tands1777.php

Taylor, J. (1816). 'Map of the environs of Dublin, extending 10 to 14 miles from the Castle'. [Online]. Available from digitalarchive.mcmaster.ca/islandora/object/macrepo%3A81283

Thacker, A (2003). 'Moving Through Modernity: Space and Geography in Modernism', Manchester University Press

Trinity College Dublin (2020) Digital Collections, The Library of Trinity College Dublin [Online]. Available from digitalcollections.tcd.ie/?locale=en

Trinity Haus (2012) Shared Space, Shared Surfaces and Home Zones from a Universal Design Approach for the Urban Environment in Ireland: Key Findings & Recommendations.

University College Dublin (UCD) (2020). OSI 19th century historical maps [Online]. Available online from digital.ucd.ie/maps.

Valuation Office (2020) Archives and Genealogy section of the Valuation Office[Online]. Available online from <https://www.valoff.ie/en/archive-research/>

Warburton, Whitelaw and Walsh (1818). Plan of Dublin [Online]. Available from archive.org/stream/historyofcityofd02warb#page/n5/mode/1up

Williams, J. (1994). A Companion Guide to Architecture in Ireland 1837 to 1921

Wilson, P. (1760) A new plan of Dublin [Online]. Reproduced in Dublin Part 3, 1756 to 1847 (Irish Historic Town Atlas, no. 26), 2014, Dublin, Royal Irish Academy. Map number 6

Wilson, P. (1767) A new plan of Dublin [Online]. Available from dublincity.ie/image/libraries/hm08-1767

Wilson, P. (1800). New Plan of the City of Dublin [Online]. Available from collections.lib.uwm.edu/digital/collection/agdm/id/1268/rec/60

Wilson, S. (2020) Milestones and Boundary Markers, South Co. Dublin [Online]. Available from swilson.info/omaps/mstones.php

Wilson, W. M. (1798) Modern plan of the City and Environs of Dublin [Online]. Available from <http://dublin1798.com>

Policy and Guidelines

Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999

Chartered Institute for Archaeologists (CIfA) (2014a) Standards & Guidance for Desk Based Assessments.

CIfA (2014b) Standards & Guidance for Field Evaluation.

Council of Europe (1985). Convention for the Protection of the Architectural Heritage of Europe (ratified by Ireland 1997), 'Granada Convention'.

Council of Europe (1992). European Convention on the Protection of the Archaeological Heritage (ratified by Ireland 1992), 'Valetta Convention'.

Council, of Europe. (2000). European landscape convention. US/ICOMOS Scientific Journal, 2, 88-92.

Council of Europe (2005). Framework Convention on the Value of Cultural Heritage for Society, 'Faro Convention'.

Department of Arts Heritage the Gaeltacht (DAHG) (2011a) Architectural Heritage Protection: Guidelines for Planning Authorities.

DAHG (2011b) Access: Improving the accessibility of historic buildings and places.

DAHG (2012) Shaping the Future to Case Studies in. Adaptation and Reuse in Historic Urban Environments.

DAHG (2015) Paving; The Conservation of Historic Ground Surfaces

Heritage Protection: Guidelines for Planning Authorities.

Department of Arts Heritage the Gaeltacht and the Islands (DAHGI) (1999) The Framework and Principles for the Protection of the Archaeological Heritage guidelines.

Department of the Environment, Heritage and Local Government (DEHLG) (2002) Conservation Guidelines PL. 9: Paving and Street Furniture

DEHLG (2007) Maintenance: A Guide to the Care of Older Buildings

DEHLG (2009a) Bricks: A Guide to the Repair of Historic Brickwork

DEHLG (2009b) Iron: the Repair of Wrought and Cast Ironwork

Department of Housing Planning and Local Government (DHPLG) (2018a) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.

DHPLG (2018b) Circular Letter: PL 05/2018 Transposition into Planning Law of Directive 2014/52/EU

DHPLG (2018c) Project Ireland 2040: The National Planning Framework.

DHPLG, (2018b) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.

DHPLG and Department of Transport, Tourism and Sport (DTTAS) (2019) The Design Manual for Urban Roads and Streets.

Department for Transport UK (2007) "Manual for Streets"

Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Directive 92/43/EEC of the 21 May 1992 on the conservation of natural habitats and wild flora and fauna (Habitats Directive)

Directive 2011/92/EU of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

Directive 2014/52/EU of 16 April 2014 on the assessment of the effects of certain public and private projects on the environment

Dublin City Council (DCC) (2009) Historic Street Surfaces Study

DCC (2012) 'Your City Your Space: Dublin City Public Realm Strategy'

DCC (2014) Public Realm Masterplan for the North Lotts & Grand Canal Dock SDZ

DCC (2015) Luas cross city heritage works Information Newsletter.

DCC (2016b) The Heart of Dublin: City Centre Public Realm Masterplan, June 2016

DCC (2022) The Dublin City Development Plan 2022 - 2028, Dublin City Council

Eastern and Midlands Regional Assembly (EMRA) (2019) Regional Spatial and Economic Strategy (RSES) 2019 to 2031 (EMRA 2019)

Environmental Protection Agency (EPA) (2002) Guidelines on the information to be contained in Environmental Impact Statements.

EPA (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports. May 2022

European Commission (1990). Green Paper on the Urban Environment (Vol. 12902). Office for Official Publications of the Commission of the European Communities.

European Commission (2017) Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impacts Assessment Report

European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. 296 of 2018)

Heritage Act, 1995, (as amended)

Historic England (2008) Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment.

Historic England (2015) Historic Environment Good Practice Advice in Planning: 2 Managing Significance in

Historic England (2017). The Setting of Heritage Assets. Historic Environment Good Practice Advice in Planning No. 3 (Second Edition). Historic England.

Historic England (2018) Streets for All; Advice for Highway and Public Realm Works in Historic Places'.

Historic England (2019) Statement of Heritage Significance: Analysing Significance in Heritage Assets Historic England Advice Note 12. Swindon. Historic England.

Historic Environment Scotland (2005) Environmental Impact Assessment Handbook Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment process in Scotland, April 2018

Historic Environment Scotland (2016) Managing Change in the Historic Environment; Setting

Historic Environment Scotland and Nature Scot (2020) Guidance on Designating Local Landscape Areas.

International Council of Monuments and Sites (ICOMOS) (1964) International Charter for the Conservation And Restoration Of Monuments And Sites (The Venice Charter)

- ICOMOS (1981) Historic Gardens-The Florence Charter, 1981
- ICOMOS (1999a) Charter on the Built Vernacular Heritage
- ICOMOS (1999b) International Cultural Tourism Charter, Managing Tourism at Places of Heritage Significance.
- ICOMOS (2005) Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas.
- ICOMOS (2008) Charter on Cultural Routes.
- ICOMOS (2011) The Valetta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas
- ICOMOS (2017a) Salalah guidelines for the management of public archaeological sites, 2017.
- ICOMOS (2017b) Document on Historic Urban Public Parks.
- ICOMOS and the International Committee for the Conservation of the Industrial Heritage (TICCIH) (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes (also known as the Dublin Principles)
- ICOMOS, Australia (1990). The ICOMOS Charter for the Protection and Management of the Archaeological Heritage
- ICOMOS, Australia (2008). The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (also known as the 'Ename Charter') International Journal of Cultural Property, 15, 377-383.
- ICOMOS, Australia (2008). The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (also known as the 'Ename Charter') International Journal of Cultural Property, 15, 377-383.
- ICOMOS, United States (1987) Charters for The Conservation of Historic Towns and Urban Areas, Washington Charter– 1987
- Local Government (Planning and Development) Act 2000 (as amended)
- McLoughlin, R. and DAHG (2015). Paving: the conservation of historic ground surfaces. Department of Arts Heritage the Gaeltacht advice series, The Stationery Office.
- National Inventory of Architectural Heritage (NIAH) (2017) NIAH Handbook, September 2017, Department of Culture Heritage and the Gaeltacht.
- NIAH (2020c) Garden Survey Resources, Department of Culture Heritage and the Gaeltacht [Online]. Available from buildingsofireland.ie/resources/
- National Monuments Acts 1930 to 2014
- National Roads Authority (NRA) (2005a) Guidelines for the Assessment of Architectural Heritage Impacts of National Road Schemes
- NRA (2005b) Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes
- National Transport Authority (NTA) (2020) Proposed Approach to Environmental Assessment
- Planning and Development Regulations 2001 (as amended)
- United Nations Educational Scientific and Cultural Organization (UNESCO) (1972) Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris 1972.