

25

Archaeology and Cultural Heritage

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List of Abbreviations

Abbreviation	Definition
AAP	Areas of Archaeological Potential
ACA	Architectural Conservation Area
CA	Conservation Area
DANP	Dublin Airport North Portal
DASP	Dublin Airport South Portal
DCAA	Dublin City Archaeological Archive
DCC	Dublin City Council
DCIHR	Dublin City Industrial Heritage Record
DECLG	Department of the Environment, Community and Local Government
DHLGH	Department of Housing, Local Government and Heritage
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
FC	Football Club
FCC	Fingal County Council
GAA	Gaelic Athletic Association
GIS	Gas Insulated Substations
GPO	General Post Office
GPR	Ground Penetrating Radar
GSWR	Great Southern and Western Railway
ICOMOS	International Council on Monuments and Sites
LAP	Local Area Plan
LCC	Luas Cross City
LOD	Limits of Deviation
MGWR	Midland Great Western Railway
MHLGH	Minister for Housing, Local Government and Heritage
MSAG	Moore Street Advisory Group
NIAH	National Inventory of Architectural Heritage
NMI	National Museum of Ireland
NMS	National Monuments Service
NRA	National Road Authority
OCC	Operational Control Centre
OHLE	Overhead Line Electricity
OMN	Old Metro North
OPW	Office of Public Works
OS	Ordnance Survey
PCA	Project Conservation Architect
PO	Preservation Order
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
SMR	Site and Monuments Record
TBM	Tunnel Boring Machine

Abbreviation	Definition
TCD	Trinity College Dublin
TICCIH	The International Committee for the Conservation of the Industrial Heritage
TII	Transport Infrastructure Ireland
UNESCO	United Nations Educational, Scientific and Cultural Organization
ZAP	Zone of Archaeological Potential
ZON	Zone of Notification

25. Archaeology and Cultural Heritage

25.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) assesses the impact of the MetroLink Project (hereafter referred to as the proposed Project), on Archaeology and Cultural Heritage during the Construction Phase and Operational Phase.

This Chapter describes and assesses the likely direct and indirect significant effects of the proposed Project on Archaeology and Cultural Heritage, in accordance with the requirements of 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 (i.e. the EIA Directive) (European Union, 2014a). This Chapter also provides a characterisation of the receiving environment within the proposed Project and within a wider study area in the vicinity of the proposed Project.

This Chapter should be read in conjunction with the following Chapters, and their Appendices, which present related impacts arising from the proposed Project and proposed mitigation measures to ameliorate the predicted impacts:

- Chapter 14 (Groundborne Noise & Vibration);
- Chapter 15 (Biodiversity);
- Chapter 18 (Hydrology);
- Chapter 22 (Infrastructure & Utilities);
- Chapter 26 (Architectural Heritage); and
- Chapter 27 (Landscape & Visual).

The assessment is based on identifying and describing the likely significant effects arising from the proposed Project as described in Chapters 4 to 6 of this EIAR. The proposed Project description is based on the design prepared to inform the planning stage of the project and to allow for a robust assessment as part of the Environmental Impact Assessment (EIA) Process.

Where it is required to make assumptions as the basis of the assessment presented here, these assumptions are based on advice from competent project designers and are clearly outlined within the Chapter.

Limits of deviation have been set for the proposed Project and this is addressed in the Wider Effects Report annexed at Appendix A5.19.

25.2 Outline Project Description

25.2.1 Overview of the Proposed Project

A full description of the proposed Project is provided in the following chapters of this EIAR:

- Chapter 4 (Description of the MetroLink Project);
- Chapter 5 (MetroLink Construction Phase); and
- Chapter 6 (MetroLink Operations & Maintenance).

Table 25.1 presents an outline description of the key proposed Project elements which are appraised in this Chapter. Diagram 25.1 presents an outline of the main elements of the proposed Construction Phase that are appraised in this Chapter and Diagram 25.2 presents an outline of the main elements of the Operational Phase of the proposed Project that are appraised in this Chapter.

Table 25.1: Outline Description of the Principal Project Elements

Project Elements	Outline Description
Permanent Project Elements	
Tunnels	<p>It is proposed to construct two geographically separate, single-bore tunnels, using a Tunnel Boring Machine (TBM). Each section of tunnel will have an 8.5m inside diameter and will contain both northbound and southbound rail lines within the same tunnel. These tunnels will be located as follows:</p> <ul style="list-style-type: none"> ▪ The Airport Tunnel: running south from Dublin Airport North Portal (DANP) under Dublin Airport and surfacing south of the airport at Dublin Airport South Portal (DASP) and will be approximately 2.3km in length; and ▪ The City Tunnel: running for 9.4km from Northwood Portal and terminating underground south of Charlemont Station.
Cut Sections	<p>The northern section of the alignment is characterised by a shallow excavated alignment whereby the alignment runs below the existing ground level. Part of the cut sections are open at the top, with fences along the alignment for safety and security. While other sections are "cut and cover", whereby the alignment is covered.</p>
Tunnel Portals	<p>The openings at the end of the tunnel are referred to as portals. They are concrete and steel structures designed to provide the commencement or termination of a tunnelled section of route and provide a transition to adjacent lengths of the route which may be in retained structures or at the surface.</p> <p>There are three proposed portals, which are:</p> <ul style="list-style-type: none"> ▪ DANP; ▪ DASP; and ▪ Northwood Portal. <p>There will be no portal at the southern end of the proposed Project, as the southern termination and turnback would be underground.</p>
Stations	<p>There are three types of stations: surface stations, retained cut stations and underground stations:</p> <ul style="list-style-type: none"> ▪ Estuary Station will be built at surface level, known as a 'surface station'; ▪ Seatown, Swords Central, Fosterstown Stations and the proposed Dardistown Station will be in retained cutting, known as 'retained cut stations'; and ▪ Dublin Airport Station and all 10 stations along the City Tunnel will be 'underground stations'.
Intervention Shaft	<p>An intervention shaft will be required at Albert College Park to provide adequate emergency egress from the City Tunnel and to support tunnel ventilation. Following the European Standard for safety in railway tunnels TSI 1303/2014: Technical Specification for Interoperability relating to 'safety in railway tunnels' of the rail system of the European Union, it has been recommended that the maximum spacing between emergency exits is 1,000m.</p> <p>As the distance between Collins Avenue and Griffith Park is 1,494m, this intervention shaft is proposed to safely support evacuation/emergency service access in the event of an incident. This shaft will also function to provide ventilation to the tunnel. The shaft will require two 23m long connection tunnels extending from the shaft, connecting to the main tunnel.</p> <p>At other locations, emergency access will be incorporated into the stations and portals, or intervention tunnels will be utilised at locations where there is no available space for a shaft to be constructed and located where required (see below).</p>
Intervention Tunnels	<p>In addition to the two main 'running' tunnels, there are three shorter, smaller diameter tunnels. These are the evacuation and ventilation tunnels (known as Intervention Tunnels):</p> <ul style="list-style-type: none"> ▪ Airport Intervention Tunnels: parallel to the Airport Tunnel, there will also be two smaller diameter tunnels; on the west side, an evacuation tunnel running northwards from DASP for about 315m, and on the east side, a ventilation tunnel connected to the main tunnel and extending about 600m from DASP underneath Dublin Airport Lands. In the event of an incident in the main tunnel, the evacuation tunnel will enable passengers to walk out to a safe location outside the Dublin Airport Lands. ▪ Charlemont Intervention Tunnel: The City Tunnel will extend 360m south of Charlemont Station. A parallel evacuation and ventilation tunnel is required from the end of the City

Project Elements	Outline Description
	Tunnel back to Charlemont Station to support emergency evacuation of maintenance staff and ventilation for this section of tunnel.
Park and Ride Facility	The proposed Park and Ride Facility next to Estuary Station will include provision for up to 3,000 parking spaces.
Broadmeadow and Ward River Viaduct	A 260m long viaduct is proposed between Estuary and Seatown Stations, to cross the Broadmeadow and Ward Rivers and their floodplains.
Proposed Grid Connections	Grid connections will be provided via cable routes with the addition of new 110kV substations at DANP and Dardistown. (Approval for the proposed grid connections to be applied for separately but are assessed in the EIAR).
Dardistown Depot	<p>A maintenance depot will be located at Dardistown. It will include:</p> <ul style="list-style-type: none"> ▪ Vehicle stabling; ▪ Maintenance workshops and pits; ▪ Automatic vehicle wash facilities; ▪ A test track; ▪ Sanding system for rolling stock; ▪ The Operations Control Centre for the proposed Project; ▪ A substation; ▪ A mast; and ▪ Other staff facilities and a carpark.
Operations Control Centre	The main Operations Control Centre (OCC) will be located at Dardistown Depot and a back-up OCC will be provided at Estuary.
M50 Viaduct	A 100m long viaduct to carry the proposed Project across the M50 between the Dardistown Depot and Northwood Station.
Temporary Project Elements	
Construction Compounds	There will be 34 Construction Compounds including 20 main Construction Compounds, 14 Satellite Construction Compounds required during the Construction Phase of the proposed Project. The main Construction Compounds will be located at each of the proposed station locations, the portal locations and the Dardistown Depot Location (also covering the Dardistown Station) with satellite compounds located at other locations along the alignment. Outside of the Construction Compounds there will be works areas and sites associated with the construction of all elements of the proposed Project, including an easement strip along the surface sections.
Logistics Sites	The main logistics sites will be located at Estuary, near Pinnock Hill east of the R132 Swords Bypass and north of Saint Margaret's Road at the Northwood Compound. (These areas are included within the 14 Satellite Construction Compounds).
Tunnel Boring Machine Launch Site	There will be two main tunnel boring machine (TBM) launch sites. One will be located at DASP which will serve the TBM boring the Airport Tunnel and the second will be located at the Northwood Construction Compound which will serve the TBM boring the City Tunnel.

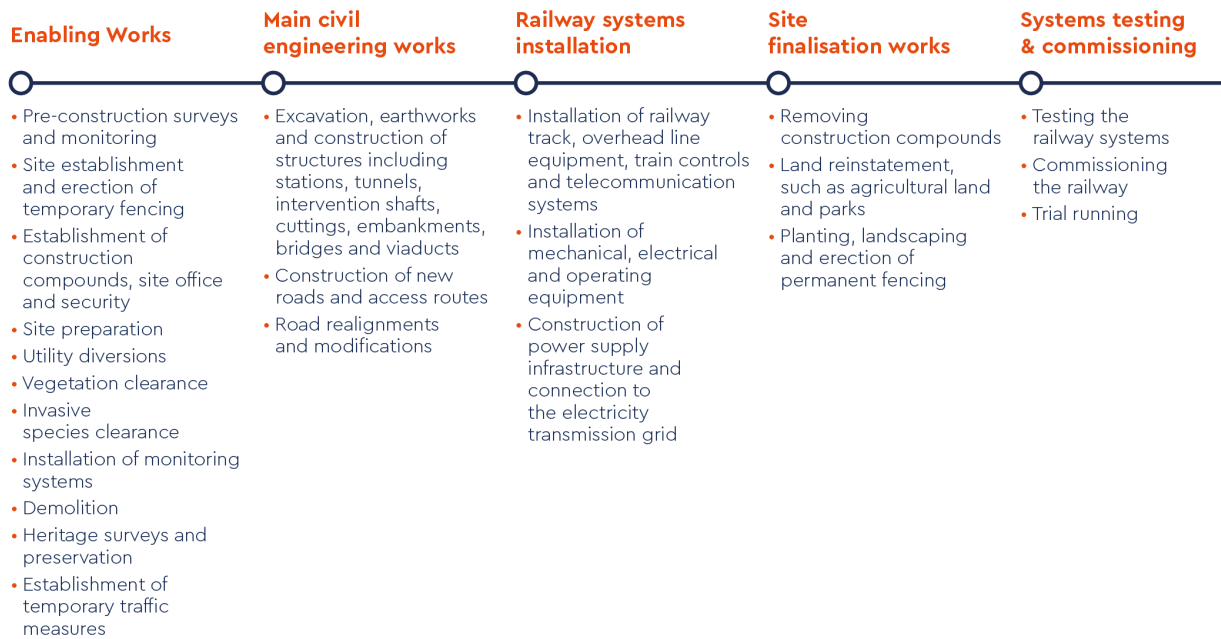


Diagram 25.1 Summary of Key Activities during the Construction Phase of the Proposed Project

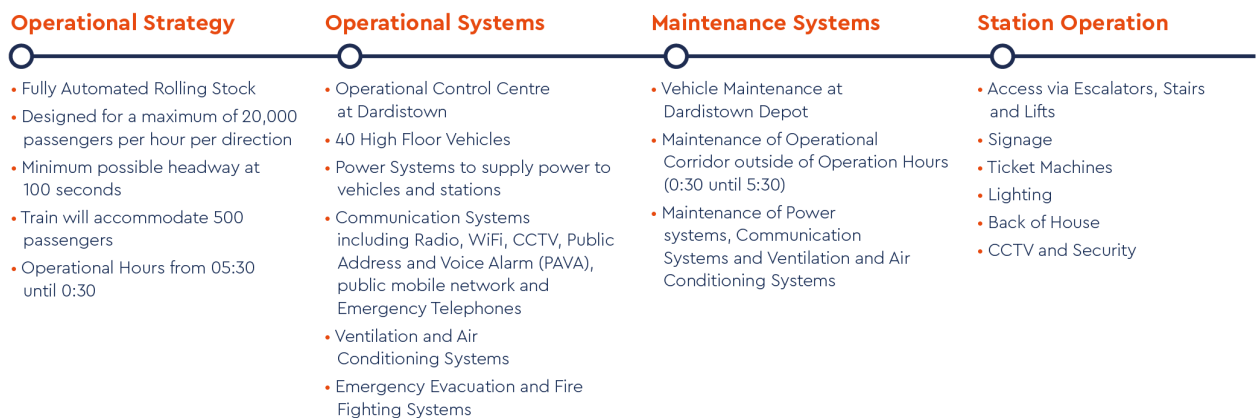


Diagram 25.2 Summary of Key Activities during the Operation Phase of the Proposed Project

25.3 Baseline Assessment Methodology

25.3.1 Study Area

The study area used within this assessment varies along the alignment of the proposed Project, reflecting the nature of the receiving baseline environment. It has been defined in accordance with published and draft guidelines for the assessment of archaeological (NRA 2005) and cultural heritage impacts (TII 2021), while equally reflecting best practice as established by published EIARs for light rail projects (e.g. Luas BxD Environmental Impact Assessment 2010) and the professional judgement of the specialist. Within greenfield land, from the proposed Park and Ride Facility to Santry Avenue (along with the MetroLink grid connection options) a study area of 250m from either side of the proposed Project boundary has been used. Within urban environments where the proposed alignment is in tunnel, south of Santry Avenue to the south of the proposed Charlemont Station, a 100m study area from either side of the Project boundary, including station locations, has been used.

To ensure all potential direct and indirect impacts are assessed, this study area encompasses all lands within the proposed LOD and all temporary and permanent land take. As direct archaeological impacts only arise where ground disturbance will take place, and indirect visual, vibration or settlement impacts

are restricted to constraints with above ground registers, this study area is deemed to be conservative and precautionary.

For specific types of constraints with defined extents or routes, namely Areas of Archaeological Potential (AAP), townland boundaries, street furniture (statues and memorials), churches and theatres, the study area was limited to the proposed Project boundary. Exceptions were made to this rule in the instance of constraints with above ground registers if the alignment of the proposed Project was deemed to have a potential indirect impact on such a constraint's associated setting.

Where commemorative plaques ('Blue Plaques') were present within the study area, and to avoid double counting of constraints, these were only assessed if they formed part of a cultural heritage constraint that was not already assessed by means of inclusion within either the Record of Monuments and Places (RMP), Record of Protected Structures (RPS) or National Inventory of Architectural Heritage (NIAH) and only where present within the proposed Project boundary, insofar that a potential direct or indirect impact could arise.

All archaeological and cultural heritage sites identified in and within the study area of the proposed Project have been assigned a unique identifying number that is prefixed by 'ACH': Archaeological and Cultural Heritage.

Table 25.2: Study Areas

Criteria	Estuary to Santry Avenue	Santry Avenue to south of Charlemont
1. National Monuments, archaeological sites recorded in the RMP and Site and Monuments Record (SMR) and their respective Zones of Archaeological Potential, archaeological sites identified through archaeological investigations.	250m	100m
2. Architectural Conservation Areas (ACAs), Conservation Areas (CA), RPS and NIAH, where such constraints are of archaeological and cultural heritage significance.	250m	100m
3. Industrial Heritage constraints	250m	100m
4. Cultural Heritage constraints	250m	100m
5. Areas of Archaeological Potential	Within the Project boundary	Within the Project boundary
6. Townland Boundaries	Within the Project boundary	Within the Project boundary
7. Street furniture, statues and memorials (including Blue Plaques), churches and theatres	Within the Project boundary	Within the Project boundary

25.3.2 Relevant Guidelines, Policy and Legislation

The following guidelines, policy and legislation were consulted as part of this assessment:

- Directive 2014/52/EU of the European Parliament and of the Council (amending Directive 2011/92/EU) on the assessment of the effects of certain public and private projects on the environment;
- National Monuments Acts 1930 (as amended);
- The Planning and Development Act 2000 (as amended);
- The Heritage Council Act 1995 (as amended);
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999;
- Fingal Development Plan 2017-2023;
- Draft Fingal Development Plan 2023-2029;
- Dublin City Development Plan 2016-2022;

- Draft Dublin City Development Plan 2022-2028;
- Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes, (NRA 2005);
- Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now Minister of Housing, Local Government and Heritage; MHLGH) and Transport Infrastructure Ireland (TII) (2017);
- Revised Advice Notes for Preparing Environmental Impact Statements (Environmental Protection Agency (EPA) 2015);
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA 2022);
- Frameworks and Principles for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and Islands 1999);
- Architectural Heritage Protection Guidelines for Planning Authorities (Department of the Environment, Community and Local Government (DECLG) 2011);
- Draft Cultural Heritage Impact Assessment of TII Projects: Overarching Technical Document (TII 2021);
- National Inventory of Architectural Heritage (NIAH) Handbook (DHLGH 2022); and
- 'The Dublin Principles' Joint International Council on Monuments and Sites (ICOMOS) and the International Committee for the Conservation of the Industrial Heritage (TICCIH) Principles for The Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes (ICOMOS 2011).

25.3.3 Data Collation and Collection

The following sources (documentary, cartographic and databases) were consulted in order to (a) establish the nature of the receiving baseline environment, (b) compile a list of documented archaeological and cultural heritage constraints within the study area of the proposed Project and (c) to identify any previously unrecorded constraints. This was further informed by the non-invasive and invasive archaeological and cultural heritage assessments set out in Sections 25.3.4.2 below.

- United Nations Educational, Scientific and Cultural Organization (UNESCO): properties inscribed on the World Heritage List and those nominated for inclusion on the tentative list;
- RMP for County Dublin;
- SMR for County Dublin;
- Monuments in State Care;
- Monuments subject to Preservation Orders (PO);
- National Inventory of Intangible Cultural Heritage;
- Dublin City Industrial Heritage Record (DCIHR);
- Topographical files of the National Museum of Ireland (NMI);
- Cartographic and documentary sources relating to the study area;
- Fingal Development Plan 2017-2023 (FCC 2017);
- Draft Fingal Development Plan (FCC 2023);
- Dublin City Development Plan 2016-2022 (DCC 2016);
- Draft Dublin City Development Plan 2022-2028 (DCC 2021);
- Aerial Photographs;
- Place Name Analysis;
- Dublin City Archaeological Archive; and
- Database of Irish Excavation Reports (1970 - June 2022).

25.3.3.1 UNESCO World Heritage Properties

The function of a UNESCO World Heritage list is to encourage member states to protect and manage their natural and cultural heritage. Properties considered for inclusion have cultural, historical, scientific or other significance, considered to be of outstanding value to humanity. There are three sites inscribed onto the UNESCO World Heritage List on the island of Ireland. These comprise the Giant's Causeway and Causeway Coast, Brú na Bóine and Skellig Michael, none of which lie within the study area.

In 2010 'The Historic City of Dublin' was inscribed onto the Tentative List for nomination as a UNESCO World Heritage Site (Lucas 2010). In 2019, in line with UNESCO policy a new call for nominations onto a revised tentative list was issued by DHLGH. On 21 July 2022 it was announced that three sites would

now be included on a revised tentative list to be submitted to UNESCO by the Minister for Housing Local, Government and Heritage, replacing the existing list. The 'The Historic City of Dublin' is not included on the revised tentative list. Once the revised list is accepted by UNESCO the 'Historic City of Dublin' will by default be removed from the tentative list (available at: <https://www.gov.ie/en/press-release/72ef0-ministers-announce-new-world-heritage-tentative-list-for-ireland/>).

Dublin was designated the 4th UNESCO City of Literature in 2010 as part of the UNESCO Creative Cities Network. Creativity is categorised as Crafts and Folk Art, Design, Film, Gastronomy, Literature, Music and Media Arts. Designation promotes cooperation with other cities. The associated Strategic Plan places creativity as a factor for sustainable urban development (DCC 2016). Ireland's bid for inclusion referenced the association of James Joyce and Ulysses, and the annual Bloomsday and Dublin Literature Festivals.

Ireland has also inscribed three intangible heritage elements Uilleann Piping (2017), Hurling (2018) and Irish Harping (2019) on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.

25.3.3.2 National Monuments

The National Monuments Acts 1930 (as amended) defines a monument as:

'any artificial or partly artificial building, structure, or erection whether above or below the surface of the ground and whether affixed or not affixed to the ground and any cave, stone, or other natural product whether forming part of or attached to or not attached to the ground which has been artificially carved, sculptured or worked upon or which (where it does not form part of the ground) appears to have been purposely put or arranged in position and any prehistoric or ancient tomb, grave or burial deposit, but does not include any building which is for the time being habitually used for ecclesiastical purposes.'

A National Monument receives statutory protection and is described in Section 2 of the act as *'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto.'*

A list of the National Monuments in the State's guardianship or ownership is available at: <https://www.archaeology.ie/national-monuments/search-by-county>. This list is not exhaustive, having been published in 2009. The National Monument may also be listed in County Development Plans but equally these are not exhaustive as additional monuments may be deemed National Monuments on a case-by-case basis at the discretion of the MHLGH. Therefore, it remains good practice to write to the MHLGH seeking clarity over a monument's status, particularly when it is in ownership of a Local Authority.

It is important to note that national monument status is not just restricted to the monument itself but encompasses its setting and attendant grounds. Once the site is in the ownership or guardianship of the State, neither it nor its attendant grounds, may be interfered with without the written consent of the MHLGH. Furthermore, no works may take place within proximity of a National Monument in the absence of Section 14 Ministerial Consent.

National Monuments in state care are maintained by the National Monuments Service (NMS) of DHLGH in partnership with the Office of Public Works (OPW).

Preservation Orders

The PO List and/or Temporary POs can be assigned to a site or sites that are deemed to be in danger of injury or destruction. These are allocated under the National Monuments Act 1930. POs make any interference with the site illegal. Temporary POs can be attached under the National Monuments (Amendment) Act, 1954. These perform the same function as a PO but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or near sites under POs with written consent, and at the discretion of the MHLGH. A list of the Monuments subject to POs is available at: <https://www.archaeology.ie/sites/default/files/media/publications/po19v1-all-counties.pdf>.

25.3.3.3 *Record of Monuments and Places and the Sites and Monuments Record*

Section 12 (1) of the National Monuments Act (1994 amendment) provides that the MHLGH shall establish and maintain a record of monuments and places where it is known that such monuments exist. The record forming the Archaeological Survey of Ireland comprises a list of monuments and relevant places and mapping showing each monument and relevant place in respect of each County in the State. Each RMP is identified by its own unique thirteen-digit reference number (e.g. DU020-018----); all receive statutory protection under the National Monuments Act. The RMP is maintained by the NMS of the DHLGH and is available at: <https://www.archaeology.ie/publications-forms-legislation/record-of-monuments-and-places> and <https://maps.archaeology.ie/HistoricEnvironment/>.

A Zone of Archaeological Potential (ZAP) that defines a large archaeological landscape (such as the historic town of Dublin) are protected as an RMP. Zones of Archaeological Notification (ZON), as indicated around RMPs on the Archaeological Survey of Ireland, are not subject to statutory protection. A ZON represents an area in proximity to the RMP within which two months' notification must be issued to the NMS of the DHLGH (under Section 12 of the National Monuments Act) for any works proposed within that area. It is not a reflection of the extent of an RMP or its associated ZAP.

The SMR holds documentary evidence and field inspections of all known archaeological sites and monuments. This includes sites that have been recorded and reported to the DHLGH in the past and are included as a 'record only' within the archive and are not subject to statutory protection. Some information is also held about archaeological sites and monuments whose precise location is not known (e.g. only a site type and townland are recorded). These are known to the National Monuments Service as '*un-located sites*' and cannot be afforded legal protection. As a result, these are omitted from the RMPs. A number of sites within the SMR have also been re-classified as non-archaeological and are referred to as 'Redundant Records'. Where this occurs within the study area of the proposed Project, any such sites have been assessed as being potentially archaeological significant, due to the fact that such reclassified sites in the past have indeed found to be archaeological in nature. SMRs are also listed on the Archaeological Survey of Ireland website DHLGH (DCHG 2018a; <https://maps.archaeology.ie/HistoricEnvironment/>).

25.3.3.4 *Record of Protected Structures, Architectural Conservation Areas and Conservation Areas*

Archaeological and cultural heritage sites may also be designated as Protected Structures under Section 51(1) of the Planning and Development Act 2000 (as amended). Section 51(1) requires that each Local Authority compiles and maintains a Record of Protected Structures (RPS). The purpose of the RPS is to record and protect structures of special architectural, historical, archaeological, artistic, cultural, scientific or technical interest, which are then listed and mapped in each County/City development plan.

In accordance with Section 81 of the Planning and Development Act 2000 (as amended) an ACA is defined as 'a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure, and whose character it is an objective of a development plan to preserve.' (DoAHG, 2011, 40). ACAs have statutory protection.

County/City development plans also provide a list of CAs which are established to protect the architectural design and overall setting of an area. A range of uses that do not impact negatively on the architectural character and setting of the area are permitted in such CAs. CAs are non-statutory objectives of Local Authority Development Plans, many having been established prior to the commencement of the Planning and Development Act 2000 (as amended).

25.3.3.5 *National Inventory of Architectural Heritage*

The NIAH was established in 1990 to fulfil Ireland's obligations under Article 2 of the 1987 *Convention for the Protection of the Architectural Heritage of Europe*, known as the 'Granada Convention'. Article 2 states 'for the purpose of precise identification of the monuments, groups of structures and sites to be protected, each Member State will undertake to maintain inventories'. The NIAH is responsible for the establishment and maintenance of a central record documenting and evaluating the architectural

heritage of the country. The NIAH was established on a statutory basis by the enactment of the Architectural Heritage (*National Inventory and Historic Monuments (Miscellaneous Provisions) Act, 1999*). Structures listed in the NIAH are deemed to be of architectural, archaeological, historical, artistic, scientific, social or technical interest by the MHLGH. It is noted that inclusion within the NIAH survey does not afford statutory protection, but the structure may be added to the RPS by the relevant Local Authority in the future; the MHLGH may also issue recommendations to a Local Authority on this matter.

25.3.3.6 *Topographical Files of the National Museum of Ireland*

The 'Topographical File' is the national archive of all known finds recorded by the NMI. This archive relates primarily to artefacts but also includes references to monuments and unique records of archaeological investigations and excavations undertaken. The files are important sources of information on the discovery of sites of archaeological significance and may indicate unrecorded areas of archaeological potential within the study area.

25.3.3.7 *Dublin City Industrial Heritage Record*

The Dublin City Industrial Heritage Record (DCIHR) is a database of industrial heritage sites across the Dublin City administrative area maintained by DCC. The DCIHR survey makes recommendations for sites to be added to the RPS in the life of the Plan. It is an objective (CHC03) of the Dublin City Development Plan to consider the recommendations of the DCIHR (in line with their Strategic Approach to the overall revision of the RPS and recommendations from the MHLGH). The draft development plan (Policy BHA16) states that the DCIHR will be reviewed in the preparation of Local Area Plans and the assessment of planning applications. It will include a review of the DCHIR in accordance with Ministerial recommendations arising from the NIAH survey of Dublin City. The record is available from DCC and online at: www.heritagemaps.ie. Where sites are no longer extant but there is potential for associated sub-surface remains, they are considered in this Chapter. Where sites consist of upstanding structural remains, they are considered in Chapter 26 (Architectural Heritage).

25.3.3.8 *Cartographic Sources*

- Cartographic sources are important in tracing land use development and the development (or demise) of sites and structures through time within the study area. Where once documented sites are no longer extant, or where numerous sites are illustrated, they provide important topographical information aiding in the identification of AAPs within the study area. The cartographic sources, listed below, were analysed to inform the receiving baseline environment and to identify AAPs;
- John Speed, Map of Dublin, 1610;
- Sir William Petty, Down Survey Map, 1654–56, Baronies of Castleknock and Coolock;
- Bernard de Gomme, The City and Suburbs of Dublin, 1673;
- Thomas Philips, An exact survey of city of Dublin, and part of the harbour, 1685;
- Charles Brooking, A Map of the City and Suburbs of Dublin, 1728;
- John Rocque, Exact survey of the city and suburbs of Dublin, 1756;
- John Rocque, A Survey of the City, Harbour, Bay and Environs of Dublin on the same Scale as those of London, Paris and Rome, 1757;
- John Rocque, An actual survey of the County of Dublin, 1760;
- Mr Bernard Scale, A Survey of the City Harbour Bay and Environs of Dublin on the same Scale as those of London Paris & Rome / by John Rocque Chorographer to his Majesty with Improvements & Additions to the Year 1773;
- George Taylor and Andrew Skinner, Maps of the Roads of Ireland, 1777;
- William Wilson, New plan of the City of Dublin, 1801;
- Thomas Campbell, City of Dublin, 1811;
- John Taylor, Map of the Environs of Dublin, 1816;
- William Duncan, Map of the County of Dublin, 1821; and
- Ordnance Survey (OS) Map Editions County Dublin (1837-1938, 6" and 25").

25.3.3.9 *Development Plans*

Development Plans contain a catalogue of all the RPSs and RMPs within the County as well as non-exhaustive information regarding historic street paving and street furniture. They contain policies and objectives relevant to the protection and conservation of archaeological and cultural heritage. The Dublin City Development Plan 2016-2022 (DCC 2016), Draft Dublin City Development Plan 2022-2028 (DCC 2021), Fingal Development Plan 2017-2023 (FCC 2017) and Draft Fingal Development Plan 2023-2029 (FCC 2021) were consulted, along with relevant Local Area Plans (LAPs) within the study area of the proposed Project.

25.3.3.10 *Aerial Photographs*

Aerial Photographs are an important source of information regarding the potential location of sub-surface sites and their extent, which can be visible on aerial photos under certain conditions. This is particularly true in warm weather with little rainfall, when the differential retention of ground water effects crop and pasture growth, the pattern of which indicates the presence of underlying archaeological sites. It also provides information on the terrain and its likely potential for archaeology. A number of online sources were consulted including aerial photographs held by the OS of Ireland, Google Earth and Bing Maps.

25.3.3.11 *Dublin City Archaeological Archive*

The Dublin City Archaeological Archive (DCAA) is the first dedicated archaeological archive in Ireland. Its remit is to preserve records arising from archaeological investigations conducted in Dublin city by archaeologists working in the private sector. The archive contains a digital record of archaeological excavation in Dublin City up to 2017 and is available online at www.heritagemaps.ie.

25.3.3.12 *Place Names*

Place Names are an important part in understanding both the archaeology and history of an area. Place names have in some cases have been found to have their root deep in the historical past.

25.3.3.13 *Database of Irish Excavation Reports*

The Database of Irish Excavation Reports ('Excavations Bulletin') is a summary publication that was produced in hard copy every year from 1970 to 2010. From 2011 onwards, the database has been published exclusively online (www.excavations.ie). The entries into the database provide summaries of every licensed archaeological excavation that has taken place in the Republic of Ireland. This information is vital when examining the archaeological context of the landscape. The summaries include a unique reference number, licence number, description of works, address and the contact details of the archaeologist who undertook the work.

25.3.3.14 *Townlands and Townland Boundaries*

The townland is an Irish land unit of considerable longevity as many of the units are likely to correspond to much earlier land divisions. However, the term townland was not used to denote a unit of land until the Civil Survey of 1654. It bears no relation to the modern word 'town' but like the Irish word "baile" refers to a place. It is possible that the word is derived from the Old English "tun land" and meant 'the land forming an estate or manor' (Culleton 1999, 174).

Gaelic land ownership required a clear definition of the territories held by each sept and a need for strong, permanent fences around their territories. Boundaries following ridge tops, streams or bog are more likely to be older in date than those composed of straight lines (Culleton 1999, 179). Many of these boundaries are preserved within, or their historical alignment is marked by, present day townland boundaries reflecting centuries of continued occupation. They were frequently used to form the boundary of, or are incorporated into the lands of, early medieval and medieval ecclesiastical sites and graveyards. This is due to 'termonn' law whereby a church founded on a boundary was eligible to claim taxes from patrons on either side. In later years they were subsequently used as liminal locations for consecrated burials, to confuse and contain the spirits of those buried beside them.

The vast majority of townlands are referred to in the 17th century when land documentation records begin. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

In the 19th century, some demesnes, deer parks or large farms were given townland status during the undertaking of the OS of Ireland and some imprecise townland boundaries in areas such as bogs or lakes, were given more precise definition (McErlean 1983, 315). Larger tracts of land were divided into a number of townlands, and named Upper, Middle or Lower, as well as Beg and More (small and large), Within and Without, and north, east, south and west (Culleton 1999, 179). In urban environments wards rather than townlands were used as administrative divisions often following earlier townland boundaries; these are now known as Electoral Divisions, By the time the first OS map had been completed in the 1840s a total of 62,000 townlands and wards were recorded in Ireland.

Townland and topographic names are an invaluable source of information on topography, land ownership and land use within the landscape. They also provide information on history, archaeological monuments and folklore of an area. A place name may refer to a long-forgotten site and may indicate the possibility that the remains of certain sites may still survive below ground. The first OS surveyors recorded townland names, all known, spelling variations, what each name meant (many being anglicised names of Irish origin) plus all known 'antiquities' relating to each townland in what is known as 'The Ordnance Survey Name Books'. These OS Name Books, 'Irish Local Names Explained' by P.W Joyce (1870), and the Place Names Database of Ireland are the main references used for place name analysis.

The townland boundary itself, due to age and their association with archaeological constraints and historical events are important aspects of our cultural heritage. In agricultural land a townland boundary, where not marked by a natural feature such as a river or stream, will generally comprise a substantial earthen bank which may have one or two parallel ditches. In mountainous or stony land such boundaries will often be marked by dry-stone walls. In demesnes landscapes they are marked by 'demesne walls'. Townland boundaries were often used as route ways, milk/butter and famine roads with many now functioning as our modern roads. In ecclesiastical environments they are marked by church and graveyard walls.

The proposed Project crosses 23 townland boundaries.

25.3.4 Analysis Methods

The approach to identifying and analysing the impact of the proposed Project on archaeology consisted of the following steps:

- A desktop study to review the material collected for the study area identified above and map features of interest. Each archaeological and cultural heritage constraint identified has been assigned a unique 'ACH' number (Archaeology and Cultural Heritage);
- The design and implementation of field inspections along the proposed Project within the study area and archaeological investigations to develop the baseline of cultural heritage constraints; and
- Identification of the potential impacts of the construction and operation of the proposed Project on cultural heritage constraints in discussion with the design team and other environmental specialists such as the Landscape and Visual specialist.

The following subsections describe the field inspections and archaeological investigations undertaken.

25.3.4.1 Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological and cultural heritage constraints and can also lead to the identification of previously unrecorded or potential constraints, structures and archaeological objects through topographical observation and local information.

The archaeological field inspection of the study area entailed:

- Noting and recording the terrain type and land usage;

- Noting and recording the presence of features of archaeological or cultural heritage merit;
- Verifying the extent and condition of known archaeological and cultural heritage constraints; and
- Visually investigating any potential landscape anomalies to determine the possibility of their being man-made (i.e. archaeological) in origin.

25.3.4.2 Archaeological Investigations

As part of the overall analysis of the archaeological and cultural heritage baseline environment for the proposed Project and its predecessor Old Metro North (OMN), a number of non-invasive (geophysical) and invasive archaeological investigations were commissioned by TII (in consultation with the NMS, DHLGH). These were carried out on TII's behalf by Headland Archaeology Ltd and IAC Ltd (refer to section 25.7) in order to provisionally identify and subsequently ground truth the archaeological potential of the existing environment and to verify the nature and extent of AAPs. Where possible the information arising from these investigations was used to inform the design of the proposed Project to determine whether an AAP could be avoided. The investigations were also used to assess the impact of the proposed Project in an informed manner within this Chapter. The investigations are listed below with the results included within the relevant sections of the EIAR Chapter:

- From May 2008 to April 2009 an extensive programme of non-invasive geophysical surveys was carried out on suitable greenfield and parkland within the Project boundary of OMN from Belinstown to St Stephen's Green Park. Both magnetometry and electrical resistivity survey techniques were used, in addition to a targeted Ground Penetrating Radar (GPR) survey of Lissenhall Bridge National Monument. Features of apparent archaeological potential were identified along the entire alignment. The works were completed by Margaret Gowen & Co Ltd, under licence 08R0117, (Thebaudeau and Harrison 2009).
- In 2009 an extensive programme of invasive archaeological test excavations within the OMN Project boundary was undertaken within the townlands of Lissenhall Little, Balheary Demesne, Swords Demesne, Miltonsfield, Fosterstown South, Cloghran Ballymun, Ballystruan, Balcurris and Hampstead South.
- In 2011 an extensive non-invasive geophysical survey was carried out at the site of the proposed Dardistown Depot for OMN (townlands of Ballymun, Ballystruan and Turnapin Great). Both magnetometry and electrical resistivity survey techniques were used. Features of apparent archaeological potential were identified across the site. The works were completed by Target Geophysics, under license 11R0017, (Target Geophysics 2010).
- In 2011, a programme of invasive archaeological test excavations was carried out at the proposed OMN Dardistown Depot in order to assess the significance of the potential archaeological anomalies identified during the 2011 geophysical survey (License 11R0017). Five sites including a probable rectangular medieval enclosure and a fulacht fia (typically a Bronze Age field cooking station) were recorded. The works were completed by ACSU, under license 19E0757 (Kyle and Bayley 2011).
- In 2018, non-invasive geophysical surveys were carried out at the townlands of Lissenhall Little, Bank Farm (Home Farm Football Club; FC), Turnapin Great, within the Mater Park (Berkeley Road) and along the eastern side of St Stephen's Green Park. Magnetometry, electrical resistivity and GPR survey techniques were used, with features of apparent archaeological significance identified at Lissenhall Little and Bank Farm. The works were completed by Earthsound Archaeological Geophysics, under license 18R0196 (Gimson and Garner 2019).
- In January 2019, a programme of invasive advance targeted archaeological test excavations was carried out at Lissenhall Little and Balheary Demesne in order to assess the significance of the potential archaeological anomalies identified during the 2018 geophysical survey (License 18R0196). An early medieval enclosure, (AD 598 – 669; 2 sigma calibration), was identified within Lissenhall Little (within AAP ACH001) that measures 46m NE-SW by 36m NW-SE externally, which had been truncated by a modern watermain. The works were completed by ACSU, under license 19E0757 (Murphy 2019).
- In December 2019, a programme of invasive advance targeted archaeological test excavations was carried out at Bank Farm (Home Farm FC) in order to assess the significance of the potential archaeological anomalies identified during the 2018 geophysical survey. The assessment was also carried out in order to assess whether any human remains were present within the site, following the discovery of fragmented skeletal remains in 2008 and the identification of potential grave cuts by means of GPR survey. No burials were identified, but six probable curving ditches were

recorded, which may indicate the presence of an enclosure c. 30m in diameter with an associated annex (ACH136). Two 2-sigma calibrated Carbon 14 dates were obtained of AD 574 – 657 and AD 538 - 645 from the ditch of the probable enclosure annex respectively. A fragment of the bone recovered in 2008 was also subject to Carbon 14 dating and returned a 2-sigma calibrated date of AD 585-651, confirming an early medieval date for the enclosure and the human remains. The works were completed by ACSU, under license 19E0738.

- In March 2020 an underwater wade and metal detection survey of a small section of the Broadmeadow River at Balheary Demesne was carried out. This followed, and expanded upon, a previous survey carried out as part of the OMN project (Licenses 08D093/08R311 and 08D092/08R312). No features or areas of archaeological potential were identified during the course of the survey. The works were carried out by ADCO Ltd, under licenses 19D0107 and 19R0255.
- In September 2020, a non-invasive geophysical survey was carried out in Ballymun. Both magnetometry and electrical resistivity survey techniques were used, with four potential enclosures of archaeological significance identified. The works were completed by Earthsound Archaeological Geophysics, under an extension to license 18R0196.
- In November 2020, a programme of invasive advance targeted archaeological test excavations was carried out at Ballymun in order to assess the significance of the potential archaeological anomalies identified during the September 2020 geophysical survey (License 18R0196 extension). Access was only possible to assess one of the potential enclosures identified during the survey, within Area 2b. Test excavations confirmed the anomalies did not represent an enclosure but a pit, a small spread and a probable kiln were recorded (ACH 109). A sample from the kiln subsequently produced a 2-sigma calibrated Carbon 14 date of AD 1045-1252, placing it in the transition between early medieval and medieval periods. The works were completed by ACSU, under license 20E0002.
- In March 2021, a non-invasive geophysical survey was carried out in Lissenhall Little, Balheary Demesne and Cloghran. Both magnetometry and electrical resistivity survey techniques were used. At Lissenhall Little the presence of an RMP comprising a probable enclosure, previously only identified through aerial photographs (ACH009) was confirmed. A second RMP comprising a ring-ditch (ACH003) identified initially through archaeological test-excavations for OMN was also confirmed within this survey. No archaeological anomalies were detected at Balheary Demesne, but a number of potential pits were noted at Cloghan (ACH086). The works were completed by Earthsound Archaeological Geophysics, under an extension to license 18R0196.
- Five phases of preliminary ground investigations have been carried out as part of the overall proposed Project, all of which were subject to archaeological monitoring. The results of these investigations, which included the identification of reclamation deposits, made ground, cellars, cobbled surfaces and a number of small finds comprising 19th and 20th glass and ceramics and a possible prehistoric flint from Ballymun townland (analysis pending), have been used as part of the baseline assessment. All of the monitoring works were carried out by Thaddeus Breen (Shanarc Archaeology) and commenced in March 2019 and continued to October 2021. All works were undertaken under license 19E0192 and subsequent extensions. As part of Phase 5 works, monitoring and metal detection and ground investigations were carried out under Ministerial Consent at St Stephen's Green Park (Ref.: C001054). No archaeological stratigraphy was identified at this location.

25.3.5 Consultation

A number of statutory and voluntary bodies were consulted by the TII Project Archaeologist and/or the specialist on various dates throughout the EIAR process, in order to gain further insight into the cultural background of the study area, as follows:

- DHLHG;
- NMI Irish Antiquities Division, accessed 10 February 2020;
- Fingal County Council (FCC): Planning, Conservation, Archaeology and Heritage sections;
- Dublin City Council (DCC): Planning, Conservation, Archaeology and Heritage sections;
- Moore Street Advisory Group (MSAG);
- Mater Hospital;
- OPW;
- Waterways Ireland; and

- District 7 and Prospect and De Courcy Square and Environs ACA Residents' groups.

A summary of consultations undertaken for the project is provided in the EIAR Chapter 8 (Consultation).

The Draft MetroLink Archaeological Strategy (Rev.01), as prepared in accordance with the Code of Practice for Archaeology, was issued for comment to NMS, DHLGH in March 2019; no formal comments were received. This strategy was revised and expanded upon as the Draft MetroLink Cultural Heritage Strategy (Rev.02) and issued for comment and information purposes to DHLGH (Built Heritage and NMS), NMI, FCC and DCC in September 2021; no formal comments were received. The Draft MetroLink Cultural Heritage Strategy Rev.03 will be issued to all stakeholders in Q4 2022/Q1 2023 and will be based on feedback from proposed stakeholder workshops.

25.3.6 Identification of Potential Effects

Various elements of both the Construction Phase and the Operational Phase of the proposed Project have the potential to impact on the archaeological and cultural heritage resource. For a full description of the construction and operation elements of the proposed Project, please see Chapter 5 (MetroLink Construction Phase) and Chapter 6 (MetroLink Operations & Maintenance) of this EIAR.

With regard to archaeological and cultural heritage constraints, impacts can be direct or indirect and either negative or positive.

25.3.6.1 Construction Impacts

Direct impacts during the Construction Phase of the proposed Project would potentially arise as a result of:

- Ground disturbance. Note archaeological stratigraphy is generally confined to the topsoil/subsoil interface in greenfield land (c. 0.20m-0.80m) and to the top of natural deposits in urban contexts (c. 0.20m-8m). No direct archaeological impact on archaeological stratigraphy will arise from construction works that take place below such levels (i.e. within the tunnel environs); and
- Total or partial demolition, temporary removal, storage, reinstatement to the original positions (or relocation to new location if not possible), rebuilding, repair and rehabilitation of upstanding archaeology and cultural heritage constraints.

Ground disturbance impacts to archaeology and cultural heritage constraints will be permanent and negative and will occur as a result of the following:

- Ground preparation for the construction of stations including vegetation removal and topsoil stripping;
- Demolition of existing structures;
- The diversion, realignment and widening of roads and junctions, and/or the provision of temporary alternative routes;
- The diversion and realignment of public rights of way and private accesses, and/or the provision of temporary alternatives routes;
- The diversion and realignment of sections of existing watercourses, railways and utilities;
- Reconfiguration of kerb lines and roads and provision of public lighting and traffic signaling;
- Construction of compounds;
- Construction of intervention shafts and portals;
- Construction of a Park and Ride Facility;
- Construction of compensatory football/ sports pitches;
- Installation of hoarding; and
- Construction of above ground substations.

25.3.6.1.1 Stations and Sub-Surface Structures

Construction of the proposed Project permanent subsurface structures will commence with the installation of vertical walls from the surface in the form of concrete secant piles or diaphragm walls (D-walls). These methodologies will be used for all subsurface works and station foundations including:

- Underground stations (D-walls);

- Surface stations (secant piles);
- Portals (D-wall and secant piles);
- Intervention shafts (D-walls and secant piles); and
- Sections with retained cut (secant piles or U-sections).

As detailed in Chapter 4 (Description of the MetroLink Project), there are four retained cut stations: Seatown, Swords Central, Fosterstown and Dardistown and 11 underground stations: Dublin Airport, Northwood, Ballymun, Collins Avenue, Griffith Park, Glasnevin, Mater, O'Connell Street, Tara, St Stephen's Green and Charlemont. Estuary Station will be at grade. At Albert College Park an Intervention Shaft will be provided. The underground stations and the Intervention Shaft will be constructed using cut and cover, top-down construction within D-walls forming a concrete box below the roof slab.

25.3.6.1.2 Rail Alignment

The rail alignment will be constructed either at grade or within retained cut sections or cut and cover sections.

- Retained cut sections will require excavation from ground level to depths varying from between approximately 6m to 8m in some areas, and significantly deeper in other areas (approximately 10m+); and
- Cut and cover construction will require excavation of depths between approximately 6m to 8m below ground level.

25.3.6.1.3 Viaducts

There are two viaducts located along the alignment (the Broadmeadow and Ward River Viaduct and M50 Viaduct), as detailed in Chapter 4 (Description of the MetroLink Project). Impacts to Archaeology and Cultural Heritage may result from the following:

- Site preparation, strip topsoil, installation of environmental mitigations and installation of piled foundations; and
- Installation of bridge bearings.

Indirect impacts during the Construction Phase of the project would potentially arise as a result of:

- Visual impacts;
- Severance of associated features;
- Dewatering and settlement; and
- Vibration impacts.

Visual impacts can be both positive or negative.

Visual impacts during the Construction Phase of the proposed Project will be temporary to short term and may include:

- Visual intrusion;
- Alteration of the existing landscape/townscape and the degradation/enhancement of a monument's setting and amenity caused by the presence of a construction site and associated hoarding, plant and equipment;
- Through the demolition, removal and/or relocation of street furniture and upstanding archaeology and cultural heritage constraints;
- Through the erection of new buildings and other structural elements; and
- Through temporary landscape and boundary treatment.

Vibration impacts during the Construction Phase of the proposed Project will be temporary to short term and may result from:

- The use of heavy plant and equipment;
- Passage of heavy traffic;

- Directional Drilling; and
- Piling.

25.3.6.2 Operational Impacts

No direct impacts to the archaeological and cultural heritage resource would occur during the Operational Phase of the proposed Project as either no ground disturbance activities are required, or those that require ground disturbance such as track replacement works, depot and station maintenance will take place within levels that have already been archaeologically resolved, or within a tunnel.

Indirect impacts during the Operational Phase of the project would potentially arise as a result of:

- Visual impacts;
- Severance of associated features;
- Vibration impacts; and
- Settlement.

Visual impacts during the Operational Phase of the proposed Project will be permanent and may include:

- Visual intrusion;
- Alteration of the existing landscape/townscape and the degradation/enhancement of a constraints setting and amenity caused by the presence of permanent stations and supporting infrastructure e.g. canopies, lift and ventilation shafts, overhead line electricity (OHLE) and surface track, park and ride facilities and sub stations and any failure to maintain same in good condition;
- Through the absence or relocation of street furniture and upstanding archaeology and cultural heritage monuments; and
- Through permanent landscape and boundary treatment.

Vibration impacts during the Operational Phase of the proposed Project will be permanent and may result from:

- The passage of trains (above ground) in close proximity to archaeology and cultural heritage constraints.

25.3.7 Appraisal Method for the Assessment of Impacts

The appraisal method for the assessment of impacts follows EPA (2022) guidance. The significance of the effect of the proposed Project on the cultural heritage constraint is based on the combination of the baseline rating of the cultural heritage constraint and the magnitude of the impact. The following sections explain how constraints are rated, the criteria used for defining impacts, and the definition of significance.

25.3.7.1 Baseline Environment Rating

Archaeological and cultural heritage constraints, which have been identified during the baseline assessment have been assigned a rating based on their importance, sensitivity and existing adverse effects. Professional judgement is used throughout the categorisation process and the rating assigned to constraints is used to determine the likely significance of effects of the proposed Project on the archaeological and cultural heritage resource. A summary of the ratings for different types of cultural heritage constraints is provided Table 25.5.

25.3.7.1.1 Importance of Baseline Environment

The importance of archaeological and cultural heritage constraints reflects the level of statutory and non-statutory protection afforded to them. All National Monuments, Monuments with POs, UNESCO World Heritage Sites and RMPs are subject to statutory protection under the National Monuments Act 1930 (as amended). All National Monuments and Monuments with POs are considered to be of very high importance. The National Monuments Act 1930 (as amended) does not differentiate between RMPs in

terms of perceived importance. As such, all RMPs, and for the purpose of this assessment, all SMRs are considered to be of high importance.

Archaeological and cultural heritage constraints afforded statutory protection as RPSs or as ACAs in accordance with the Planning and Development Act 2000 (as amended) are considered to be of high importance. CAs are considered to be of medium importance.

Within the study area, a number of newly identified archaeological sites comprising sub-surface remains have been uncovered within greenfield areas following the completion of geophysical survey and archaeological test excavations. Where these have been added to the SMR, they are considered of high importance. Where they have not been added to the SMR they are considered to be of medium importance.

AAPs have been identified through an examination of cartographic, aerial photographic and documentary evidence, as well as a review of the geophysical surveys, archaeological test excavations and Ground Investigations monitoring. In addition, any topographical features noted during the field inspections and high concentrations of archaeological objects and/or RMP in and within the study area of the proposed Project, can also indicate areas of archaeological potential. Each AAP identified is considered to be of medium importance, or where there is evidence for some previous disturbance, they are considered to be of low importance.

Archaeological or cultural heritage constraints listed on the NIAH and the DCIHR, which do not otherwise have statutory protection, but either comprise extant structures and/or are likely to possess associated sub-surface remains, are considered to be of medium importance. Those sites that have been intensively developed and are unlikely to contain any associated sub-surface remains, are considered to be of low or very low importance. The exception to this are canals and railways, which due to their significant cultural heritage and associated engineering contribution to the evolution of the Irish landscape, and due to their consideration as RPSs by Local Authorities external to the study area, are considered to be of high importance.

Tangible cultural heritage constraints (which do not otherwise have statutory protection), and comprise a variety of constraints such as sculptures and memorials, extant townland boundaries (or those likely to have associated sub-surface remains) and historical Gaelic Athletic Association (GAA) grounds, are considered to be of medium or low importance. Where townland boundaries have been removed or there is little or no potential for associated sub-surface remains, they are considered to be of very low or neutral importance.

Intangible cultural heritage represents aspects of cultural heritage within today's society that are of cultural heritage value but may not have a directly associated physical landscape element. Intangible heritage is therefore formed by activities or traditions associated with a particular area, such as the St Patrick's Day parade (17 March) in the centre of Dublin, or Bloomsday (16 July), which celebrates the James Joyce novel 'Ulysses', within Dublin City. Associated tangible elements such as plaques and buildings are considered to be of high importance.

Greenfield land, where the archaeological potential remains unknown having not been subject to archaeological surveys, are considered to be of medium importance. Where geophysical surveys of greenfield land have failed to identify definite archaeological features, these AAPs are considered to be of low importance. Where archaeological test excavations have failed to identify definite archaeological features, these AAPs are considered to be of neutral importance.

Modified landscapes such as developed urban/suburban plots, car parks, golf courses and sports grounds, where potential sites of archaeological significance have either been removed in the past, or previously archaeologically excavated, are considered to be of very low importance.

25.3.7.1.2 Sensitivity

Archaeological and tangible cultural heritage constraints are considered to be a non-renewable resource and are generally considered to be location sensitive. Therefore, any change to their physical

structure or immediate surroundings could result in irreversible damage or removal. As such, all archaeological and cultural heritage constraints are considered to have very high sensitivity.

25.3.7.1.3 Existing Adverse Effects

Existing adverse effects do not exist for designated archaeological and cultural heritage constraints (i.e. National Monuments, RMPs, SMRs and Protected Structures) as all constraints have statutory protection, irrespective of their existing condition.

Existing adverse effects have been considered for sites included within the NIAH and DCIHR, which are not afforded statutory protection. The presence or absence of extant remains as well as the potential for associated subsurface material has been taken into account and for the purposes of this Chapter these constraints have been divided into two categories as set out in Section 25.3.1.

Existing adverse effects have also been considered with regards to AAPs, townland boundaries and modified landscapes based on the level of archaeological investigations undertaken to date and the likelihood of surviving sub-surface archaeological stratigraphy (i.e. medium to neutral).

Table 25.3: Baseline Environment Criteria Rating

Baseline Rating	Criteria
Very High	National Monuments Monuments subject to Preservation Orders UNESCO World Heritage Properties (excluding tentative list)
High	RMP SMR RPS ACA UNESCO Cultural Heritage Sites (associated tangible elements only) Industrial Heritage: Canals and historic railways only
Medium	CA NIAH DCIHR (with extant or high potential of associated archaeological remains) AAP identified through investigations (geophysics/underwater/test excavations) and/or documentary or cartographic research Greenfield land (where no archaeological investigation has taken place) Extant townland boundaries Sculptures/Memorials not on NIAH/RPS (based on professional judgement) Tangible Cultural Heritage
Low	NIAH (destroyed) DCIHR (destroyed or low potential of associated archaeological remains) AAP where non-invasive archaeological investigations have provided no definite evidence for sub-surface archaeological stratigraphy but where level of previous disturbance is unknown Sculptures/Memorials not on NIAH/RPS (based on professional judgement)
Very Low	Modified landscapes where disturbance is known Townland boundary (with low potential of associated sub-surface stratigraphy)
Neutral	Greenfield land that has been the subject of extensive invasive archaeological investigations Townland boundary where there is little to no potential for associated sub-surface stratigraphy

25.3.7.2 Magnitude of Impacts

As per the 2022 EPA guidelines, the nature of impacts can be categorised as follows:

- Quality: Positive, neutral or negative;
- Nature: Direct, indirect;
- Probability: Likely or unlikely;
- Duration: Momentary, brief, temporary, short-term, medium-term, long-term, permanent, reversible; and
- Frequency: Once, rarely, occasionally, frequently, constantly.

The criteria used to assess the different impacts associated with the proposed Project are shown in Table 25.4. The criteria have been defined in consideration of the "Draft Guidelines on Information to be Contained in Environmental Impact Statements" (EPA 2022).

Table 25.4: Impact Assessment Criteria

Impact Magnitude	Criteria
Very High	These impacts arise where an archaeology or cultural heritage site, either below ground or upstanding, is completely and irreversibly destroyed.
High	An impact which, by its magnitude, duration or intensity, alters an important aspect of the archaeological and cultural heritage environment, including the setting of upstanding monuments. 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 an archaeological or cultural heritage feature/site. A beneficial or positive impact that permanently enhances or restores the character and/or setting of a feature of archaeological or cultural heritage significance in a clearly noticeable manner.
Medium	A medium impact arises where a change to a site/monument is proposed which though noticeable, is not such that the archaeological or cultural heritage integrity of the site is compromised. The change is likely to be consistent with existing and emerging trends. Impacts are probably reversible and may be of relatively short duration. A beneficial or positive impact that results in partial or temporary enhancement of the character and/or setting of a feature of archaeological or cultural heritage significance in a clearly noticeable manner.
Low	An impact which causes changes in the character of the environment, such as a visual impact, which are not high or very high and do not directly impact or affect an archaeological or cultural heritage feature or monument. A beneficial or positive impact that causes some minor or temporary enhancement of the character of an upstanding archaeological or cultural heritage structure or feature which, although positive, is unlikely to be readily noticeable.
Very Low	An impact on an archaeological or cultural heritage feature or monument capable of measurement but without noticeable consequences. A beneficial or positive impact on an upstanding archaeological or cultural heritage structure or feature that is capable of measurement but without noticeable consequences.
Neutral	No predicted impact, either negative or positive, to an archaeological or cultural heritage site.

25.3.7.3 Significance of Effects

The likely significance of the effect of the proposed Project on the archaeological and cultural heritage baseline environment is determined in consideration of the magnitude of the impact and the baseline rating of the constraint upon which the impact occurs. The significance rating is determined by multiplying the baseline rating by the magnitude of the impact. Table 25.5 shows how the baseline rating and the magnitude of the impact are combined to give the significance of effect prior to any mitigation being implemented. The significance of effect ranges are then defined using the following score: Imperceptible (1-2); Slight (3-5); Moderate (6-10); Significant (10-15); Very Significant (16-20) and Profound (21-25) as per the EPA guidelines (2022).

Table 25.5: Significance of Effects

	Significance of Effects (+/-)				
Impact Magnitude (+/-)	Baseline Rating				
	Very low (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Neutral (0)	No predicted impact (0)	No predicted impact (0)	No predicted impact (0)	No predicted impact (0)	No predicted impact (0)
Very Low (1)	Imperceptible (1)	Imperceptible (2)	Slight (3)	Slight (4)	Slight (5)
Low (2)	Imperceptible (2)	Slight (4)	Moderate (6)	Moderate (8)	Moderate (10)
Medium (3)	Slight (3)	Moderate (6)	Moderate (9)	Significant (12)	Significant (15)
High (4)	Slight (4)	Moderate (8)	Significant (12)	Very Significant (16)	Very Significant (20)
Very High (5)	Slight (5)	Moderate (10)	Significant (15)	Very Significant (20)	Profound (25)

25.4 Baseline Environment

25.4.1 General

The study area of the proposed Project has been divided into four sections for ease of discussion; AZ1 Northern Section, AZ2 Airport Section, AZ3 Dardistown to Northwood, and AZ4 Northwood to Charlemont. AZ4 has been further subdivided into three sections for ease of description: Ballymun, Glasnevin and Phibsborough, and Dublin City Centre (south from Dorset Street Upper to the River Liffey and from the River Liffey to Charlemont).

The proposed Project commences in Lissenhall (AZ1) to the northeast of the medieval town of Swords, travelling south along and to the east and west of the R132. The very northern and southern ends of the proposed Project are located across agricultural fields, with the remainder traversing mostly built up and previously disturbed areas. The proposed Project also crosses four watercourses comprising the Broadmeadow and Ward Rivers at Swords, the Gaybrook and Fosterstown streams (at Pinnock Hill Roundabout and north of Naul Road).

The majority of the landscape across AZ2 is occupied by structures and infrastructure associated with Dublin Airport. Two small greenfield areas are located at the northern and southern ends of the section, while the Cuckoo stream flows east to west along the southern end of Corballis townland boundary.

The landscape across AZ3 is dominated by agricultural land and sports pitches to the north of the M50 and the R108 dual carriageway and greenfield areas to the south of the motorway. One watercourse, the River Santry, traverses the proposed Project to the south of the M50.

In AZ4 the proposed Project traverses south through Dublin City suburbs and city centre with the main alignment in tunnel and all stations underground. This area is entirely urban and suburban.

25.4.2 Archaeological and Cultural Heritage Background

A general overview of the archaeological and historical background of the study area for the proposed Project, including relevant detailed information for important occupation centers, is provided within this section.

Where measurements are provided these will always be from the boundary of the proposed study area of the proposed Project unless specifically stated otherwise.

25.4.2.1 Mesolithic Period (8000-4000 BC)

Although very recent discoveries may push back the date of human activity by a number of millennia (Dowd and Carden 2016), the Mesolithic period is the earliest time for which there is clear evidence of prehistoric activity in Ireland. During this period people hunted, foraged, and gathered food and appear to have had a mobile lifestyle centred on the seashore, river banks and lake shores. The most common evidence indicative of Mesolithic activity at a site comprises scatters of worked flint material; a by-product from the production of flint implements or rubbish middens from food waste consisting largely of shells (Stout and Stout 1997). The latter are commonly discovered in coastal regions or at the edge of lakes. A number flint scatters and shell middens are located along the coast of Dublin from Sutton and Malahide to Balbriggan, although none are recorded from within the study area of the proposed Project.

Two tertiary retouched flint flakes recovered from the north bank of the Broadmeadow River in the townland of Lissenhall Great may represent Mesolithic activity in the study area of AZ1 (NMI Ref.: 1978:77-8). Furthermore, late Mesolithic fish traps were identified and recorded during the development of the Spencer Dock area, c. 950m to the east of the study area within AZ4 (McQuade 2008, 8-11). These fish traps were constructed almost exclusively of hazel and radiocarbon dated to 6100-5720 BC and may represent the earliest known wooden fish traps from Ireland. During the excavations, the Mesolithic shoreline was identified 5m below the current ground level (sealed by post medieval reclamation deposits) and 30m north of the current edge of the River Liffey. A further trap, dated to the Neolithic period, was found higher up in the silts (ibid).

25.4.2.2 Neolithic Period (4000-2500 BC)

During the Neolithic period, communities transitioned to a more sedentary lifestyle with their economy based predominantly on the rearing of stock and cereal cultivation; though supplementation of the diet by hunting and gathering did occur. This transition was accompanied by major social change. Agriculture demanded an altering of the physical landscape and here was a greater concern for territory. This saw the construction of large communal ritual monuments called megalithic tombs, which are characteristic of the period. However, less ostentatious funerary rites such as individual cremation (pit) burials were also practised.

No known Neolithic sites are located within the study area of the proposed Project, however a review of the Topographical Files held by the NMI have revealed that a Neolithic polished stone axe is recorded from two townlands within AZ1 at Fosterstown North (Ref.: 1959:13) and Seatown West (Ref.: RIA1922:2) although the exact find location of the axes is unknown, they are indicative of the archaeological potential of the area. A further stone axehead is recorded from the townland of Santry Demesne within AZ3 (NMI Ref.: 1947:43; AZ3).

25.4.2.3 Bronze Age (2500-800 BC)

The Bronze Age was characterised by the introduction of metalworking technology to Ireland and coincides with many changes in the archaeological record, both in terms of material culture as well as the nature of the sites and monuments themselves. Though this activity has markedly different characteristics to that of the preceding Neolithic period including new structural forms and new artefacts (such as Beaker pottery), it also reflects a degree of continuity.

During the Bronze Age, Megalithic tombs were no longer constructed, and the burial of the individual became more typical. Cremated or inhumed bodies were often placed in a cist, which is a stone-lined grave, usually built of slabs set upright to form a box-like construction and capped by a large slab or

several smaller lintels (Buckley and Sweetman 1991). Burials were often made within cemeteries, which were either unenclosed or else marked in the landscape with the construction of an earthen barrow. Barrows of this period often vary in form and can include the ring-ditch, the embanked ring-ditch, the ring barrow, the bowl barrow and the bowl barrow lacking an external bank. In general, ring ditches date to the Bronze Age, with the earlier examples being simpler in form and later examples incorporating entrances and a wider range of burials practices. Within Ballystruan (AZ3), a cluster of three cremation pits (ACH101), which were dated to the late Bronze/early Iron Age were recorded during OMN test excavations, within the site of the proposed DASP (Frazer 2009).

A number of ring-ditches are recorded within the study area of the proposed Project. A ring-ditch (ACH003) was identified in Lissenhall Little (AZ1) via analysis of aerial photography. Archaeological test excavations for OMN revealed the eastern ditch (c. 3.3m wide) of the ring-ditch and a cremation pit containing a fragment of pottery (Channing 2009). This is located within the site of the proposed Park and Ride compound where recent geophysical surveys have also identified the potential for further associated remains. Ring-ditches were identified in Nevinstown West (AZ1) (ACH078) at the eastern side of the study area and at Crowcastle (RMP DU011-152----) (O'Hara 2010), c. 100m south of the study area.

One of the most frequently recorded Bronze Age sites within the archaeological record is the burnt mound or *fulacht fia*. Over 7000 *fulachta fia* have been recorded in the country and hundreds excavated, making them the most common prehistoric monument in Ireland (Waddell 1998, 174). They generally consist of a low mound of burnt stone, often in horseshoe shape surrounding an earth cut through, which may also be lined with wood or stone. Often these sites have been ploughed out and survive as a spread of heat shattered stones in charcoal rich soil with no surface expression in close proximity to a trough. Much debate exists as to the function of these monuments and suggestions include cooking sites, bathing sites, textile dyeing sites and beer making sites. Numerous *fulachta fia* are recorded within North County Dublin. They are often found near to low-lying marshy areas or adjacent to streams or rivers enabling the trough to fill naturally with ground or surface water. A burnt mound (ACH073) within the proposed Project boundary in Fosterstown South (AZ1) was subject to a geophysical survey and test excavations in advance of OMN (Hession 2009). It comprised a spread of black silty clay (3m x 2m) with inclusions of burnt and heat shattered stone.

A burnt mound (ACH107) comprising an oval-shaped deposit of dark black sandy silt was investigated within the site of the proposed Dardistown Depot in Ballymun (AZ 3; Hession 2009). A kidney-shaped pit containing burnt mound material was also exposed, at the proposed depot location in Ballystruan (ACH106). No trace of an associated burnt mound was exposed (Frazer 2009).

Prehistoric activity within Dublin City Centre is rare within the archaeological record, as it can be assumed that archaeological remains, in many instances, have predominantly been removed by later development. Evidence for early Bronze Age activity was identified as a burnt spread on the northern shore of the River Liffey at Hammond Lane, c. 985m west-southwest of the study area (Cryerhall 2003, RMP DU018-134----).

The Topographical Files of the NMI record a large number of stray finds dating from the Bronze Age from within the study area at Townparks (AZ1), near Swords. These records indicate activity dating to this period in this area, although the specific find location of the artefacts is not recorded. The records comprise: a socketed bronze spearhead (NMI Ref.: 1998:48); a flat bronze axehead (NMI Ref.: E92:335); a bronze palstave and a flat bronze axehead (NMI Ref.: 1939:16-7) and a bronze palstave, a socketed bronze axehead, and a flanged bronze axehead (NMI Ref.: RIA1916:39/41-2). A bronze penannular brooch (NMI Ref.: 1938:8566) with an interlaced design has also been recorded from Collinstown (AZ2).

25.4.2.4 Iron Age (800 BC-AD 500)

Until recently, the dearth of evidence representing the Irish Iron Age led to it being among the most enigmatic and least understood periods in Irish prehistory. However, large scale commercial excavations carried out over the past two decades have produced significant quantities of new data relating to Iron Age settlement and industry across the country. This raw excavation data is still being analysed and a picture of life during the Iron Age is being assembled (Becker 2012, 1). As outlined in Section 25.4.2.3 a cluster of three cremation pits (ACH101) identified in Ballystruan (AZ3) possessed a late Bronze Age/early Iron Age date (Frazer 2009). Furthermore, a possible Iron Age artefact comprising a bronze bridle bit has

been recorded within the study area at Wad, in lands now occupied by Albert College Court (AZ4; NMI Ref.: IA/105/77).

Evidence for fording the River Liffey in the Iron Age has been identified at Ormond Quay at the confluence with one of its northern tributaries, the River Bradogue, c. 435m southwest of the study area (AZ4). The earlier of the two prehistoric structures found at this site was a timber braced gravel bank with an associated pathway made of hurdles (prefabricated wattle panels), which was in turn succeeded by a brushwood platform. The structures were located at the river's edge and were radiocarbon dated to c. 160-60 BC (Bolger 2008). They may relate to activities associated with exploiting the resources along the river's floodplain or, given the site's proximity to the supposed location of the 'ford of the hurdles' at Usher's Island, they may have been associated with a crossing point of the River Liffey.

25.4.2.5 Early Medieval Period (AD 500-1100)

During this period, Ireland is depicted in the surviving sources as entirely rural with the kingdoms subdivided into smaller territorial units, known as *túath* (Stout 1997). The most common indicator of settlement during the early medieval period is the ringfort. Ringforts (also known as *rath*, *lios*, *caiseal*, *cathair* and *dún*) are a type of defended homestead comprising of a central accommodation area enclosed by a number of defensive circular banks and ditches. Ringforts are most commonly positioned on sites with commanding views of the surrounding landscape which provided an element of security. While ringforts, for the most part, avoid the extreme low and uplands, they also show a preference for the most productive soils (Stout 1997).

The most recent study of the ringfort (Stout 1997) has suggested that there are a total of 45,119 potential ringforts or enclosure sites throughout Ireland. This figure has since been revised upwards to 'over 47,000 ringforts', while other studies suggest that there are 'at least 60,000 early medieval settlement enclosures on the island' (O'Sullivan et al., 2014).

Archaeological investigations carried out as part of the proposed Project have identified a number of archaeological sites that may represent of the remains of ringforts or early medieval enclosures. In Lissenhall Little, within the proposed Park and Ride (AZ1), an enclosure measuring 46m NE-SW by 36m NW-SE externally was identified within ACH001. A portion of a further possible early medieval enclosure site was also identified during geophysical survey in the northern most portion of the study area in Lissenhall Little (ACH005) (Gimson and Garner 2021).

Analysis of aerial photographic coverage has revealed two adjacent enclosures within the study area in Balheary Demesne (AZ1) to the west of the proposed Project. ACH014 is marked as a possible tree ring (demesne feature) on the first edition OS map. The second (ACH015) is located just to the south of ACH014 and is sub-oval in plan with apparent associated features. This is not listed on any cartographic sources. In the absence of invasive investigations, the potential that both enclosures are of early medieval date cannot be ruled out.

Two early medieval enclosures, likely to represent the remains of ringforts have been identified within the footprint of the proposed Project in Fosterstown South (AZ1; ACH075 and ACH080; Hession 2009), with a further example located within the proposed Dardistown Depot at Ballystruan (AZ3; ACH096, Frazer 2009).

Another site traditionally dated to the early medieval period is the Holy Well. The worship of water sources was seen as a pagan activity. With the arrival of Christianity, the curative powers of the well water were subsequently apportioned to Saints in order to encourage the local populace to convert to the new religion in a manner that related to their pre-existing belief system. The examples of Holy Wells located within the study area at AZ1 including ACH007 in Lissenhall Little and ACH050 in Crowscastle.

25.4.2.5.1 Swords (AZ1)

Swords was an important centre of the ancient Gaelic kingdom of *Brega*, which, from the late Iron Age to the Norman intervention of 1169, approximately covered the same area as modern Fingal and was bounded by the Rivers Tolka to the south and Delvin to the north. *Brega* was ruled by the *Ui Chernaig* branch of the dynasty known as *Sil nAedo Slaine*, a southern branch of the *Ui Neill* who gained control of

the territory in the early 8th century (Bradley 1998). Swords formed part of the sub kingdom of *Gailenga Becca* until the expansion of the Hiberno-Norse kingdom of Dublin in the late 9th and 10th centuries.

The name 'Swords' derives from the Irish *Sord Colmcille* or 'St Colmcille's Well'. The Irish word *sord* means 'pure' can also be applied to a spring or well (Joyce 1995, 566). The monastic settlement dedicated to St Colmcille was founded on high ground to the west of the River Ward. Its association with St Colmcille suggests a 6th century date for its foundation (Gwynn and Hadcock 1988, 44; O'Donovan 2016). However, the first documented reference to a *Fínán* of 'Swords' is in the Martyrology of Tallaght dating to the late 8th century (MacShamráin 2016). The monastic foundation is not directly documented until the tenth century, when the death of Ailill Mac Maenach, Bishop of Swords and Lusk was recorded for the year AD965 in the Annals of the Four Masters (Bradley 1998, 44). The ZAP for the historic town extends into the western section of the study area (ACH036), being located c. 160m west of the proposed Project at its closest point.

The monastic settlement at Swords was burned in AD 994 by Maelseachlainn of Meath. This attack was part of a wider move against the Sitric Mac Amlaoimbh (Hiberno-Norse descendants of mixed Irish and Scandinavian ancestry), illustrating the extent to which Swords fell within the ambit of the Hiberno-Norse kings of Dublin at this time. An extension of this conflict into the 11th century resulted in the burning of Swords by the Vikings of Dublin in 1012 and 1016, as recorded by the Annals of the Four Masters. These attacks clearly show that Swords fell outside of the control of Dublin for several years during the early 11th century. This may explain why Howard (2004, 153) notes that following the death of Brian Boru at the Battle of Clontarf that 'the body of Brian Bórama ... was handed over to the Armagh clerics at Swords, then a church on the border of Fine Gall'.

A large cemetery (ACH039), which was in use from the 6th century onwards, was excavated at Mount Gamble, Townparks now occupied by the Pavilions Shopping centre (O'Donovan and Geber 2009). The cemetery illustrates how Swords was an important local centre throughout the early medieval period. In addition, O'Donovan (2016) also points to possible missionary activity in the environs of Swords in the 6th century with the coming of Palladius and Secundus, while according to MacShamráin (2016) there is a strong possibility of Gaulish and British ecclesiastical links at Swords and the wider Fingal area in the early 6th century.

25.4.2.5.2 *Glasnevin and Phibsborough (AZ4)*

The name 'Glasnevin' is derived from the Irish *Glas Naíon*, meaning stream. The name derives from a stream that flowed into the River Tolka on the east side of present-day Glasnevin Bridge from the grounds of Deville House (now the grounds of the Bon Secours Hospital). The early medieval ecclesiastical settlement at Glasnevin was founded by St Mobhi (d. AD 544) presumably in the first half of the 6th century (ACH134). The present-day St Mobhi Church of Ireland building and graveyard (ACH134) is believed to mark the position of the original ecclesiastical foundation and is located to the west of the study area. The fossilized remains of the early medieval ecclesiastical enclosure survives within the landscape, c. 65m west of the proposed Griffith Station and now forms a large portion of the Bon Secours Hospital. It is clearly visible within the historic OS maps with the enclosure being oval in plan and measuring c. 250m north to south and c. 240m east to west (Swan 1985). Two burial grounds are also recorded within the overall zone of archaeological potential (RMP DU018-005005- and RMP DU018-005004-), both of which were identified during works in the 1950s (SMR file) and are located 64m and 144m to the west of the study area respectively. Further to the south of Glasnevin, a Holy Well, known as 'Dane's Well' (ACH137), is recorded within study area. This well resulted in the townland being called Daneswell (SMR file).

Archaeological investigations, comprising a geophysical survey (Gimson and Garner 2019) and a programme of archaeological test excavations (Murphy 2020), were carried out at the proposed Griffith Station as part of the proposed Project. Human remains were recorded from the site in 2008 and the initial geophysical survey identified significant potential sub-surface archaeological remains.

Archaeological test excavations confirmed the results of the geophysical survey and indicated the presence of at least six curving ditches, possibly relating to an enclosure c. 30m in diameter, prominently placed overlooking the River Tolka (ACH136). No further human remains were identified during the archaeological investigations, but a fragment of the bone recovered in 2008 was subject to Carbon 14 dating and returned a 2-sigma calibrated date of AD 585-651, confirming an early medieval

date for the remains. The site may have been established following the foundation of the ecclesiastic centre at Glasnevin, c 180m to the northwest, and given its prominent position overlooking the River Tolka, may have been of high status and possibly directly related to the ecclesiastical site.

Dublin City Centre (AZ4)

The early cartographic representations of Dublin City indicate the position of the estuary shoreline prior to the commencement of reclamation works. On the northern side of the River Liffey, it is possible that Amiens Street (formerly the North Strand), represents this former shoreline (De Courcy 1996, 270); whilst the southern shoreline would have included a complex marshy delta at the mouth of the River Dodder, extending to cover the proposed Project area surrounding Tara Street. De Courcy also argues that this is likely to have been the position of the shore line as far back as AD 850 (De Courcy 1996, xxvii).

The name Dublin (*Dubhlinn*), meaning 'black pool', is generally taken to refer to the pool or pond that was located directly southeast of the site of the present Dublin Castle (RMP DU018-020488-), c. 560m west of the study area. It has been argued that the name refers to an early Christian monastic settlement south of the black pool and Clarke (1990, 58) believes that this interpretation of Dublin would explain why the town has two names – *Dubhlinn* (for the enclosed ecclesiastical area) and *Baile Áth Cliath* – a secular settlement that was developed to guard over the 'ford of the hurdles' (now the present-day Fr Mathew Bridge RMP DU018-020042-).

It has been argued that *Dubhlinn* formed the focus of pre-Viking Dublin and that early Christian Dublin had no particular significance as a population centre, border post, or transport hub until the Vikings arrived and took advantage of its position (Stout and Stout 1992, 15). Ecclesiastical foundations were common across the county at this time and it is unlikely that any of the major route ways would have passed through a settlement where travel was limited to the north by a large tidal river. However, De Courcy (1996, xxviii) suggests that the *Slighe Midluachra* (one of the four ancient highways of early medieval Ireland), crossed the River Liffey at the location of the 'ford of the hurdles', which would have made Dublin a more important settlement due to the traffic passing through.

The medieval settlement was transformed by the arrival of the Vikings who had established themselves in Dublin by the middle of the 9th century. By the 10th century Dublin had become a recognised urban centre. One of the first of the Viking landing points was marked by a standing stone or pillar stone ('The Long Stone'), which was erected according to Norse custom (de Courcy 1996, 235). The Long Stone stood just above the high-tide shoreline at the confluence of the Rivers Liffey (to north) and Steine (to south) (RMP DU018-020129-). Today this is thought to be on the northern side of Trinity College, directly to the west of the study area. The Long Stone was stolen c.1794. A modern replica was erected at the location at the north-eastern end of College Street in 1986; in 2017 this was relocated several metres further to the east in order to facilitate the construction of Luas Cross City (LCC). Direct evidence of Viking activity in this area comes from a Viking iron sword with a bronze inlay recovered from Kildare Street in 1898. Although the exact find location is unknown, the street is located c. 90m to the west of the study area (NMI Ref.: SA104/1898).

The first steps towards urbanisation in Dublin date to AD 841 when Vikings established a longphort, which was a semi-permanent Viking encampment, which then developed over the next 60 years into a commercial centre that was an important marketplace for slaves and luxury goods. The precise location of this initial settlement has remained somewhat elusive. It has been suggested that it was located next to the River Poddle and the River Liffey, close to the current Dublin Castle. Excavations at the intersection of Stephen's Street Lower and South Great George's Street in 2003 produced evidence of a Viking warrior burials dating to the 9th century (Simpson 2005). The burials were located along the southern shore of the 'Black Pool', which was found to extend as far south as the excavated area. Kilmainham is the only area to produce a large amount of 9th century artefacts to date. These artefacts were discovered during the construction of Heuston Station over 150 years ago. Although not excavated under scientific conditions, it is thought that these finds represent a large cemetery that must have been associated with the 9th century longphort, which was in all probability located close by. Clarke (2002) has argued that the initial longphort of the Vikings was actually the enclosure of *Dubhlinn* commandeered by the invaders. He also proposes that the second secular enclosure at *Áth Cliath* was also commandeered soon after.

This first phase of settlement only lasted until AD 902, when the Annals of Ulster record that the Vikings were driven away from Dublin. The Vikings returned to Dublin in AD 917 and established themselves in a new location overlooking the confluence of the Rivers Liffey and the Poddle in an area that stretches today from Dublin Castle to Christchurch Cathedral (Bradley 1992, 45). This settlement differed in form as it appears to have been founded as a trading town, with archaeological evidence suggesting the presence of individual property plots, a street layout and earthen defences (ibid).

A key event within the environs of the early medieval settlement of Dublin, and the study area, was the Battle of Clontarf, which took place in 1014 involving Brian Boru's army and the Vikings of Dublin. A burial ground thought to potentially be associated with the battle is recorded by the RMP c. 45m to the east of the study area encompassing the area delineated by Parnell Square West to the southwest, Mountjoy Square East to the northeast, Parnell Street to the southeast and Dorset Street to the northwest (RMP DU018-020495-), although in reality, any burial grounds and the battlefield are likely to have occupied even larger areas than this. In 1897 (Irish Builder, 106), it was reported in the press that in previous years there had been a discovery of human bones, swords and spears during the construction of houses in North Great George's Street, Summerhill, Gardiners Row and Mountjoy Square. Previous to this, a 1763 report (Dublin Magazine) stated that "Vast quantities of bone" were discovered whilst digging behind the New Gardens (now Parnell Square) at Great Britain Street (now Parnell Street). They were found 2 to 3ft beneath the surface and were also present on Cavendish Row and Granby Row. The remains, which included a large sword and a spear, were thought to relate to the Battle of Clontarf. In 2018 archaeological test excavations, carried out to the rear of 23–28 Parnell Square North, c. 50m west-southwest of the study area, recovered 864 fragments of human skeletal remains representing at least eight people. The remains were retrieved from a deposit that had been disturbed during the post-medieval period (McIlreavy 2018). Analysis of the bone indicated a burial date ranging from the late 7th to mid-10th century AD, contemporary with the Viking period. Whether the remains are associated with the Battle of Clontarf is unclear, especially as the bone assemblage included juvenile bones, a demographic unlikely to have been involved in battle. It may alternatively represent the remains of a Viking period settlement site.

The *Annals of the Four Masters* say that the Battle of Clontarf was fought *from Tulcainn to Áth Cliath* and while one may expect that isolated encounters of small groups occurred during the day over a wide area, this description is the simplest and the most accurate definition of the battlefield. *Tulcainn* was the River Tolka and *Ath Cliath* was likely to have been located at the *Droichet Dubhgail*: the bridge that crossed the River Liffey at this time. The *Annals of Loch Ce* state that Brian Boru faced the allies on the slope of Crinan Hill; however, the precise location of Crinan Hill is unknown today. One record from 1339 places it south of Ballybough Road, but by deduction from other records of 1192 and 1324 it is possible that it is extended from Ballybough Road to Drumcondra Road. It has been suggested (De Courcy 1996) that the main action of the battle took place in the area bounded by O'Connell Street, Dorset Street, Drumcondra Road, the River Tolka, Ballybough Road and the North Strand. This area was likely to have been sparsely populated at the time and was thus a suitable area for a large battle to take place.

The study area south of the River Liffey is located over 650m to the east of the Viking Town; however, the focal point of Hoggen Green was located c. 300m southwest, at the eastern end of what is now College Green. This area is potentially an old Viking burial ground characterised by mounds known as 'haugr'. Hoggen Green', the medieval name for this area, is both a legacy of the old Norse word as well as demonstrating the continued importance of the place for subsequent generations.

A Viking assembly place or, 'Thing', from which oral laws would be recited, was located south of 'Hoggen Green' at the intersection of present-day Suffolk Street/Church Lane. It comprised a large flat-topped mound known as the 'Thingmote' or 'Thingmound' (RMP DU018-020132-) which was razed c.1685, and the arising material used to alleviate flooding on Nassau Street.

25.4.2.6 Late Medieval Period (AD 1100-1600)

The Anglo-Normans arrived in Ireland in 1169, to support the deposed King of Leinster, Diarmuid MacMurchadha. By the end of the 12th century the Anglo-Normans had succeeded in gaining control over much of the country (Stout and Stout 1997, 53). Leinster, including Dublin and Meath, was 'sub-infuedated', meaning that large swathes of land were parcelled out among the Anglo-Norman elites. The Anglo-Norman tenurial system more or less appropriated the older established land units known as

túaths in the early medieval period but described the territories as manors (MacCotter 2008). The feudal barony of Coolock, within AZ1 of the study area, was granted in 1199 by Henry II to the Archbishop of Dublin. In 1208, the Lordship of Fingal was granted to Walter de Lacy by King John of England.

Hugh de Lacy granted the lands of Santry to his baron, Adam de Phepoe. A medieval manor was located at Santry Demesne, possibly occupying the site of the later post medieval house (RMP DU014-030----), c. 1km east-southeast of the study area. The manor consisted of hall and chambers, with stables, bakery, orchards, and forestry (SMR file).

This time period was also synonymous with castle-building both masonry and earthwork as well as the creation of new towns and enlargement of older urban centres, including Swords (AZ1), Glasnevin (AZ4) and Dublin City (AZ4; see below). A number of late medieval sites are recorded outside these urban cores in and within the vicinity of the study area of AZ1-AZ3. These include the site of Corballis Castle (RMP DU014-011----), which is located c. 255m to the southeast of the proposed Dublin Airport Station (AZ3). Archaeological investigations of the site in 2006 did not identify any remains of a castle (O'Donovan 2006), but a stone structure potentially dating to the 17th century was identified, which may have later been incorrectly recorded as a 'castle'.

Lissenhall Bridge National Monument, which possesses a late medieval origin (ACH020), is located within the study area, c. 35m east of the proposed Project boundary. The structure traverses the River Broadmeadow to the north of Swords. It is depicted on the Down Survey map of c. 1655, but according to the NIAH it was rebuilt c. 1760. The central section of the bridge has slightly pointed arches with wattle marks and was dated to c. 1450-1550 by O'Keeffe and Simington (1991, 186-188). An underwater assessment of the Broadmeadow and Ward Rivers and GPR survey of Lissenhall Bridge and the adjacent Balheary Bridge was undertaken as a component of OMN works (Bangeter 2009) and was supplemented by further survey work in 2020 (Brady 2020). This confirmed the bridges are part of the same continuous structure and that the first phase of building (pre-1600s) formed the middle section of both bridges with later phases abutting the eastern and western sides. In addition, several riverine features of historic interest, dating to the post-medieval period were documented, including a weir location and associated walling, five sections of river revetment wall, and a single-arched bridge structure (ACH019) located 91m west of Balheary Bridge on the River Broadmeadow, Chapter 26 (Architectural Heritage). This structure is immediately adjacent to the proposed Project and appears within the historic mapping as carrying a drive to Balheary House.

The location of the Broadmeadow and Ward Rivers are illustrated on Rocque's Map of 1760, at this time the Broadmeadow River was separated into two channels north and south of which only the southern channel now survives (ADCO 2020). Rocque depicts a single bridge structure crossing the Broadmeadow River channels and the Ward River on the same site now occupied by Lissenhall and Balheary Bridges. The age of Lissenhall Bridge, dating from 1450-1550, suggested that this bridge was potentially that depicted by Rocque and that its original structure was much larger, and likely to have extended southwards beneath the alignment of present day Balheary Bridge. To establish a structural relationship a GPR Survey and an archaeological test excavation of both bridges was undertaken as a component of OMN works.

The GPR survey identified a c.30m continuous wall beneath a modern landscaped area to the south of Lissenhall Bridge/north of Balheary Bridge, orientated along the same north-south axis as the eastern wall of the existing Lissenhall Bridge (Thebaudeau and Harrison 2009). It also identified a possible wall to the east of a clearly visible arch/culvert built into the western side of the construct between the two bridges (Channing and Hession 2009). These results were interpreted as the eastern wall of a structure that formerly connected the two bridges. The subsequent archaeological assessment confirmed the existence of an extensive sub-surface wall which originally spanned from Balheary Bridge to Lissenhall Bridge confirming that at one point the rivers were crossed by a single continuous bridge structure. Although the dating of the sub-surface wall was uncertain it appeared to be of post-medieval date, possibly representing a rebuild of an earlier medieval structure (Channing and Hession 2009).

Although once continuous, the section of bridge that carried the old Drogheda Road over the Ward River was replaced at some time in the mid-nineteenth century with a new twin-arched bridge known as Balheary Bridge. As noted above, Balheary House was built sometime between 1816 and 1843 and its demesne ran southward across the two rivers. A driveway from Balheary House crossed both rivers and

ran south-eastward to a gate and gate lodge on the main road to the south of Balheary Bridge. The bridge that took this driveway over the Broadmeadow River is no longer extant, while the one crossing the Ward River remains in place and in use.

25.4.2.6.1 Swords (AZ1)

In the mid-12th century, the monastic site at Swords (RMP DU011-034002-) and its possessions were transferred to the Archbishop of Dublin. Swords subsequently became one of the principal archiepiscopal manors of Dublin. Archbishop Comyn established a borough in Swords in the late 12th century and in 1197, King Richard granted a charter to Swords, by which each burgess (an inhabitant of a town or borough with full citizenship rights) was to pay 12 pence annually for his burgage. In a later charter, he confirmed the burgesses of Swords in their burgages and gave them the liberties and free customs of Dublin and established an annual rent of one shilling per burgage (Bradley 1998; Ball 1906). An extent of the manor recorded in 1326 noted that there were the 122 burgesses.

According to D'Alton (1838, 141) the town was considered one of the walled towns of Dublin in 1578, although no evidence for a medieval town wall has been recorded within the settlement. The medieval settlement was laid out either side of the north-south main street, located to the south of Swords Castle (the archbishop's residence). The first edition OS map of 1843 suggests the eastern defences may have travelled along the rear of the burgage plots c.40m west of the study area.

The main street in the town was called High Street in medieval documentation (Mc Neill 1950, 285). There is a reference within a 14th century deed to a lane called 'Le Camerothe' that ran in an east-west direction in the settlement and may possibly be the modern Well Road or Seatown Road. A weekly market was confirmed to the archbishops in 1395 and this was located in Main Street, possibly at the centre of the settlement, where the street widens noticeably at the junction with what is the Malahide Road today.

During the 13th century, the Archbishops of Dublin occasionally resided at Swords Castle. Expenditure on the upkeep of the castle (Nat. Mon. 340; RMP DU011-034001-; RPS 0351), c. 90m to the west of study area, was recorded and in the 1270s a sum of £100 was accounted for the 'repairs of houses, mills, and other expenses in the manor of Swords' (Stalley 2006).

Archbishop Alexander De Bicknor, whose episcopacy lasted from 1317 to 1349, was accused of misappropriating church monies and as a result an inquisition was held into the matter. Magnificent detail not only of the arrangement of Swords Castle but of the elements within a 14th century manorial centre are contained within the inquisition record which describe the castle as follows:

'there are a hall; a chamber for the archbishop annexed to it, of which the walls are of stone and crenellated like a castle, roofed with shingles — there are a kitchen there with a larder, whose walls are of stone and roof of shingle, a chapel with stone walls and a shingle roof; there was a chamber for the friars with a cloister now thrown down; near the gate is a chamber for the constable and four chambers for knights and squires, roofed with shingles: under these a stable and bakehouse; there was a house for a derreria [dairy] and a carpentria [workshop], now thrown down. In the haggard a grange constructed of poles and covered with thatch, a timber granary roofed with wooden boards; a byre for housing nags and kine; these easements they extend at no value, for nothing is to be got from them either by letting or otherwise, since they need great repair, as they are badly roofed.' (McNeill 1950, 175)

Such an extensive farmstead and industrial centre within the walls of the castle suggests a significant supporting settlement, which was likely to have involved the utilisation of the hinterland surrounding Swords for agricultural activity, including within the landscape of the study area. The recovery of a medieval bronze vessel (NMI Ref.: R181) and a medieval copper alloy ewer, a jug, (NMI Ref.:4969:W57) within the study area of the proposed Project supports this assertion.

25.4.2.6.2 Ballymun (AZ4)

Whilst there are no definitively late medieval sites located in Ballymun, one site does have the potential to date to this period. This AAP (ACH110) is located within the townland of Ballymun on the alignment of the proposed M50 Viaduct. The site primarily comprises a charter-school, known today as 'Santry

Lodge' that was opened for 60 girls in 1744 (D'Alton 1835, 259). The Glasnevin Heritage organisation notes that the school was originally a mill, built in c. 1700¹. The 'Charter School' is shown on Roque's map of 1760 bounded to the north by the Santry River and to the south by a probable attached walled garden or orchard that is square in plan. A rectilinear structure with a central porch to east is shown between the garden and river, and this is likely to represent the charter school building. The first edition OS map of 1843 shows the river and an adjacent building, with a further watercourse running along the western edge of the complex associated with the school. The school structure possesses a larger footprint than the structure that is present today. Part of the property fronting onto Old Ballymun Road is annotated as 'Tower House' on the 2nd edition OS map of 1909; it no longer survives, though a Gate Lodge is present to the north of the entranceway.

It is possible that milling may have taken place on this site prior to the construction of a building in the early 1700s, especially given the proximity of Santry Demesne (and associated medieval manor) to the east. The presence of a square enclosure bounded by watercourses to the north and west may also suggest the presence of an earlier complex that was re-used to construct the Charter School. The south-western portion of the structure (now removed), which is marked as 'Tower House' within the mapping, may suggest the presence of a late medieval structure on the site, possibly within a square bawn. It is similarly possible that the structure possessed replica medieval characteristics and was viewed as a type of post medieval folly, rather than an actual medieval structure. Santry Lodge (and associated complex) are also discussed in Chapter 26 (Architectural Heritage) (BH-14).

25.4.2.6.3 *Glasnevin and Phibsborough (AZ4)*

From 1306, the lands of Glasnevin, together with St Mobhi's church, appear as the property of the Priory of the Holy Trinity under the Archbishop of Dublin, until the dissolution of the monasteries in the 16th century (Bennett 1996:123). The site of the early Christian monastery of St Mobhi (ACH134; RMP DU018-005001-), c. 200m west of the study area, was still in use during the 13th century when its church was part of the home farm for the Priory of the Holy Trinity, Christchurch (Ball 1920, 124-147). In 1344 the manorial residence at Glasnevin underwent restoration (Ball 1920) and in the same year, or during a similar period, a medieval church was constructed on the site of the original early medieval monastery and a motte (RMP DU018-005009-) is recorded to the southeast of the ecclesiastical enclosure, c. 40m west of the study area. There is no direct evidence of secular medieval settlement associated with the ecclesiastical site, although a settlement cluster (RMP DU018-005011-) is recorded dating to the 17th century, c. 300m northwest of the proposed Project. It is possible that the townland of Bankfarm, to the east of the ecclesiastical settlement and incorporating the site of the proposed Griffith Station, also formed part of the lands associated with the Priory of the Holy Trinity, with the placename referring to farmlands on the banks of the River Tolka.

25.4.2.6.4 *Dublin City Centre (AZ4)*

After the Anglo-Norman invasion of Ireland in 1169, the medieval settlement of Dublin enjoyed a period of prosperity and development, which continued until the beginning of the 14th century. The Anglo-Norman administration was responsible for reinforcing the town walls with defensive towers. Improvements were made to the medieval town defences, which involved erecting a number of gates on the built-up streets outside the walls and supplementing the defensive gates already in place along the town wall itself. It was also during this period that the first substantial reclamations of land occurred along the River Liffey at Wood Quay, c. 810m to the west of the study area (Halpin 2000, 34). The 1192 Dublin Charter admitted that citizens were free to "improve themselves in making buildings.....upon the water," implying that land was being reclaimed from the river at that date.

Late medieval development that took place on the lands to the north of the River Liffey was principally restricted to the medieval suburb at Oxmantown and St Mary's Abbey. St Mary's Abbey was located c. 450m to the west of the study area, with Oxmantown located to the west of the abbey. St Mary's Abbey (National Monument, RMP DU018-020048-) was founded in 1139 by Benedictine Monks belonging to the Congregation of Savigny. In 1147, St Mary's became subject to the monastery of Combermere in

¹ <https://www.facebook.com/GlasnevinHeritage/posts/ballymun-santry-charter-schoolthe-schoolhouse-was-originally-a-mill-built-c1700-/887818121368856/> (accessed 12.08.21)

Cheshire. At its largest extent St Mary's was the richest monastery in Ireland with a holding of 30,000 acres, 17,000 of which were in County Dublin (Ó Conbhuidhe 1962, 21-29) and included Grangegorman to the north of Smithfield. The enclosed outer precinct of the Abbey was bounded by modern day Parnell Street, Little Britain Street, Little Green Street, Arran Street East, Liffey Street Upper and Liffey Street Lower, c. 90m to the west of the study area, parallel to the proposed O'Connell Street Station. This is shown as being a large walled area on John Speed's map of 1610. The inner abbey precinct was located further to the west and recent excavations on Little Green Street identified part of the northern gateway into the abbey precinct (Duffy 2019), 450m west-southwest of the study area.

Late medieval development also took place to the east of the town walls on the south bank of the River Liffey. In 1166, the Augustinian Priory of All Saints (All Hallows) (RMP DU018-020044-) was established by Diarmait Mac Murchada, King of Leinster, on the location that would later become Trinity College Dublin (TCD) (Gwynn and Hadcock 1988, 171). The priory, located c. 155m west-southwest of the study area, consisted of lands comprising twelve acres of meadow and nine acres of pasture in addition to seven orchards. The priory was dissolved in 1538 and its possessions granted to the citizens of Dublin in recognition of their loyalty during the Silken Thomas Rebellion of 1534 (Gilbert 1861, 3-4). In 1592, a college (now TCD), was established on the site.

During the later medieval period, the general area to the north of the Priory of All Saints was locally known as Lazar's Hill, which became an open public space known as 'The Steine'. De Courcy (1996, 190) states that a growing number of Dubliners embarked on pilgrimage to Santiago de Compostella by departing on ships sailing from the southern shore of the River Liffey, east of the mouth of the River Stein. The Archbishop of Dublin, Henry of London, founded a hospital in c. 1220 to care for waiting pilgrims as well as lepers (Lee 1996, 14). The hospital (ACH197), located within the proposed Project boundary at Tara Street, was endowed with the Church of Delgany to maintain it. A 'Lazaretto' is the name for a quarantine station for maritime travellers, while a leper colony administered by a Christian order is known as a lazaret house after the parable of Lazarus the beggar (Takeda 2011, 118). It is believed that this foundation gave its name to the area – Lazar's Hill – which was later corrupted to Lazy Hill, eventually becoming modern Townsend Street. There is no evidence that this hospital survived into the 18th century or is associated with the Lock Hospital established in 1753. This stood on the site of the proposed Tara Station and was archaeologically excavated in 1997 (Walsh 1998 (ACH197)). The site of the proposed Tara Station also contains the site of a Lutheran church and Burial Ground established in 1725 (ACH196). This was also archaeologically excavated in 1992 after development works exposed truncated post medieval burials in the northern part of the site in 1992 (Channing, 1992). The southwest corner of the proposed station was investigated in 2001 and post medieval remains possibly associated with the stabling of horses was recorded (Kehoe 2002). No sites of an earlier medieval date have been recorded.

25.4.2.7 Post-Medieval Period (AD 1600-1900)

25.4.2.7.1 Swords (AZ1)

The settlement of Swords was granted a new charter by Elizabeth 1 in 1578 which established it as a parliamentary borough. It appears that the castle was retained by the archbishop well into the 17th century if not beyond. Samuel Lewis (1837) notes that:

'James I, in 1603, granted to the archbishop of Dublin a confirmation of the privileges of the town, together with a weekly market on Monday; in this document the place is called the archbishop's manor of Swords. A grant of two additional fairs was made to it in 1699.'

During the Wars of the Catholic Confederation in 1641 Swords Castle was used as a rendezvous for Confederate forces and attacked and routed by the forces led by Sir Charles Coote. Following the execution of Charles I, the aristocracy of Fingal remained loyal to the Royalist cause. A rebel force was defeated by Charles Coote at Swords in 1642.

The 17th century saw dramatic rise in the establishment of large residential houses around the country. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be located nationwide. Lands associated with the large houses were generally turned over to formal gardens, which were much the style of continental Europe. By the mid-18th century more natural parkland landscapes were in favour, although the creation

of these required considerable effort, including moving earth, removal of field boundaries, culverting streams to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate. During the 18th century the landscape within the study area was primarily rural and agricultural, with the town of Swords comprising the main settlement area and individual houses scattered across surrounding countryside. Such houses within and surrounding the study area include Lissenhall Little House and Balheary House. These houses and their associated demesnes are addressed in detail within Chapter 26 (Architectural Heritage) but are also described in brief below.

Lissenhall Little was a Georgian villa set in a demesne to the north of Ennis Lane. The southern part of the demesne, within the boundary of the proposed Project was in parkland, while there were orchards and gardens near to the house, the remainder of the demesne appears to have been farmed. The avenue leading from Ennis Lane is extant and many of the original hedgerows and trees also survive.

Balheary House stood c.100m to the west of the proposed Estuary Station. The extensive demesne extended over the entire area surrounded by Ennis Lane, Magillstown Road, Balheary Road and the main road to Drogheda, with the Broadmeadow River and the Ward River flowing through. The site of the former Balheary House is now occupied by the Emmaus Retreat Centre, with a range of buildings close to the site of the original house. The greater part of what was a large demesne is now under cultivation, north of the Broadmeadow River, or built over and under a public park south of the river.

By the 18th century Swords expanded into a market and post-town and in 1837, Lewis describes the population as comprising '3722 inhabitants, of which number, 2537 are in the town'. He further describes the town as occupying a:

'...pleasing situation on the steep banks of a small but rapid stream, which discharges itself northwards into the inner extremity of the creek or pill of Malahide [...] It consists chiefly of one wide street, a mile in length, formed of houses which, with but few exceptions, are of mean appearance. Fairs are held on March 17th and May 9th for cattle and pedlery; petty sessions on Wednesdays; and it is a constabulary police station. [...] The soil is good, and the system of agriculture rapidly improving: there are several extensive corn-mills within the parish, and it is embellished with numerous seats and villas.'

Rocque's map of county Dublin (1760) and the first edition OS map (1843) show the growth of Swords town and the surrounding area over the course of the late 18th and early 19th centuries. While the landscape through which the proposed Project passes remained largely rural, small structures can be seen lining the roadways across the area, some of which are located within the proposed project boundary, elements of which may survive below ground (ACH013, 017, 018, 026, 040, 060-067, 071, 072, 079 and 089).

25.4.2.7.2 Ballymun (AZ4)

Santry Lodge, c. 30m to the west of the proposed Project, is depicted on Rocque's map of 1760 as a charter school and it is not until the 1906-9 OS map that it is annotated as Santry Lodge. To the north of the Lodge a building is shown directly on the northern bank of Santry River on Rocque's 1760 map which may represent evidence for milling in this area. There is also potential for a tower house and bawn to be located in this area and therefore the area surrounding Santry Lodge has been identified as an AAP (ACH110).

As was the case throughout AZ1 and AZ2, the landscape throughout AZ3 during the post-medieval was a largely rural one to the north of Dublin City. Due to the proximity of the city, the landscape was attractive to the landed gentry as a place to establish their country houses and demesnes. Rocque's map of 1760 depicts the buildings and gardens of Stormanstown House (ACH 123) to the immediate west of the proposed Project. The first edition OS map of 1837 shows the original house in ruins (ACH 123) and a new Stormanstown House (ACH122) and an associated demesne landscape are depicted to its northeast within the alignment of the proposed Project. Stormanstown House was the birthplace of Catherine McAuley, who founded the Sisters of Mercy in 1831. A number of other post-medieval structures are recorded on Rocque's map and are located within the study area (ACH128-129); however, these are located beneath Ballymun Road and it is unlikely that any associated below ground remains have survived.

The first edition OS map of 1843 shows the study area occupied largely by agricultural fields, with Ballymun Road being a prominent feature of the landscape in this area. There is very little evidence for settlement along the route of the road, with only a small Roman Catholic Chapel (ACH117) and school noted on the west side of the road, at the corner of Balcurris townland. This church was relocated c. 290m to the south-southwest from its former position in 1847 and a graveyard established in this location at that time (ACH119). There is a Victorian vault within the graveyard dedicated to a coachman of the Domville family, James Kelly. The family paid for his tomb after he was burned alive at the Hellfire Club. A clay pipe bowl was recovered from Santry to the north of the graveyard (NMI Ref.: 1954:44) providing further evidence of post-medieval activity in the Ballymun area.

Wad Bridge (ACH124), elements of which may survive below ground, is annotated on the 1843 OS map and later editions and is located within the proposed Project, to the north of Collins Avenue Station. The landscape had changed little by the 1938 OS map, with the expansion of the Dublin suburbs not reaching this area until the mid-20th century.

25.4.2.7.3 *Glasnevin and Phibsborough (AZ4)*

Following the dissolution of the monasteries, the church at Glasnevin (RMP DU018-005001-) was let fall to ruin, and in 1615, during the regal visitation, the church is described as being in a state of disrepair. For much of the remainder of the 17th century and into the early years of the 18th century the church remained evidently in ruins, as the parish was served by the curate or vicar of Drumcondra. The existing St Mobhí's Church, which is credited to Sir John Rogerson, was built in 1717.

At the beginning of the 18th century the principal residence at Glasnevin was situated on the site of the existing Bon Secours Hospital, c. 155m to the west of the proposed Project. Originally known as Glen, the property became celebrated under the name of Deville during the residence of the Rev. Patrick Delany, Dean of the diocese of Down, and his wife. The original house was levelled sometime in the mid-18th century by Rev. Delany and replaced by Deville. Deville was in its turn demolished in the 1950s and replaced by the Bon Secours Hospital.

The landscape across this area in the mid-18th century was still essentially rural, with a settlement focus around Glasnevin to the west of the study area, as depicted on Rocque's 1760 map of Dublin. There was little change to the north of Glasnevin by the mid-19th century, with the settlement at Glasnevin only expanding slightly by the late 19th to early 20th century. To the south of Glasnevin however, terrace housing can be seen fronting on to Botanic Road, while the Royal Canal (ACH149) is shown crossing the proposed Project and study area.

The Royal Canal is believed to have originated as a result of a former director of the Grand Canal establishing a rival route to link the River Shannon and the City of Dublin. Two routes had been previously discussed, with the Grand Canal route taking precedent in 1755. The Act of Parliament, which established the Royal Canal, was passed in 1789 and the first stone was laid in the following year by the Lord Lieutenant, the Earl of Westmoreland at the 5th Lock within the proposed Project boundary. Measuring c.145km in length, construction began in 1790 and was completed in 1817 (www.royalcanal.ie).

The Broadstone Branch of the Royal Canal (ACH158), which extends from the main line of the canal southwards towards the Royal Canal Harbour at Broadstone, is located within the study area of the proposed Project. The construction of this branch commenced in tandem with the main line of the canal and was completed in 1796. A number of other canal features are recorded within the study area and are associated with the Broadstone Branch, these include the canal tow path (ACH160) and two dry docks (ACH159 and 161). This branch of the canal has been infilled and where the route of this canal branch passes through the study area of the proposed Project, it is occupied by a modern building where it formerly joined the Royal Canal (Dakota Court).

There is potential for remains associated with the Royal Canal to survive below ground as has been shown during the construction of the LCC at Broadstone. Archaeological excavations carried out at Broadstone revealed a deep, stratified sequence of activity. Activity predating the canal was identified followed by sections of the canal and harbour. The archaeological evidence suggested that the canal channel was not subject to significant dredging which resulted in artefact rich deposits being uncovered which provided a snapshot of early to mid-19th century Dublin (Moraghan et. al. 2020).

By the 1830s the canal carried 80,000 tons of freight and 40,000 passengers a year. In 1845 the canal was bought by the Midland Great Western Railway (MGWR) Company. They considered draining the canal and building a new railway along its bed, however the terms of sale required the Railway Company to maintain the canal as a separate means of transport, therefore the railway (ACH147) was built parallel to the canal along its northern side. Competition from the railways gradually eroded the canal's business and by the 1880s annual tonnage was down to about 30,000 and the passenger traffic had all but disappeared. The canal closed to all navigation in 1961 and fell into disrepair. Following over 30 years of restoration works, the canal was reopened as a public amenity in 2010.

The presence of the Royal Canal across the landscape brought with it an impetus for industrial development. The canal brought a water supply across the country with substantial flow and with significant falls at each lock. The canal company leased the use of controlled quantities of water from the canal to industrialists who could use it to drive mill wheels. At Cross Guns the company came to an arrangement with a manufacturer of lead products and a lead works was erected on the southern bank. The works did not survive, however and was in ruins by the end of the 1830s. The site was taken on by J and R Mallet iron founders and engineers in the late 1830s and they built a new iron works on the site, where they manufactured material for the railway business. Robert Mallet, born in 1810, was a successful engineer who designed the pontoon bridge for the Broadstone Branch of the Royal Canal and who was also the founder of seismology, the study of earthquakes (available at: <https://www.malletfamilyhistory.org/>). Mallet's Iron Mill, Chapter 26 (Architectural Heritage) was constructed on the south bank of the canal in c. 1800, c. 40m to the west of the proposed Project. Early iron-works had charcoal-fuelled furnaces however, the scarcity of timber sources, and its substitute coal, in the 18th century led to the closure of many iron-works (Dublin Historic Industry Database 2011). The 1864 OS map reveals that Mallet's Mill had closed down at this time and was replaced with the larger North City Flour Mills. The mills were an important employer in the area, utilising the canal and railway lines.

The MGWR (ACH147) received royal assent in 1845 authorising it to build a railway from Dublin to Mullingar and to purchase the Royal Canal. Construction of the railway began parallel to the Canal in 1846. In 1925, 26 railway companies operating in the Irish Republic, including the MGWR, were amalgamated to form the Great Southern Railway (GSR). From east to west the proposed Project boundary contains two separate railway tracks, the MGWR Link Line that extends from Islandbridge to Amiens Street (the line running along the northern side of the area) and the MGWR Line that extends from North Wall to Sligo (along the southern side of the area). A number of features associated with the railway have been identified within the proposed Project boundary, these include the site of a signal house (ACH147.1), the site of two railway sidings (ACH147.3-147.4), the former railway platform of Glasnevin Station (ACH147.5) and the site of late 19th century structures (ACH147.2). Extant architectural railway infrastructure of historical merit is addressed in Chapter 26 (Architectural Heritage).

By 1800, the population of Dublin City had climbed close to 200,000 and residential sprawl began to spread northwards towards Glasnevin. As the 19th century progressed, residential and industrial development expanded within the study area and surrounding landscape and by the production of the 1906-1909 OS map the study area is largely occupied by such developments.

25.4.2.7.4 Dublin City Centre (AZ4)

Royal Canal to the River Liffey

During the post-medieval period Dublin city changed in plan, function and composition. It moved from a decaying colonial outpost to a cosmopolitan second 'city of the Empire' (Boyd 2006). In 1610, Speed's map of Dublin largely depicted the last snapshot of a medieval city, which more or less had occupied the same structural framework for the previous 600 years. The land to the north of the River Liffey is depicted, with St Mary's Abbey (RMP DU018-020048-; National Monument), to the west of the study area, shown with a road leading eastward towards the proposed Project. The Abbey is again shown on De Gomme's map of Dublin dated to 1673, with the study area located to the east of an area labelled as 'Abbey Parks'.

Lennon (2008, 2) records that the religious estate of St Mary's Abbey was largely consumed by urban sprawl by the 18th century, surviving at that time only as a small number of monastic buildings and a

toponym. Little is known about the early development on the lands formerly belonging to the abbey, which were granted to the Moore family, later the Earls of Drogheda, in 1619. The former abbey lands were bought by Sir Humphrey Jervis in 1676. He laid out a grid pattern on his estate, including Jervis Street, Capel Street, Mary Street, and Ormond Quay by 1685 (*ibid.* 4).

Brooking's map of 1728 shows significant development across the northern part of the city by this date, with the proposed Project and study area located on the edge of the city and now occupied by formally laid out streets and buildings. By 1756, the city was transformed, as illustrated on Rocque's map of Dublin. The city had expanded as far as Dorset Street Upper, with land to the north of this still remaining rural in character, though with post-medieval structures featuring along the roads leading out of the city. The development of this part of the city was in part thanks to the actions of individuals such as Luke Gardiner and Nathaniel Clements, who became agents of urban development from the 1660s (Simpson 2020 p.7, Brady and Simms 2001). The development of this area and that of the immediate surrounding area occurred principally between the middle of the 17th and 18th century. John Rocque's map of 1756 show that prior to the construction of all three sides of Rutland Square (now Parnell Square), the area to the northwest of the Rotunda Gardens, containing the proposed Project, was mainly open fields. Rutland (now Parnell) Square had been completed by 1792. Subsequent mapping from the early 19th century depicts terraced buildings fronting onto Parnell Square and a number of other newly constructed streets with much of the rear plots occupied by outbuildings and mews.

The Moore family oversaw the layout of streets and intersecting lanes including Liffey Street and Marlborough Street (Lennon 2008). Moore Street was developed at this time (1708) as a secondary street in the Moore estate and is shown on Brooking's map of 1728. Gardiner purchased the Drogheda Estate which had owned the lands in and around the study area. O'Connell Street was originally known as Drogheda Street and extended from Parnell Street in the North to Abbey Street in the south, as can be seen on Brooking's map of 1728. In the 1750s Gardiner set about demolishing buildings along Drogheda Street, between Parnell Street and Henry Street, which in effect widened the northern half of Drogheda Street, which by this time had been renamed Sackville Street. Sackville Street, with its central mall, was planned as a residential mall and promenade by Gardiner. Rocque's map of 1756 shows this new layout along with the new buildings fronting on to Sackville Street and Old Brickfield Lane (now Moore Lane).

The Wide Streets Commission, established in 1757, was one of the earliest town planning authorities in Europe and its members were appointed by the Irish Parliament, having been drawn from Dublin merchants and minor gentry. The Commission had wide ranging powers to allow for the redesign of the city of Dublin which included the authority to acquire property by compulsory purchase; demolish it; lay down new streets; and set lots along these new streets. In practice, the Commission redesigned medieval Dublin replacing it with a city aligned along a north-south axis, with streets following mathematically-straight lines. The result of the Commission's works in the mid-late 18th century was the demolition of a significant portion of the medieval and early post-medieval buildings of Dublin to facilitate the widening of streets. The Commission set about expanding on Gardiner's efforts to widen Sackville Street when in 1777 they extended Sackville Street to the River Liffey to the south. Wilson's map of 1801 first shows this extension of the street to the river. Archaeological deposits relating to the earlier buildings within the study area have been identified through archaeological investigations including work undertaken in 2014 at the National Monument 14-17 Moore Street and 8-9 Moore Lane ('Moore Street National Monument'). Cellars of early structures were shown to survive both beneath the buildings fronting on to Moore Street and below those fronting on the Moore Lane (Simpson 2014). Archaeological monitoring undertaken in 2014-15 along Parnell Street (O'Dowd et. al 2016) identified post-medieval features including cellars, drains, a watermain, and the boundary wall of the Rotunda Hospital along Parnell Street. The cellars relate to Georgian buildings from the original layout of the street in the first half of the 18th century while the culverts, drains, water pipes and street surfaces showcase the post-medieval civic infrastructure of Dublin (*Ibid.* p.4). Cellars have also been identified along Parnell Street during LCC works, where the archaeological monitoring of enabling works recorded a total of 19 cellars along Parnell Street and one on O'Connell Street Upper (Gillian and McGlade 2018). The apex of the crowns of these cellars was generally found to lie within 1m of the existing ground level. The buildings corresponding to these cellars are illustrated on Rocque's 1756 map.

Rocque's 1756 map also contains the first depiction of ACH179, a brickfield, which at this time is recorded on the map as 'Old Brick Field' suggesting it has been out of use for some time. Part of this

brickfield is located within proposed O'Connell Street Station location. In the 18th century it became conventional for town houses in Dublin to be built of brick and following Pearse's Act of Parliament in 1729 the manufactured bricks were made to standard dimensions (Dublin Historic Industry Database 2011). Monitoring of stabilisation works at the Moore Street National Monument (ACH108) identified reclamation deposits used to infill the brick field (Simpson 2016) that occupied the site prior to its construction. Archaeological investigations at a site bounded by O'Rahilly Parade, Moore Street, Moore Lane, and Parnell Street revealed several phases of archaeological activity including evidence for the early 18th century brickfield (O'Donovan 2004). Other industrial activity within the study area during the 18th century includes the site of a glass house (ACH184) which is recorded on Rocque's map on the northern banks of the River Liffey.

The development of lands along the River Liffey that had been part of the margins of the river, or low-lying land adjacent, was also undertaken during the post-medieval period, with reclamation deposits identified within the study area at Eden Quay. Prior to the 17th century Eden Quay and the area to the east were underwater, forming part of the River Liffey's inter-tidal zone. Eden Quay was constructed in the early 19th century following the construction of O'Connell Bridge (originally called Carlisle Bridge). Following the opening of Carlisle Bridge in 1795 the quays to the west were no longer accessible to ships; however, ships did continue to berth at Eden Quay, resulting in the development of commerce in this area (Fraser 2004). A quay recorded to the east of Eden Quay (ACH189), within the study area, is annotated as 'Iron Quay' on Rocque's map of 1756 and was later known as the 'Iron Yard'. The city of Dublin ordered its construction in 1733, prior to the formal laying out of Eden Quay, and had a river frontage of c. 30m. A human skull was recovered from riverine deposits at Eden Quay during excavations associated with the construction of a basement, as well as artefactual evidence ranging in date from the 13th to the 18th century (Fraser 2004; ACH186).

By the production of the first edition OS map in 1838 the cityscape from the Royal Canal to the River Liffey had seen considerable development. Settlement had expanded southwards from the canal along Phibsborough, while the study area to the east of the Broadstone Branch of the Royal Canal and west of Dorset Street Lower still maintained some agricultural land. The North Circular Road has been established by this time, with the city expanding northwards to meet it. By the time of the 1864 OS map the Mater Hospital has been constructed within the study area and residential streets established to the west towards the Broadstone Branch of the canal. A feature of the late 19th streetscape of the study area was the Dublin tramway system, which in its day was seen as the most efficient of its type in Europe and had the seventh largest electric tramway network in the world. Although not visible on the streets today, there is every possibility that elements of the tramlines survive beneath the existing road surfaces across the study area. This includes tramlines along Phibsborough Road (ACH161), North Circular Road (ACH165), Berkeley Road (ACH167), Parnell Street (ACH176), O'Connell Street (ACH182) and Abbey Street Lower (ACH188).

During the 19th century Moore Street became a busy trading area, known for victuallers, poultry shops, and butchers; with slaughterhouses to the rear of the properties. The markets centred on Market Street, Anglesea Market, and Moore Place, extending into Moore Street by the 1890s (Gowan 2006). The construction of the Ilac Centre during the 1970s caused the demolition of most of the city's markets, including Rotunda Market, Taafe Market, Norfolk Market, Anglesea Market, and Moore Street Market.

River Liffey to Ranelagh

The study area, to the south of the River Liffey, lay outside the medieval core of Dublin City, with post-medieval development slowly extending eastwards throughout the 17th and 18th centuries as more and more land was reclaimed from the River Liffey. Land reclamation was carried out initially in the 17th century to the west of TCD within the area of the medieval walled town. This development can be seen in John Speed's map of 1610 and was facilitated by Dublin's Norman charter, which granted to the city all of the tidal area, so that any land reclaimed from the water became city property with potential rental income. In 1627 newly-reclaimed lands within and surrounding the study area were granted to a Mr Robert Arthur on the condition that a new road running west to east, linking the settlement at Ringsend with the remainder of the city, be provided, for reasons unknown, however this grant was revoked. T. De Gomme's map of 1673 shows the study area south of the River Liffey being occupied by marsh land of the inter-tidal zone, with 'Lazy Hill' (present day Townsend Street) depicted with houses fronting on to this street along its northern and southern sides. Trinity College (ACH203) is depicted to the west of

the study area, with greenfield land shown within and to the west of the study area. By the time of Brooking's map of 1728 significant development had taken place within the study area, with marsh land reclaimed, streets laid out and buildings occupying much of the study area to the north of Townsend Street.

The study area directly south of the River Liffey can be seen in detail on Rocque's map of 1756, with the proposed Project boundary at Tara Street occupied by numerous buildings and yard areas. The Hospital of Incurables is shown in the presumed location of St James's Hospital (ACH198). This hospital is known as Locks Hospital on Campbell's map of 1811 and as Westmoreland Lock Hospital on the 1847 OS map. The wall footings of this hospital were exposed during archaeological investigations in this area in 1997 and 1998 (Hayden 1997; Walsh 1998). A church is shown to the north of this which represents the Lutheran Church established in 1725 (ACH197). A programme of monitoring and rescue excavation at the site of the Church (ACH197) exposed the remains of a post-medieval graveyard (Channing 1992). The burials are of at least 12 individuals consisting of 11 adults and one juvenile (Buckley 1992). A dry stone well with a wooden barrel at the lowest levels was also excavated adjacent to the remains. A foundry (ACH195) is also annotated to the east of the hospital. By the mid-19th century significant development had occurred within the study area, with the construction of Great Brunswick Street (now Pearse Street) and the construction of new buildings as part of the work of the Wide Street Commission undertaken across this area around the turn of the 19th century.

Evidence of post-medieval activity within this area has been identified through various archaeological investigations undertaken in advance of development during the 1990s and 2000s. At the southern end of the proposed Project boundary archaeological test excavations on Townsend Street, beneath the proposed location of Tara Station, exposed post-medieval river dock features (Hayden 1997). The features comprised a possible 17th century quay wall extending east-west across the site and 17th century timber revetments at depths of c. 1.8 to 4.4m. Excavation followed on from the testing and identified a phase of use after the construction and operation of the mid/late 17th century timber wharf, the construction of the Hospital of Incurables in c. 1753 (ACH198; Walsh 1998). The foundation walls of the hospital and a redbrick cellar wall overlay the revetments and slipway.

Subsequent archaeological test excavations and monitoring at the southwest corner of the proposed Project boundary revealed post-medieval cellars on the Townsend Street and Luke Street frontage as well as compact organic deposits with post-medieval finds. Oak wooden remains were also uncovered which may be a continuation of the 17th timber revetments identified by Walsh to the east (Kehoe 2002). Post-medieval refuse deposits containing cattle horn, clay pipe fragments, shell, animal bone, sherds of pottery, fragments of redbrick and a number of cellars were also recorded. A wooden curry comb and fragment of a leather bridle from the refuse deposit suggest activities related to the care of horses and that the site may have been used as a stable.

TCD (ACH203) was created by Royal Charter in 1592 and is situated on the site of the medieval Priory of All Hallows. The new institution, originally called The College of the Holy and Undivided Trinity, was influenced by Oxford and Cambridge. By the time of the college's foundation, the only remaining structure of the medieval priory was the steeple of the church which was incorporated into the new college structures. The early descriptions of the college buildings describe the hall and chapel on either side of the former belfry, perhaps suggesting that the hall may have incorporated the medieval nave of the monastery church. The original extent of the college did not reach the current eastern boundary of the establishment, beneath which the proposed Project passes.

The proposed Project and its study area are located at the eastern side of the TCD Campus, outside the post-medieval core of the college. Brooking's map of 1728 shows this area as open land, with buildings fronting on to South Leinster Street (now Lincoln Place). Rocque's maps of 1756 shows the area largely consisting of greenfield with a watercourse and artificial drainage channels also depicted. The Trinity College Cricket Ground is labelled as 'College Park' at this time. On William Faden's map of 1797 this area has been transformed into a garden called 'Vice Provosts Garden', with a Bowling Green also depicted. The first structure to be depicted on mapping in this area is the School of Anatomy building which is shown on Cooke's Royal Map of Dublin, 1822. The 1836 OS maps shown development along Westmorland Row and to the south of the Anatomy building. A graveyard is also annotated to the north of the Anatomy building on this map. Archaeological excavations are currently on going in this area and human remains which appear to have been used for dissection and discarded by the medical school in

the 18th and 19th centuries have been uncovered. A culverted stream has also been encountered, while natural riverine deposits have been recorded in this area at c. 3.5m below current ground level (Ni Cheallachain pers. comm.). Human remains had previously been found in this area during archaeological monitoring in 2002 (Simpson 2002b). Archaeological investigations at the Parsons Building revealed deep silt and gravel deposits of 2m in depth in this area (Simpson 2002a).

St Stephen's Green Park (ACH 211) originally comprised a marshy common outside the city walls of Dublin until 1635 when the City Assembly passed an ordinance stating that no parts of the Park were to be let, but kept for use by the citizens of the city (Duchas, 1). In 1664 the Corporation of Dublin ordered its development as a residential area with a park, the Park was enclosed by a perimeter wall in 1669 and in 1670 instructions were issued to establish a lime-tree walk and hedging (McCabe 2011, 59). Given the Park's location on marshy ground, it was surrounded by a perimeter ditch which was so large it was referred to as a canal (McCabe 2011, 59, 66). Ninety building lots were reserved around the Park, with the rents of these lots used to build the Park itself. De Gomme's map of 1673 only shows a handful of structures on the northern and western sides of the Park, whilst Phillip's map of 1685 shows the Park bordered by buildings on all four sides. Access to the Park was via three entrance gates located on the north, east and west sides. Brooking's map of 1728 depicts a continuous row of structures on the north, east, and west sides and by the time of Rocque's map of 1756 buildings occupy most of the plots that front onto the Park. On Brooking's map minor access gates are shown on the Park's north and east sides, while the main gates, accompanied by gate houses are located on the northwest and southeast corners. On Rocque's map of 1756 the interior of the Park has been subdivided by four tree-lined paths, with a monument placed centrally within the Park interior. The entrances and gate houses shown on Brooking's map have been removed, with four entrances now located centrally on all four sides.

The Park had deteriorated by the early 19th century and in 1814 an Act of Parliament was obtained to allow improvements to be made (Duchas, 2). It is thought that works carried out between 1816 and 1818 included the levelling and drainage of the Park's interior, the demolition of the enclosing stone wall, the widening of the surrounding street and the erection of the current railings and bollards (TII 2019, 14). This work changed the park from a public to a private one. In 1877, the St Stephen's Green (Dublin) Act returned the Park to the care of the Commissioners for Public Works and the Victorian park was re-opened in 1880 as a public park by Lord Ardilaun, Sir Arthur Guinness, after he had redeveloped it to include a waterfall, bridge, and fountains. The Park itself is dominated by mature trees, pathways, and ponds. The Park has been designated as a National Monument and the perimeter of the National Monument extends to the kerb line of the surrounding footpath, as defined in the Act as 'all the ground which has been for some time before passing of this Act inclosed within the posts and chains of St Stephen's Green'. The Park is also a Protected Structure and is addressed under that designation in Chapter 26 (Architectural Heritage) (BH-501).

A number of archaeological investigations have been undertaken within St Stephen's Green Park, many of which are located at the western side of the Park, outside the study area. Investigations undertaken within the study area include a geophysical survey (Gimson and Garner 2019) for the proposed Project which revealed the presence of four possible ditches. There was considerable magnetic disturbance across the survey area which may have masked any potential archaeological remains. Archaeological monitoring of works associated with the dealignment of DCC traffic layouts on St Stephen's Green East (Bailey 2013) revealed natural subsoils underlying post-medieval deposits at a depth of 0.8m below current ground level. A number of post-medieval stone-lined culverts were also recorded.

During the construction of LCC archaeological investigations were carried out along the footpath and carriageway of St Stephen's Green West and North (Johnston 2020). The archaeological stratigraphy along the areas impacted was consistent, with pavement and roadbed generally extending to c. 0.4m below existing ground level. Beneath this was a series of thin layers of silts containing stone, brick and mortar inclusions, overlaying a thin and darker more compact silt deposit at c. 0.7-1m below existing ground level. Immediately below these deposits was a compact silt from c. 0.8-1m below existing ground level which appears to represent the natural subsoil (Johnston 2020, p.42). Substantial evidence for the 17th century perimeter ditch (ACH211.1) was recorded during these investigations. The inner edge of the ditch was generally below or just outside the line of the current railings of the park along its northern side (ibid. 42). Investigations showed that the position of the ditch correlates well with the inner edge of the walk surrounding the Park as depicted on De Gomme's map of 1673 and Rocque's map of 1756 (ibid.). A 15m length of the ditch was exposed and recorded in front of Fusilier's Arch and an

exploratory section was excavated across the ditch and its stone revetment. Following this, a 200m long section of the ditch was exposed along St Stephen's Green North and a 60m section was exposed along St Stephen's Green West (ibid. 44). The ditch measured between 3.6m and 3.9m wide, with the base recorded at an average depth of 1.8m below existing ground level. A stone revetment was recorded along the inner edge of the ditch, measuring 0.55m in thickness at the base and 0.4m thick at the top (ibid).

Tentative evidence for the Park's perimeter wall (ACH211.2) was also recorded on St Stephen's Green North during LCC works. It comprised the cut for a wall foundation, with one course of a single limestone masonry wall surviving and was located along the approximate centreline of the modern carriageway surrounding the Park (McQuade 2016, 23). A line of pits was also identified running parallel to the boundary wall that may represent tree-pits associated with the lime-tree walk set out c.1670 (ibid.). Other post-medieval features were also identified along St Stephen's Green North during the LCC works, including open drainage ditches, stone-lintelled and box drains dating to the late 18th to early 19th century and sewer culverts (Johnston 2020).

Archaeological monitoring of a series of geotechnical boreholes excavated within the perimeter footpath surrounding the Park in 1998 did not reveal any deposits of archaeological significance (Kehoe 1998). Three boreholes excavated within northwest and southwest corners of the Park in 2007 exposed natural soils from 0.75 – 1m below current ground level (Fallon 2007). Archaeological monitoring of boreholes excavated in advance of the DART Underground on the north and northwest side of the Park revealed a varying depth of rubble and soil landfill covering natural deposits. These rubble and landfill deposits ranged in depth from 0.75m – 2.5m. A deposit which may represent the fill of the original 17th century drainage ditch was identified within the northern edge of the Park. This was found at 0.6-0.9m below ground level (Frazer and Kerins 2009).

Trenches excavated to identify the nature and extent of the foundations of Fusilier's Arch (Dennehy 2011; C313/E1396) identified 19th and 20th century garden soil deposits. Utility silt trenches excavated around the Toilet Block in St Stephen's Green West revealed 0.2m of made ground overlying garden soil (Dennehy 2017).

As with the land to the north of the River Liffey, the cityscape to the south of the river changed considerably during the post-medieval period, with the activities of the Wide Streets Commission resulting in the extensive residential development of the study area.

The River Liffey divides Dublin into its north and south sides and has played an important role in the development of the city and earlier settlements. A river fording point was in use from at least the early medieval period onwards and maritime activity is recorded from the 8th century onwards (Brady 2008). A total of 26 wrecks are listed in the Shipwreck Inventory for the River Liffey, however none are recorded within the study area of the proposed Project. No structures, deposits or objects of archaeological significance were encountered during an underwater archaeological assessment undertaken in 2008 (Brady 2009), however structural features of historic value were encountered. These include two 19th century quayside structures (Eden Quay and Burgh Quay), a bridge structure of late 18th to early 19th century date (O'Connell Bridge) and a 19th century timber revetment associated with Burgh Quay. A possible fording point was also encountered upstream of O'Connell Bridge.

The landscape to the southwest of St Stephen's Green Park was primarily rural during the mid-18th century, as can be seen from Rocque's map of the County of Dublin from 1760. To the south of the Grand Canal the proposed Project passes through the former village of Cullenswood. In the 18th century, Cullenswood was a self-sufficient village with a smith and farrier on the Mornington Road, a coach factory, and the extensive O'Tooles nursery established in 1777 at Anna Villa directly east of the proposed Project. The village is not named on Rocque's map of 1760.

The origins of the name Ranelagh lie with Lord Ranelagh who, in the 17th century, was Paymaster General to the Forces and took the title from Ranelagh in Wicklow. Lord Ranelagh moved to London in about 1690 and built a house to the east of Chelsea Hospital. After his death a syndicate bought his London property and in 1742 opened the famous Ranelagh Pleasure Gardens in Chelsea, London (Bennett 1994). His house of Willbrook and gardens were renamed Ranelagh after the gardens at Chelsea. The extensive grounds opened to the public until 1787. Eventually the wider area became known as Ranelagh rather

than Cullenswood and following the closure of the gardens, the residence of Willbrook was occupied in 1788 by Carmelite nuns who remained there until the 1970s. The site of the house and gardens is marked as a nunnery on Taylor's map and the first edition 1837 OS map.

In 1649 the area of Bloody Fields, at the southern end of the proposed Project, became the site of the Battle of Rathmines. The Duke of Ormonde, leading an army of Irish Confederates and English Royalists, was routed by an English Parliamentary army led by Michael Jones while attempting to take the city of Dublin. It is believed that between 2000 and 4000 of the Duke's men were killed during a surprise attack of his camp. The decisive victory for the Parliamentarians enabled Oliver Cromwell to land at Dublin several days later and conquer Ireland.

The proposed Project traverses the Grand Canal and continues southwards from it. By 1773 the line of the Circular Road had been laid out respective of the course of the Grand Canal. Following the success of the Dublin and Kingstown Railway, which opened in 1834, proposals for a second commuter railway were put forward. These plans proposed the building of a railway from Bray, opened in 1854, to terminate initially at Harcourt Road, Harcourt Street Station built in 1859. The Dublin and Wicklow Railway was built by William Dargan and renamed the Dublin, Wicklow and Wexford Railway in 1860 and Dublin and South-Eastern Railway in 1907 (ACH220). The line closed in 1959 and was reused as part of the Luas Green Line. The proposed Project extends along and adjacent to this railway line to the south of the canal. The public transport in the area was further improved with the construction of a tramline between College Green and Rathfarnham with a branch along Ranelagh Road in c. 1878 (ACH227). The line was originally horse-drawn and only became electrified in c. 1898. This was after the introduction of electricity generation by gas companies in the 1880s, which was first generated by steam (Dublin Historic Industry Database 2011). The tramway is not depicted on the 1935-8 OS map as it closed in c. 1938 due to the rise of bus transport in the city.

25.4.2.8 20th Century

The 20th century heralded significant political, social and economic changes across Ireland and a number of areas and sites within the study area attest to these changes. Nos. 14-17 Moore Street and 8-9 Moore Lane are designated as a National Monument and were the site of the final headquarters of the rebels during the 1916 Rising. The surrounding streets, including Moore Street, Moore Lane, O'Rahilly Parade and Henry Place (ACH181) were the scene of fighting during the final days of the Rising, following the retreat of the Leaders and their followers from the General Post Office (GPO). The definition of the extent of this streetscape has been confined to those lands within the study area and does not cover the entirety of the 1916 streetscape. The rebels fled the GPO through a side entrance on Henry Street and crossed to Henry Place. From here they made their way north, following Henry Place around to the west where they then proceeded to break through into No. 10 Moore Street (outside the LOD). As the British soldiers were firing along Moore Lane, bullets ricocheted off the front of the White House at the top of Moore Lane.

A detailed assessment of the Moore Street area, specifically in relation to the 1916 Rising, has been undertaken by Frank Myles (2012), which indicates that the buildings along Moore Street do not demonstrate any exterior evidence of the conflict. The White House has been substantially altered since 1916 and no evidence survives for the bullet holes recorded in 1916, while the majority of O'Rahilly Parade has been significantly altered. Myles notes that there is a disappointing lack of physical evidence of the conflict across this area, with shopfronts which would have taken the brunt of the gunfire having been replaced in the 20th century (Myles 2012, 116). The most enduring survival from the Rising is the street plan itself, with the route of the evacuation from the GPO to No. 10 Moore Street still traceable.

St Stephen's Green Park (ACH211) was also the scene of conflict during the Rising, the Park being seized by rebels during the fighting. At midday on 24th April around 100 men and women from the Irish Citizen's Army took control of the Park, this operation was carried out by Michael Mallin and Constance Markievicz. Although the fighters controlled the Park and barricaded key routes in and around the Park, they failed to secure the buildings to the north side of the Park. Control of these buildings was taken by the British forces overnight and used as machine gun positions to drive out the Irish forces from the Park the following day (Shiels 2006). There is potential for machine gun bullets and gun cartridges to survive below ground within the Park, although none have been found during metal detection surveys carried out to date. Eyewitness accounts recount the excavation of trenches within the Park at the southeast

corner, within the proposed Project boundary. It is stated that two trenches were excavated, either side of the gate (Shiels 2006).

Three statues dedicated to key figures in the fight for Irish independence throughout the 18th to 20th centuries are located within the study area in and around O'Connell Street, which are designated as National Monuments. These are the Charles Stewart Parnell monument (ACH175), William Smith O'Brien monument (ACH183), and the Daniel O'Connell monument (ACH185). A further statue is located at the site of the Tara Station, which comprises a bronze statue of Countess Markievicz (ACH046), although this is not a RMP or National Monument.

During the late 19th and early 20th century a number of amenity and leisure areas were constructed within the study area which due to their historical nature and cultural significance (particularly relating to the GAA), have been identified as Archaeology and Cultural Heritage constraints. These comprise a number of GAA clubs, a football stadium, tennis clubs and snooker clubs.

The GAA was founded in 1884 and focuses primarily on managing and promoting Gaelic games, which include the traditional Irish sports of hurling, camogie, Gaelic football, handball and rounders, but also promotes Irish language and culture. Hurling has been inscribed on the UNESCO List of Intangible Heritage in recognition of its value to Irish cultural heritage and folklore. GAA clubs within the study area include Fingallians GAA Club (ACH022), St Colmcilles GAA Club (ACH023), CLG Na Fianna GAA Collinstown Pitches (AC093), Starlights GFC (AC093), Ballymun Kickhams GAA Club (ACH094), Albert College Park and GAA Pitches (ACH131), and CLG Na Fianna (ACH135).

Other sports grounds of historical merit include Glasnevin Lawn Tennis Club (ACH133), Charleville Lawn Tennis Club (ACH152), CrossGuns Snooker Club (ACH157), Dalymount Park (ACH163), Trinity College rugby pitch and cricket ground (ACH203) and Paddy Mahoney Park Whitehall Rangers Pitch (AC093).

Across the study area a number of museums, galleries and libraries which were established largely during the 19th and 20th centuries, have been identified which are considered to be of cultural heritage importance owing to their role as repositories of important cultural heritage material including art, literature, archives and archaeological monuments and artefacts. These include the Hugh Lane Gallery (ACH173), Dublin Writers Museum (ACH172), the National Gallery of Ireland (ACH204), Royal College of Physicians of Ireland Heritage Centre and Archives (ACH205), the National Library of Ireland (ACH206), the Oireachtas Library at Leinster House (ACH207), the National Museum of Ireland – Archaeology (ACH208) and the Royal Hibernian Academy (ACH212).

25.4.3 Characterisation of the Baseline

25.4.3.1 AZ1 Northern Section

There is one National Monument of Very High importance located within the study area in this section, Lissenhall Bridge (ACH020). The below ground archaeological remains relating to this bridge, where it extends southwards to Balheary Bridge, are included within this constraint. This medieval bridge is located to the east of the R132 at the northern end of the proposed Project.

15 Recorded Monuments of High importance are located within the study area in this section, these are:

- Three ring-ditches (ACH003, 078 and 083);
- Two Holy Wells (ACH007 and 050);
- Four enclosures (ACH009, 075, 080 and 084);
- An earthwork (ACH030);
- Swords medieval town (ACH036);
- One burial ground (ACH039);
- One pit (ACH057);
- One structure (ACH059); and
- One field system (ACH074).

27 archaeological and cultural heritage constraints of Medium importance have been identified within the study area in this section. These are:

- Eight AAPs (ACH001, 004, 019, 021, 051, 068, 077, and 081);
- Three enclosures (ACH005, 014 and 015);
- An area containing ditches and pits (ACH006);
- Eight townland boundaries (ACH010, 011, 016, 043, 047, 049, 067, and 085);
- One traveller community area (ACH012);
- Two GAA clubs (ACH022 and 023);
- Three sculptures (ACH027, 037 and 052);
- One graveyard (ACH038); and
- One shrine (ACH053).

Six archaeological and cultural heritage constraints of Low importance have been identified within the study area in this section. These are:

- Four AAP (ACH028, 029, 033, and 035);
- One townland boundary (ACH054); and
- Site of one structure (ACH079).

11 archaeological and cultural heritage constraints of Very Low importance have been identified within the study area in this section. These are:

- Two townland boundaries (ACH024 and 025); and
- Sites of nine structures (ACH026, 040, 044, 061-65, and 071).

21 archaeological and cultural heritage constraints of Neutral importance have been identified within the study area in this section. These are:

- Seven areas subject to previous archaeological test excavations (ACH002, 008, 034, 058, 070, 076 and 082);
- Sites of four structures (ACH013, 017, 018, and 072);
- One previously disturbed area (ACH045); and
- Nine townland boundaries (ACH031, 032, 041, 042, 048, 055, 056, 060, and 066).

25.4.3.2 AZ2 Dublin Airport

There are no archaeological and cultural heritage constraints of Very High, Low or Very Low importance within the study area AZ2.

Two archaeological and cultural heritage constraints of High importance have been identified within the study area in this section. These are:

- One ringfort (ACH088); and
- One castle (ACH090).

Two archaeological and cultural heritage constraints of Medium importance have been identified within the study area in this section. These are:

- One AAP (ACH086); and
- One airport (ACH087).

Two archaeological and cultural heritage constraints of Neutral importance have been identified within the study area in this section. These are:

- Site of one structure (ACH089); and
- One townland boundary (ACH091).

25.4.3.3 AZ3 Dardistown to Northwood

There are no archaeological and cultural heritage constraints of Very High importance within the study area AZ2.

Four archaeological and cultural heritage constraints of High importance have been identified within the study area in this section. These include:

- One enclosure (ACH096);
- One cremation pit (ACH101);
- One burnt spread (ACH106); and
- One burnt mound (ACH107).

15 archaeological and cultural heritage constraints of Medium importance have been identified within the study area in this section. These are:

- Three AAPs (ACH093, 108, and 110);
- One GAA club (ACH094);
- Five areas containing archaeological features (ACH095, 097, 100, 105, and 109); and
- Six townland boundaries (ACH099, 101, 103, 104, 112, and 113).

Two archaeological and cultural heritage constraints of Low importance have been identified within the study area in this section. These are:

- Two AAPs (ACH115 and 116).

One archaeological and cultural heritage constraint of Very Low importance have been identified within the study area in this section, the site of a Roman Catholic Chapel (ACH117).

Six archaeological and cultural heritage constraints of Neutral importance have been identified within the study area in this section. These are:

- Four townland boundaries (ACH092, 114, 118, and 120); and
- Two areas subject to previous test excavations (ACH098 and 111).

25.4.3.4 AZ4 Northwood to Charlemont

Seven archaeological and cultural heritage constraints of Very High importance have been identified within the study area in this section. These are:

- Three statues (ACH175, 183, and 185);
- One group of buildings at Moore Street/Moore Lane (ACH180); and
- One Park and potential associated below ground remains (ACH211, 211.1 and 211.2).

26 archaeological and cultural heritage constraints of High importance have been identified within the study area in this section. These are:

- Six houses (ACH122, 123, 210, 214, 215, and 226);
- One ecclesiastical settlement (ACH134);
- Two Holy Wells (ACH137 and 170);
- Two historic transport-related structures (ACH147 and 149);
- One Historic Town (ACH169);
- Two industrial heritage constraints (ACH179 and 184);
- One burial (ACH086);
- Two quays (ACH189 and 194);
- One windmill (ACH193);
- Three chapels/churches (ACH196, 197, and 202)
- One site of a hospital (ACH198);
- One museum and its collection (ACH208);

- One burial ground/cemetery (ACH119);
- One graveyard (ACH209); and
- Three cross slabs (ACH213).

30 archaeological and cultural heritage constraints of Medium importance have been identified within the study area in this section. These are:

- One burial ground/cemetery (ACH150);
- Seven AAPs (ACH127, 132, 136, 166, 177, 195, and 225);
- Six sports ground/clubs (ACH131, 133, 135, 152, 157, and 163);
- One public house (ACH145);
- Seven repositories of cultural heritage material (ACH172, 173, 204, 205, 206, 207 and 212);
- Three areas of cultural heritage significance (ACH174, 178, and 203);
- One river (ACH187);
- Three Parks (ACH217, 223, and 228); and
- One memorial (ACH221).

40 archaeological and cultural heritage constraints of Low importance have been identified within the study area in this section. These are:

- Site of 10 structures (ACH124, 125, 146, 147.1, 147.2, 148, 149.2, 164, 220 and 222);
- One townland boundary (ACH126);
- Ten industrial heritage sites (ACH138, 139, 168, 171, 191, 192, 199, 200, 201, and 224);
- Three sites of railway infrastructure (ACH147.3, 147.4, and 147.5);
- Four sites of canal infrastructure (ACH158, 159, 160, and 161);
- The site of ten tramlines (ACH162, 165, 167, 176, 181, 182, 188, 218, 219, and 227); and
- The site of one river infrastructural element (ACH190).

Four archaeological and cultural heritage constraints of Very Low importance have been identified within the study area in this section. These are:

- Two townland boundaries (ACH143 and 144); and
- Three sites of structures (ACH149.1, 151 and 229).

13 archaeological and cultural heritage constraints of Neutral importance have been identified within the study area in this section. These are:

- Nine townland boundaries (ACH120, 130, 140, 141, 142, 153, 154, 155, and 156); and
- Site of four structures (ACH121, 128, 129, and 140).

Table 25.6: Characterisation of Baseline Environment

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH001	AZ1	N/A	Lissenhall Little	<p>Area of Archaeological Potential</p> <p>To the northeast of Ennis Lane a geophysical survey carried out in 2021 (Gimson and Garner 2021) identified a range of potential archaeological features across this area. This includes an enclosure and line of possible pits at the northern end of the area, a subcircular ditch enclosing a number of pits at the centre of the area, and an arching ditch with possible burnt remains towards the southern end. Relict agricultural boundaries and other anomalies of unknown nature were also identified across this area. This AAP is located in close proximity to known prehistoric archaeology including ACH003, a ring ditch and ACH009, an enclosure.</p> <p>A geophysical Survey (Gimson and Garner 2019) encountered a D-shaped enclosure which subsequent test excavations (Murphy 2020) confirmed the presence of an enclosure which was defined by a single ditch ranging in width from 0.77m to 1.6m and in depth from 0.38m to 0.65m. An additional ditch extended north-westwards from the northern part of the enclosure possibly representing an annex. A number of small features, including a charcoal spread, possible pit and a small narrow liner were identified in the immediate vicinity of the enclosure, however for the most part features were absent from the interior of the enclosure. A number of other geophysical anomalies were subject to testing and were confirmed not to be of archaeological origin.</p> <p>To the southwest of Ennis Lane archaeological testing (Murphy 2020) identified two ditches which produced pottery of 19th/20th century date and aligned with demesne boundaries shown on historic maps. No archaeological features were exposed; however, only limited test excavations were carried out in this area.</p>	Medium
ACH002	AZ1	N/A	Lissenhall Little	<p>Area of Archaeological Potential</p> <p>No archaeological remains were identified in this area during testing in 2009 (Channing 2009).</p>	Neutral
ACH003	AZ1	RMP DU011-130---	Lissenhall Little	<p>Archaeological site/monument - Ring ditch</p> <p>A circular ring-ditch was identified on an aerial photograph in this area. This site was subject to geophysical survey (Thebaudeau and Harrison 2009 and Gimson and Garner 2021) and test excavation (Channing 2009) which revealed a cremation pit and the eastern ditch of this feature. The extent of the monument which was exposed during testing measured 14.90m in external diameter and 8.80m in internal diameter. A section was excavated across the ditch which recorded a maximum depth of 1.2m and width of 3.3m. The cremation pit comprises a sub-rectangular deposit of black</p>	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				charcoal-stained silty clay (0.31m x 0.44m). Assessment of the feature stopped when a fragment of pottery was noted against the edge, in order to preserve the integrity of any human remains or cremation vessel (Ibid.).	
ACH004	AZ1	N/A	Lissenhall Little	Area of Archaeological Potential Geophysical survey carried out in 2021 (Gimson and Garner 2021) identified a range of potential archaeological features across this area. This includes numerous pits and linear cut features at the northern end, a zone of pits and cut features at the centre of the area. The remains of an arching enclosure ditch which likely represents the remains of ACH009 are located adjacent to this area. This land is currently in use as pasture/tillage.	Medium
ACH005	AZ1	N/A	Lissenhall Little	Archaeological site/monument - Enclosure A geophysical survey (Gimson and Garner 2021) revealed a series of enclosure ditches covering an area of 67m in width. The survey results indicate the presence of an enclosure with multiple internal divisions and possible ditch re-cuts (Ibid. p.12). A range of other features of likely archaeological origin were also identified in this area, including multiple pits, some possibly representing industrial activity as well as other linear features.	Medium
ACH006	AZ1	N/A	Lissenhall Little	Archaeological site/monument – Ditches and pits A geophysical survey (Gimson and Garner 2019) revealed a series of ditches and pits. A number of the ditches corresponds to topographical expressions visible in LiDAR data (Ibid. p.8-9).	Medium
ACH007	AZ1	RMP DU012-011----	Lissenhall Little	Archaeological site/monument – Ritual site Holy Well Marked on Taylor's map of 1816, the 1837 OS map and subsequent historical maps as Sunday Well. This natural spring well was formerly considered a 'station well of great estimation' (O'Danachair 1958, 81). It is located on the northern side of an access road to Lissen Hall Little and was reported to have been infilled during roadworks c. 1974 (Healy 1975). No visible remains were identified at its location, however there is the potential for below ground remains to survive.	High
ACH008	AZ1	N/A	Lissenhall Little	Area of Archaeological Potential No archaeological remains identified during testing in 2009 (Channing 2009 and Channing and Hession 2009).	Neutral
ACH009	AZ1	RMP DU011-131----	Lissenhall Little	Archaeological site/monument – Enclosure A circular enclosure visible as a crop mark on an aerial photograph. No previous archaeological investigations have been carried out at this location; however, test	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				excavations were carried out directly to the east and north east of this site (Channing and Frazer 2009) within the same field where the ring ditch ACH003 was identified.	
ACH010	AZ1	N/A	Lissenhall Little/ Balheary Demesne	<p>Cultural Heritage - Townland boundary</p> <p>The townland boundary between Lissenhall Little and Balheary Demesne consists of Ennis Lane. Boundary walls are located along both sides of the lane at its northern end, with mature trees planted along the interior of the walls. The boundary wall along the eastern side of the lane terminates at ITM 718528, 748666, while that on the western side extends as far as the intersection with the Balheary Demesne/Lissenhall Great townland boundary and represents the demesne wall of Balheary Demesne (Chapter 26 BH-2). The remainder of the eastern side of the boundary consists of a bank and ditch with mature trees along its length.</p> <p>A photographic and drawn record was made of the demesne wall which survives along the western side of Ennis Lane (Channing and Hession 2009)</p>	Medium
ACH011	AZ1	N/A	Lissenhall Little	<p>Cultural Heritage - Townland boundary</p> <p>Townland boundary between Lissenhall Little and Lissenhall Great consisting of a laneway and hedge along its north western side. Mature trees, which form part of the landscaping of the dual carriageway form the south eastern edge. The laneway represents the former course of the Swords to Balrothery Road.</p>	Medium
ACH012	AZ1	N/A	Balheary Demesne	<p>Cultural Heritage - Traveller community area</p> <p>Location of Halting Site, observed during site inspection and occupying former alignment of R132.</p>	Medium
ACH013	AZ1	N/A	Lissenhall Great	<p>Cultural Heritage – Site of post-medieval structure</p> <p>Site of post medieval structure, visible on Rocque's 1760 map but not on subsequent historic maps, no above ground remains, located beneath R132 and very unlikely for subsurface remains to survive.</p>	Neutral
ACH014	AZ1	N/A	Balheary Demesne	<p>Archaeological site/monument – Enclosure/tree ring</p> <p>Enclosure/tree-ring first identified on 1843 OS map and visible on later editions. This feature is no longer extant but sub-surface remains are likely to survive as the site is visible on Google Satellite imagery (2018).</p>	Medium
ACH015	AZ1	N/A	Balheary Demesne	<p>Archaeological site/monument – Enclosure</p> <p>Possible enclosure first identified on Google Satellite imagery (2018) measuring approximately 25m in diameter and located along the edge of a former field boundary which is also visible on the satellite imagery.</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH016	AZ1	N/A	Balheary Demesne / Lissenhall Great	Cultural Heritage - Townland boundary Townland boundary between Balheary Demesne and Lissenhall Great runs along the River Broadmeadow and along the road leading north from Lissenhall Bridge (ACH020).	Medium
ACH017	AZ1	N/A	Lissenhall Great	Cultural Heritage – Site of post-medieval structure Site of post medieval structure, visible on Rocque's 1760 map but not on subsequent historic maps, no above ground remains survive. The site is located beneath R132 and very unlikely for subsurface remains to survive.	Neutral
ACH018	AZ1	N/A	Lissenhall Great	Cultural Heritage – Site of post-medieval structure Site of post medieval structure, visible on Rocque's 1760 map but not on subsequent historic maps, no above ground remains survive. The site is located beneath R132 and very unlikely for subsurface remains to survive.	Neutral
ACH019	AZ1	N/A	Balheary Demesne, Lissenhall Great	Area of Archaeological Potential Underwater archaeological assessments were undertaken in this area in 2008 and 2020 (Bangerter 2009 and Brady 2020), these included walkover surveys on the banks, wade surveys within the river channels, metal detector surveys, magnetometer survey of the riverbed during the 2008 survey, and a detailed survey of Lissenhall Bridge (ACH020) and Balheary Bridge (Refer to Chapter 26: Architectural Heritage; BH4 and BH5) structures. Metal detecting during the 2008 survey recorded modern debris where targets were exposed, while a number of targets remained buried and their nature and significance was not determined (Bangerter 2009). The 2020 survey did not record many targets, and where those were noted, it was possible to determine the source being modern debris (Brady 2020 p.7). Features recorded during the 2008 survey include a single-arched bridge, river revetments, a weir, and a single-arched culvert (Bangerter 2009). A possible mill race on first edition OS map was not seen during underwater assessment (Brady 2020). Geophysical survey was carried out at the southern part of this area in 2021 (Gimson and Garner 2021). The resistivity survey revealed a series of ditches and cut features which may be archaeological in origin. Archaeological test excavations in advance of the Swords Watermain Rehabilitation Project (Quinn 2013) in this area did not reveal any archaeological features, however the extent of the test excavations was limited.	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH020	AZ1	National Monument RMP DU011-081---- Protected Structure No. 341	Balheary Demesne	<p>Archaeological site/monument – Bridge</p> <p>Lissenhall Bridge traverses the Broadmeadow River to the north of Swords. It is depicted on the Down Survey map of c. 1655, but according to the NIAH it was rebuilt c. 1760. The central section of the bridge has slightly pointed arches with wattle marks and was dated to c. 1450-1550 by O’Keeffe and Simington (1991, 186-188). The bridge is depicted on Rocque’s map of 1760 which shows a single bridge structure crossing the Broadmeadow River channels and the Ward River, on the same site now occupied by Lissenhall and Balheary Bridges. This suggests that Lissenhall Bridge was originally much larger and extended beneath the alignment of the present Balheary Bridge.</p> <p>An underwater assessment of the Broadmeadow and Ward Rivers and GPR survey of Lissenhall Bridge and the adjacent Balheary Bridge (BH-5) was undertaken as a component of OMN Works (Bangeter 2009) and was supplemented by further survey work in 2020 (Brady 2020). This confirmed the bridges are part of the same continuous structure and that the first phase of building (pre-1600s) formed the middle section of both bridges with later phases abutting the eastern and western sides.</p> <p>The GPR survey identified a c.30m continuous wall beneath a modern landscaped area to the south of Lissenhall Bridge/north of Balheary Bridge, orientated along the same north-south axis as the eastern wall of the existing Lissenhall Bridge (Thebaudeau and Harrison 2009). It also identified a possible wall to the east of a clearly visible arch/culvert built into the western side of the construct between the two bridges (Channing and Hession 2009). These results were interpreted as the eastern wall of a structure that formerly connected the two bridges. The subsequent archaeological assessment confirmed the existence of an extensive sub-surface wall which originally spanned from Balheary Bridge to Lissenhall Bridge confirming that at one point the rivers were crossed by a single continuous bridge structure. Although the dating of the sub-surface wall was uncertain it appeared to be of post-medieval date, possibly representing a rebuild of an earlier medieval structure (Channing and Hession 2009). Although once continuous, the section of bridge that carried the old Drogheda Road over the Ward River was replaced at some time in the mid-19th century with a new twin-arched bridge known as Balheary Bridge (Refer to Chapter 26: Architectural Heritage; BH-5).</p>	Very High
ACH021	AZ1	N/A	Balheary Demesne	<p>Area of Archaeological Potential</p> <p>Gradiometer scanning was carried out along the eastern edge of this AAP in 2008 (Thebaudeau and Harrison 2009) however no detailed gradiometer survey, or other archaeological investigations, have been undertaken in this area.</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>Historic maps show a number of structures located within the AAP, including a small structure at the north end shown on Taylor's 1816 map (which does not appear on subsequent maps), and a gate lodge also towards the northern end, on the eastern edge, on the 1843 OS map. This lodge is also shown on subsequent OS maps. Neither survive above ground today, however there is potential for sub surface remains to survive. The AAPs location along the eastern bank of the Ward River lends archaeological potential to the area.</p> <p>This AAP also contains four pitches associated with Fingallians GAA Club (ACH022) and Swords Rovers Football Club which may have caused some disturbance during works associated with their installation. Archaeological monitoring undertaken during the excavation of geotechnical works (Breen 2020b) in this area do indicate some disturbance from landscaping, however the location of the geotechnical investigations was along the eastern side of the AAP, and disturbance in this area is likely due to the proximity of the verge of the R132.</p>	
ACH022	AZ1	N/A	Balheary Demesne	<p>Cultural Heritage - Fingallians GAA Club</p> <p>The GAA club was founded in 1884, the year of the foundation of the Gaelic Athletic Association (GAA). It caters for Gaelic football, hurling, ladies' football, camogie and athletics and includes a club house/changing rooms, main pitch and practice area.</p>	Medium
ACH023	AZ1	N/A	Newtown	<p>Cultural Heritage - St Colmcilles GAA Club</p> <p>The GAA club was founded in 1935. The area includes a club house, main pitch and other greenfield areas.</p>	Medium
ACH024	AZ1	N/A	Newtown / Seatown West	<p>Cultural Heritage - Townland boundary</p> <p>Newtown/Seatown West townland boundary. Where this boundary traverses the proposed Project boundary it is located along roadways and previously disturbed areas therefore there is little to no potential for associated below ground remains.</p>	Very Low
ACH025	AZ1	N/A	Newtown / Balheary Demesne	<p>Cultural Heritage - Townland boundary</p> <p>Newtown/Balheary Demesne townland boundary. Where this boundary traverses the proposed Project boundary it is located along roadways and previously disturbed areas therefore there is little to no potential for associated belowground remains.</p>	Very Low
ACH026	AZ1	N/A	Newtown	<p>Cultural Heritage – Site of 20th century structure</p> <p>Site of structure first shown on 1906-9 OS map and is also shown on the 1938 edition. It appears to have been replaced by a small bungalow and therefore considered to be little to no potential for associated below ground remains to survive.</p>	Very Low
ACH027	AZ1	N/A	Newtown	<p>Cultural Heritage – Sculpture</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				Sculpture located on west exit of Estuary Roundabout celebrating the culture and history of Swords and comprising three Red Deer.	
ACH037	AZ1	N/A	Newtown	Cultural Heritage – Sculpture Sculpture located on west exit of Seatown Roundabout celebrating the culture and history of Swords and comprising an installation of farming equipment.	Medium
ACH028	AZ1	N/A	Seatown West	Area of Archaeological Potential Area of greenfield which may have been disturbed and landscaped during the construction of the adjacent housing estate, however the level of previous disturbance is currently unknown.	Low
ACH029	AZ1	N/A	Seatown West	Area of Archaeological Potential Area of greenfield which may have been disturbed and landscaped during the construction of the adjacent housing estate, however the level of previous disturbance is currently unknown.	Low
ACH030	AZ1	RMP DU011-036----	Seatown West	Archaeological site/monument – Zone of archaeological notification for Earthwork This feature is first depicted on Duncan's map of 1821 as an earthwork entitled 'moat'. There is no evidence for the feature on subsequent historic maps and its location is currently shown as under a housing estate, therefore there are no visible remains at ground level.	High
ACH031	AZ1	N/A	Seatown West/Greenfields	Cultural Heritage – Townland boundary The townland boundary between Seatown West and Greenfields, where it traverses the proposed Project boundary, is located along Newtown Road, crosses the dual carriageway and continues on to Mantua Park Road and Seatown Road. Approximately 20m of the boundary is located within a greenfield area between the dual carriageway and Mantua Park Road where there may be surviving below ground remains. Where the boundary follows the course of roadways, there is deemed to be very low potential for subsurface remains.	Neutral
ACH032	AZ1	N/A	Swords Demesne/Mantua	Cultural Heritage – Townland boundary The townland boundary between Swords Demesne and Mantua, where it traverses the proposed Project boundary, is located across roadways, car parks and beneath existing modern structures. In these areas there is deemed to be very low potential for subsurface remains. Approximately 65m of the boundary is located within a greenfield area, which has been subject to previous disturbance.	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH033	AZ1	N/A	Swords Demesne	Area of Archaeological Potential Although subject to some disturbance during construction and landscaping for the adjacent industrial units, this area may possess some archaeological potential.	Low
ACH034	AZ1	N/A	Swords Demesne	Area of Archaeological Potential Archaeological test excavations were carried out in two locations within this area which revealed a modern tarmacadam surface and foundation material which was interpreted as a precursor of the R132 dual carriageway (Frazer et. al. 2009).	Neutral
ACH035	AZ1	N/A	Swords Demesne	Area of Archaeological Potential Area of greenfield which may have been disturbed and landscaped during the construction of the adjacent housing estate, however the level of previous disturbance is currently unknown. This area is adjacent to Chapel Lane which was originally a medieval routeway.	Low
ACH036	AZ1	RMP DU011-034/5---	Windmill Lands, Townparks, Commons West, Swords Glebe, Swords Demesne	Archaeological site/monument – Zone of Archaeological Potential for Swords Town Swords was an important centre of the ancient Gaelic kingdom of Brega from the late Iron Age to the Norman intervention of 1169. The monastic settlement dedicated to St Colmcille was founded on high ground to the west of the River Ward. Its association with St Colmcille suggests a 6th century date for its foundation (Gwynn and Hadcock 1988, 44; O'Donovan 2016). However, the first documented reference to a Fínán of 'Swords' is in the Martyrology of Tallaght dating to the late 8th century (MacShamráin 2016). The monastic foundation is not directly documented until the tenth century when the death of Ailill Mac Maenach, Bishop of Swords and Lusk was recorded for the year AD965 in the Annals of the Four Masters (Bradley 1998, 44). The ZAP for the historic town extends into the western section of the study area.	High
ACH038	AZ1	N/A	Swords Demesne	Cultural Heritage – St Colmcilles Graveyard The graveyard of St Columcilles Roman Catholic Church is still in use, with the eastern half of the graveyard located within the study area. The Church was built in 1827 on land donated by James Taylor of Swords House. The graveyard is not depicted on the 1843 OS map but does appear on the 1906-9 edition.	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH039	AZ1	RMP DU011-101----	Townparks	<p>Archaeological site/monument – Burial ground</p> <p>A previously unknown cemetery was excavated in 2003 in advance of a private development. Excavation revealed a graveyard which was in use between AD 550 and 1150. The cemetery was unenclosed and located on a low prominence. The burial rite varied from crouched, flexed, or extended inhumations. The range of grave types comprised simple unlined, stone-lined and lintel graves and body position changed throughout the use of the site.</p> <p>The earliest dated burial was the grave of a 'high status' male who was buried within a lintel grave. Analysis of the skeletal remains indicate that this individual was c. 40-50 years old at time of death, with the burial dated to between AD 549-310. The burials at the cemetery appear to represent a broad spectrum of the local population, with all ages and sexes represented (O' Donovan and Gerber 2009, p.64-74).</p> <p>This site, which is best known as Mount Gamble, is scheduled for inclusion in the next revision of the RMP; however, the site was fully excavated in 2003 and is now occupied by the Pavilion Shopping centre.</p>	High
ACH040	AZ1	N/A	Swords Demesne	<p>Cultural Heritage – Site of post-medieval structure</p> <p>A structure is visible on Rocque's 1760 map but not depicted on later maps. No above ground remains survive, with the current location occupied by mature trees adjacent to a modern housing estate. There is very low potential for sub surface remains to survive.</p>	Very Low
ACH041	AZ1	N/A	Swords Demesne/ Barryspark	<p>Cultural Heritage – Townland Boundary</p> <p>The route of the townland boundary between Swords Demesne and Barryspark, where it crosses the proposed Project boundary, is located along the northern edge of Malahide Road. The boundary is likely to have been impacted during the upgrading of the road following the construction of the adjacent shopping centre. There is very low potential for sub surface remains to survive.</p>	Neutral
ACH042	AZ1	N/A	Swords Demesne/Commons East	<p>Cultural Heritage – Townland Boundary</p> <p>The route of the townland boundary between Swords Demesne and Commons East, where it traverses the proposed Project boundary, passes beneath Malahide Road Roundabout and continues on to Drynam Road. There is very low potential for sub surface remains to survive.</p>	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH043	AZ1	N/A	Barryspark/Commons East	Cultural Heritage – Townland boundary Part of the townland boundary between Barryspark and Commons East traverse the edge of a previously disturbed greenfield area to the northeast of the proposed Swords Central Station. This boundary now forms the rear boundary of a number of residential gardens and traverse a small wooded area within the proposed Project boundary.	Medium
ACH044	AZ1	N/A	Barryspark	Cultural Heritage – Site of three 20 th century structures Three structures of unknown function first depicted on the 1935-8 OS map. One of these was still visible on the OSI 2005 satellite imagery, however this has since been demolished. This area is now occupied by mature trees and concrete slab. There is very low potential for sub surface remains to survive.	Very Low
ACH045	AZ1	N/A	Barryspark	Area of Archaeological Potential This area is reported as having been previously stripped of topsoil (O' Hara and O' Connell 2009) prior to archaeological investigations which encompassed a wider area in Barryspark and encompassing the site of the proposed Swords Central Station. Archaeological test excavations were carried out in areas where topsoil stripping had not taken place, these locations are outside of the proposed Project boundary. A structure is noted within this area on Rocque's 1760 map, however given the level of previous disturbance it is unlikely that any below ground remains survive.	Neutral
ACH047	AZ1	N/A	Crowcastle / Barryspark	Cultural Heritage – Townland Boundary The townland boundary between Crowcastle and Barryspark, where it crossed the proposed Project boundary, consists of a line of mature trees and a ditch which also define the boundary of a modern industrial estate.	Medium
ACH048	AZ1	N/A	Miltonfields / Barrypark	Cultural Heritage – Townland Boundary The townland boundary between Miltonfields and Barryspark, where it crosses the proposed Project boundary, is located below the existing R132, therefore there is very low potential for sub surface remains to survive.	Neutral
ACH049	AZ1	N/A	Miltonfields / Crowcastle	Cultural Heritage – Townland Boundary The townland boundary between Miltonfields and Crowcastle, where is cross the proposed Project boundary, is extant in places. Where extant, it consists of a boundary of mature trees and a ditch.	Medium
ACH050	AZ1	RMP DU011-045----	Crowcastle	Archaeological site/monument – Ritual site - Holy Well	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				This Holy Well is dedicated to St Werburgh; it was a natural spring situated by a stream. The local belief was that its water cured sore eyes but by the 1950s was no longer venerated (Ó Danachair 1958, 81). In March 2011 the well was cleared and reconstructed without an archaeological licence. According to the SMR file the well was re-located in a different position, plastic piping inserted and stone removed. It is now signposted with an inscribed stone and described as an 'oasis of transformation'. It is visible on the 1837 OS map as well as later editions.	
ACH051	AZ1	N/A	Miltonfields	Area of Archaeological Potential Area of greenfield land with no previous disturbance. There is medium potential for sub surface remains to survive.	Medium
ACH052	AZ1	N/A	Miltonfields	Cultural Heritage – Modern sculpture Sculpture located on west exit of Pinnock Hill Roundabout celebrating the culture and history of Swords and comprising bog oak with a surround of limestone kerbs. It incorporates two swans with golden beaks in full flight.	Medium
ACH053	AZ1	N/A	Miltonfields	Cultural Heritage – Shrine Shrine with statue of Jesus located in wall adjacent to small steam. The shrine consists of two small niches in a stone wall, with a statue of Christ contained within one and the phrase 'An tAoire Maith' (the good shepherd) written above the second. The shrine, thought modern and not associated with any curative powers or saint is visited by a small number of locals for prayer.	Medium
ACH054	AZ1	N/A	Cremona / Miltonfields	Cultural Heritage – Townland Boundary The townland boundary between Cremona and Miltonfields, where it crosses the proposed Project boundary, followed the line of R132 prior to its realignment and upgrade. The route of the original road now lies beneath an area of mature trees on the verge of Pinnock Hill Roundabout. The route of the former road may survive beneath these trees.	Low
ACH055	AZ1	N/A	Cremona / Fosterstown North	Cultural Heritage – Townland Boundary The townland boundary between Cremona and Fosterstown North, where it traverses the proposed Project boundary, is located beneath the R132 and there is very low potential for survival of associated below ground remains.	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH056	AZ1	N/A	Miltonfields / Fosterstown North	Cultural Heritage – Townland Boundary The townland boundary between Miltonfields and Fosterstown North, where it traverses the proposed Project boundary, is located beneath the R132 and there is very low potential for survival of associated below ground remains.	Neutral
ACH057	AZ1	RMP DU011-153----	Miltonsfields	Archaeological site/monument – Pit This monument was subject to geophysical survey (Thebaudeau and Harrison 2009 and Harrison 2010) and test excavation (Fraser et. al. 2009). A sub-circular pit (1.2m diameter) contained a charcoal rich fill with heat shattered stone, provisionally interpreted as Bronze Age in date and was recorded in isolation, with no associated features recorded in proximity during the testing (ibid.).	High
ACH058	AZ1	N/A	Miltonsfields	Area of Archaeological Potential This area was subject to archaeological testing in 2009 (Fraser et. al. 2009) and no archaeological features were identified.	Neutral
ACH059	AZ1	RMP DU011-154----	Miltonsfields	Archaeological site/monument – Structure This monument was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Fraser et. al. 2009). A metallated surface measuring 7.25m x 5.9m associated with three U-shaped channels, postholes and pits was revealed during testing. Although no diagnostic material was recovered the remains were interpreted on the basis of the morphology as a medieval structure (ibid.).	High
ACH060	AZ1	N/A	Fosterstown North / Crowcastle	Cultural Heritage – Townland Boundary The townland boundary between Fosterstown North and Crowcastle, where it passes through the proposed Project boundary, runs along the route of the R132. As such there is very low potential for the survival of below ground remains.	Neutral
ACH061	AZ1	N/A	Fosterstown North	Cultural Heritage – Site of 19 th century structure Site of structure, visible on OS 1837 map, possibly representing a shed or agricultural building. It is also depicted on subsequent OS maps, however no above ground remains survives today. Any associated below ground remains which may survive are located beneath verge of R132.	Very Low
ACH062	AZ1	N/A	Fosterstown North	Cultural Heritage – Site of 19 th century structure Site of structure, most likely a house, visible on OS 1837 map. It is also depicted on subsequent OS maps, with the addition of a small outbuilding shown on the 1906-9	Very Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				map, however no above ground remains survives today. Any associated below ground remains which may survive are located beneath verge of R132.	
ACH063	AZ1	N/A	Fosterstown North	Cultural Heritage – Site of 19 th century structure Site of structure, most likely a house, visible on OS 1837 map. It is not depicted on subsequent OS maps. No above ground remains survives today. Any associated below ground remains which may survive are located beneath verge of R132.	Very Low
ACH064	AZ1	N/A	Fosterstown North	Cultural Heritage – Site of 19 th century structure Site of structure, most likely a house, visible on OS 1837 map. It is also depicted on subsequent OS maps, with the addition of out buildings shown on the 1906-9 map, however no above ground remains survives today. Any associated below ground remains which may survive are located beneath verge of R132.	Very Low
ACH065	AZ1	N/A	Crowscastle	Cultural Heritage – Site of 19 th century structure Site of structure, most likely a house, visible on OS 1837 map. It is not depicted on subsequent OS maps. No above ground remains survives today. Any associated below ground remains which may survive are located beneath verge of R132.	Very Low
ACH066	AZ1	N/A	Crowscastle / Nevinstown West	Cultural Heritage – Townland Boundary The townland boundary between Crowscastle and Nevinstown West, where it passes through the proposed Project boundary, runs along the route of Nevinstown Lane. As such there is very low potential for the survival of below ground remains.	Neutral
ACH067	AZ1	N/A	Nevinstown West / Fosterstown North	Cultural Heritage – Townland Boundary The townland boundary between Nevinstown West and Fosterstown North, where it passes through the proposed Project boundary, runs along the route of the R132 before turning westwards and travelling along the edge of a greenfield area, the boundary in intact in this area and consists of a hedge line with mature trees.	Medium
ACH068	AZ1	N/A	Nevinstown West	Area of Archaeological Potential Greenfield area not previously subject to archaeological testing, however known prehistoric archaeological sites are located in close proximity including a burnt mound (ACH073) and a field system (ACH074). The site of two post-medieval structures, visible on Rocque's 1760 map are located within this AAP. The site of one of the structures is occupied by a modern house, no above ground remains of the historic structure were noted. The location of the second now within the corner of a greenfield area, no above ground remains were noted however there is potential for subsurface remains to survive.	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH069	AZ1	N/A	Nevinstown West/ Fosterstown South	Cultural Heritage – Townland Boundary The townland boundary between Nevinstown West and Fosterstown South, where it crosses the proposed Project boundary, is intact and consists of a hedgerow.	Medium
ACH070	AZ1	N/A	Fosterstown South	Area of Archaeological Potential Greenfield area subject to archaeological geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009) with no archaeological remains identified.	Neutral
ACH071	AZ1	N/A	Nevinstown West	Cultural Heritage – Site of 19 th century structure Site of structure, possibly a house, visible on OS 1837 map. It is not depicted on subsequent OS maps. No above ground remains survives today and the location is currently occupied by a scrapyard.	Very Low
ACH072	AZ1	N/A	Nevinstown West	Cultural Heritage – Site of post-medieval structure Site of structure, visible on Rocque's 1760 map, but not marked on subsequent maps. The location is now on the verge of the R132, no above ground remains were noted and there is very low potential for subsurface remains to survive.	Neutral
ACH073	AZ1	RMP DU011-151----	Fosterstown South	Archaeological site/monument – Burnt mound This monument was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009). A spread of heat shattered stone within a charcoal rich silty matrix was uncovered. This is typical of the composition of burnt mounds of prehistoric date (Hession 2009, 35).	High
ACH074	AZ1	RMP DU011-117----	Fosterstown South	Archaeological site/monument – Field system A field system that appears to be associated with a circular enclosure (ACH075). This site was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009). The presence of ditches and pits was confirmed and these are likely to be associated with a bi-vallate ringfort (RMP DU011-116---- which is located to the south (Hession 2009).	High
ACH075	AZ1	RMP DU011-116----	Fosterstown South	Archaeological site/monument – Enclosure This site was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009). A double ditched or bi-vallate enclosure with an associated field system situated to the south was identified. The bi-vallate enclosure consists of an inner enclosure (30m diameter) which is partially encompassed on the eastern, north-eastern and northern sides by a second elliptical enclosing ditch (50m	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				diameter). While no diagnostic material was recovered the morphology suggests a bi-vallate ringfort (Hession 2009, 23).	
ACH076	AZ1	N/A	Fosterstown South	Area of Archaeological Potential This site was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009), no archaeology was identified.	Neutral
ACH077	AZ1	N/A	Fosterstown South	Area of Archaeological Potential Greenfield areas not subject to archaeological test excavations and located in close proximity to known archaeological remains including a ring ditch and enclosure (ACH078 and ACH080).	Medium
ACH078	AZ1	RMP DU011-047----	Nevinstown West	Archaeological site/monument – Ring ditch A subcircular feature (c. 15m in diameter) was identified on an aerial photograph taken in 1971 (SMR reference: FSI 3.489-490). This monument is now located under a car park and no remains are visible at ground level.	High
ACH079	AZ1	N/A	Fosterstown South	Cultural Heritage – Site of 19 th century structure A small structure is visible on the 1837 OS map, it is also present on later editions and marked as 'lodge'. Its location on the northern side of the drive to Fosterstown House indicates it served as the gate lodge for this house. No remains survive above ground.	Low
ACH080	AZ1	RMP DU011-118----	Fosterstown South	Archaeological site/monument – Enclosure An irregular shaped enclosure was identified as a cropmark on aerial photographs. This site was subject to geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Hession 2009). A possible D-shaped enclosure was identified during testing, while an additional enclosure was identified 20m to the northeast. A corn drying kiln was also identified directly north of a ditch feature. It is likely that these features are of early medieval date given their close proximity to the bi-vallate ringfort to the north (ACH075) (Hession 2009, 36).	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH081	AZ1	N/A	Fosterstown South	Area of Archaeological Potential Greenfield area not subject to archaeological test excavations but located in close proximity to known archaeological remains including an enclosure (ACH080).	Medium
ACH082	AZ1	N/A	Fosterstown South	Area of Archaeological Potential Greenfield area which was subject to archaeological geophysical survey (Thebaudeau and Harrison 2009) and test excavations (Hession 2009), which did not reveal any archaeology remains.	Neutral
ACH083	AZ1	RMP011-113--- -	Fosterstown South	Archaeological site/monument – Ring-ditch The SMR notes that a circular ring-ditch is visible as a crop mark on an aerial photograph. No above ground remains survive.	High
ACH084	AZ1	RMP DU011-115----	Fosterstown South	Archaeological site/monument – Enclosure The SMR notes that this sub-rectangular enclosure is visible as a crop mark on an aerial photograph together with other possible features.	High
ACH085	AZ1	N/A	Fosterstown South / Cloghran	Cultural Heritage – Townland boundary The townland boundary between Fosterstown South and Cloghran, where it crosses the proposed Project boundary, consists of a small stream. A 100m section of the boundary was recorded during archaeological test excavations in this area in 2009 (Fagan and Hession 2010). At the time of the survey the townland boundary consisted of a stream within a deep ditch with semi-mature trees and hedge plants along the stream banks (ibid. 18).	Medium
ACH086	AZ2	N/A	Cloghran	Area of Archaeological Potential This area was subject to a geophysical survey in 2021 (Gimson and Garner 2021) which revealed a number of linear ditches and series of pits which may be archaeological or agricultural in origin. Two areas of compacted earth were also identified which may be archaeological in origin. The site of a post-medieval structures was identified in this area on Roque's map of 1760, however no evidence for this was found during the geophysical survey.	Medium
ACH087	AZ2	N/A	Collinstown, Corballis, Rock, Cloghran, Frrest Little	Cultural Heritage – Dublin Airport Dublin Airport was established as a commercial airport in 1936, having previously served as a military airport base. The inaugural flight took place on 19 th January 1940 to Liverpool.	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH088	AZ2	RMP DU011-046----	Cloghran	Archaeological site/monument – Ringfort This monument is named as 'fort' on the 1837 OS map, the monument is not shown on subsequent OS mapping. The SMR file notes that it was partly demolished in 1822 and cleared away in 1873 (Healy 1975, 24). The area was impacted during the construction of Dublin Airport's northern runway.	High
ACH089	AZ2	N/A	Corballis	Cultural Heritage – Site of 20th century structures Site of three small structures first depicted on the 1938 OS map. These are now located beneath the modern airport therefore there is very low potential for associated subsurface remains to survive.	Neutral
ACH090	AZ2	RMP DU014-011----	Corballis	Archaeological site/monument –castle - unclassified This site is marked 'Corballis castle, in ruins' on the 1837 OS map. There are no remains of the castle surviving above ground and the site is under buildings within Dublin Airport. A post-medieval field ditch was uncovered during testing in this area which suggests elements of the old ground surface still survive in the vicinity of the castle location (O'Donovan 2006).	High
ACH091	AZ2	N/A	Collinstown / Corballis	Cultural Heritage – Townland Boundary The townland boundary between Collinstown and Corballis, where it crosses the proposed Project boundary, is located within Dublin Airport, beneath Atrium Road, therefore there is very low potential for survival of below ground remains.	Neutral
ACH092	AZ3	N/A	Collinstown / Ballystraun	Cultural Heritage – Townland Boundary The townland boundary between Collinstown and Ballystraun, where it crosses the proposed Project boundary, follows the route of Collinstown Lane which was constructed in the mid-20 th century. Therefore, there is very low potential for the survival of associated belowground remains.	Neutral
ACH093	AZ3	N/A	Ballystraun	Area of Archaeological Potential Greenfield areas which have not been subject to archaeological test excavations but are located in close proximity to known archaeological remains including a curvilinear ditch and pits, an enclosure and a fire pit (ACH095-ACH097). This area also contains a number of sports pitches (including CLG Na Fianna GAA, Collinstown Pitches, Paddy Mahoney Park Whitehall Rangers Pitch, and Starlights GFC Pitch). The site of 19th century structures, visible on OS 1837 map, likely representing a farmhouse and associated farm buildings are also located in this area. The farmhouse is still depicted on the 1906-9 OS map, however some of the farm buildings have been removed. These buildings were demolished at some point in the 20 th century and no	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				above ground remains survive. The area is occupied by a small car park for the adjacent sports pitches, a small building and an overgrown greenfield area.	
ACH094	AZ3	N/A	Ballymun	Cultural Heritage –Ballymun Kickhams GAA Club The club was formed in 1969 by the merging of the Ballymun Gaels and C.J. Kickhams Clubs. This area contains a club house, one Astro turf pitch and one greenfield pitch.	Medium
ACH095	AZ3	N/A	Ballystruan	Archaeological site/monument – Curvilinear ditch and pits Archaeological test excavations (Frazer 2009) exposed a concentration of archaeological features in this area. These include a shallow curvilinear ditch, two associated linear pits. The ditch was c.0.6-0.85m wide and c.0.09-0.15m deep while the pits were c. 2.45m x 1.1m and 3.6m x 0.85-1.00m (Ibid. p.25). A linear ditch was also identified which corresponded to a ditch found during geophysical survey and likely represent a post-medieval field boundary.	Medium
ACH096	AZ3	RMP DU014-121----	Ballystruan	Archaeological site/monument – Enclosure Geophysical survey (Thebaudeau and Harrison 2009) and test excavations (Frazer 2009) revealed a sub-rectangular enclosure (56m east-west x 45m north-south). The feature consists of an enclosure ditch (1.9–3.5m wide) on three sides, branching into a double ditch on the remaining west side, with metallised surfaces, pits, and shallower, narrower ditches surviving in its interior (Ibid. p.22). A shallow, metallised hollow way (c. 4.2m wide and 0.15m–0.53m deep) was found to the east of the enclosure. The monument has been tentatively dated to the early medieval period, based on the absence of (later) medieval pottery and on the recovery of a fragment of concave ‘furnace bottom’ iron slag from a lower fill of the enclosure ditch (Frazer 2009, 23).	High
ACH097	AZ3	N/A	Ballystruan	Archaeological site/monument – Fire pit Archaeological test excavations (Frazer 2009) exposed a firepit measuring c. 0.8m in diameter. The pit is of uncertain date. However, it is located c.60m to the east of enclosure ACH096 and may be associated with this feature.	Medium
ACH098	AZ3	N/A	Ballystruan	Area of Archaeological Potential This area was subject to archaeological geophysical survey (Thebaudeau and Harrison 2009 and Nicholls 2011) and test excavations (Frazer 2009 and Kyle and Bayley 2011), and no archaeological remains were identified.	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH099	AZ3	N/A	Ballystraun / Turnapin Great	Cultural Heritage – Townland Boundary The townland boundary between Ballystraun and Turnapin Great, where it crosses the proposed Project boundary consists of a mature hedgerow.	Medium
ACH100	AZ3	N/A	Ballystruan	Archaeological site/monument – Pit with burnt material Archaeological test excavations (Frazer 2009) exposed a kidney-shaped pit with burnt material which has been provisionally dated to the Bronze Age. The pit measures c.3.5m x 2.5m (Ibid. p.20). No associated burnt mound material was identified in the area (Ibid. p.21).	Medium
ACH101	AZ3	RMP DU014-120----	Ballystruan	Archaeological site/monument – Cremation Pit Geophysical survey (Thebaudeau and Harrison 2009) and test excavation (Frazer 2009) revealed a cluster of three east-west aligned pits (0.25m – 0.50m diameter). Each pit contained a charcoal-rich fill with occasional burnt bone. A single find of possible prehistoric pottery with slag or similar material adhering to its interior side was recovered from the topsoil in this area (Ibid. 22).	High
ACH102	AZ3	N/A	Coultry / Ballymun	Cultural Heritage – Townland Boundary The townland boundary between Coultry and Ballymun, where it passes through the proposed Project boundary, consists of a hedgerow with mature trees along a small stream.	Medium
ACH103	AZ3	N/A	Ballystruan / Ballymun	Cultural Heritage – Townland Boundary The townland boundary between Ballystraun and Ballymun, where it passes through the proposed Project boundary, follows a laneway, with mature planting on either side and a stream on the northern side.	Medium
ACH104	AZ3	N/A	Coultry / Ballystraun	Cultural Heritage – Townland Boundary The townland boundary between Coultry and Ballystraun, where it passes through the proposed Project boundary, follows a laneway, with mature planting on either side.	Medium
ACH0105	AZ3	N/A	Ballymun	Archaeological site/monument – Pits with burnt material Archaeological test excavations (Frazer and Hession 2009) revealed four pits which contained charcoal rich material and burnt stones, indicating these may be associated with a <i>fulacht fia</i> (Ibid. p.21).	Medium
ACH106	AZ3	N/A	Ballystruan	Archaeological site/monument – Burnt spread Archaeological test excavations (Frazer and Hession 2009) revealed an oval shaped black deposit measuring c. 5m x 7.5m with frequent inclusions of burnt stones,	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				representing a burnt spread of possible Bronze Age date (Ibid. p.19-20). A number of linear and curvilinear features were also identified in this area (Ibid. p.20-21). This feature is not recorded in this location by the SMR, however the location of RMP DU014-119---- (ACH107 below) recorded by the SMR relates to the archaeological feature identified by Kyle and Bayley, while the description on the SMR file relates to this archaeological site. A discrepancy between the site described and the location has been identified and the National Monuments Service has been notified. Until a resolution is agreed with the NMS both ACH106 and ACH107 have been assigned a baseline rating of High.	
ACH107	AZ3	RMP DU014-119----	Ballymun	Archaeological site/monument – Burnt mound Archaeological test excavations (Kyle and Bayley 2011) revealed the flattened remains of a burnt mound measuring c. 3m x 3m.	High
ACH108	AZ3	N/A	Ballymun	Area of Archaeological Potential Part of this area was subject to archaeological geophysical survey (Thebaudeau and Harrison 2009; Nicholls 2011; Gimson 2020) which revealed multiple relict field boundaries, cultivation furrows and land drains. Potential archaeological remains were also identified including a number of possible enclosures, arching ditches, pits and possible compacted earth or stone boundaries. A small structure is noted in this area on the 1837 OS map and is marked as 'Dairy Ho.' By the 1983 map the structure is called 'Cabin Cottage'. This structure is no longer extant.	Medium
ACH109	AZ3	N/A	Ballymun	Archaeological site/monument – Kiln Targeted test excavations identified a pit, a small spread and a probable kiln (Murphy 2021). A sample from the kiln subsequently produced a 2-sigma calibrated Carbon 14 date of AD 1045-1252, placing it in the transition between early medieval and medieval periods. Additional sub-surface archaeological stratigraphy to that identified during targeted test excavations are likely to survive within the overall environs of this kiln.	Medium
ACH110	AZ3	No	Ballymun, Santry Demesne	Area of Archaeological Potential This area has been identified as an AAP due to the presence of Santry River, a possible mill and the potential location of tower house and bawn. Several structures are also recorded on Rocque's map 1760 and subsequent historic maps. The AAP includes a charter-school, known today as 'Santry Lodge' (BH-14; Refer to Chapter 26: Architectural Heritage for further detail). The Glasnevin Heritage organisation notes that the school was originally a mill, built in c. 1700. The 'Charter	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>School' is shown on Roque's map of 1760 bounded to the north by the Santry River, and to the south by a probable attached walled garden or orchard that is square in plan. A rectilinear structure with central porch to east, is shown between the garden and river, and this is likely to represent the charter school building which is located outside of the proposed Project boundary. The first edition OS map of 1843 shows the river and an adjacent building, with a further watercourse running along the western edge of the complex associated with the school. The school structure possesses a larger footprint than the structure that is present today. Part of the property fronting onto Old Ballymun Road is annotated as 'Tower House' on OS map of 1909; it no longer survives, though a gate lodge is present to the south of the entranceway.</p> <p>It is possible that milling may have taken place on this site prior to the construction of a building in the early 1700s, especially given the proximity of Santry Demesne (and associated medieval manor) to the east. The presence of a square enclosure bounded by watercourses to the north and west may also suggest the presence of an earlier complex that was re-used to construct the Charter School. The south-western portion of the structure (now removed), which is marked as 'Tower House' within the mapping, may suggest the presence of a late medieval structure on the site, possibly within a square bawn. It is similarly possible that the structure possessed replica medieval characteristics and was viewed as a type of post medieval folly, rather than an actual medieval structure.</p>	
ACH111	AZ3	N/A	Ballymun	<p>Area of Archaeological Potential</p> <p>This area was subject to archaeological test excavations in 2009 (Hession 2010); however, no archaeological features were identified. There is considered to be no potential for associated subsurface remains to survive.</p>	Neutral
ACH112	AZ3	N/A	Ballymun, Santry Demesne	<p>Cultural Heritage – Townland boundary</p> <p>The townland boundary between Ballymun and Santry Demesne, where it passes through the proposed Project boundary, runs along the route of Old Ballymun Road before turning eastwards where it follows the route of Santry River.</p>	Medium
ACH113	AZ3	N/A	Ballymun / Balcurris	<p>Cultural Heritage – Townland Boundary</p> <p>The townland boundary between Ballymun and Balcurris, where it crosses the proposed Project boundary, is occupied by a broken line of trees and hedges either side of the R108.</p>	Medium
ACH114	AZ3	N/A	Santry Demesne, Balcurris	<p>Cultural Heritage – Townland Boundary</p>	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				The townland boundary between Santry Demesne and Balcurris, where it runs through the proposed Project boundary, runs along Old Ballymun Road, therefore there is very low potential for associated sub surface remains to survive.	
ACH115	AZ3	N/A	Balcurris / Ballymun	Area of archaeological potential Satellite imagery indicates that there has been disturbance in this area, however the extent of this disturbance is currently unknown, therefore there remains some potential for below ground archaeology to survive.	Low
ACH116	AZ3	N/A	Balcurris	Area of archaeological potential Satellite imagery indicates that there has been disturbance in this area, however the extent of this disturbance is currently unknown, therefore there remains some potential for below ground archaeology to survive.	Low
ACH117	AZ3	N/A	Balcurris	Cultural Heritage – Site of Roman Catholic Chapel Roman Catholic Chapel and National School building seen on 1837 OS map, no longer present by the production of the 1906-9 map. This site is no located beneath the R108 and therefore there is very low potential for associated sub surface remains to survive.	Very Low
ACH118	AZ3	N/A	Balcurris / Stormanstown	Cultural Heritage – Townland Boundary The townland boundary between Balcurris and Stormanstown, where it runs through the proposed Project boundary, runs beneath the R108, therefore there is very low potential for associated sub surface remains to survive.	Neutral
ACH119	AZ4	RPS 482, NIAH 50130113	Santry, Stormanstown	Cultural Heritage – St Pappin's Church and Burial Ground The Roman Catholic Chapel was originally located at the junction of the Naul Road and Santry Avenue (ACH117). The chapel was moved to its current location in 1847 and it is depicted on the 1871-5 OS map with a vault. The Victorian vault was relocated to the southwest corner of the graveyard under archaeological supervision following a programme of test excavation, no archaeological features were encountered (Scally 2000 and Dick 2002).	High
ACH120	AZ3	N/A	Stormanstown / Balbutcher	Cultural Heritage – Townland Boundary The townland boundary between Stormanstown and Balbutcher where is passes through the proposed Project boundary, is located beneath the R108 and therefore there is considered to be very low potential for associated subsurface remains to survive.	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH121	AZ4	N/A	Stormanstown	Cultural Heritage – Site of 19 th century structure Site of small structure, possibly a dwelling, visible on the 1906-9 OS map and later 1938 map. There are no above ground remains surviving and the site is currently occupied by a car park for an adjacent commercial structure which has been demolished. There is considered to be no potential for associated subsurface remains to survive.	Neutral
ACH122	AZ4	RMP DU014-067001-- and DU014-067002--	Stormanstown	Archaeological site/monument – House - 16 th /17 th century The SMR records that there are 17 th century references to a sizeable dwelling and cottages possibly in this location (Simington 1945,200; Cary, c. S. 1930-3, 395). These may be on the site of Stormanstown House annotated on the 1843 OS map; however, the original Stormanstown House (ACH123) is located c. 200m to the southwest. The original house is marked as 'in ruins' on the 1843 map but is depicted extant on Rocque's map of 1760 as 'StormansTown'. It is likely that any remains of a 16 th or 17 th century house are located in or around the site of the original 'StormansTown' House.	High
ACH123	AZ4	RMP DU014-067	Stormanstown	Archaeological site/monument – Zone of Notification for House - 16 th /17 th century The ZoN for Stormanstown House is located here on the published RMP map. This may be the location of an earlier house as shown on Rocque's map of 1760 as 'StormansTown'. On the 1843 OS map it is marked as in ruins and a new structure annotated as Stormanstown House has been built to the northeast (ACH122).	High
ACH124	AZ4	N/A	Stormanstown / Wad	Cultural Heritage – Site of bridge (road/river) Recorded by the DCIHR, no trace of this bridge survives above ground though it is possible that some remains survive beneath the ground surface. The river appears to have been culverted in this area. The bridge is annotated on the 1843 and 1935-8 OS maps (BH-17; Refer to Chapter 26: Architectural Heritage).	Low
ACH125	AZ4	N/A	Stormanstown	Cultural Heritage – Site of structure Site of structure visible on 1906-9 OS map and later editions. Located on the north bank of the River Wad. This location is now occupied by a small green area and footpath therefore there is some potential for sub surface remains to survive.	Low
ACH126	AZ4	N/A	Stowmanstown / Wad	Cultural Heritage – Townland Boundary The townland boundary between Stormanstown and Wad, where it crosses the proposed Project boundary, consists of the River Wad. The river has been culverted in this area.	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH127	AZ4	N/A	Wad	Area of Archaeological Potential Green space in front of Our Lady of Victories Church (BH-18; Refer to Chapter 26: Architectural Heritage for further detail). While this area may have been impacted by landscaping works, the extent of the disturbance is unknown and there remains potential to encounter previously unidentified archaeological remains. This area also contains a memorial plaque to Canon Richard Philips (d. 2006) and a gravestone, marking the underlying internment of the church's first parish priest 'The Very Reverend Bernard Brady' (d.1987).	Medium
ACH128	AZ4	N/A	Wad	Cultural Heritage – Site of post-medieval structure Site of post-medieval structure, visible on Rocque's 1760 map but not shown on later maps. No above ground remains survive; the site is located beneath Ballymun Road	Neutral
ACH129	AZ4	N/A	Wad	Cultural Heritage – Site of post-medieval structure Site of post-medieval structure, visible on Rocque's 1760 map but not shown on later maps. No above ground remains survive; the site is located beneath Ballymun Road	Neutral
ACH130	AZ4	N/A	Walnut Grove/Wad	Cultural Heritage – Townland Boundary The townland boundary between Walnut Grove and Wad, where it passes through the proposed Project boundary, is located along the R108 therefore there is considered to be very low potential for associated subsurface remains to survive.	Neutral
ACH131	AZ4	N/A	Hampstead North	Cultural Heritage – Albert College Park and GAA Pitches The townland is named after 'Hamstead' House, visible on Rocque's map of 1757 and subsequently renamed Albert College Park. The grounds were used by various educational institutions of agriculture until 1978 when they were converted into a public park with playing pitches, a boules court, and artists-in-residence. A geophysical survey across the western half of this area returned responses indicative of ditches and pits of possible archaeological potential (Thebaudeau and Harrison 2009).	Medium
ACH132	AZ4	N/A	Hampstead North	Area of archaeological potential This greenfield area, which is currently occupied by playing pitches was subject to a geophysical survey which returned responses indicative of ditches and pits of possible archaeological potential (Thebaudeau and Harrison 2009). No archaeological test excavations have been undertaken in this area to date.	Medium
ACH133	AZ4	N/A	Claremont, Walnut Grove	Cultural Heritage – Glasnevin Lawn Tennis Club	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				The club was founded in 1909, the original ground was just south of the present club, and is annotated as 'Glasnevin Tennis Gd.' On the 1935-8 OS map.	
ACH134	AZ4	RMP DU018-005---- and DU018-005001-	Glasnevin, Glasnevin Demesne	<p>Archaeological site/monument – Zone of Notification for early medieval ecclesiastical settlement</p> <p>The early medieval ecclesiastical settlement at Glasnevin was founded by St Mobhi (d. AD 544) presumably in the first half of the sixth century. The present-day St Mobhi Church of Ireland building, and graveyard is believed to mark the position of the original ecclesiastical foundation and is located to the west of the study area. The fossilized remains of the early medieval ecclesiastical enclosure survive within the landscape, c. 65m west of the proposed Griffith Station and now forms a large portion of the Bon Secours Hospital. It is clearly visible within the historic OS maps with the enclosure being oval in plan and measuring c. 250m north to south and c. 240m east to west (Swan 1985).</p> <p>From 1306, the lands of Glasnevin, together with the church, appear as the property of the Priory of the Holy Trinity under the Archbishop of Dublin, until the dissolution of the monasteries in the 16th century (Bennett 1996:123). The site of the early Christian monastery of St Mobhi was still in use during the 13th century when its church was part of the home farm for the Priory of the Holy Trinity, Christchurch (Ball 1920, 124-147). In 1344 the manorial residence at Glasnevin underwent restoration (Ball 1920) and in the same year, or during a similar period, a medieval church was constructed on the site of the original early medieval monastery. There is no direct evidence of secular medieval settlement associated with the ecclesiastical site, although a settlement cluster (RMP DU018-005011-) is recorded dating to the 17th century, c. 300m northwest of the proposed Project.</p>	High
ACH135	AZ4	N/A	Bankfarm	<p>Cultural Heritage – CLG Na Fianna</p> <p>CLG Na Fianna was founded in 1955 and caters for Gaelic Football, Hurling, Ladies Football, Camogie, Handball, and Rounders. This represents the main pitch of the club.</p>	Medium
ACH136	AZ4	N/A	Bankfarm	<p>Area of Archaeological Potential</p> <p>These lands are currently occupied by Home Farm Football Club pitch and are located to the south-east of the early medieval ecclesiastical enclosure of St Mobhi at Glasnevin (ACH134), It is possible that this area formed part of the lands associated with the Priory of the Holy Trinity, with the townland name, Bankfarm, referring to farmlands on the banks of the River Tolka.</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>A geophysical survey identified multiple arcing ditches of archaeological potential within this area. Further GPR survey was carried out in 2018 (Gimson and Garner 2019) followed by archaeological test excavations (Murphy 2020) revealed curving ditches and linear features as well as four pits. While some linear features correspond to the line of post-medieval field boundaries shown on historic mapping, a definitive date could not be assigned to the majority of these features.</p> <p>Human remains were recorded from the site in 2008; however, no further human remains were identified during the archaeological investigations. A fragment of the bone recovered in 2008 was subject to Carbon 14 dating and returned a 2-sigma calibrated date of AD 585-651, confirming an early medieval date for the remains. The site may have been established following the foundation of the ecclesiastic centre at Glasnevin, c 180m to the northwest, and given its prominent position overlooking the River Tolka, may have been of high status and possibly directly related to the ecclesiastical site.</p> <p>This area may also have been the scene of some activity during the Battle of Clontarf. It is unlikely that the Battle of Clontarf of AD1014. took place in the modern district of Clontarf. The Annals of the Four Masters say it was fought 'from Tulcainn to Ath Cliath' and while one may expect that isolated encounters of small groups occurred during the day over a wide area this description is the simplest and the most accurate definition of the battlefield. Tulcainn was the River Tolka and Ath Cliath was probably located at the Droichet Dubhgaill the bridge that crossed the Liffey at this time. We are told in the Annals of Loch Ce that Brian Boruma faced the allies on the slope of Crinan Hill; however, the precise location of Crinan Hill is unknown today. One record of 1339 places it south of Ballybough Road, but by deduction from other records of 1192 and 1324, it is possible that it extended from Ballybough Road to Drumcondra Road. It has been suggested (De Courcy 1996) that the main action of the battle took place in the area bounded by O'Connell Street, Dorset Street, Drumcondra Road, the River Tolka, Ballybough Road and the North Strand (ACH 174).</p> <p>The River Tolka is a Conservation Area and is addressed as BH-22 in Chapter 26: Architectural Heritage.</p>	
ACH137	AZ4	RMP DU018-010----	Daneswell	<p>Archaeological site/monument – Ritual site - Holy Well</p> <p>Formerly known as 'Dane's Well' this gave its name to the townland of Daneswell. The well is not shown on the 1836 OS map but does feature on the 1906-9 map. The site is now occupied by a housing estate with very low potential for surviving sub-surface remains.</p>	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH138	AZ4	N/A	Prospect	Cultural Heritage – Iona Printing Works The Printing Works are recorded by the DCIHR and are visible on the 1935-8 OS map and consist of a large east-west orientated building with an adjoining structure to the east and yard areas to the rear. No above ground elements of this Printing Works survive and the site is currently under construction.	Low
ACH139	AZ4	N/A	Slutsend	Cultural Heritage – Smithy The smithy is recorded by the DCIHR and is labelled on the 1906-9 OS map. Today the site is occupied by shops/apartments and no remains of smithy survive above ground survive.	Low
ACH140	AZ4	N/A	Crossguns North	Cultural Heritage – Site of structure A small structure is depicted in roughly this location on Rocque’s map of 1757. A small garden is depicted to the north indicating the structure may be residential. The approximate location of the structure is now beneath Botanic Road.	Neutral
ACH141	AZ4	N/A	Crossguns North / Prospect	Cultural Heritage – Townland Boundary The townland boundary between Crossguns North and Prospect, where it crosses the proposed Project boundary, is located beneath Botanic Road and there is very little potential for finding associated below ground remains.	Neutral
ACH142	AZ4	N/A	Prospect / Slutsend or Westfarm	Cultural Heritage – Townland Boundary The townland boundary between Prospect and Slutsend or Westfarm, where it crosses the proposed Project boundary, is located beneath Finglas Road and Prospect Road and there is very little potential for finding associated below ground remains.	Neutral
ACH143	AZ4	N/A	Slutsend or Westfarm / Crossguns	Cultural Heritage – Townland Boundary The townland boundary between Slutsend or Westfarm and Crossguns, where it crosses the proposed Project boundary, follows the line of a boundary wall between modern housing and a car park area to the rear of the Brian Boru public house (ACH145) (BH-31; Refer to Chapter 26 Architectural Heritage for further detail) before crossing the existing railway tracks. There is very little potential for finding associated below ground remains.	Very Low
ACH144	AZ4	N/A	Crossguns / Crossguns North	Cultural Heritage – Townland Boundary The townland boundary between Crossguns and Daneswell or Crossguns North, where it crosses the proposed Project boundary. Today this boundary is formed by the R135 (Prospect Rd), which is a modern carriageway.	Very Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH145	AZ4	N/A	Crossguns / Crossguns North	Cultural Heritage – Brian Boru Public House 19th century licensed premises which is mentioned in the Hades episode of Joyce's novel Ulysses, when the funeral cortege passes the public house on the way to Prospect Cemetery, Glasnevin.	Medium
ACH146	AZ4	N/A	Crossguns	Cultural Heritage – Site of group of 19 th century structures A terrace of houses is depicted in this area on the 1843 OS map, these are partially impacted by the construction of the GSWR railway which removed two of the houses, as shown on the 1906-9 OS map, therefore there is little to no potential for associated sub surface remains to be found. The subsurface remains of one of the houses may survive adjacent to the Brian Boru public house (ACH145);. These may have been constructed on the site of an earlier structure seen on Rocque's 1757 map. The remaining extant structures are addressed in Chapter 26 Architectural Heritage (BH-32).	Low
ACH147	AZ4	N/A	Daneswell / Crossguns / Slutsend or Westfarm	Area of Industrial Heritage – Railways Midland and Great Western Railway (MGWR) received royal assent in 1845 authorising it to build a railway from Dublin to Mullingar and to purchase the Royal Canal. Construction of the railway began parallel to the canal in 1846. In 1925, 26 railway companies operating in the Irish Republic, including the MGWR, were amalgamated to form the Great Southern Railway (GSR). From east to west this area of industrial heritage contains two separate railway tracks, the MGWR Link Line from Islandbridge to Amiens Street (the line running along the northern side of the area) and the GSWR Line from North Wall to Sligo (along the southern side of the area). Upstanding features associated with the railways, including tunnels, abutments of former railway bridge and extant bridges are addressed in Chapter 26 (Architectural Heritage) (BH-34, 36, 41, 42).	High
ACH147.1	AZ4	N/A	Slutsend or Westfarm	Cultural Heritage – Signal House Signal house visible on the 1889 OS map located on the north side of the railway tracks. This structure is no longer depicted by the production of the 1938 map and no visible remains survive. Subsurface remains may survive beneath the railway verge.	Low
ACH147.2	AZ4	N/A	Slutsend or Westfarm	Cultural Heritage – Site of 19 th century structures Three 19 th century residential structures visible on the 1889 OS map, these were demolished during the construction of the Amiens Street and North Wall Branch of the	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				MGWR and are not depicted on the 1906-9 OS map. Subsurface remains may survive beneath the railway verge.	
ACH147.3	AZ4	N/A	Slutsend or Westfarm	Cultural Heritage – Railway sidings This is part of the original line of the Amiens Street and North Wall Branch of the MGWR as depicted on the 1889 OS map, this track is no longer extant however subsurface associated remains may survive.	Low
ACH147.4	AZ4	N/A	Slutsend or Westfarm	Cultural Heritage – Railway sidings Railway sidings leading from the North City Mills Siding of the MGWR, across the Royal Canal to the North City Mills. These sidings are no longer extant however subsurface associated remains may survive.	Low
ACH147.5	AZ4	N/A	Crossguns	Cultural Heritage – Former railway platform Former railway platform of Glasnevin Station situated on the MGWR Link Line from Islandbridge to Amiens Street, which is depicted on the 1096-9 OS map. This station and associated platform were unusual in that its platform was a single island platform located between the upline and downline which was linked to the station by a footbridge (www.eiretrains.com). The line closed to passengers in 1910 and the platform was removed; however, subsurface associated remains may survive.	Low
ACH148	AZ4	N/A	Crossguns	Cultural Heritage – Site of 19 th century structure The site of a structure, known as Prospect Villa, is located here on the 1889 OS map and is still extant on the 1938 OS map. The structure has since been demolished and the area is now occupied by a car park to the rear of the Brian Boru public house. Subsurface associated remains may survive.	Low
ACH149	AZ4	Conservation Area	Daneswell / Crossguns / Slutsend or Westfarm	Area of Industrial Heritage – Canals The Royal Canal links the River Liffey in Dublin to the River Shannon in Longford. Measuring c.145km in length, construction began in 1790 and was completed in 1817 (www.royalcanal.ie). By the 1830s the canal carried 80,000 tons of freight and 40,000 passengers a year. In 1845 the canal was bought by the Midland Great Western Railway Company. They considered draining the canal and building a new railway along its bed however the terms of sale required the Railway Company to maintain the canal as a separate means of transport, therefore the railway was built beside the canal. Competition from the railways gradually eroded the canal's business and by the 1880s annual tonnage was	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>down to about 30,000 and the passenger traffic had all but disappeared. The canal closed to all navigation in 1961 and fell into disrepair.</p> <p>Upstanding remains associated with the canal, including the locks and its status as a Conservation Area are addressed in Chapter 26 Architectural Heritage (BH-39, 40, 43).</p>	
ACH149.1	AZ4	N/A	Crossguns	<p>Cultural Heritage – Site of Lock House</p> <p>This Canal Lock House is depicted and annotated on 1847 OS map and present on maps up to c.1938 edition OS. The lock house was subsequently demolished during the construction of the adjacent railway. The location is now occupied the railway and associated tunnel.</p>	Very Low
ACH149.2	AZ4	N/A	Crossguns	<p>Cultural Heritage – Site of industrial building</p> <p>An industrial building is shown in this location on the 1889 OS map. The building is orientated parallel to the canal to the north. The structure may be associated with the North City Flour Mills (Refer to Chapter 26 Architectural Heritage) (BH-50) located to the east. This structure was depicted on the 1938 OS map but has since been demolished, however there is potential for associated subsurface remains to survive.</p>	Low
ACH150	AZ4	N/A	Slutsend or Westfarm	<p>Cultural Heritage – Glasnevin Cemetery – St Paul's Section</p> <p>St Paul's Section of Glasnevin Cemetery was opened in 1908. This cemetery contains both marked and unmarked graves and a 1916 memorial (BH-46; Refer to Chapter 26 Architectural Heritage). Archaeological test excavations undertaken at the eastern side of the cemetery (Myles 2017) established the depth of burials on this area to be between 1.4-1.7m below ground level.</p>	Medium
ACH151	AZ4	N/A	Crossguns	<p>Cultural Heritage – Site of post medieval structure</p> <p>A small structure is depicted in roughly this location on Rocque's map of 1757 but is not depicted on later maps. The approximate location of the structure is now beneath a car park to the rear of residential buildings.</p>	Very Low
ACH152	AZ4	N/A	Daneswell	<p>Cultural Heritage – Charleville Lawn Tennis Club</p> <p>The tennis club was founded in 1894 and moved to its current location in 1904. A tennis court is marked on the 1906-9 OS map.</p>	Medium
ACH153	AZ4	N/A	Crossguns North / Crossguns South	<p>Cultural Heritage – Townland Boundary</p> <p>The townland boundary between Crossguns North and Crossguns South, where it crosses the proposed Project boundary, is located along the route of the Royal Canal, therefore there is very low potential for associated below ground remains to survive.</p>	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH154	AZ4	N/A	Grangegorman Middle / Crossguns South	Cultural Heritage – Townland Boundary The townland boundary between Grangegorman Middle and Crossguns South, where it crosses the proposed Project boundary, is located along the route of Phibsborough Road, therefore there is very low potential for associated below ground remains to survive.	Neutral
ACH155	AZ4	N/A	Crossguns / Grangegorman Middle	Cultural Heritage – Townland Boundary The townland boundary between Crossguns and Grangegorman Middle, where it crosses the proposed Project boundary, is located beneath roads and a vacant plot previously occupied by industrial buildings, therefore there is very low potential for associated below ground remains to survive.	Neutral
ACH156	AZ4	N/A	Sultsend or West Farm / Grangegorman North	Cultural Heritage – Townland Boundary The townland boundary between Sultsend or West Farm and Grangegorman North, where it crosses the proposed Project boundary, is located beneath the railway line, therefore there is very low potential for associated belowground remains to survive.	Neutral
ACH157	AZ4	N/A	Crossguns South	Cultural Heritage – CrossGuns Snooker Club The snooker club first opened on Easter Sunday 1958 and claims to be the oldest club in Ireland and the UK.	Medium
ACH158	AZ4	N/A	Crossguns South	Cultural Heritage – Canal The Broadstone Branch of the Royal Canal, which extends from the main line of the canal southwards towards the Royal Canal Broadstone Harbour. The construction of this branch commenced in tandem with the main line of the canal and was completed in 1796, with the harbour completed c. 1806. This branch of the canal has been infilled, where the route of this canal branch passes through the study area of the proposed Project, it is occupied by a modern building at its northern end, where it interests with the Royal Canal, and by Blessington Street Park as it runs southwards. There is potential for remains associated with the canal to survive below ground as has been shown during the construction of LCC at Broadstone. Archaeological excavations carried out at Broadstone revealed a deep, stratified sequence of activity. Activity predating the canal was identified followed by sections of the canal approach and harbour. The archaeological evidence suggested that the canal channel was not subject to significant dredging which resulted in artefact rich deposits being uncovered which provided a snapshot of early to mid-19 th century Dublin (Moraghan et. al. 2020).	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH159	AZ4	N/A	Crossguns South	Cultural Heritage – Dry Dock Dry dock located along the Broadstone Branch (ACH158) of the Royal Canal (ACH149). The dock yard is annotated on the 1838 OS map and is connected to the east bank of the Royal Canal. Although the dock is now located beneath an existing building there is potential for survival of subsurface remains as the dock was infilled; however, canal infrastructure has been shown to survive infilling as has been shown during excavations at Broadstone Harbour (Moraghan et. al. 2020).	Low
ACH160	AZ4	N/A	Crossguns South	Cultural Heritage – Broadstone Canal Branch Tow Path The tow path, along with the canal branch itself (ACH158) are no longer visible above ground. The line of the tow path, where it crosses the study area of the proposed Project, is occupied by a road and park, however subsurface associated remains may survive.	Low
ACH161	AZ4	N/A	Crossguns South	Cultural Heritage – Dry Dock Dry Dock located along the Broadstone Branch (ACH158) of the Royal Canal (ACH149). The dock yard is annotated on the 1838 OS map and is connected to the east bank of the Broadstone Branch of the Royal Canal. Although the dock is now located beneath a multistorey car park there is potential for survival of subsurface remains as the dock was infilled, however canal infrastructure has been shown to survive infilling as has been shown during excavations at Broadstone Harbour (Moraghan et. al. 2020).	Low
ACH162	AZ4	N/A	Grangegorman Middle, Crossguns South	Cultural Heritage – Tramway The Dublin tramway system was in its day seen as the most efficient of its type in Europe and the city the seventh largest electric tramway network in the world. This tramline, which ran from Nelson Pillar to Phoenix Park was opened in 1876 as an extension of line from Donnybrook and closed in 1940. The line was electrified in 1898-9 becoming the first cross-city electric service. The tramway is visible on the 1886 OS map however it was removed by the time of the 1935-8 OS map. Where the route of the original tramway crosses the study area of the proposed Project along Phibsborough Road, the roadways have been resurfaced, with no visible remains of tramway seen today. There remains some potential for subsurface remains to survive.	Low
ACH163	AZ4	No	Grangegorman Middle	Cultural Heritage – Dalymount Park This is the home ground of Bohemian FC, the oldest football club in Dublin. The grounds are depicted on the 1906-9 OS map and have held many Irish internationals	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				and FAI Cup finals. It has also hosted UEFA Champions League qualifiers, UEFA Cup and UEFA Cup Winners' Cup matches.	
ACH164	AZ4	No	North Circular Road	Cultural Heritage – Site of Blaquiere Bridge (road/rail) This is the site of a road bridge traversing the Broadstone Branch of the Royal Canal, first depicted on Wilson's 1801 map of Dublin. No visible remains of the structure survive following the infilling of the canal, however there is potential for some fabric from the bridge to survive beneath the current road surface.	Low
ACH165	AZ4	No	North Circular Road	Cultural Heritage – Tramway The tramway is visible on the 1890 OS map however it was removed by the time of the 1935-8 OS map. Where the route of the original tramway crosses the study area of the proposed Project along North Circular Road the road has been resurfaced, with no visible remains of tramway surviving. There remains some potential for subsurface remains to survive.	Low
ACH166	AZ4	N/A	Berkeley Road	Area of Archaeological Potential Berkeley Park, located to the fore of the Mater Hospital and also known as Four Masters Park, is an open green space with little evidence for previous disturbance. An L-shaped 19 th century structure with associated gardens or orchards is visible at the north west corner of the Park on OS 1838 map, it is depicted on maps up to 1890. There are no above ground remains on site however there is potential for associated subsurface remains to survive. Today the Park contains two sculptures, a memorial cross named 'The Four Master' and a modern sculpture known as 'The Healing Hands' (BH68, BH-69 and BH-71; Refer to Chapter 26 Architectural Heritage). To the east of the Park a small grotto is located outside the Park railings and is associated with St Joseph's Carmelite Church (BH-74). A geophysical survey carried out at the Park in 2018 did not reveal any archaeological features, however there was considerable magnetic interference which may have masked any archaeological remains (Gimson and Garner 2019).	Medium
ACH167	AZ4	N/A	Berkeley Road	Cultural Heritage – Tramway The tramway is visible on the 1890 OS map however it was removed by the time of the 1935-8 OS map. Where the route of the original tramway crosses the proposed Project boundary along Berkeley Road the road has been resurfaced, with no visible remains of tramway surviving. There remains some potential for subsurface remains to survive.	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH168	AZ4	N/A	Blessington Court	Cultural Heritage – Metal Works The site of a metal works has been identified by the DCIHR and is shown on OS mapping from 1940. The site is occupied by 20 th -century houses and no extant remains associated with the metal works have been identified above ground.	Low
ACH169	AZ4	RMP DU018-020----	Dublin	Archaeological site/monument – Historic Town of Dublin Zone of Archaeological Potential for the historic city of Dublin which encompasses the early medieval, medieval and part of the post-medieval areas of the city. The proposed Project and its study area intersect with the ZAP from Dorset Street Upper in the north to Leeson Street Lower in the South. Archaeological remains identified during investigations across the study area are included within this constraint. These include a redbrick cellar, redbrick coal chute, and mortared surface identified during archaeological monitoring undertaken in 2009 (Doyle 2009) along Parnell Square East. These remains were left in situ. Archaeological monitoring undertaken in 2014-15 along Parnell Street as part of the LCC works (O’Dowd et. al 2016) identified post-medieval features including cellars, drains, a watermain, and the boundary wall of the Rotunda along Parnell Street. The cellars relate to Georgian buildings from the original layout of the street in the first half of the 18 th century while the culverts, drains, water pipes and street surfaces showcase the civic infrastructure of Dublin (Ibid. p.4). Where archaeological features were to be impacted, they were fully recorded and removed, however some features remain in situ and there is likely to be similar features located along the south carriage of the street which was not subject to archaeological investigation. Archaeological investigations carried out as part of the LCC works revealed evidence for the activities of the Wide Streets Commission along O’Connell Street including boundary walls and cess pits as well as civic infrastructure including box drains (O’Dowd 2019).	High
ACH170	AZ4	RMP DU018-024----	Hardwicke Lane	Archaeological site/monument – Well A well known as the 'Stone Well' was located at the intersection of Dorset Street Upper and Frederick Street North. It is located near a nunnery on Wilson's map of 1801. This area is currently occupied by a housing estate and no evidence for the well survives above ground.	High
ACH171	AZ4	N/A	Frederick Court	Cultural Heritage – Saw Mills	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				The site of Saw Mills has been identified by the DCIHR and is shown on OS mapping from 1940. The site is occupied by 20 th -century apartments and no extant remains associated with the mills have been identified above ground.	
ACH172	AZ4	RPS 6380, NIAH 50010911	Parnell Square North	Cultural Heritage – Dublin Writers Museum The Dublin Writers Museum opened to the public in 1991 to display a collection celebrating Ireland’s literary heritage over the past three hundred years. It serves as a repository of Ireland’s literary and cultural heritage.	Medium
ACH173	AZ4	RPS 6384, NIAH 50010915	Parnell Square North	Cultural Heritage – Dublin City Gallery (The Hugh Lane Gallery) The Hugh Lane, originally the Municipal Gallery of Modern Art was established in 1908 and is the first public gallery of modern art in the world (available at: https://lithub.com/heres-the-worlds-first-public-gallery-of-modern-art/). The gallery contains collections mostly by contemporary Irish artists and includes the reconstructed studio of Francis Bacon which was moved from London in 2001 (available at: https://www.hughlane.ie/). It serves as a repository for Ireland artistic and cultural heritage.	Medium
ACH174	AZ4	N/A	Parnell Square	Cultural Heritage – Parnell Square Parnell Square has been identified as an area of cultural heritage significance due to both the archaeological potential of the area as well as being the site of a number of events and places of historical and cultural importance. Whilst there are no recorded archaeological sites dating to the early medieval period within this area, the surrounding lands have produced evidence for Viking burials. A site which may date to the later part of this period is a burial ground recorded c. 300m east of the proposed Project (RMP DU018-020496-), although this may in theory cover a much larger area. A 1763 report stated that “Vast quantities of bone” were discovered whilst digging behind the New Gardens (Rotunda Gardens) at Great Britain Street (now Parnell Street) (SMR file). The remains, which included a large sword and a spear, are thought to relate to the Battle of Clontarf. It seems possible that part of the battle took place in very close proximity to this area. The discovery of redeposited human bone during test excavations at 23-28 Parnell Square North (c.130m west of the proposed Project) has been dated to between AD 692-961 which would place the remains in the early medieval period. Analysis of the bone indicated a burial date ranging from the late 7 th to mid-10 th century AD,	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>contemporary with the Viking period. Whether the remains are associated with the Battle of Clontarf is unclear, especially as the bone assemblage included juvenile bones, a demographic unlikely to have been involved in battle. It may alternatively represent the remains of a Viking period settlement site (McIlreavy 2018).</p> <p>No 25 Parnell Square (RPS 6387) was of great significance during the period leading up to the War of Independence. It was here on 9 September 1914 that a meeting held by Supreme Council of the Irish Republican Brotherhood (IRB), with selected others, agreed to rise up against the British before the First World War finished. Those in attendance included Eamonn Ceannt, Thomas Clarke, James Connolly, Arthur Griffith, John MacBride, Sean MacDermott, Sean McGarry, William O'Brien, Seán T. O'Kelly, Pádraig Pearse and Joseph Plunkett.</p> <p>The buildings surrounding the area also played important roles in the organisation for the 1916 Rising. No 41, formerly the Irish National Forester's Hall (RPS 6403) was used for drilling by the IRB and Irish Volunteers. Éamon de Valera assembled the 3rd Battalion of the Volunteers here immediately prior to the 1916 Rising. Similarly, the building at No 46 (RPS 6408) was used to assemble the 2nd Battalion of the Volunteers under Thomas MacDonagh on the eve of the 1916 Easter Rising.</p> <p>The Garden of Remembrance is located at Parnell Square and was designed by Dáithí Hanly. It is located in the former pleasure gardens of the Rotunda Hospital which opened in 1749. The Garden of Remembrance was opened in 1966 and is dedicated to the memory of all those who gave their lives in the cause of Irish freedom. The location of the Garden is where the Irish Volunteers were founded in 1913 and where several of the leaders of the 1916 Rising were held overnight before being transferred to Kilmainham Gaol. The 'Rotunda Rink' memorial dedicated to the founding of Óglaigh na hÉireann is located on the verge of Parnell Square (East) (available at: https://opwdublincommemorative.ie/garden-of-remembrance/learn-more/).</p> <p>The Garden of Remembrance serves as commencement point of many of the city's public and commemorative marches.</p>	
ACH175	AZ4	National Monument RMP DU018-425----	O'Connell Street Upper, Parnell Street	<p>Archaeological site/monument – Monument/Sculpture</p> <p>Charles Stewart Parnell Monument. Produced by Irish born sculptor Augustus Saint-Gaudens, this monument is located at the northern end of O'Connell Street. In 1899, the foundation stone was laid and it was unveiled on the 1 October 1911, where it now stands in answer the O'Connell monument at the south end of O'Connell Street Lower.</p> <p>(BH-249; Refer to Chapter 26 Architectural Heritage for further detail)</p>	Very High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH176	AZ4	N/A	Parnell Street	<p>Cultural Heritage – Tramway</p> <p>The tramway is visible on the 1906-9 OS map however it was removed by the time of the 1935-8 OS map. Monitoring of construction of the LCC line (O’Dowd 2019) did not identify any remains associated with this tramway. The road has been resurfaced, with no visible remains of tramway surviving. There remains some potential for subsurface remains to survive.</p>	Low
ACH177	AZ4	Architectural Conservation Area	O’Connell Street Upper, Henry Place, Moore Lane, O’Rahilly Parade	<p>Area of Archaeological Potential</p> <p>During the medieval period the northern suburb of the city was largely dominated by the Cistercian Abbey of St Mary, with this AAP most likely comprising agricultural land associated with the Abbey. Following the dissolution of the monasteries in the mid-16th century this area became marginal land, as seen on Philip’s map of 1685, prior to the expansion of the city. The layout of streets and buildings in the area is first depicted on Brooking’s map of 1728.</p> <p>The development of this part of the city was in part thanks to the actions of individuals such as Luke Gardiner and Nathaniel Clements, who became agents of urban development from the 1660s (Simpson 2020 p.7, Brady and Simms 2001). The development of this AAP and the immediate surrounding area occurred principally between the middle of the 17th and 18th century. Gardiner purchased the Drogheda Estate which had owned the lands in and around the AAP. O’Connell Street was originally known as Drogheda Street and extended from Parnell Street in the North to Abbey Street in the south, as can be seen on Brooking’s map of 1728. Buildings can be seen depicted within the AAP at this time, as well as open areas. In the 1750s Gardiner set about demolishing buildings along Drogheda Street, between Parnell Street and Henry Street, which in effect widened the northern half of Drogheda Street, which by then had been renamed Sackville Street. Rocque’s map of 1756 shows this new layout along with the new buildings fronting on to Sackville Street and Old Brickfield Lane (now Moore Lane), within the AAP. This map also contains the first depiction of ACH179, a brickfield, which at this time is recorded on the map as ‘Old Brick Field’ suggesting it has been out of use for some time; though the production of brick in the city was not banned until the 1770’s. Part of this brickfield is located within the AAP. Henry Place is also shown on this map and is known at the time as ‘Off Lane’.</p> <p>The Wide Streets Commission, established in 1757, expanded on Gardiner’s efforts to widen Sackville Street when, in 1777, they extended Sackville Street to the River Liffey to the south. Wilson’s map of 1801 first shows this extension of the street to the river. By the production of the first edition OS map in 1838 the AAP had seen considerable development, with the majority of the land within the area now occupied by buildings</p>	Medium

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				<p>and associated yards and gardens. A small laneway named 'Mulligan's Court' is shown opposite the southern end of Moore Lane. Subsequent OS maps up to 1938 show AAP as dominated by structures and associated small yard areas.</p> <p>Archaeological investigations undertaken within the AAP have shown considerable disturbance as a result of the construction of the buildings and associated basements. Archaeological test excavations were undertaken in 2020 to the rear of Nos. 40-41 O'Connell Street Upper, at the northern end of the area of archaeological potential. Due to the presence of two layers of reinforced concrete, it was not possible to excavate the archaeological trenches (Simpson 2021 p.12). However archaeological monitoring undertaken in this area in 2008 (Simpson 2009) showed that the slab extended to a least 1m in depth and was cut into natural gravels, indicating substantial excavation in this area. Trenches excavated to the rear of 50-51 O' Connell Street Upper revealed evidence for the brickworks (ACH179) at c.3.8m below current ground level which was sealed by a deep deposit of rubble, grey and brown clay. A wall foundation and floor were revealed at c.2.7-3.3m below ground level, while natural deposits were encountered at c.4m below ground level in the excavated trenches.</p> <p>Archaeological investigations undertaken in 2014 at the National Monument 14-17 Moore Street and 8-9 Moore Lane (ACH180) has shown that cellars survive both beneath the buildings fronting on to Moore Street and below those fronting on the Moore Lane, similar cellars may be encountered within the AAP (Simpson 2014).</p> <p>This area has been designated as a CA and contains a number of Protected Structures. These elements are addressed in Chapter 26 Architectural Heritage.</p>	
ACH178	AZ4	N/A	O'Connell Street Upper, Henry Place, Moore Lane, O'Rahilly Parade	<p>Cultural Heritage – Elements of 1916 Streetscape</p> <p>The definition of the extent of this streetscape has been confined to the study area of the proposed Project and does not cover the entirety of the 1916 streetscape of O'Connell Street and surrounding area.</p> <p>Moore Street, Moore Lane, O'Rahilly Parade and Henry Place were the scene of fighting during the final days of the 1916 Rising, following the retreat of the Leaders and their followers from the GPO. The rebels fled the GPO through a side entrance on Henry Street and crossed to Henry Place. From here they made their way north, following Henry Place around to the west where they then proceeded to break through into No. 10 Moore Street.</p> <p>A detailed assessment of the Moore Street area, specifically in relation to the 1916 Rising, has been undertaken by Frank Myles (2012), which indicates that the buildings along Moore Street do not demonstrate any exterior evidence of the conflict. The White House has been substantially altered since 1916 and no evidence for the bullet</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				holes recorded in 1916, while the majority of O’Rahilly Parade has been significantly altered. Myles notes that there is a disappointing lack of physical evidence of the conflict across this area, with shopfronts which would have taken the brunt of the gunfire having been replaced in the 20 th century (Myles 2012, 116). The most enduring survival from the Rising is the street plan itself, with the route of the evacuation from the GPO to No. 10 Moore Street still traceable.	
ACH179	AZ4	RMP DU018-020506-	Parnell Street, O’Rahilly Parade	<p>Archaeological site/monument – Brickworks</p> <p>The site is annotated as the 'Old Brick Field' on Rocque's map of 1756 and on Faden's map of 1797 Moore Lane is annotated as Brickfield Lane. A structure, possibly representing the brickworks is depicted in the northern corner of the brick field. Brick is first recorded in use in Dublin in the 16th century and the brickfield identified here may pre-date the 18th century. The site is currently occupied by shops/offices and no above ground remains have been identified.</p> <p>Archaeological investigations in this area have revealed evidence for the brickfield. Monitoring of stabilisation works at the Moore Street National Monument (ACH180) identified reclamation deposits used to infill the brick field that occupied the site prior to its construction to depths of up to 2.1m below ground level (Simpson 2014). The reclamation deposits consist of organic clays containing animal bones, shells, cinders, ash, mortar, fragments of timber, glass and ceramics (ibid. 10).</p> <p>Archaeological excavation (O'Donovan 2004) at Moore Street/Parnell Street in advance of the construction of Jurys Inn, to the west of the boundary of the proposed Project, revealed evidence for the brickfield in the form of a 'brickfield deposit' of crushed, poorly fired bricks. Similar deposits of crushed brick were identified on the junction of O'Connell Street Upper/Parnell Street during LCC works, though these may relate to the use of brick manufacturing waste to create street surfaces.</p>	High
ACH180	AZ4	National Monument No. RMP DU018-390--- - Preservation Order No. 1/2007 Protected Structures	Moore Street/Moore Lane	<p>Archaeological site/monument – 14-17 Moore Street and 8-9 Moore Lane</p> <p>The buildings at Nos. 14 -17 Moore Street and 8-9 Moore Street date from the mid-18th century. The facades of Nos. 14-17 Moore Street were rebuilt in the 19th century, and they survive as a distinct and recognisable group in the streetscape. No. 16 Moore Street is accepted as the final headquarters of the 1916 leaders and is the location where the decision to surrender was taken. The buildings and yard area in between are a National Monument in State care. As early surviving houses in an area largely lost during the Rising, they are examples of particular importance both architecturally and historically.</p>	Very High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
		Nos. 5282-5285		The buildings were constructed on the site of an old brickfield (ACH179). Monitoring of stabilisation works identified reclamation deposits used to infill the brick field that occupied the site prior to the construction of 14-17 Moore Street (Simpson 2014).	
ACH181	AZ4	N/A	O'Connell Street	Cultural Heritage – Tramway The tramway is visible on the 1906-9 OS map however it was removed by the time of the 1935-8 OS map. Monitoring of construction of LCC (O'Dowd 2019) did not identify any remains associated with this tramway, however excavations were limited to the north bound lane of O'Connell Street Upper and the central median, therefore elements may survive beneath the current ground surface on the southbound lane.	Low
ACH182	AZ4	N/A	O'Connell Street Upper	Cultural Heritage – Tramway The tramway is visible on the 1891 OS map however it was removed by the time of the 1935-8 OS map. Monitoring of construction of LCC (O'Dowd 2019) did not identify any remains associated with this tramway, however excavations were limited to the north bound lane of O'Connell Street and the central median, therefore elements may survive beneath the current ground surface on the southbound lane.	Low
ACH183	AZ4	National Monument RMP DU018-424---- Protected Structure No 5997	O'Connell Street Lower	Archaeological site/monument – Monument/Sculpture The statue dedicated to the Young Irelander William Smith O'Brien, a leader of the 1848 rebellion, was the first monument erected in Dublin to commemorate an individual who had stood for armed resistance to British rule. O'Brien was also a descendant of the Protestant nobility who traced his lineage back to Brian Boru. In 1929 the O'Brien statue was relocated from D'Olier Street to its current location on O'Connell Street at its junction with Lower Abbey Street. The noble figurative monument is of artistic, historic and cultural importance while adding to the great collection of monuments on O'Connell Street.	Very High
ACH184	AZ4	RMP DU018-020154----	Harbour Court	Archaeological site/monument – Glasshouse There is a glasshouse marked here on Rocque's map of 1756 however it is not depicted on any subsequent OS maps. No above ground remains of the factory survive and an office currently occupies the site.	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH185	AZ4	National Monument RMP DU018-423--- Protected Structure No 5990	O'Connell Street Lower	Archaeological site/monument – Monument/Sculpture The two-ton Dalkey granite foundation stone was laid on 8 August 1864 by Lord Mayor Peter Paul McSwiney. The Irish-born sculptor John Henry Foley was chosen to design the monument however he died in 1874 and his assistant, Thomas Brock, completed the monument. The O'Connell Monument was unveiled to the public on 15 August 1882, on the centenary of the Volunteer Movement. Evidence of the original foundation stone was exposed during LCC works	Very High
ACH186	AZ4	RMP DU018-129----	Eden Quay	Archaeological site/monument – Burial A human skull was recovered from riverine deposits in this location during excavations associated with the construction of a basement. Previous archaeological test excavations revealed no archaeological remains (Fraser 2003); however, archaeological monitoring was undertaken following discovery of the skull (Fraser 2004). Archaeological objects recovered during the monitoring programme ranged in date from 13 th -18 th century.	High
ACH187	AZ4	CA & multiple RPS (Chapter 26: Architectural Heritage)	River Liffey	Cultural Heritage – River Liffey The River Liffey divides Dublin in to its north and south sides and has played an important role in the development of the city and earlier settlements. A river fording point was in use from at least the early medieval period onwards and maritime activity is recorded from the 8 th century onwards (Brady 2008). Reclamation of land along the riverside occurred extensively throughout the post-medieval period right up until the 19 th century. This process of reclamation significantly extended the land available for development to the north of the river. A total of 26 wrecks are listed in the Shipwreck Inventory for the River Liffey, however none are recorded within the study area of the proposed Project. No structures, deposits or objects of archaeological significance were encountered during an underwater archaeological assessment undertaken within the AAP in 2008 (Brady 2009), however structural features of historic value were encountered. These include two 19 th century quayside structures (Eden Quay and Burgh Quay), a bridge structure of late 18 th -early 19 th century date (O'Connell Bridge) and a 19 th century timber revetment associated with Burgh Quay. A possible fording point was also encountered upstream of O'Connell Bridge.	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH188	AZ4	N/A	Abbey Street Lower	Cultural Heritage – Tramway The tramway is visible on the 1892 OS map; however, it was removed by the time of the 1935-8 OS map. There remains some potential for associated subsurface remains to be encountered.	Low
ACH189	AZ4	RMP DU018-020461 (proposed RPS 8835)	Eden Quay	Archaeological site/monument – Quay The quay is annotated as 'Iron Key' on Rocque's map of 1756 and was later known as the 'Iron Yard'. The city of Dublin ordered its construction in 1733 and the quay had a river frontage of c. 30m.	High
ACH190	AZ4	N/A	Eden Quay	Cultural Heritage – North Wall Slip This feature is visible on Brooking's map of 1728; however, it appears to have been removed by the time of Campbell's 1811 map. A quay wall/boardwalk now occupies the site, no remains of the North Wall Slip were identified on site.	Low
ACH191	AZ4	N/A	Burgh Quay	Cultural Heritage – Printing Works The Printing Works is marked on the 1864 OS map, the original building has been replaced by a modern office complex. The Tivoli Theatre, which also occupied the original building, is only annotated on the 1906-9 OS map.	Low
ACH192	AZ4	N/A	Hawkins Street, Poolbeg Street	Cultural Heritage – Market The site of this market was formerly occupied by the Department of Health and Children building ('Hawkins House'). The house was demolished in 2021 and the site is now undergoing redevelopment and archaeological excavation. It is annotated on Rocque's map of 1756 and was replaced by the Theatre Royal by the 1847 OS map. Evidence of cellars associated with the Theatre Royal were recorded and excavated under the central carriageway of Hawkins Street during LCC. Additional remains may survive beneath the footpath, which was outside of the LCC impact zone.	Low
ACH193	AZ4	RMP DU018-020464-	George's Quay, Tara Street	Archaeological site/monument – Windmill A map dated to 1683 shows 'Mr Hawkins Windmill' at Lazars Hill on the south bank of the River Liffey (De Courcy 1996, 219). There are no visible traces of this monument on the ground, with the site currently occupied by a modern building.	High
ACH194	AZ4	RMP DU018-020458-, proposed RPS 8841)	George's Quay	Archaeological site/monument – Quay De Courcy (1996, 173) mentions that George's Quay was erected in the early 18 th century as part of the development of Mercer's Ground. It was likely named after George I (1714-27).	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>The quay is first shown on Brooking's map of 1728 and appears on subsequent OS maps.</p>	
ACH195	AZ4	N/A	<p>Luke Street, Poolbeg Street, Tara Street, Townsend Street</p>	<p>Area of Archaeological Potential</p> <p>This AAP is located to the east of the medieval city of Dublin. Buildings are shown on the north side of 'Lazers Hill', which follows the route of Townsend Street at the southern side of the AAP, on De Gommès map of 1673. The area to the north of these houses is shown as part of the estuary of the River Liffey. By the time of Brookings map of 1728 this area has been reclaimed from the estuary and new streets and buildings have been constructed across the AAP. Rocque's map of 1756 shows the area in detail, with a hospital called 'Hospital of Incurables' located within the AAP. This hospital is known as Locks Hospital on Campbell's map of 1811, and as Westmoreland Lock Hospital on the 1847 OS map. A church (ACH196) is also depicted in this area, to the north of the hospital. The remainder of the AAP is occupied by buildings and associated yards. Subsequent OS maps all show the AAP occupied by a dense collection of buildings. The hospital was demolished in 1949 and modern buildings now occupy the majority of the AAP.</p> <p>The DCIHR records a foundry at the eastern side of the AAP. Known as 'Poundens Foundry' on Rocque's map of 1756, no above ground remains of this survive though the archaeological monitoring of GI works at this location has revealed deep deposits with archaeological potential (Phase 3, Breen 2020c).</p> <p>Archaeological investigations within the AAP identified 12 post-medieval burials at the site of the Church (ACH197; Channing 1992), the wall footings of the Hospital of Incurables (Hayden 1997; Walsh 1998), and wooden riverine revetments and quay wall dating to the 17th century (Hayden 1997; Walsh 1998).</p> <p>Archaeological test excavations and monitoring at the southwest corner of the AAP revealed post-medieval cellars on the Townsend Street frontage as well as compact organic deposits with post-medieval finds. Oak wooden remains were also uncovered which may be a continuation of the 17th timber revetments identified by Walsh to the east (Kehoe 2002).</p> <p>There has been considerable disturbance across this AAP as a result of the redevelopment in the 1990s and 2000s; however, there remains some potential for archaeological remains to be encountered beneath the foundation levels of the current buildings and beneath the surrounding streets.</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH196	AZ4	RMP DU018-020161-	Tara Street	Archaeological site/monument – Chapel There is a chapel site marked on Rocque's maps of 1756 and 1757, however it is not depicted on any subsequent mapping. Excavation of this monument took place in 2019 prior to redevelopment of the site (Bennet 2020:470).	High
ACH197	AZ4	RMP DU018-020648-	Poolbeg Street	Archaeological site/monument – Church A church is depicted in this location on Rocque's map of 1756. The OS maps label the church as 'The German Lutheran Church' until the 1935-8 OS map. Archaeological monitoring and excavation at the site (Channing 1992) identified the remains of at least 12 individuals consisting of 11 adults and one juvenile (Buckley 1992), however no structural remains associated with the church were found.	High
ACH198	AZ4	RMP DU018-020061-	Townsend Street, Luke Street	Archaeological site/monument – Hospital St James' Hospital/Stein Hospital was founded by Henry, the Archbishop of Dublin, for pilgrims departing to the shrine of St James at Compostela in Spain from the mouth of the Stein in c. 1220. There is no evidence that the hospital survived into the 18 th century and no archaeological evidence for the hospital was uncovered during investigations at this site in 1997 or 1998 (Hayden 1997; Walsh 1998). A post-medieval hospital was located in this area and is first marked on Rocque's map of 1756 as 'Hospital of Incurables'. It is named as Locks Hospital on Campbell's map of 1811, and as Westmoreland Lock Hospital on the 1847 OS map. A programme of archaeological test excavations and excavation identified the remains of a 17 th -century river revetment pre-dating the hospital (Walsh 1998). There remains some potential for archaeological remains to be encountered beneath the foundation levels of the current buildings and beneath the surrounding streets.	High
ACH046	AZ4	N/A	Townsend Street	Cultural Heritage – Statue Bronze stature of Countess Markievicz, by Elizabeth McLaughlin, dating to 1998. The statue was commissioned by Treasury Holdings and features her dog Poppet.	Medium
ACH199	AZ4	N/A	Townsend Street, Luke Street	Cultural Heritage – Tile Factory The site of the tile factory is first occupied by a Mission House as shown on the 1864 OS map. By the production of the 3 rd (1940) edition 25-inch OS map a tile factory is seen in this location. The DCIHR records that a surviving brick-built arcading to the south of the site, may have been a party wall between railway and factory. No other remains of the factory were identified.	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH200	AZ4	N/A	Townsend Street	Cultural Heritage – Baby Carriage Factory Initially functioning as the site of a brewery in the mid-18 th century, the site was subsequently redeveloped as a "Baby Carriage Factory" and is annotated as such on the 3 rd (1940) edition 25-inch OS map. No upstanding remains of this structure survive and the site is now occupied by offices.	Low
ACH201	AZ4	N/A	Townsend Street	Cultural Heritage – Bedstead Factory This factory is shown on the 1940 OS map; however, the original factory has been replaced and the site is now occupied by an office building/fire station.	Low
ACH202	AZ4	RMP DU018-020347-, RPS 6503	Pearse Street	Archaeological site/monument – St Mark's Church Construction of Saint Mark's Church was commenced in 1729 and is the oldest standing building on Pearse Street. The structure is depicted on Rocque's map of 1757. The churchyard was in-use from 1730 to 1950. It is enclosed by 19 th -century cast-iron railings.	High
ACH203	AZ4	RPS 1999-2006	Westmoreland Row	Cultural Heritage – Trinity College Dublin Trinity College Dublin was created by Royal Charter in 1592 and is situated on the site of the medieval Priory of All Hallows. By the time of the college's foundation, the only remaining structure of the priory was the steeple of the church which was incorporated into the new college structures. The early descriptions of the college buildings describe the hall and chapel on either side of the former belfry, perhaps suggesting that the hall may have incorporated the medieval nave of the monastery church. The original extent of the college did not extend as far as its current eastern boundary at Westland Row, beneath which the proposed Project passes. The proposed Project and its study area are located at the eastern side of the TCD Campus, outside of its post-medieval core. Brooking's map of 1728 shows this area as open land, with buildings fronting on to South Leinster Street (now Lincoln Place). Rocque's map of 1756 shows this area largely consisting of greenfield with a watercourse and artificial drainage channels also depicted. The Trinity College Cricket Ground is labelled as 'College Park' at this time. On William Faden's map of 1797 this area has been transformed into a garden called 'Vice Provosts Garden', with a Bowling Green also depicted. The first structure to be depicted on mapping in this area is the School of Anatomy building which is shown on Cooke's Royal Map of Dublin, 1822. The 1836 OS maps shown development along Westmorland Row and to the south of the Anatomy building. A graveyard is also annotated to the north of the Anatomy building on this map. Archaeological excavations are currently on going in this area and human remains which appear to have been used for dissection and discarded by the medical	Medium

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				<p>school in the 18th and 19th centuries have been uncovered. A culverted stream has also been encountered, while natural riverine deposits in this area have been recorded at a depth of c. 3.5m below current ground level (Ni Cheallachain pers. comm.). Human remains had previously been found in this area during archaeological monitoring in 2002 (Simpson 2002b). Archaeological investigations at the Parsons Building revealed deep silt and gravel deposits of 2m in depth in this area (Simpson 2002a).</p> <p>Two historic sports grounds are also located within the study area of the proposed Project and within the TCD campus. Trinity Rugby Pitch is the home ground of Dublin University Football Club, founded in 1854 making it the oldest rugby club in continuous existence in the world. Cricket has been played in Trinity since the 1820s and the earliest date for a constituted cricket club is 1835.</p>	
ACH204	AZ4	RPS 5191	Clare Street, Merrion Square West	<p>Cultural Heritage – National Gallery of Ireland Collection</p> <p>The National Gallery of Ireland contains the national collection of Irish and European art. It is first depicted on the 1864 OS map and has been an important repository of artistic and cultural material since that time.</p>	Medium
ACH205	AZ4	RPS 4196	Kildare Street	<p>Cultural Heritage – Royal College of Physicians of Ireland Heritage Centre and Archives</p> <p>The Royal College of Physicians of Ireland Heritage Centre is a research and educational centre specialising in the history of medicine and medical humanities in Ireland. Its historical archives date from the foundation of the Royal College of Physicians of Ireland in 1654. The library's collections represent an important cultural heritage repository.</p>	Medium
ACH206	AZ4	RPS 4197	Kildare Street	<p>Cultural Heritage – National Library of Ireland Collection</p> <p>The mission of the library is to collect, preserve, promote and make accessible the documentary and intellectual record of the life of Ireland. The library's collections represent an important cultural heritage repository.</p>	Medium
ACH207	AZ4	RPS 4198	Kildare Street	<p>Cultural Heritage – The Oireachtas Library at Leinster House</p> <p>The Oireachtas Library and Research Service holds a collection of historical documents and documents dating from the 16th century. The library's collections represent an important cultural heritage repository.</p>	Medium

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH208	AZ4	RMP (x175) SMR (x15) DU018-146--- - to DU018-237---, DU018-241--- - to DU018-274---, DU018-277--- -, DU018-284---, DU018-287--- - to DU018-292---, DU018-295--- -, DU018-304--- to DU018-307--- -, DU018-311---, DU018-355--- to DU018-377--- -, DU018-388---, DU018-391--- - to DU018-412---, DU018-414--- -, DU018-415---, DU018-418---, and DU018-427--- -	Kildare Street	Cultural Heritage – National Museum of Ireland – Archaeology The National Museum of Ireland – Archaeology contains artefacts dating from 7000BC to the 20 th century exhibited in seven galleries. As the main repository for the archaeological heritage of the country it is considered to be an important cultural heritage institution.	High

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ACH209	AZ4	RMP DU018-020535	Merrion Row	Archaeological site/monument – Graveyard There is a date stone of 1673 on the gateway to the cemetery. This small cemetery contains the descendants of Huguenots who fled persecution in France, it is first depicted on Rocque's map of 1756 as a 'French Burying Gr.' A programme of test excavations to the immediate east of the graveyard encountered a charnel pit containing disturbed human bone (Walsh 2006).	High
ACH210	AZ4	RMP DU018-020646	St Stephen's Green	Archaeological site/monument – House - 16 th /17 th century The Shelbourne Hotel was built atop the foundations of the Earl of Shelburne's house. Also known as Kerry House. Test excavation in 2005 (Bolger 2005) did not identify any archaeological remains. The Hotel also played a role in the 1916 Rising when it was occupied by British soldiers who were fighting the Irish republicans in St Stephen's Green. The Hotel was also where the Constitution of the Irish Free State was drafted in 1922.	High
ACH211	AZ4	National Monument RMP DU018-020334- Protected Structure Nos. 7751-7761	St Stephen's Green Park	Archaeological site/monument – St Stephen's Green Park St Stephen's Green originally comprised a marshy common outside of the walls of Dublin until 1635 when the City Assembly passed an ordinance stating that no parts of the Green were to be let but kept for use by the citizens of the city (Duchas, 1). In 1664 the Corporation of Dublin ordered its development as a residential area with a green. In 1669 the Park was enclosed by a perimeter wall and in 1670 instructions were issued to establish a lime-tree walk and hedging (McCabe 2011, 59). Given the Parks location on marshy ground, it was surrounded by a perimeter ditch which was so large it was referred to as a canal (McCabe 2011, 59, 66). Ninety building lots were reserved around it and the rents of these lots were used to build the Park. De Gomme's map of 1673 only shows a handful of structures on the northern and western sides of the Park, whilst Phillip's map of 1685 shows the Park bordered by buildings on all four sides. Access to the Park was via three entrance gates located on the north, east and west sides. Brooking's map of 1728 depicts a continuous row of structures on the north, east, and west sides and by the time of Rocque's map of 1756 buildings occupy most of the plots that front onto the Park. On Brookings map minor access gates are shown on the Park's north and east sides, while the main gates, accompanied by gate houses are located on the northwest and southeast corners. On Rocque's map of 1756 the interior of the Park has been subdivided by four tree-lined paths, with a monument placed centrally within the Park interior. The entrances and date houses shown on Brooking's map have been removed, with four entrances now located centrally on all four sides.	Very High

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				<p>The Park had deteriorated by the early 19th century and in 1814 an Act of Parliament was obtained to allow improvements to be made (Duchas, 2). It is thought that works carried out between 1816 and 1818 included the levelling and drainage of the Parks interior, the demolition of the enclosing stone wall, the widening of the surrounding street and the erection of the current railings and bollards (TII 2019, 14). This work changed the Park from a public to a private one. In 1877, the St Stephen's Green (Dublin) Act returned the Park to the care of the Commissioners for Public Park Works and the Victorian park was re-opened in 1880 as a public park by Lord Ardilaun, Sir Arthur Guinness, after he had redeveloped it to include a waterfall, bridge, and fountains. The Park itself is dominated by mature trees, pathways, and ponds. The Park has been designated as a National Monument the extent of which extends to the kerb line of the perimeter footpath a 30m buffer zone has been added to this extent for the purposes of this assessment. The Park is also a Protected Structure and is addressed under that designation in Chapter 26 (Architectural Heritage).</p> <p>During the 1916 Rising, St Stephen's Green Park was an important position, which was fought over by the opposing sides. On the 24 April, at midday, approximately 100 members of the Irish Citizen's Army took control of the Park and erected barricades along key routes. They failed to secure the buildings along the northern side of the Park and these were occupied by British forces who used the positions for machine gun fire, in order to drive the Irish from the Park (Shiels 2006). There is potential for machine gun bullets and gun cartridges to survive belowground within the Park. Eyewitness accounts recount the excavation of trenches within the Park at the southeast corner, within the proposed Project boundary. It is stated that two trenches were excavated, either side of the gate (Shiels 2006).</p> <p>A number of archaeological investigations have been undertaken within St Stephen's Green, many of which are located at the western side of the Park, outside of the study area. Investigations undertaken within the study area include a geophysical survey (Gimson and Garner 2019) which revealed the presence of four possible ditches. There was considerable magnetic disturbance across the survey area which may have masked any potential archaeological remains. Archaeological monitoring of works associated with the dealignment of DCC traffic layouts on St Stephen's Green East (Bailey 2013) revealed natural subsoils underlying post-medieval deposits at a depth of 0.8m below current ground level. A number of post-medieval stone-lined culverts were also recorded.</p> <p>During the construction of the LCC archaeological investigations were carried out along Stephen's Green West and North (Johnston 2020). The archaeological stratigraphy along the areas impacted was consistent, with pavement and road-bed</p>	

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>generally extending to c. 0.4m below existing ground level. Beneath this was a series of thin layers of silts containing stone, brick and mortar inclusions, overlaying a thin and darker more compact silt deposit at c. 0.7-1m below existing ground level. Immediately below these deposits was a compact silt from c. 0.8-1m below existing ground level which appears to represent the natural subsoil (Johnston 2020, p.42). Substantial evidence for the 17th century perimeter ditch was recorded during these investigations. The inner edge of the ditch was generally below or just outside the line of the current railings of the Park along its northern side (ibid. 42). Investigations showed that the position of the ditch correlates well with the inner edge of the walk surrounding the Park as depicted on De Gomme's map of 1673 and Rocque's map of 1756 (ibid.). A 15m length of the ditch was exposed and recorded in front of Fusilier's Arch and an exploratory section was excavated across the ditch and its stone revetment. Following this, a 200m long section of the ditch was exposed along St Stephen's Green North and a 60m section was exposed along St Stephen's Green West (ibid. 44). The ditch measured between 3.6m and 3.9m wide, with the base recorded at an average depth of 1.8m below existing ground level. A stone revetment was recorded along the inner edge of the ditch, measuring 0.55m in thickness at the base and 0.4m thick at the top (ibid.).</p> <p>Tentative evidence for the Park's perimeter wall was also recorded on St Stephen's Green North during LCC works. It comprised the cut for a wall foundation, with one course of a single limestone masonry wall surviving and was located along the approximate centreline of the modern carriageway surrounding the Park (McQuade 2016, 23). A line of pits was also identified running parallel to the boundary wall that may represent tree-pits associated with the lime-tree walk set out c.1670 (ibid.). Other post-medieval features were also identified along St Stephen's Green North during the LCC works, including open drainage ditches, stone-lintelled and box drains dating to the late 18th to early 19th century and sewer culverts (Johnston 2020).</p> <p>Archaeological monitoring of a series of geotechnical boreholes excavated within the perimeter footpath surrounding the Park in 1998 did not reveal any deposits of archaeological significance (Kehoe 1998).</p>	

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH211.1	AZ4	National Monument RMP DU018-020334-	St Stephen's Green Park	Archaeological site/monument – 17 th century boundary ditch of St Stephen's Green Park During the construction of LCC archaeological investigations were carried out along Stephen's Green West and North (Johnston 2020). Substantial evidence for the 17 th century perimeter ditch was recorded during these investigations. The inner edge of the ditch was generally below or just outside the line of the current railings of the Park along its northern side (ibid. 42). Investigations showed that the position of the ditch correlates well with the inner edge of the walk surrounding the Park as depicted on De Gomme's map of 1673 and Rocque's map of 1756 (ibid.). A 15m length of the ditch was exposed and recorded in front of Fusilier's Arch and an exploratory section was excavated across the ditch and its stone revetment. Following this, a 200m long section of the ditch was exposed along St Stephen's Green North and a 60m section was exposed along St Stephen's Green West (ibid. 44). The ditch measured between 3.6 and 3.9m wide, with the base recorded at an average depth of 1.8m below existing ground level. A stone revetment was recorded along the inner edge of the ditch, measuring 0.55m in thickness at the base and 0.4m thick at the top (ibid.).	Very High
ACH211.2	AZ4	National Monument RMP DU018-020334 RPS 7751	St Stephen's Green Park	Archaeological site/monument – 17 th century boundary wall of St Stephen's Green Park Tentative evidence for the Park's boundary wall was also recorded on St Stephen's Green North during LCC works. It comprised the cut for a wall foundation, with one course of a single limestone masonry wall surviving and was located along the approximate centreline of the modern carriageway surrounding the Park (McQuade 2016, 23).	Very High
ACH212	AZ4	N/A	Ely Place Upper, Bells Lane	Cultural Heritage – Royal Hibernian Academy The Royal Hibernian Academy is an artist based and artist orientated institution dedicated to developing, affirming and challenging the public's appreciation and understanding of traditional and innovative approaches to the visual arts. The Academy contains five galleries which exhibit Irish and international art and as such is considered to represent a represent an important cultural heritage repository.	Medium
ACH213	AZ4	RMP DU018-238---- / DU018-239--- - / DU018-240----	Ely Place Upper	Archaeological site/monument – Cross-slabs; Three number (present location) Three cross slabs formerly situated at Toureen Peacaun Monastery. Co. Tipperary (RMP TS075-023----). One of the slabs has the outline of a Latin cross incised on its face and a horizontal line on text below. The second has fragmentary text inscribed on its face, while the third has the outline of a Latin cross incised on its face. Above this is a horizontal line of text with further letter below.	High

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH214	AZ4	RMP DU018-020519-	St Stephen's Green South	Archaeological site/monument – House – Indeterminate Date Houses are seen here on Brooking's map of 1728 and in more detail on Rocque's map of 1756. The existing structure here is Iveagh House (Refer to Chapter 26 (Architectural Heritage) (BH-539) which dates to the mid-19 th century; however, it conceals two early Georgian houses.	High
ACH215	AZ4	RMP DU018-020520-	St Stephen's Green South	Archaeological site/monument – House – Indeterminate Date Houses are seen here on Brooking's map of 1728 and in more detail on Rocque's map of 1756.	High
ACH216	AZ4	RMP DU018-020249-	Leeson Street Lower	Archaeological site/monument – House - 18 th /19 th century The house is first depicted on the Rocque's 1756 map. On the 1847 OS map it is annotated as No. 9 Leeson Street.	High
ACH217	AZ4	N/A	Hatch Street Lower	Cultural Heritage – Iveagh Gardens The gardens are among the finest and least known of Dublin's parks and gardens. They were designed by Ninian Niven, in 1865, as an intermediate design between the 'French Formal' and the 'English Landscape' styles and their design is first depicted on the 1864 OS map.	Medium
ACH218	AZ4	N/A	Earlsfort Terrace	Cultural Heritage – Tramway The tramlines are first depicted on the 1890 OS map however they have been removed by the 1935-8 OS map. There are no surface remains of this tramway, however there is potential for associated subsurface remains to survive.	Low
ACH219	AZ4	N/A	Earlsfort Terrace, Hatch Street Upper, Hatch Street Lower	Cultural Heritage – Tramway The tramlines are first depicted on the 1890 OS map however they have been removed by the 1935-8 OS map. There are no surface remains of this tramway, however there is potential for associated subsurface remains to survive.	Low
ACH220	AZ4	N/A	Charlemont Place	Cultural Heritage – Site of bridge The bridge is first depicted on the 1864 OS map as part of the Dublin, Wicklow, and Wexford Railway. It is shown on each subsequent cartographic source up to and including the 1935-8 OS map. The original bridge was replaced and the site is occupied by Charlemont Luas Stop supported on new bridge abutments incorporating an ESB sub-station.	Neutral

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
ACH221	AZ4	N/A	Charlemont Place	Cultural Heritage – Memorial to Paul Smith Paul Smith was born near Charlemont Street in Dublin and was the author of The Countrywoman (1962), The Stubborn Season (1962), and 'Stravanga (1963). From the age of 16 he was involved with the Gate Theatre and he worked as a costume maker and designer in the Abbey and Gate Theatres in Dublin. Prior to returning to Dublin in 1972, he lived and worked in a number of countries, including the USA and Australia. He died on 11 January 1997.	Medium
ACH222	AZ4	N/A	Charlemont Street	Cultural Heritage – Site of bridge The bridge is depicted William Faden's map of 1797 and is called 'Eustace Bridge'. The original bridge was replaced by a concrete single span bridge. There is some potential for associated below ground remains to survive.	Low
ACH223	AZ4	Architectural Conservation Area	Dartmouth Square	Cultural Heritage – Dartmouth Square It is a significant historical park dating from the late Victorian/early Edwardian period. It lies midway between Upper Leeson St. and Ranelagh Road. The Park began development in 1865 and is depicted as complete on the 1906-9 OS map. The Park is an ACA and is dealt with under that designation in Chapter 26 Architectural Heritage.	Medium
ACH224	AZ4	N/A	Ranelagh North	Cultural Heritage – Site of Smithy The smithy is first annotated on the 1906-9 OS map however by the 1935-8 OS map the structure is no longer marked. The site is now occupied by a late 20 th century house. There is some potential for associated below ground remains to survive.	Low
ACH225	AZ4	N/A	Ranelagh North	Area of Archaeological Potential Development of the city to the south of the canal began on earnest in the 19 th century, with the land directly to the west of the AAP occupied by residential housing which is visible on the 1886 OS map. The area to the east of the railway line, within the AAP, was undeveloped at this time. Industrial activity was taking place within the AAP from the late 19 th century and by 1909 a number of structures have been constructed, including a chimney. A programme of archaeological monitoring and excavation was carried out within the site of the proposed Charlemont Station at the centre of the AAP in 2020 and 2021 (Duffy and Finney 2021). The site was archaeologically monitored to a formation level of 11.8m OD which represented a 3.7-4m reduction from existing ground level. The site was found to be largely devoid of archaeological features. A build-up of 19 th century infill and clinker material was identified which varied across the site between 1m and 1.5m in depth. A stone-built culvert and a cellar wall, both of later 19 th century date,	Low

ACH Constraint	Zone	Status	Location (Townland/Street)	Description	Baseline Rating
				<p>were identified towards the centre of the site. Extensive concrete foundations from a former warehouse were encountered at the western side of the site (ibid.). There is potential for some intact below ground remains to survive in the southern end of the proposed station, beneath extant buildings and Dartmouth Road.</p>	
ACH226	AZ4	N/A	Grand Parade	<p>Industrial Heritage Area – Canals</p> <p>The Grand Canal, which is 131km long navigable water channel was built between 1756 and 1803 linking Dublin to the River Shannon. The construction of the canal preceded that of the Royal Canal and historically defined the city's 18th century southern limits. It formerly supplied water to James' Basin, Guinness and the lakes within St Stephen's Green Park National Monument (ACH211).</p>	High

25.4.4 Provision of power supply

Two 110kV GIS stations are to be provided as part of the proposed Project, one at the North Portal and the other at Dardistown. These stations will be provided with power from existing High Voltage (HV) substations located at Belcamp, which is a 220kV station, and the 110kV station at Newbury. In each case the provision of the power supply will necessitate the laying of cables beneath the ground and analysis has been carried out by ESBN to determine the preferred route for the MetroLink grid connection cables. The three routes are outlined below, identifying any archaeological or cultural heritage constraints that may be affected.

25.4.4.1 Forrest Little to Belcamp

Three options were considered by ESBN for the route of the cable between the 220kV substation at Belcamp and the Metrolink GIS station at Forrest Little. The selected option will take the cable southward from the Belcamp substation to the R139, from where it will run eastward along that road to the Clare Hall junction, where it is to turn northward along the R107 Malahide Road. On reaching Baskin Lane the cable is to run westward to the junction with Stockhole Lane, where it turns north to run along Naul Road to reach the proposed Forrest Little Station at ML North Portal (within ACH086).

The proposed cable route will travel along the existing road network for the most part, which has been subject to previous disturbance due to the construction and ongoing maintenance of the road and insertion of services. There are 18 individual or groups of ACH constraints located within 250m of the proposed cable option.

Table 25.7: Characterisation of Baseline Environment: Forrest Little to Belcamp

ACH Constraint	Status	Location (Townland/Street)	Description	Baseline Rating
ACH227	RMP DU015-009----	Saintdoolaghs	Archaeological site/monument – Zone of Archaeological Potential for St Doolagh's Ecclesiastical complex. Containing ACH227.1-9 detailed below.	High
ACH227.1	RMP DU015-009002- RPS 459	Saintdoolaghs	Archaeological site/monument – Cross. A stone cross with short arms and a triangular-shaped head, which is located on a pedestal adjacent to the Malahide Road, but was formerly located in the graveyard (SMR file).	High
ACH227.2	RMP DU015-009001- RPS 459	Saintdoolaghs	Archaeological site/monument – Church. Although the site is early medieval in origin the current church is multi-period in date. Medieval masonry dating to the 12 th , 13 th and 15 th centuries is present.	High
ACH227.3	RMP DU015-009005-	Saintdoolaghs	Archaeological site/monument – Ecclesiastical Enclosure. Associated with the early medieval foundation of St Doolagh's, the ecclesiastical enclosure was identified during geophysical survey in 2009 (Nichols, 2009. Licence 09R165). The enclosure has a diameter of c. 162m and extends beyond the Malahide Road to east.	High
ACH227.4	RMP DU015-009008-	Saintdoolaghs	Archaeological site/monument – Field system.	High

ACH Constraint	Status	Location (Townland/Street)	Description	Baseline Rating
			Associated with the early medieval foundation of St Doolagh's, a network of ditches was identified to the south of the church during geophysical survey in 2009 (Nichols, 2009. Licence 09R165). These extended to the ecclesiastical enclosure and the survey included anomalies that may represent pits and kilns.	
ACH227.5	RMP DU015-009007-RPS 459.	Saintdoolaghs	Archaeological site/monument – Architectural fragment. Late medieval mouldings are present as coping stones in a wall to the south of the church (ACH227.2), whilst two further mouldings are present at the foot of stone steps to the southwest.	High
ACH227.6	RMP DU015-009006-RPS 459.	Saintdoolaghs	Archaeological site/monument – Graveyard Sub-rectangular graveyard defined by a masonry wall. The ground level around the church has been truncated during extensive reconstruction works in the 19 th century.	High
ACH227.7	RMP DU015-009009-	Saintdoolaghs	Archaeological site/monument – Enclosure. Poorly defined sub-circular enclosure identified during geophysical survey in 2009 (Nichols, 2009. Licence 09R165). Located to the west of the church.	High
ACH227.8	RMP DU015-009004-RPS 459.	Saintdoolaghs	Archaeological site/monument – Holy well St Doolagh's Well. A circular, stone lined well housed within an octagonal building with a cone-shaped roof.	High
ACH227.9	RMP DU015-009003-RPS 459.	Saintdoolaghs	Archaeological site/monument – Holy well St Catherine's Well. An underground bath enclosed by a rectangular vaulted building.	High
ACH228	N/a	Ballymacartle	Area of Archaeological Potential. Small area of level, previously undisturbed greenfield containing a small stream to be crossed by the ESPN route.	Medium
ACH229	RMP DU014-112----	Stockhole	Archaeological site/monument - Field system A possible field system visible as a crop mark within aerial photography and containing an irregular shaped enclosure (ACH230).	High
ACH230	RMP DU014-111----	Stockhole	Archaeological site/monument – Enclosure	High

ACH Constraint	Status	Location (Townland/Street)	Description	Baseline Rating
			Irregular enclosure visible as a cropmark within a possible field system (ACH229).	
ACH231	RMP DU015-001----	Cloghran	Archaeological site/monument – Mound Originally identified from aerial photographic coverage but not visible at ground level today.	High
ACH232	N/a	Cloghran	Area of Archaeological Potential. Area of level pasture, adjacent to realigned Stockhole Lane and the M1. The first edition OS map (1843) shows a stream crossing this area, which the ESPN route will cross.	Medium
ACH233	N/a	Cloghran	Area of Archaeological Potential. Area of level pasture, adjacent to realigned Stockhole Lane and the M1.	Medium
ACH234	RMP DU014-010---- RPS 608	Cloghran	Archaeological site/monument – Holy well. In 1958 the well was recorded as dry and only visible as a hollow in a field marked by a whitethorn bush. At this time the well was not venerated (SMR file).	High
ACH235	RMP DU014-009002- and DU014-009002- RPS 609	Cloghran	Archaeological site/monument – Church and graveyard. Foundations of an early medieval church present within the northeast portion of a graveyard. The church was recorded as being in reasonable condition in 1630 (SMR file). The graveyard is built on a rock outcrop and contain post-medieval grave markers.	High

25.4.4.2 *Newbury to Ballystruan*

As with the route between Belcamp and Forrest Little, three options were considered for the route running from the substation at Newbury to the GIS station at Ballystruan. The preferred route runs from the substation in the Clonshaugh Business and Technology Park, running eastward, then southward and westward within the Business and Technology Park and the Gateway Business Campus to reach the eastern side of the M1 motorway before crossing the motorway to Turnapin Lane. From Turnapin Lane the route runs westward, then turns northward to run beneath the M50 motorway and up the R132 Swords Road, then running westward to join the Old Airport Road to the destination at Dardistown.

The proposed cable route will travel along the existing road network, which has been subject to previous disturbance due to the construction and ongoing maintenance of the road and insertion of services. The only constraints located within the study area of the cable route are those within the proposed Dardistown Depot site, that are detailed in Table 25.6: Characterisation of Baseline Environment. These comprise ACH 87, 93, 94, 95, 96, 98 and 99.

25.4.4.3 *Ballystruan to Forrest Little*

The third cable route would connect the two GIS stations at Forrest Little and Ballystruan. Three route options were examined before the preferred route was selected, running from Ballystruan westward along Harristown Road and the R108 to the junction with the R122. From there, the route will run northward, turning eastward to run along Naul Road to Forrest Little (ACH086).

The proposed cable route will travel along the existing road network, which has been subject to previous disturbance due to the construction and ongoing maintenance of the road and insertion of services. There are 10 individual or groups of ACH constraints located within 250m of the proposed cable option.

Table 25. 8: Characterisation of Baseline Environment: Ballystruan to Forrest Little

ACH Constraint	Status	Location (Townland/Street)	Description	Baseline Rating
ACH236	RMP DU014-040----	Harristown	Archaeological site/monument – House – 16 th /17 th century. This site is now beneath a runway within Dublin Airport (ACH087). The Down Survey map (1655-56) marks a dwelling here, which may have been incorporated into the later Harristown House, marked within the historic OS maps.	High
ACH237	RMP DU014-098----	Shanganhill	Archaeological site/monument – Ring-ditch. Cropmark of a ring-ditch visible in aerial photographic coverage.	High
ACH238	RMP DU014-099----	Shanganhill	Archaeological site/monument – Ringfort. Cropmark of a probable ploughed out ringfort, identified from aerial photographs.	High
ACH239	RMP DU014-108----	Sandyhill	Archaeological site/monument – Enclosure. Cropmark of enclosure visible in aerial photographic coverage.	High
ACH240	RMP DU014-003---- RPS 624	St Margaret's	Archaeological site/monument – Holy well. An enclosed spring well defined by a stone wall, iron railings and a gate, with steps down to a stone lined base. The well was visited for medicinal purposes but has now dried up and the base is grassed over.	High
ACH241	RMP DU014-004----	St Margaret's	Archaeological site/monument – Building. Rectangular stone tablet with carvings in high relief (uncertain date), but may be a date stone. Located on the southeast corner of the Parochial Hall.	High
ACH242	RMP DU014-002001-, 002-, 003- RPS 626	St Margaret's	Archaeological site/monument – Church, graveyard and chapel. Ruins of a medieval parish church, located within a sub-rectangular graveyard. A 16 th century chantry chapel is located to the southeast of the parish church.	High
ACH243	RMP DU011-043----	Forrest Great	Archaeological site/monument – Ringfort. Formerly a platform type ringfort with a diameter of c. 50m, but now	High

ACH Constraint	Status	Location (Townland/Street)	Description	Baseline Rating
			levelled and apparent only as a cropmark.	
ACH244	RMP DU011-044----	Forrest Great	Archaeological site/monument – House - 16th/17th century. The Civil Survey (1654-56) records a stone house at Great Forrest, which is marked as being 'in ruins' on the first edition OS map (1843). No visible remains survive today.	High
ACH088	RMP DU011-046----	Cloghran	Archaeological site/monument – Ringfort This monument is named as 'fort' on the 1837 OS map, the monument is not shown on subsequent OS mapping. The SMR file notes that it was partly demolished in 1822 and cleared away in 1873 (Healy 1975, 24).	High

25.5 Predicted Impacts

Do Nothing

In the event that the proposed Project does not go ahead, there may be future impacts on the archaeological baseline environment through development in the green open spaces along the northern part of the alignment and due to redevelopment on sites within Dublin City.

Much of the open land along the northern part of the proposed Project is zoned for development. Consequently, it is likely that this land will be built on in future decades. The potential impact on archaeological and cultural heritage constraints will depend upon the nature of that development and any mitigation measures undertaken by the developer.

Within Dublin City, there is one a planned project where redevelopment may take place without the proposed Project, namely the redevelopment of O'Connell Street Upper as a component of the Dublin Central Masterplan. Site 2 of the Dublin Central Masterplan comprises a large tract of land extending east-west from O'Connell Street Upper to Moore Street and from Henry Place to 42 O'Connell Street Upper on which it is proposed to develop a multi-storey mix-use (retail and commercial) space with a new pedestrian street linking O'Connell Street Upper to Moore Street. This development incorporates the proposed Projects O'Connell Street Station and compound. The proposed station is to be sub surface (120m length, 26m width, 34.5m depth) and will occupy plots fronting O'Connell Street Upper from Nos 43-58/ rear of 59-60 O'Connell Street Upper, with compound works taking place on the rear of 24-25 Moore Street. Should Site 2 of the Dublin Central Masterplan proceed in the absence of the proposed Project the likely significant impacts on the archaeological baseline environment as identified for the proposed Project will still arise, due to the Site 2 proposal for a single level basement, and underlying piling system to support their development.

25.5.1 Construction Phase

Prior to the implementation of mitigation strategies (see Section 25.6 below), a range of potential significant negative effects on the archaeological and cultural heritage baseline environment have been identified as a result of the construction of the proposed Project (Table 25.9). These include potential direct and indirect impacts.

No construction impacts upon archaeological and cultural heritage constraints have been identified as a result of the construction of the MetroLink grid connections.

The proposed Project has the potential to have a very significant direct negative (permanent) effect on 15 archaeology and cultural heritage constraints during the Construction Phase. These are:

- Four enclosures (ACH009, 075, 080 and 096);
- One ring ditch (ACH003)
- One structure (ACH059);
- One burnt mound (ACH073);
- One field system (ACH074);
- Two burnt spreads (ACH106 and 107)
- One canal (ACH149)
- One brickworks (ACH179);
- One church (ACH196);
- One hospital (ACH197); and
- St Stephen's Green Park National Monument (ACH211) incorporating below ground remains of its associated boundary ditch (ACH211.1), wall (ACH211.2) and cultural heritage associations.

The proposed Project will also have a very significant short term indirect impact on St Stephen's Green Park National Monument (ACH211), due to the visual disturbance generated by construction activities, including the erection of hoarding.

The proposed Project has the potential to have a significant direct negative permanent effect on 30 archaeology and cultural heritage constraints during the Construction Phase. These are:

- 18 AAPs (ACH001, 004, 019, 021, 051, 068, 077, 081, 086, 093, 108, 110, 127, 132, 136, 166, 177, and 194);
- One Halting Site (ACH012);
- Four Archaeological Sites identified during investigations (ACH095, 097, 105 and 109);
- One shrine (ACH053);
- One public house (ACH145);
- One railway (ACH147);
- One Historic Town and associated potential archaeological remains (ACH169);
- One GAA club (ACH093);
- One 1916 streetscape (ACH178); and
- One statue (ACH046).

The proposed Project has the potential to have a significant indirect permanent negative effect on two archaeology and cultural heritage constraints during the Construction Phase. These are:

- One bridge (indirect impact; ACH020); and
- One Moore Street National Monument (ACH180).

The proposed Project has the potential to have a moderate direct negative permanent effect on 26 archaeology and cultural heritage constraints and an indirect negative impact on one constraint during the Construction Phase. These are:

- 13 townland boundaries (ACH010, 011, 043, 047, 049, 069, 085, 099, 102, 103, 104, 112, and 113);
- Seven AAPs (ACH028, 029, 033, 035, 115, 116, and 225);
- Five 'sites of' structures (ACH146, 147.1, 147.2, 147.5 and 149.2); and
- Two railway sidings (ACH147.3 and 147.4).

The proposed Project has the potential to have a slight direct negative permanent effect on nine archaeology and cultural heritage constraints during the Construction Phase. These are:

- Five 'sites' of structures (ACH026, 044, 071, 149.1 and 151);
- Two townland boundaries (ACH067 and 143);
- One GAA club (ACH131); and
- One Site of tram (ACH167).

The proposed Project has the potential to have a not significant indirect short term negative effect on six archaeology and cultural heritage constraints during the Construction Phase. These are:

- Six repositories of cultural heritage material (ACH204-208 and 212).

25.5.2 Operational Phase

Prior to the implementation of mitigation strategies (see Section 25.6 below), a range of potential Significant Negative indirect effects on the archaeological and cultural heritage baseline environment have been identified as a result of the operation of the proposed Project Table 25.9).

No operation impacts upon archaeological and cultural heritage constraints have been identified as a result of the operation of the MetroLink grid connections.

The proposed Project has the potential to have a very significant indirect negative effect on one archaeology and cultural heritage constraint during the Operation Phase. This is:

- St Stephen's Green Park National Monument (ACH211).

The proposed Project has the potential to have a significant indirect negative effect on one archaeology and cultural heritage constraint during the Operation Phase. This is:

- Lissenhall Bridge National Monument (ACH020).

The impacts on the remaining archaeological and cultural heritage constraints are assessed to be neutral and not significant.

25.6 Mitigation Measures

In accordance with the Code of Practice TII has appointed a Project Archaeologist to oversee and manage the archaeological elements of the proposed Project. All archaeological consultants appointed to the proposed Project shall comply with the Code of Practice and shall liaise directly with the TII Project Archaeologist in relation to all archaeological requirements.

The MetroLink Project Conservation Architect (PCA) has been appointed and will act on behalf of TII with reference to built heritage constraints (some of which have also been identified as archaeology and cultural heritage constraints).

Mitigation measures will seek to preserve *in situ* any archaeological or cultural heritage constraints, which may be impacted by the proposed Project. Where this is not possible a hierarchical range of mitigation measures will be implemented in advance of and during construction phase which will aim to ameliorate all impacts. All construction phase mitigation measures will be carried out by the appropriate contractor appointed to each phase of the works and as specified in the most up to date version of the Draft MetroLink Cultural Heritage Strategy (Rev.02; 2021). The MetroLink Cultural Heritage Strategy, is a required output of the Code of Practice for Archaeology and will be maintained as a live document throughout the Construction Phase of the proposed Project and will be updated in response to new information received from archaeological investigations, the PCA surveys, ongoing stakeholder liaison and in response to changes in the receiving baseline environment inclusive of adjacent developments.

25.6.1 Construction Impact Mitigation Measures

Mitigation of impacts on the archaeological and cultural heritage resource that would occur during the Construction Phase of the proposed Project will be a staged approach that will be carried out during the pre-construction, enabling and main infrastructure works phases. It is acknowledged that other schemes that interact with this project, may be constructed beforehand and subject to their own mitigation measures. In these instances, mitigation measures will not be repeated.

Mitigation measures which may be undertaken prior to and during the Construction Phase include:

- Full measured, written, drawn and photographic surveys;
- Detailed construction methodology (demolition, removal, storage, relocation/reinstatement, rebuilding, repair and rehabilitation of archaeological and cultural heritage monuments; appropriate screening; monitoring of vibration);
- Dive, underwater and wade surveys (including metal detecting);
- Geophysical surveys (including Ground Penetrating Radar (GPR));
- Archaeological test excavations;
- Archaeological monitoring; and
- Preservation by record (Archaeological excavation).

Where a constraint has been subject to extensive archaeological test excavations either as a component of OMN works or the proposed Project, no further test excavations will be proposed. Where extensive test excavations have taken place and no sub-surface archaeological stratigraphy has been identified, or where a constraint has been fully preserved by record within the proposed Project boundary, no further mitigation measures will be proposed.

25.6.1.1 Ministerial Consent

Of the six National Monuments located within the study area, one will be directly impacted by the proposed Project (ACH211 St Stephen's Green Park) and two will be subject to indirect impacts (ACH020 Lissenhall Bridge and ACH180 14-17 Moore Street and 8-9 Moore Lane). In accordance with Sections 5 and 14 of the National Monuments Act 1930 (as amended), Ministerial Consent will be required for all works carried out within the zone of proximity of the relevant monuments which is defined by the MHLGH on a case by case basis.

25.6.1.2 Archaeological Licence Requirements

Archaeological excavation and the use of detection devices are subject to strict control under the National Monuments Act 1930 (as amended). All archaeological investigations, including test excavations, preservation by record (excavation) and archaeological monitoring, will be undertaken by a suitably qualified archaeologist in accordance with Section 26 (2) Excavation Licence.

All dive, underwater and wade surveys shall be carried out pursuant to a Section 3 (5) Dive Survey Licence. All detection surveys shall be carried out pursuant to a Section 2 (2) Detection Survey Licence. Consent to use a detection device or to undertake an underwater, dive or wade survey does not include permission to excavate for archaeological objects. If excavation or recovery of archaeological objects is required, a separate Section 26 (2) Excavation Licence or Section 14 (2) Ministerial Consent must be applied for.

25.6.1.3 Reporting

In order to fulfil licence conditions, a preliminary report and a final report on the findings are required. Details of the reporting requirements are contained within the Draft MetroLink Cultural Heritage Strategy (2021) provided in Appendix A25.1 and further detail as to the content required for each report will be outlined in the individual contract documentation, as produced by the TII Project Archaeologist. All reports will be produced in accordance with government guidelines.

25.6.1.4 Operation Impact Mitigation Measures

The visual impact on the setting of Lissenhall Bridge National Monument (ACH020) will be mitigated by preparing a full written and photographic record of the setting of the bridge prior to the start of construction. The new Broadmeadow and Ward Viaduct will be screened where possible through the planting of trees, similar to species growing nearby.

At St Stephen's Green Park National Monument (ACH211) the railings, statues, bollards, lamp standards and other park features that have to be removed prior to construction would be conserved and reinstated following completion of construction and all hard and soft landscaping will be reinstated. New structures will be designed to cause minimal visual impact on the Park and all final landscaping,

conservation and reinstatement requirements will be agreed in direct consultation with the MHLGH/OPW and the TII Project Archaeologist and PCA. The Contractor appointed for the Operation Phase of the proposed Project will be required to keep all stations and their associated infrastructure well maintained and clean and to replace any failed planting above the station box.

25.7 Residual Impacts

Following the implementation of the mitigation strategies set out in Table 25.9, the following residual impacts have been identified:

- Moderate negative residual impacts to the setting of Lissenhall Bridge National Monument as a result of Broadmeadow and Ward River viaduct and landscaping necessary for the operation of the proposed Project (ACH020);
- Moderate negative residual impacts to the current setting of St Stephen's Green Park National Monument (ACH211) as a result of new structures and landscaping necessary for the operation of the proposed Project. This is offset by an improvement to the current setting and appreciation of Wolfe Tone, which is moderate positive in nature; and
- Slight, imperceptible or imperceptible to slight negative impacts to the remainder of the identified archaeology and cultural heritage constraints, which are predominantly below ground constraints with no appreciable above ground register against which an impact can be readily measured. In the case of extant sites with an above ground register such as townland boundary, the removal of the impacted section of the constraint is such that no appreciable loss is suffered once appropriate mitigation has been put in place. Or, in the case of statues and street furniture, once the items have been carefully reinstated to agreed locations. Potential indirect effects will be appropriately mitigated at construction stage through appropriate monitoring or architectural/landscape detailing with no loss or damage suffered.

Table 25.9: Impact Assessment and Mitigation

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH001	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Potential for Very High impact resulting from ground disturbances to facilitate construction of Estuary Station, Park and Ride facility, construction compound and associated infrastructure and landscaping.	Significant Negative	Archaeological preservation by record (excavation) of the D-shaped enclosure to be carried out in advance of construction. Archaeological test excavations to be carried out where feasible in surrounding areas of direct impact in advance of construction. Should, archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH003	Archaeological site/monument - Ring ditch	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Estuary Station, Park and Ride facility, construction compound and associated infrastructure and landscaping.	Very Significant Negative	Archaeological preservation by record (excavation) to be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH004	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Estuary Station, Park and Ride facility, construction compound and associated infrastructure and landscaping.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction supported as necessary by archaeological monitoring. Should, archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH009	Archaeological site/monument - Enclosure	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Estuary Station, Park and Ride facility, construction compound and associated infrastructure and landscaping.	Very Significant Negative	Archaeological preservation by record (excavation) to be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH010	Cultural Heritage -	Medium	AZ1	Construction: Direct Negative	Medium impact resulting from the construction of a pedestrian and	Moderate Negative	Archaeological monitoring to be carried out during enabling and construction works and a full written and photographic	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
	Townland boundary				cyclist underpass where the proposed Project crosses and realigns Ennis Lane.		record of any features associated with the townland boundary made if found. Should any additional archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH011	Cultural Heritage - Townland boundary	Medium	AZ1	Construction: Direct Negative	Medium negative impact resulting from ground disturbances to facilitate construction of Estuary Station, Park and Ride facility, utilities, track works, construction compound and associated infrastructure and landscaping.	Moderate Negative	Any extant section of Townland Boundary to be directly impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH012	Cultural Heritage - Traveller community area	Medium	AZ1	Construction: Direct Negative	Very high negative impact. Located within area required for station and park and ride facility, impacts resulting the removal of the community area to	Significant Negative	Relocation of the community area to an alternative location.	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					facilitate construction.			
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH019	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of viaduct including the construction of temporary bailey bridges.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH020	Archaeological site/monument – Bridge	Very High	AZ1	Construction impact: Indirect permanent	Indirect Impacts The construction of the viaduct will be visually intrusive on the setting of the bridge. Potential high indirect impact to the bridge as a result of the construction of piles as part of the	Significant Negative	The bridge is to be protected by hoardings to prevent plant and machinery from approaching close to it. Obstructions and signage are to be placed on the approach to the bridge close to, but not on, the bridge deck to prevent access by construction vehicles and machinery.	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					works which may cause damage to the bridge through vibration or settlement.		The extent of vibrations is to be measured by means of vibration monitors fixed to the bridge and constantly monitored to ensure that vibration threshold limits agreed with MHLGH are not exceeded. Should limits be exceeded work in the vicinity of the bridge is to cease until the source of vibration is identified and measures to reduce vibration are introduced.	
				Operation: Indirect Negative	The finished Project will result in a raised viaduct running in proximity to the bridge, which is a National Monument, and with high overhead line electricity (OHLE) pylons and cables.	Significant Negative	A full written and photographic record of the setting of the bridge will be made prior to construction. The viaduct will be screened where possible through the considered landscape design inclusive of planting of trees similar to those found at present in the vicinity.	Slight Negative
ACH021	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	High direct impact resulting from excavations associated with the construction of the viaduct at the northern end of the AAP and the proposed Project within a retained cut along the remainder of this area.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					Impacts also resulting from the installation of infrastructure for the proposed Project inclusive of compound establishment, utilities, pitch realignment and track works.		as preservation in situ or full archaeological preservation by record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH026	Cultural Heritage - Site of 20 th century structure	Very Low	AZ1	Construction: Direct Negative	Very high direct impact resulting from excavations associated with the establishment of Seatown West satellite compound and associated infrastructure and utilities and the construction of the proposed Project within a cut and cover in this area.	Slight Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH028	Area of Archaeological Potential	Low	AZ1	Construction: Direct Negative	Very high direct impact resulting from excavations associated with establishment of Seatown West satellite compound and associated infrastructure and utilities and the construction of the proposed Project within a cut and cover in this area.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should, archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH029	Area of Archaeological Potential	Low	AZ1	Construction: Direct Negative	Very high direct impact resulting from excavations associated with the establishment of Estuary Court satellite compound and associated infrastructure and utilities and the construction of the proposed Project within a cut and cover in this area.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH033	Area of Archaeological Potential	Low	AZ1	Construction: Direct Negative	Very High direct impact resulting from excavations associated with the establishment of Seatown Station compound and associated infrastructure and utilities and the construction of the proposed Project within a cut and cover in this area.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH035	Area of Archaeological Potential	Low	AZ1	Construction: Direct Negative	Very High direct impact resulting from the establishment of Chapel Lane compound and excavations – demolition of footbridge.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH043	Cultural Heritage – Townland boundary	Medium	AZ1	Construction: Direct Negative	Medium direct impact resulting from excavations associated with the establishment of Swords Central Station compound, associated infrastructure and utilities and the construction of the proposed Project within a cut and cover and retained cut in this area.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH044	Cultural Heritage – Site of three 20 th century structures	Very Low	AZ1	Construction: Direct Negative	Very high direct impact resulting from excavations associated with the establishment of Pavilions compound and associated infrastructure and utilities.	Slight Negative	Archaeological monitoring to be carried out during enabling and construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH046	Cultural Heritage – Statue	Medium	AZ4	Construction: Direct Negative	Very High direct impact resulting from removal of the statue from within the Tara Station.	Significant Negative	A full photographic, condition and written survey of the statue will be undertaken by MetroLink PCA prior to construction. PCA to prepare draft specifications for removal, storage and relocation. Revised location to be agreed with LA.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH047	Cultural Heritage – Townland Boundary	Medium	AZ1	Construction: Direct Negative	Medium impact resulting from ground disturbances associated with the establishment of Swords Central Station compound and associated infrastructure and utilities, the construction of the Swords Central Station and the proposed Project within a cut and cover and retained cut in this area.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH049	Cultural Heritage –	Medium	AZ1	Construction: Direct Negative	Medium impact resulting from ground disturbances	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
	Townland Boundary				associated with the establishment of Swords Central Station compound and associated utilities, the construction of the Swords Central Station and the proposed Project within a cut and cover and retained cut in this area.		written and photographic survey (to include test excavations where appropriate).	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH051	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very High direct impact resulting from excavations associated with the establishment of Pinnock Hill compound and associated infrastructure and utilities and the construction of the proposed Project within a retained cut and cut and cover in this area.	Significant Negative	A programme of geophysical survey and archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH053	Cultural Heritage – Shrine	Medium	AZ1	Construction: Direct Negative	Very High direct impact resulting from excavations associated with construction of the proposed Project within a retained cut in this area.	Significant Negative	A full photographic, condition and written survey of the shrine will be undertaken by MetroLink PCA prior to the construction of the proposed Project. PCA to prepare draft specifications for removal, storage and relocation. Revised location to be agreed with Local Authority and property owner.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH059	Archaeological site/monument – Structure	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Fosterstown Station and the proposed Project within a cut and cover in this area.	Very Significant Negative	Archaeological preservation by record (excavation) to be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH067	Cultural Heritage – Townland Boundary	Medium	AZ1	Construction: Direct Negative	Medium impact resulting from ground disturbances to facilitate construction the proposed Project within a cut and cover in this area.	Slight Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH068	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Bolands compound and associated infrastructure and utilities and the proposed Project in retained cut in this area.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH069	Cultural Heritage – Townland Boundary	Medium	AZ1	Construction: Direct Negative	Medium negative impact resulting from ground disturbances to facilitate construction of Bolands compound and associated infrastructure and utilities and the proposed Project in retained cut in this area.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH071	Cultural Heritage – Site of 19 th century structure	Very Low	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project within a retained cut in this area.	Slight Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH073	Archaeological site/monument – Burnt mound	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project within a retained cut in this area.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH074	Archaeological site/monument – Field system	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project within a retained cut in this area.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH075	Archaeological site/monument – Enclosure	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project within a retained cut in this area.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH077	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project within a retained cut in this area.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH080	Archaeological site/monument – Enclosure	High	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					within a retained cut in this area.			
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH081	Area of Archaeological Potential	Medium	AZ1	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the proposed Project in this area.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH085	Cultural Heritage – Townland boundary	Medium	AZ1	Construction: Direct Negative	Medium impact resulting from ground disturbances to facilitate construction of the proposed Project in this area. This includes the construction of a box culvert and farm underpass where the proposed Project crosses the stream. Construction of these elements will require	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate). An archaeological wade survey will be carried out along the section of the stream to be impacted. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					the stream to be temporarily diverted.		archaeological preservation by record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH086	Area of Archaeological Potential	Medium	AZ2	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the ESBN substation, MetroLink substation and associated transformers.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH093	Area of Archaeological Potential	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from the construction of Dardistown Depot at the southern end of this AAP and from the realignment or relocation of the sports pitches and associated facilities located along the northern side of the AAP, and diversion of Turnapin Stream.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should, archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							record (excavation) will be required. An archaeological wade survey will be carried out along the section of the stream to be impacted. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH095	Archaeological site/monument – Curvilinear ditch and pits	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot and the DASP.	Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH096	Archaeological site/monument – Enclosure	High	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot and the DASP.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH097	Archaeological site/monument – Fire pit	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot and the DASP.	Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH099	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Potential medium impact resulting from removal of the Townland Boundary in order to facilitate the insertion of new boundary treatments in this area.	Moderate Negative	Townland boundaries will be preserved in situ where possible. If this is not possible, any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH102	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Medium impact resulting from removal of the Townland Boundary in order to facilitate the construction of Dardistown Depot and the DASP.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate). An archaeological wade survey will be carried out in advance of construction along the section of the stream to be impacted. Should archaeological remains be	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH103	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Medium impact resulting from removal of the townland boundary in order to facilitate the construction of Dardistown Depot and the DASP.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH104	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Medium impact resulting from removal of the Townland Boundary in order to facilitate the construction of Dardistown Depot and the DASP.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH105	Archaeological site/monument – Pits with burnt material	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate	Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					construction of Dardistown Depot.			
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH106	Archaeological site/monument – Burnt spread	High	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH107	Archaeological site/monument – Burnt mound	High	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot.	Very Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH108	Area of Archaeological Potential	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH109	Archaeological site/monument – Kiln	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Dardistown Depot.	Significant Negative	Archaeological preservation by record (excavation) will be carried out in advance of construction.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH110	Area of Archaeological Potential	Medium	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the M50 Viaduct, the Northwood Station and Portal main compound, associated infrastructure and utilities and the proposed Project in retained cut and cut and cover.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH112	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Medium impact resulting from ground disturbances to facilitate construction of the Northwood Station	Moderate Negative	An archaeological wade survey will be carried out in advance of construction along the section of the river to be impacted. Should archaeological remains be	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					<p>and Portal main compound, associated infrastructure and utilities and the proposed Project in retained cut and cut and cover.</p> <p>Medium impacts also resulting from minor alterations to the Santry River including straightening of the channel and addition of scour protection immediately downstream of the culvert outlet.</p>		<p>confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.</p> <p>Archaeological monitoring to be carried out during construction. Should the route of the townland boundary be identified, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.</p>	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH113	Cultural Heritage – Townland Boundary	Medium	AZ3	Construction: Direct Negative	Medium impact resulting from removal of the townland boundary in order to facilitate the construction of Northwood Logistics Yard.	Moderate Negative	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH115	Area of archaeological potential	Low	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the M50 Viaduct, the Northwood Station and Portal and associated infrastructure and utilities.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH116	Area of archaeological potential	Low	AZ3	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of the Northwood Station and Portal and associated infrastructure and utilities.	Moderate Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH127	Area of Archaeological Potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Collins Avenue Station, compound and associated utility	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					diversions and infrastructure works.		construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Memorial to be removed and stored during construction and reinstated following completion of the Construction Phase. Priests grave to be protected in situ.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH131	Cultural Heritage – Albert College Park and GAA Pitches	Medium	AZ4	Construction: Direct Negative	Very low impact resulting from the reorientation of the existing playing fields in this area.	Slight Negative	The existing playing fields will be realigned to allow for the construction of the intervention and escape shaft. Impacts to potential below ground archaeology are addressed under ACH132	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH132	Area of archaeological potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Albert College Park Intervention Shaft and associated infrastructure and utilities.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be	Imperceptible to Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH136	Area of Archaeological Potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from ground disturbances to facilitate construction of Griffith Park Station and compound to the south.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. Should additional archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH143	Cultural Heritage – Townland Boundary	Very Low	AZ4	Construction: Direct Negative	Medium impact resulting from demolition of the structure to allow for the construction of Glasnevin Station and compound.	Slight	Any extant section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test excavations where appropriate).	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH145		Medium	AZ4	Construction: Direct Negative	Very high impact resulting from demolition of the	Significant Negative	The licensed premises are to be recorded by means of photography and written	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
	Cultural Heritage – Brian Boru Pub				structure to allow for the construction of Glasnevin Station and compound.		description to English Heritage level 3 prior to demolition (see AHI-31, Table 26.62, Chapter 26).	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH146	Cultural Heritage – Site of group of 19th century structures	Low	AZ4	Construction: Direct Negative	Very high impact resulting from ground disturbances to allow for the construction of Glasnevin Station and compound and associated infrastructure and utilities.	Moderate Negative	Archaeological monitoring to be carried out during enabling and construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH147	Area of Industrial Heritage – Railways	High	AZ4	Construction: Direct Negative	Medium impact resulting from construction works to facilitate the regrading of the railway as part of the works to construct the interchange at Glasnevin Station, affecting approximately 750m of the track and works to embankments, retaining walls and	Significant Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Where Japanese knotweed removal is required, the Knotweed Specialist will liaise with the archaeology specialist to determine agreeable means of implementing the means of mitigation.	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					supporting infrastructure.			
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH147.1	Cultural Heritage – Signal House	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the construction of the proposed Project.	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Where Japanese knotweed removal is required, the Knotweed Specialist will liaise with archaeology specialist to determine agreeable means of implementing the means of mitigation.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH147.2	Cultural Heritage – Site of 19 th century structures	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the construction of the proposed Project.	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Where Japanese knotweed removal is required, the	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
				Operation: Neutral	Neutral	N/A	Knotweed Specialist will liaise with archaeology specialist to determine agreeable means of implementing the means of mitigation.	Neutral
ACH147.3	Cultural Heritage – Railway sidings	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the construction of the proposed Project.	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Where Japanese knotweed removal is required, the Knotweed Specialist will liaise with archaeology specialist to determine agreeable means of implementing the means of mitigation.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH147.4	Cultural Heritage – Railway sidings	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					construction of the proposed Project.		Where Japanese knotweed removal is required, the Knotweed Specialist will liaise with archaeology specialist to determine agreeable means of implementing the means of mitigation.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH147.5	Cultural Heritage – Former railway platform	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the construction of the proposed Project.	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Where Japanese knotweed removal is required, the Knotweed Specialist will liaise with archaeology specialist to determine agreeable means of implementing the means of mitigation.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH148	Cultural Heritage – Site of 19 th century structure	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the construction of Glasnevin Station,	Moderate Negative	Archaeological monitoring to be carried out during construction. Should archaeological remains be confirmed, further archaeological mitigation such	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					construction compound and associated utilities and infrastructure.		as preservation in situ or full archaeological excavation may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH149	Area of Industrial Heritage – Canals	High	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate the construction of Glasnevin Station, construction compound and associated utilities and infrastructure. The construction of the station will necessitate the closure of the Royal Canal and dewatering and infilling of a section of the canal during construction, with reinstatement on completion. The top of the quay wall on the northern side of the canal will be removed and reinstated at the end of the works in this area. Southern tow path to be upgraded to allow for	Very Significant Negative	Underwater archaeological survey to be carried out along the canal basin in advance of construction. GPR Survey of area between 5 th /6 th Lock to be carried out for the purpose of identifying external buttress and built infrastructure that may remain buried. Archaeological test excavations to be carried out where feasible at the rear of the tow path in order to determine the support structure. Should additional archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					pedestrian/cycle way access (Royal Canal Way) and abutments of bridge used for new structure.		archaeological excavation may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH149.1	Cultural Heritage – Site of Lock House	Very Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the construction of Glasnevin Station, construction compound and associated utilities and infrastructure.	Slight Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH149.2	Cultural Heritage – Site of industrial building	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the construction of Glasnevin Station, construction compound and associated utilities and infrastructure.	Moderate Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH151	Cultural Heritage – Site of post medieval structure	Very Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate the lowering of the level of the existing railway tracks to allow for the construction of the proposed Project.	Slight Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH166	Area of Archaeological Potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from ground disturbances to allow for the construction of Mater Station and compound and associated utility diversion works.	Significant Negative	Archaeological test excavations to be carried out where feasible in areas of direct impact in advance of construction. If this is not possible, archaeological monitoring should be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible to Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH167	Cultural Heritage – Tramway	Low	AZ4	Construction: Direct Negative	Very low impact resulting from ground disturbances to allow for the	Slight Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					construction of Mater Station and compound and associated infrastructure and utilities.		confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH169	Archaeological site/monument – Historic town of Dublin	High	AZ4	Construction: Direct Negative	Medium impact resulting from ground disturbances associated with the construction of the proposed Project including utilities diversions, landscaping, installation of the proposed Project.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH177	Area of Archaeological Potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate construction of O'Connell Street Station, construction compound and associated utilities and infrastructure.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works and supported by further archaeological test excavations where feasible. Monitoring will be carried out to the base of the formation level of the construction compound and station. Should archaeological remains be confirmed, further archaeological mitigation such	Imperceptible

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							as preservation in situ or full archaeological excavation may be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH178	Cultural Heritage – Elements of 1916 streetscape	Medium	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate construction of O’Connell Street Station, construction compound and associated utilities and infrastructure.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Monitoring will be carried out to the base of the formation level of the construction compound and station. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required. All historic street surfaces on Moore Lane/Henry Place (where directly impacted) will be removed under archaeological supervision to secure storage. Process of removal, storage and reinstatement will be undertaken by specialist heritage contractor to PCA specifications.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH179	Archaeological site/monument – Brickworks	High	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate construction of O'Connell Street Station, construction compound and associated utilities and infrastructure.	Very Significant Negative	Archaeological monitoring to be carried out during enabling and construction. Monitoring will be carried out to the base of the formation level of the construction compound and station. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH180	Archaeological site/monument – 14-17 Moore Street and 8-9 Moore Lane	Very High	AZ4	Construction: Indirect Negative	14-17 Moore Street are located about 60m from the deep excavation for the construction of O'Connell Street Station, while 8-9 Moore Lane are located 35m from the deep excavation. There is potential for damage to the buildings from vibration and settlement, which is considered to be a medium indirect impact.	Significant Negative	Any works to be undertaken within the defined proximity zone of the National Monument will be undertaken under Ministerial Consent. Vibration and settlement monitoring equipment is to be installed at the buildings. The equipment is to be monitored and in the event of threshold limits agreed with the MHLGH being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH194	Area of Archaeological Potential	Medium	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate construction of Tara Station, construction compound and associated utilities and infrastructure.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH197	Archaeological site/monument – Church	High	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate construction of Tara Station, construction compound and associated utilities and infrastructure.	Very Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation may be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH198	Archaeological site/monument – Hospital	High	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate construction of Tara Station, construction compound and associated utilities and infrastructure.	Very Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation will be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH204	Cultural Heritage – National Gallery of Ireland Collection	Medium	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH205	Cultural Heritage – Royal College of Physicians of Ireland Heritage Centre and Archives	Medium	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling.	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH206	Cultural Heritage – National Library of Ireland Collection	Medium	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling.	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
ACH207	Cultural Heritage – The Oireachtas Library at Leinster House	Medium	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling.	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH208	Cultural Heritage – National Museum of Ireland – Archaeology	High	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling.	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded, all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH211	Archaeological site/monument – St Stephen's Green Park	Very High	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate construction of St Stephen's Green Station, construction compound, landscaping and associated utilities and infrastructure. Works will include the removal of paths,	Very Significant Negative	All works carried out within or in proximity to the National Monument must be undertaken in accordance with Ministerial Consent. Archaeological monitoring to be carried out during all enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full	Moderate Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					railings, bollards, lamp standards, lawn guards, statues, vegetation and all other park elements within the construction zone. Medium indirect impacts resulting from short term changes to the setting of the Park during construction, removal of upstanding park elements, the erection of site hoarding, and the operation of plant and equipment within the construction zone.		archaeological excavation will be required.	
				Operation: Indirect Negative	High indirect impacts to the form of the Park through the permanent addition of new structures associated with the operation of the station.	Very significant	Railings, statues, bollards, lamp standards and other park features to be conserved and reinstated, hard and soft landscaping to be carried out to MHLGH/OPW agreement following completion of construction. New structures associated with the proposed Project within the Park have been designed to cause minimal visual impact on the Park and its setting. All	Moderate Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							permanent infrastructure to be kept clean and well maintained and any failed planting to be replaced.	
ACH211.1	Archaeological site/monument – 17th century boundary ditch of St Stephen's Green Park	Very High	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate construction of St Stephen's Green Station, construction compound, landscaping and associated utilities and infrastructure.	Very Significant Negative	All works carried out within or in proximity to the National Monument must be undertaken in accordance with Ministerial Consent. Archaeological monitoring to be carried out during all enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation will be required.	Moderate Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH211.2	Archaeological site/monument – 17th century boundary wall of St Stephen's Green Park	Very High	AZ4	Construction: Direct Negative	High impact resulting from construction works to facilitate construction of St Stephen's Green Station, construction compound, landscaping and associated utilities and infrastructure.	Very Significant Negative	All works carried out within or in proximity to the National Monument must be undertaken in accordance with Ministerial Consent. Archaeological monitoring and metal detection of spoil to be carried out during all enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full	Moderate Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							archaeological excavation will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH212	Cultural Heritage – Royal Hibernian Academy	Medium	AZ4	Construction: Indirect Negative temporary	No significant impact from ground borne vibration during tunnelling	Not Significant	Vibration monitoring equipment is to be installed. The equipment is to be monitored and in the event of threshold limits being exceeded all work in the vicinity is to stop until the cause of the issue is identified and resolved.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH225	Area of Archaeological Potential	Low	AZ4	Construction: Direct Negative	Very high impact resulting from construction works to facilitate construction of Charlemont Station, construction compound and associated utilities and infrastructure.	Moderate Negative	Archaeological monitoring to be carried out during enabling and construction works. Should archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological excavation will be required.	Imperceptible
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH227.1	Archaeological site/monument – Church	High	N/A	Construction: Direct Negative	Very high impact resulting from construction works associated with the laying of the ESPN cable immediate adjacent to the	Significant Negative	Cross to be hoarded off from construction works in order to prevent inadvertent impacts. Process will be undertaken to PCA specifications.	Neutral

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
					cross (within the road).			
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH227.3	Archaeological site/monument – Ecclesiastical enclosure	High	N/A	Construction: Direct Negative	Very high impact resulting from construction works associated with the laying of the ESPN cable along the Malahide Road, which crosses the ecclesiastical enclosure.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should any archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) may be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH228	Area of Archaeological Potential	Medium	N/A	Construction: Direct Negative	Very high impact resulting from construction works associated with the laying of the ESPN cable through a short section of greenfield and across a stream.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should any archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) may be required. An archaeological wade survey will be carried out along the section of the stream to be impacted. Should archaeological remains be confirmed, further	Slight Negative

ACH No	Description	Baseline Rating	Zone	Impact Phase and Type	Potential Impact Level and Assessment	Potential Significance of Effect	Mitigation Measures	Potential Residual Impacts
							archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) will be required.	
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH232	Area of Archaeological Potential	Medium	N/A	Construction: Direct Negative	Very high impact resulting from construction works associated with the laying of the ESPN cable through a short section of greenfield.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works. Should any archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) may be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral
ACH233	Area of Archaeological Potential	Medium	N/A	Construction: Direct Negative	Very high impact resulting from construction works associated with the laying of the ESPN cable through a short section of greenfield.	Significant Negative	Archaeological monitoring to be carried out during enabling and construction works Should any archaeological remains be confirmed, further archaeological mitigation such as preservation in situ or full archaeological preservation by record (excavation) may be required.	Slight Negative
				Operation: Neutral	Neutral	N/A	N/A	Neutral

25.8 Difficulties Encountered

No difficulties were encountered during this phase of the EIAR.

25.9 Glossary

Term	Meaning
Archaeological Conservation Area / Conservation Area	<p>Archaeological and cultural heritage sites may also be designated as Protected Structures under Section 51(1) of the Planning and Development Act 2000 (as amended). Section 51(1) requires that each Local Authority compiles and maintains a Record of Protected Structure to record and protect structures of special architectural, historical, archaeological, artistic, cultural, scientific or technical interest, which are then listed and mapped in each County/City development plan.</p> <p>In accordance with Section 81 of the Planning and Development Act 2000 (as amended) an ACA is defined as 'a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure, and whose character it is an objective of a development plan to preserve.' (DoAHG, 2011, 40). ACAs have statutory protection.</p> <p>County/City development plans also provide a list of Conservation Areas which are established to protect the architectural design and overall setting of an area.</p>
Archaeological Monitoring	A formal programme of observation, investigation and recording of any archaeological remains which may be encountered during the initial phases of a development, for example topsoil stripping or site preparation works. Also known as a Watching Brief
Conservation	The process of managing change to a heritage asset in its setting in ways that will best sustain its heritage values, while recognising opportunities to reveal or reinforce those values for present and future generations.
Designation	The recognition of particular heritage interest(s) of a heritage asset by giving it formal status under legislation or policy intended to sustain its regional significance.
Mitigation	The process whereby the impacts of development upon archaeology can be avoided, minimised or offset. It may include preservation in-situ of remains or full archaeological excavation. Also referred to as Mitigation Strategy.
Enabling works	These are works to prepare a site in advance of the main construction works, for example, demolition, removal of vegetation, land levelling.
Park and Ride facility	A location usually sited out of the main urban areas comprising a large car park and connected with a mass transit system, in the case of MetroLink an urban metro to attract potential travellers to drive and park at the facility and take the metro into the city centre and avoid driving into the city centre.
Preservation in-situ	The retention of an archaeological site in its original location.
Retained outstation	A railway station constructed primarily below ground level with vertical retaining walls either side of the alignment to reinforce the walls and no roof or enclosure overhead.
Setting	The immediate and extended environment that is part of – and contributes to – the significance and distinctive character of a heritage assets, and through which a heritage asset is understood, seen, experienced and enjoyed.
Significance	The value of a heritage asset to past, present and future generations because of the sum of its embodied heritage interests. Those interests may be archaeological, architectural, historic or others. Significance also derives from its setting.
Surface station	A railway station designed at ground level.
Tunnel portal	The openings at the end of the tunnel.
Underground stations	A railway station located fully underground with a roof slab over the station to enclose it

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