



**Planning and Environmental
Considerations Report (PECR)**
Steeven's Lane 110kV Substation

The Electricity Supply Board (ESB)

August 2026

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Executive Summary

This Planning and Environmental Considerations Report (PECR) has been prepared by MWP to accompany a planning application for a Strategic Infrastructure Development (SID) being made by the Electricity Supply Board (ESB) (the Applicant) to An Coimisiún Pleanála (ACP).

The project for which planning consent has been sought is called the “Steeven’s Lane 110kV/MV Substation”. The project objective is to add capacity and improve distribution security of supply for the Dublin South West Inner City area. This will be achieved by looping the proposed substation into the existing Francis Street – Heuston Square 110 kV underground cable, which runs along Bow Lane West.

This non-statutory Planning and Environmental Considerations Report (PECR) has been prepared to ensure that appropriate planning requirements and potential environmental impacts of the Proposed Development on receiving environment are considered.

This PECR and associated assessments have concluded the following:

- The Proposed Development is necessary to ensure the secure and effective supply of electricity to the greater Dublin area. National policy outlines the need to invest in the distribution grid to support growing populations. The electrification of new sectors will also drive the increased demand for electricity.
- The characteristics of the Proposed Development are compatible with the stated objectives and policies of the Dublin City Council Development Plans and present no conflicts in terms of surrounding land uses. The Dublin City Development Plans also outline the Council’s ambitions to work with service providers, such as ESB, to enhance the distribution grid in order to ensure adequate power capacity for the existing and future business and enterprise needs of the County.
- The Proposed Development is considered to be compatible with all relevant policies and objectives including EU policy, national sectoral policy, national planning policy, regional planning policy and local planning policy.
- The likely significant impacts arising from the construction and operation of the Proposed Development were assessed against relevant environmental and planning criteria. Where necessary, mitigation measures have been recommended which will be fully implemented. These are detailed in this PECR and set out in a standalone outline Construction and Environmental Management Plan (oCEMP) under separate cover.
- An Appropriate Assessment (AA) Screening has been undertaken for the Proposed Development. The Screening determined that Stage 2 Appropriate Assessment, in the form of a Natura Impact Statement (NIS), was required (both provided under separate cover). The NIS has been prepared and concludes that, with the implementation of mitigation measures, the Proposed Development will not result in any adverse effects on the integrity of any European site, either alone or in combination with other plans or projects, having regard to their conservation objectives.

1. Introduction

This Planning and Environmental Considerations Report (PECR) has been prepared by Malachy Walsh and Partners (MWP) to accompany a Strategic Infrastructure Development (SID) planning application being made by the Electricity Supply Board (ESB) (the Applicant) to An Coimisiún Pleanála (ACP) for a 110kV Gas Insulated Switchgear (GIS) electrical Substation, at Steeven's Lane, Dublin 8.

The project for which planning consent is being sought is called "Steeven's Lane 110kV Substation" (hereafter referred to as the "Proposed Development") and includes approximately 1.5 km of underground electrical cabling connecting the proposed substation into the existing Francis Street – Heuston Square 110 kV underground cable, which runs along Bow Lane West. The Proposed Development will provide additional network capacity, relieve loading on existing substations in the area, and enhance overall security and resilience of supply.

The purpose of this PECR is to

- i) outline the details and characteristics of the Proposed Development,
- ii) provide an analysis of its compliance with national, regional, and local policies
- iii) evaluate the potential environmental impacts of the project, and
- iv) identify mitigation measures required to prevent any adverse effects arising from its construction and operation.

The PECR and accompanying documentation have been prepared in support of the planning application to provide information to the Planning Authority to assist with its assessment and determination on the project.

2. The Planning Application

2.1 Proposed Development Overview

The Proposed Development comprises the construction of a new 110 kV/MV electricity substation and associated underground cable infrastructure, together with all ancillary works required to facilitate its operation and connection to the electricity distribution network.

Further detail on the Proposed Development boundary is provided in Section 3, and a full description of the characteristics and components of the Proposed Development is set out in Section 4 below.

2.2 The Applicant

The Applicant for which permission for the Proposed Development being sought is the Electricity Supply Board (ESB). The registered address of the applicant is ESB Head Office, 27 Fitzwilliam Street Lower, Dublin 2, D02KT92, Ireland.

ESB was established in 1927 as a statutory corporation in the Republic of Ireland under the Electricity (Supply) Act 1927. With a holding of 97.7%, ESB is majority owned by the Irish Government. The remaining 2.3% is held by the trustees of an Employee Share Ownership Plan.

ESB operates across the electricity market: from generation, through transmission and distribution to supply of customers. ESB is the licensed owner of the transmission and distribution systems in Ireland and ESB's subsidiary, ESB Networks DAC is the licensed distribution system operator ("DSO"). Pursuant to the licences granted by the Commission for the Regulation of Utilities ("CRU"), and arrangements approved by CRU, these licensed network functions are carried out on a ring-fenced basis by staff in the 'ESB Networks' business unit of ESB, managed by ESB Networks DAC.

For the purposes of the planning application, ESB is acting (through the ESB Networks business unit), in its capacity as holder of the distribution system owner licence (also known as the distribution asset owner or 'DAO' licence) issued by the Commission for the Regulation of Utilities ("CRU"), pursuant to Section 14(1)(k) of the Electricity Regulation Act 1999 as amended ("1999 Act").

ESB, acting through the ESB Networks business unit, has appointed Malachy Walsh & Partners (MWP) to prepare this Planning and Environmental Report on its behalf for the purposes of the planning application.

ESB is committed to empowering the sustainable energy transition, by undertaking transformational changes across its business to achieve net zero emissions by 2040: developing and connecting renewables, building resilient infrastructure, and enabling and supporting customers to live more sustainably using clean electricity.

2.3 Statement of Legal Interest in the Lands

A letter of consent has been provided from the relevant landowner (Diageo) consenting to the making of this application. This letter is included within the Statutory Documentation accompanying the planning application.

2.4 Project Rationale

Under its *Networks for Net Zero* strategy, ESB Networks has committed to delivering a net zero ready electricity distribution network by 2040 to enable Ireland to achieve its legally binding net zero target by 2050. ESNB has published its *Ten-Year Distribution Network Development Plan* (DNBP) to provide information on the existing distribution network capacity, assess future capacity to accommodate customer needs and identify areas of the distribution network that requires investment to provide the necessary capacity and security supply across the distribution grid.

As outlined in the DNBP, significant investment is required over the coming decade to facilitate both the connection of renewable generation and the anticipated increase in electricity demand arising from population growth, new housing delivery, economic expansion, and the electrification of heat, transport, and industry. In the Dublin Central area, forecast peak distribution system demand growth is estimated to range between 3.8% and 5.7% for the period 2025–2030.

The Dublin South West Inner City and surrounding area is served by three 110 kV substations – Inchicore, Francis Street and Hueston Square and five 38 kV substations – Camden Row, Kingsbridge, Marrowbone Lane, Newmarket and Watling Street. See Figure 2-1 below.

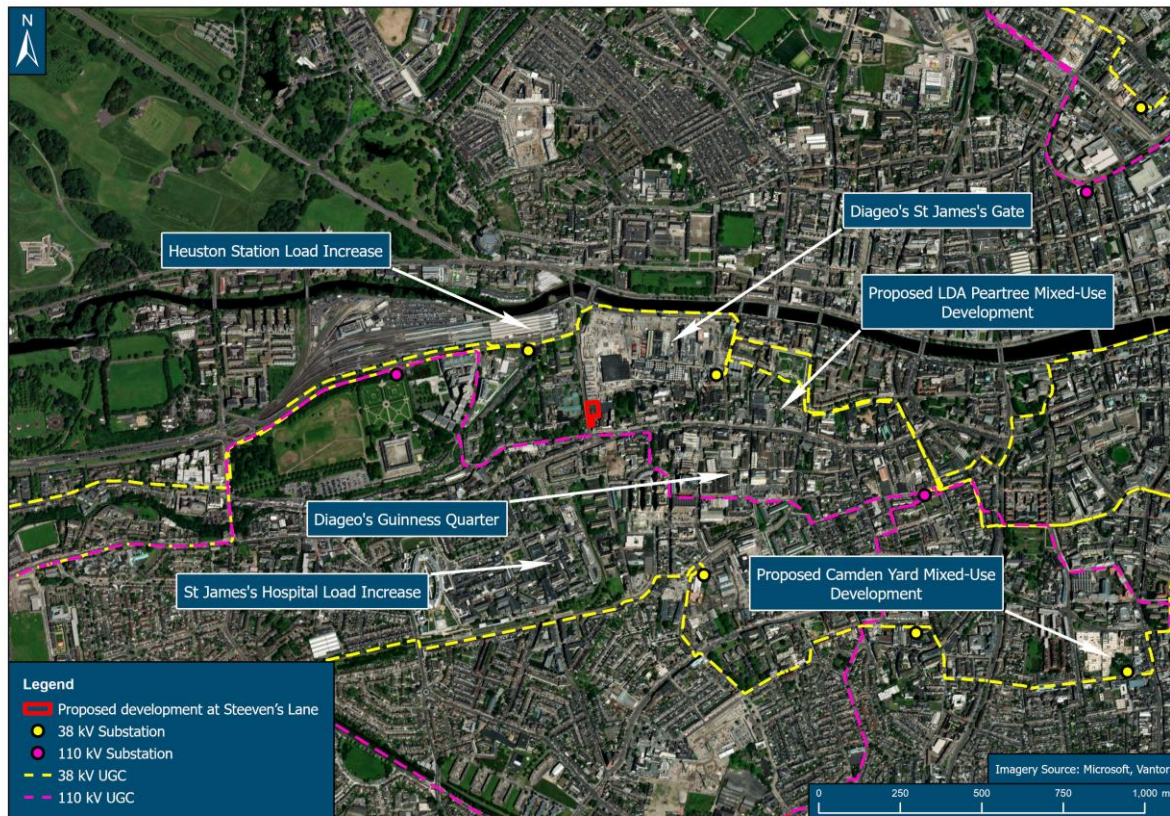


Figure 2-1: Overview of the key load increase developments and the existing infrastructure.

Following a detailed network assessment and investment appraisal, ESNB has identified that this existing infrastructure will not be sufficient to accommodate projected demand growth and connection requirements.

A key constraint identified is that several of the existing 38 kV substations are approaching or exceeding their capacity limits. In addition, confirmed and anticipated load growth from multiple large-scale developments is forecast to exceed available network capacity. These include Diageo's St James's Gate decarbonisation project, increased demand at St James's Hospital as part of its campus redevelopment, and major mixed-use developments such as the Guinness Quarter (Thomas Street), the LDA Peartree development at the Digital Hub, and Camden Yard on Kevin Street. Further load increases are also associated with Irish Rail's DART+ electrification project, including proposed customer supply requirements at Heuston Station.

In response to these constraints, ESNB has determined that a new 110 kV / MV distribution substation is required in the Dublin South West Inner City area. The Proposed Development will provide essential network reinforcement and additional capacity, supporting multiple strategic objectives, including:

- Offloading existing 38 kV substations to improve system resilience, operational flexibility, and security of supply;
- Increasing Medium Voltage (MV) capacity and enhancing interconnectivity between substations;
- Facilitating major customer connections, including industrial, healthcare, and transport infrastructure developments;
- Supporting national decarbonisation objectives through electrification of heat, transport, and industry.

Overall, the proposed substation is a critical reinforcement project required to address existing capacity constraints, accommodate committed and forecast demand growth, and ensure a resilient and future-ready electricity distribution network for the area.

2.5 The Planning Application Process

2.5.1 Pre-Planning Consultation

Pre-planning consultation with An Coimisiún Pleanála took place in September 2025 (Case No. 322700-25). The purpose of which was to outline details of the Proposed Development and determine if the Proposed Development constitutes strategic infrastructure in accordance with the meaning provided by the Planning and Development Act (PDA) 2000, as amended. In February 2026, the Commission determined that the Proposed Development constitutes SID under Section 182A of the PDA 2000 as amended, and that a planning application should be made directly to the Commission. This letter is included within the Statutory Documentation accompanying the planning application.

2.5.2 Non-Statutory Consultation

The following outlines the key stakeholder meetings that have taken place throughout the pre-planning process of the proposed Scheme. Key stakeholders were identified at an early stage to ensure relevant parties were appropriately engaged. Meetings and communications were conducted outside of the periods of statutory public consultation, as required.

The purpose of these meetings was to:

- Identify any additional information, not previously available to the project team, that should be considered in the development of the proposed Scheme; and
- Determine whether there were any additional constraints or issues, not necessarily known by the project team, that should be taken into consideration in preparing the application and various assessments.

Where appropriate, the information and advice received from the consultation process was incorporated into the design of the proposed Scheme and addressed within the relevant environmental topics of the Planning and Environmental Considerations Report (PECR).

Table 2-1: Key Stakeholders Meetings

Stakeholder	Number of Meetings & Dates	Topics Discussed and Key Actions
Dublin City Council	2 (9th June 2026 & 3rd July 2026)	Topics discussed during initial meeting with DCC representatives on 9th June 2026: • Proposed Development Overview including: Architectural Design, Traffic, Drainage, Visual Impact, Archaeology, Noise and Vibration • Alternatives considered for Site Location Topics discussed during subsequent meeting on the 3rd July 2026 with DCC Drainage Engineer: • Presentation of drainage and green blue roof derogation request
NTA	1 (28th May 2026)	• Liffey Valley to City Centre BusConnects Interface • Construction Programme and Traffic Management • Continuous coordination / Communication Strategy
TII	1 (21 st April 2026)	• Luas Interface • Steeven's Lane Access & Visibility • Boundary Wall / Footpath

Stakeholder	Number of Meetings & Dates	Topics Discussed and Key Actions
		Fire Safety & Emergency Response
Uisce Eireann (UE)	2 (via email)	- Pre-connection Enquiry - Over/Near Existing Services application
Diageo	2 (12 th March 2026, 27 th March 2026)	- Project Interfaces - Construction Phasing & Logistics - Services & Infrastructure Coordination - Environmental & Technical Assessments

2.5.3 Statutory Consultation and Public Notices

In accordance with the requirements for public notices set out under the PDA 2000, ESB has notified the public of this application by means of the following:

- Site notices – Three site notices have been erected on the relevant land. The location of the notices are shown on the submitted site location map drawing included in the application pack. A copy of the notice is also included in the application pack.
- Newspaper notices – a notice has been published in two national newspapers (Irish Examiner and The Herald). A copy of the newspaper notices has been included in the application pack.
- A copy of this application has been circulated to the prescribed bodies, as advised by ACP during the pre-planning consultations.
- A stand-alone website has been established (www.steevenslane110kvsbstation.ie). All planning application documentation can be viewed on this website.

2.6 Application Drawings

This application has been prepared in accordance with the requirements set out under the PDA and its associated regulations, as amended. This PECR report should be read in conjunction with the accompanying drawings. The list of drawings prepared in support of this planning application is tabulated in Table 2-2 below.

Table 2-2: Drawings submitted in support of this planning application

Discipline	Drawing Title	Drawing Number	Scale
Architectural	Site Location Map	27057-00-DTM-DR-RLA-AR-0100	1:1000
	Existing Site Layout Plan	27057-00-DTM-DR-RLA-AR-0101	1:200
	Proposed Site Layout Plan	27057-00-DTM-DR-RLA-AR-0102	1:200
	Proposed Entrance Gate	27057-00-DTM-DR-RLA-AR-0150	As indicated
	Existing Plans / Sections / Elevations of Demolition of Textile House	27057-00-DTM-DR-RLA-AR-0400	1:200

Discipline	Drawing Title	Drawing Number	Scale
	Existing Plans / Sections / Elevations of Demolition of Disused Office Building	27057-00-DTM-DR-RLA-AR-0401	1:200
	Proposed Ground Floor Plan	27057-00-DTM-DR-RLA-AR-0402	1:100
	Proposed First Floor Plan	27057-00-DTM-DR-RLA-AR-0403	1:100
	Proposed Roof Plan	27057-00-DTM-DR-RLA-AR-0404	1:100
	Existing and Proposed Contiguous Elevations (West)	27057-00-DTM-DR-RLA-AR-0501	1:200
	Existing and Proposed Contiguous Sectional Elevations (East)	27057-00-DTM-DR-RLA-AR-0502	1:200
	Existing and Proposed Contiguous Sectional Elevations (North)	27057-00-DTM-DR-RLA-AR-0503	1:200
	Existing and Proposed Contiguous Sectional Elevations (South)	27057-00-DTM-DR-RLA-AR-0504	1:200
	Existing and Proposed Contiguous North Elevations (North)	27057-00-DTM-DR-RLA-AR-0505	1:200
	Existing and Proposed Contiguous Section Elevations (West)	27057-00-DTM-DR-RLA-AR-0601	1:200
	Existing and Proposed Contiguous Section Elevations (North)	27057-00-DTM-DR-RLA-AR-0602	1:200
Structural	GIS Building - Transformer Bund Layout	27057-01-L00-DR-MWP-SE-1111	1:50
	GIS Building - Transformer Bund Section	27057-01-ZZZ-DR-MWP-SE-1211	1:10 / 1:50
Civil	Proposed Site Levels	27057-00-DTM-DR-MWP-CE-0103	1:200
	Volumetric Analysis	27057-00-DTM-DR-MWP-CE-0110	1:200
	Ireland Context Location Map	27057-00-DTM-DR-MWP-CE-0120	1:1500
	Temporary Proposed Development Layout	27057-00-DTM-DR-MWP-CE-0122	1:500
	Temporary Construction Compound Layout	27057-00-DTM-DR-MWP-CE-0123	1:250
	Proposed Entrance Layout and Sightlines	27057-00-DTM-DR-MWP-CE-0150	1:200
	Existing Ground Profiles Sheet 1	27057-00-ZZZ-DR-MWP-CE-0201	1:200
	Existing Ground Profiles Sheet 2	27057-00-ZZZ-DR-MWP-CE-0202	1:200

Discipline	Drawing Title	Drawing Number	Scale
	Access Road Longitudinal Section	27057-00-ZZZ-DR-MWP-CE-0300	1:100
	Proposed Site Cross Sections Sheet 1	27057-00-ZZZ-DR-MWP-CE-0301	1:150
	Proposed Site Cross Sections Sheet 2	27057-00-ZZZ-DR-MWP-CE-0302	1:150
	Proposed Site Cross Sections Sheet 3	27057-00-ZZZ-DR-MWP-CE-0303	1:150
	Proposed Drainage and Watermain Layout	27057-00-DTM-DR-MWP-CE-2100	1:200
	Compound Drainage Details	27057-00-DTM-DR-MWP-CE-2400	1:10 / 1:20
	Cable Trench Details	27057-00-DTM-DR-MWP-CE-2500	1:10
	Joint Bay General Arrangement and Details	27057-00-DTM-DR-MWP-CE-2501	1:25 / 1:50
	110kV Trench Cross Section for Crossing Over Culverts or Services	27057-00-DTM-DR-MWP-CE-2502	1:10
	110kV Trench Cross Section for Crossing Under Culverts or Services	27057-00-DTM-DR-MWP-CE-2503	1:20 / 1:50

2.7 Development Project Team

The project team comprised a multidisciplinary group of suitably qualified engineering, environmental, and specialist experts.

Malachy Walsh and Partners were the lead Planning, Environmental and Engineering Consultants on this project and the final application has been compiled by Malachy Walsh and Partners on behalf of the applicant.

The concept and design for this project has been developed by the *Project Design Team* which is comprised of the following companies:

Table 2-3: Project Design Team

Company	Role
ESB	Development design
Malachy Walsh and Partners	Project manager and lead structural and civil designer
RYAN+LAMB Architects	Architectural design and finishes

The study team of specialists involved this PECR and supporting assessments are presented in Table 2-4.

Table 2-4: Specialist Contributors to the Application and Supporting Assessments

Assessment/Report	Author	Company	Qualifications / Competence
EIA Screening	Caitriona Fox	MWP	Senior Environmental Consultant and Environmental Impact Assessment practitioner with over 20 years' consultancy experience. Holds BA and MSc qualifications and has acted as EIA Project Manager for a range of large-scale infrastructure, energy, commercial, industrial, and tourism developments. As an environmental practitioner she is very familiar with all relevant legislation, guidance and codes of practices in the area of EIA. She is experienced in undertaking EIA screenings and in the co-ordination and preparation of environmental impact assessment reports and environmental reports and has authored numerous specialist reports including: air and climate impact, landscape and visual assessment, population and human health, and material assets assessments.
AASR/NIS	Salona Reddy	MWP	Senior Ecologist (MSc, BSc) with over 10 years' consultancy experience in ecological assessment and reporting. She has extensive experience in EIAR, Ecological Impact Assessments, Appropriate Assessment screenings, Natura Impact Statements, habitat surveys, and zoological surveys for a range of projects in Ireland and internationally.
Land and Soils Assessment	Olivia Holmes	MWP	Senior Environmental Consultant with over 15 years' experience in environmental engineering, contaminated land assessment and remediation, waste management, Environmental Impact Assessment (EIA), and planning. Recognised by Engineers Ireland as suitably qualified and experienced to undertake risk-based assessment and certification of historic landfill and contaminated land sites. Experienced in land, soils, and brownfield site assessments for infrastructure and development projects.
Water Assessment	Micheal Fenton	MWP	Chartered Civil Engineer with over 18 years' experience in hydrology, flood risk assessment, hydraulic modelling, and water environment assessments. He has extensive experience delivering Flood Risk Assessments, Water Framework Directive (WFD) Assessments, and hydrological assessments for major infrastructure and renewable energy projects across Ireland.
Noise and Vibration Assessment	Kieran Barry	MWP	Environmental consultant with experience in environmental noise monitoring, prediction, assessment, and mitigation for infrastructure and energy projects. Holds the Institute of Acoustics (IOA) Certificate of Competence in Environmental Noise Measurement and has undertaken noise impact assessments in accordance with EPA guidance and relevant standards.
Archaeological Assessment	Aisling Collins	ACAS	Archaeological consultant with expertise in archaeological assessment, cultural heritage appraisal, archaeological monitoring, and statutory heritage compliance for infrastructure and urban development projects.

Assessment/Report	Author	Company	Qualifications / Competence
Landscape and Visual Assessment	Caitriona Fox	MWP	Same as above.
Visualisations / Photomontages	Charles Ryan	RYAN+LAMB Architects	Registered architect with experience in architectural visualisation, verified photomontages, urban design analysis, and preparation of graphical material to support planning and EIAR documentation for strategic and complex urban developments.
Traffic Assessment and Pedestrian Comfort Assessment	Glen Moon	Systra	Principal Engineer and Chartered Member of the Chartered Institution of Highways and Transportation (CIHT), with approximately 15 years' experience in development planning, transport assessments, EIAR appraisal, traffic engineering, and construction traffic management for major urban and infrastructure projects
Conservation Assessment	Rory Ryan	RYAN+LAMB Architects	Conservation architect with expertise in protected structures, architectural heritage assessment, conservation-led design, and interventions within historic urban environments. Experienced in heritage impact assessment and conservation strategies for planning applications.
Daylight and Sunlight Overshadowing	Rory Walsh	GV8	Specialist consultant in daylight, sunlight, overshadowing, and visual amenity analysis, with experience in the preparation of BRE-compliant assessments for urban and strategic development projects.
<i>Note: Further details on the qualifications, professional experience, and competencies of each specialist are provided within the relevant technical reports submitted as part of the application documentation.</i>			

3. Development Setting

3.1 Site Location and Context

The Proposed Development site is located on unoccupied brownfield land owned by Diageo, immediately adjacent to the Diageo Guinness Brewery at James Street. The site currently comprises a number of vacant and derelict buildings, together with an associated yard area.

It is bounded to the north and northeast by the industrial lands of the Guinness Brewery. Steeven's Lane forms the western boundary, serving primarily pedestrians, cyclists, and the Luas Red Line, with limited vehicular access restricted to the site and St Patrick's University Hospital located on the opposite side of Steeven's Lane.

To the south, the Proposed Development site is bordered by mixed-use and residential properties, including 132-134 James's Street and Steeven's Gate Apartments.

The site location within the greater Dublin area is shown in Figure 3-1 below.

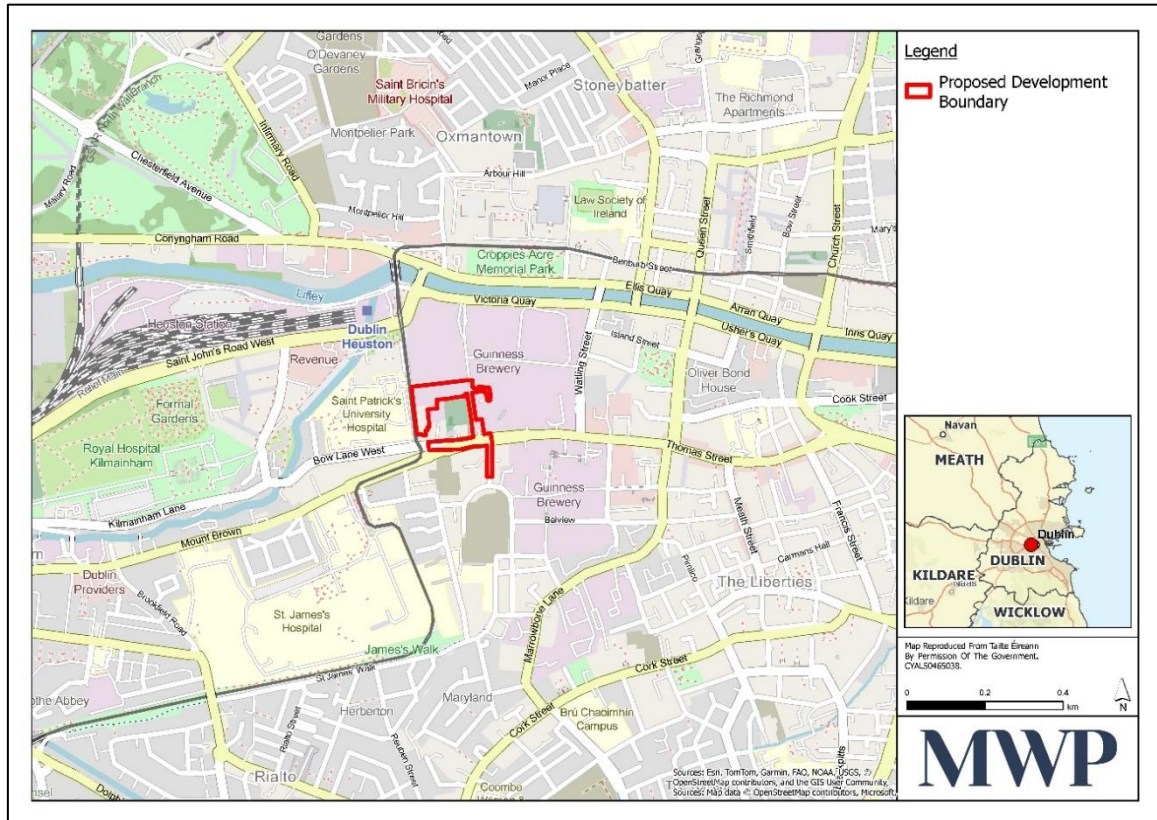


Figure 3-1: Proposed Site Location

3.1.1 Interaction with Diageo IEL Site Boundary

Diageo is the owner of two large strategic industrial and commercial landbanks amounting to c. 20ha located to the north and south of James Street (R810) in the southwest Dublin inner city (outlined in blue in Figure 3-2). The land to the north of James's Street accommodates the majority of Diageo's operational and brewing activities. The lands south of James's Street include a mix of brewing and support operations, including underutilised buildings relating to Guinness historic brewing options. Collectively, these lands are encompassed within Diageo's Industrial Emissions Licence (IEL) site boundary (Licence Ref. No. P0301-04).

The Proposed Development site forms part of the wider Diageo landholding and is located immediately southwest of the active brewery operations. While the proposed substation is located outside the IEL boundary, a section of the associated underground grid connection (UGC) infrastructure is proposed within the licensed area. The relationship between the Proposed Development site, the proposed works and the Diageo IEL site boundary is illustrated in Figure 3-2.

The substation has been carefully positioned within available brownfield lands to maintain an appropriate separation from existing operational areas, while facilitating the delivery of the required electrical connection infrastructure.

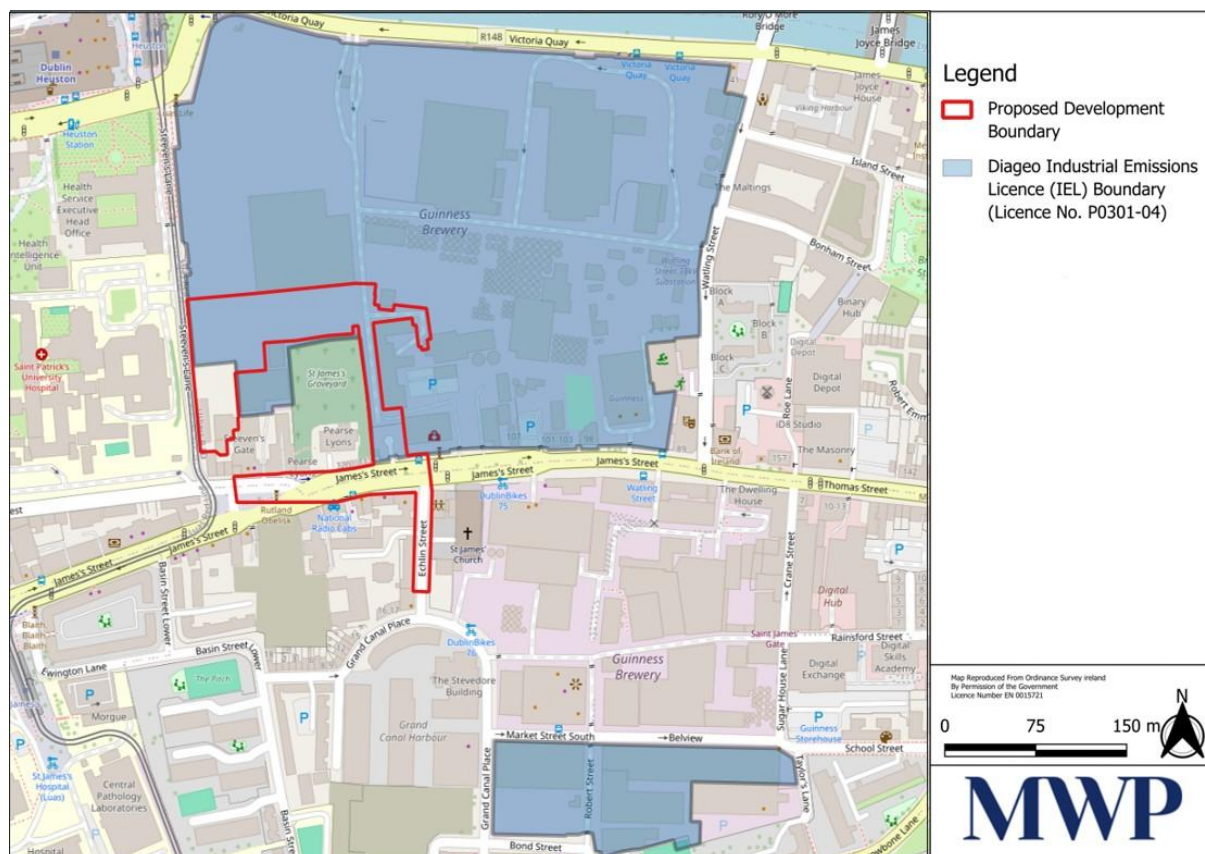


Figure 3-2: Proposed Development Site and Diageo IEL Boundary Interface

3.2 Planning History in the Area

A desktop review of Dublin City Council's (DCC) online planning portal, MyPlan.ie's National Planning Application database and An Coimisiún Pleanála's online portal was undertaken, to take account of development applications onsite and within the immediate environs. This search confirmed that there were no recent site-specific applications or available planning details relating to the existing buildings on the site. A review of historic maps (1907 OS edition) indicated that the site was formerly a Tobacco & Snuff Manufactory with the existing building along the western boundary of the site already present at that time.

The review of the planning registers reveals a number of planning applications in the vicinity of the subject site. These principally relate to industrial developments associated with the Diageo site as well as various applications relating to the mix of buildings located to the south of the site. See **Appendix 1** for details of the identified planning applications in the vicinity of the subject site.

Having reviewed these applications and having regard to the reasons for any grants or refusals, it is considered that the principal planning concerns relate to the potential impacts on the character of the area and the protected structures within the streetscape, particularly with respect to the scale, height, and proposed building materials of any development. Additional concerns were also raised regarding the management of construction works in close proximity to the operational Luas line along Steeven's Lane, with particular emphasis on ensuring safety and minimising disruption.

Furthermore, in-combination effects with the Diageo's proposed decarbonisation and water recovery works (Planning Ref. WEB2472/24), including a new energy centre to support decarbonisation, give rise to additional concerns during construction. These include potential impacts on traffic, noise, drainage, and other environmental factors, as well as the need for careful management of construction activities to minimise disruption and ensure safety.

These concerns are acknowledged and are a key consideration in the design and preparation of the current planning application.

4. Characteristics of the Proposed Development

4.1 Development Boundary

The characteristics of the Proposed Development are fully described in Section 4 of this report. In addition, full details of the proposed design, layout, elevations, sections, and associated site development works are provided within the planning drawings. A summary of the Proposed Development is provided below to set the context and aid clarity.

Figure 4-1 shows the Proposed Development footprint within the development boundary. The Proposed Development footprint extends to approximately 0.23 ha within the overall site area of 1.73 ha.

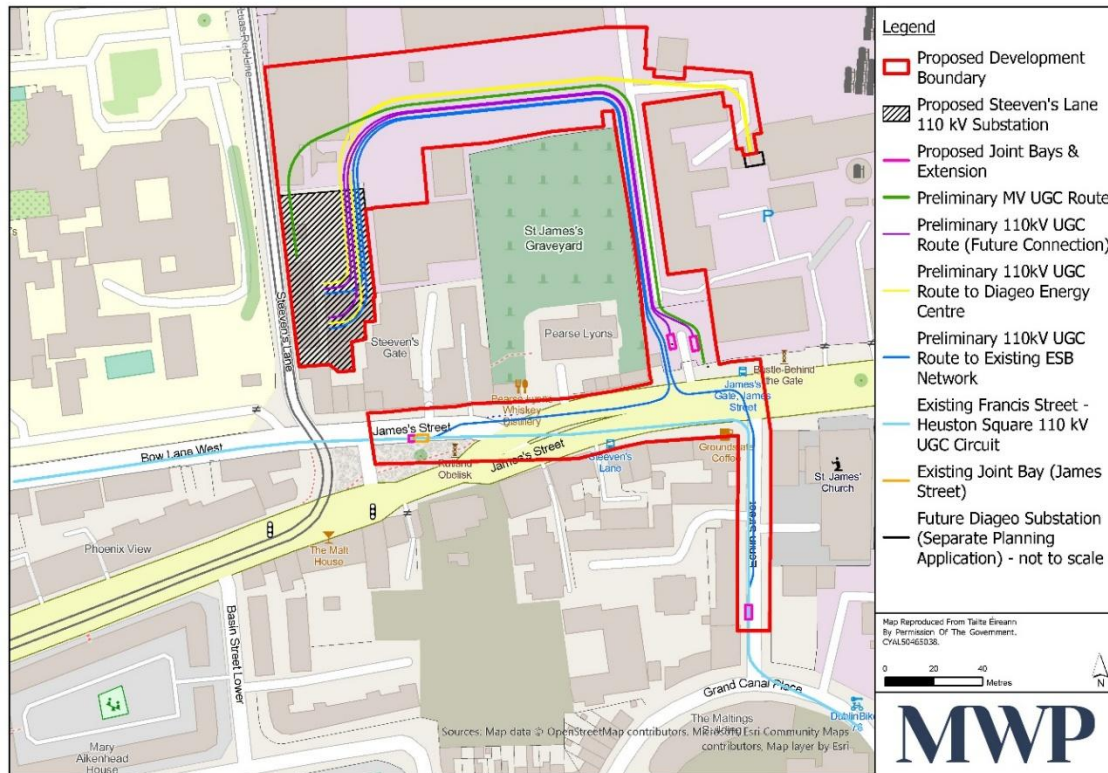


Figure 4-1: Proposed Development Footprint within the development boundary

4.2 Proposed Substation Development

The Proposed Development will consist of a 110 kV / MV electrical substation and will include the following elements:

- Demolition of all existing buildings on site including a former office building, warehouse and storage shed;
- The construction of 110 kV / MV substation compound with the following electrical plant within the substation:
 - A two storey 110 kV / MV Gas Insulated Switchgear (GIS) building (c. 559 m²; 14.1 m in height);
 - Two banded 110 kV / MV transformers in transformer bays (c. 5.75 m in height) and surrounding fire walls (c. 6.1 m high) and associated electrical equipment;
 - All associated and ancillary site development and infrastructural works, including site clearance, demolition of existing western boundary wall and gates, provision of new boundary treatments and gates along the western site boundary, replacement of the existing retaining wall along the northern and northeastern site boundary, provision of new boundary treatments along the southern and south eastern site boundary, site services including electrical circuits, lighting, telecommunications and drainage.

4.3 Proposed Connection to Electricity Grid

The Proposed Development will also involve the installation of six 110 kV underground cable (UGC) circuits connecting the proposed Steeven's Lane 110 kV substation to key locations, including:

- Loop-in connection joint bays on the existing Francis Street – Heuston Square 110 kV circuit at Bow Lane West and Echlin Street / James's Street;

- Diageo's proposed 110 kV substation, (subject to separate and future consenting process); and
- Ducting for future use to be terminated in joint bays at St James's Gate Medical car park, north of James's Street.

The combined total length of the circuits is approximately 1.5 km, and they will be installed as either double or single circuits.

The installation of 14 circuit MV UGC between the proposed substation and new joint bays at St James's Gate Medical car park, north of James's Street.

4.4 Site Access and Traffic Volumes

During operation, access for routine maintenance and inspection will be via the entrance on Steeven's Lane and will typically involve ESN standard yellow vans. Access via Victoria Quay through the Diageo site will be limited to major maintenance works requiring the delivery or removal of large equipment, such as transformers or switchgear, in accordance with the existing agreement with Diageo. As the facility will typically be unmanned, there will be visits to the site for scheduled and unscheduled inspections, maintenance and repairs as necessary. Typically, scheduled inspections and maintenance works would generate, on average, two to four visits a month.

Construction site access arrangements are described in Section 4.8.4.

4.5 Foul Water and Stormwater

4.5.1 Existing Combined Network

Recorded data from UÉ GIS mapping shows that there is an existing combined sewer close to the site as shown in Figure 4-2. The data indicates that there is a 300mm VC Gravity-Combined main on Steeven's Lane and combination of 300mm VC, 300mm uPVC and 750mm concrete main south of the site on James's Street.

Existing foul drainage within the site serves the current buildings and discharges via a 100mm diameter outfall to a combined manhole on Steeven's Lane. At this point, foul and surface water flows are combined and conveyed within the public combined network operated by Uisce Éireann, ultimately discharging to Ringsend Wastewater Treatment Plant.

Stormwater runoff is collected via downpipes and rainwater gullies and conveyed, together with foul flows, to this existing Uisce Éireann combined manhole on Steeven's Lane.

Ground penetrating radar (GPR) surveys were undertaken at the proposed substation site and cross-referenced against existing UÉ network information to confirm the presence of an existing combined sewer close to the site comprised of a 300 mm vitrified clay (VC) gravity combined main on Steeven's Lane, while to the south of the proposed developed site on James's Street there is a combination of 300 mm VC pipe, 300 mm uPVC¹ pipe, and 750 mm concrete main – refer to Figure 4-2, below.

¹ uPVC - unplasticised polyvinyl chloride

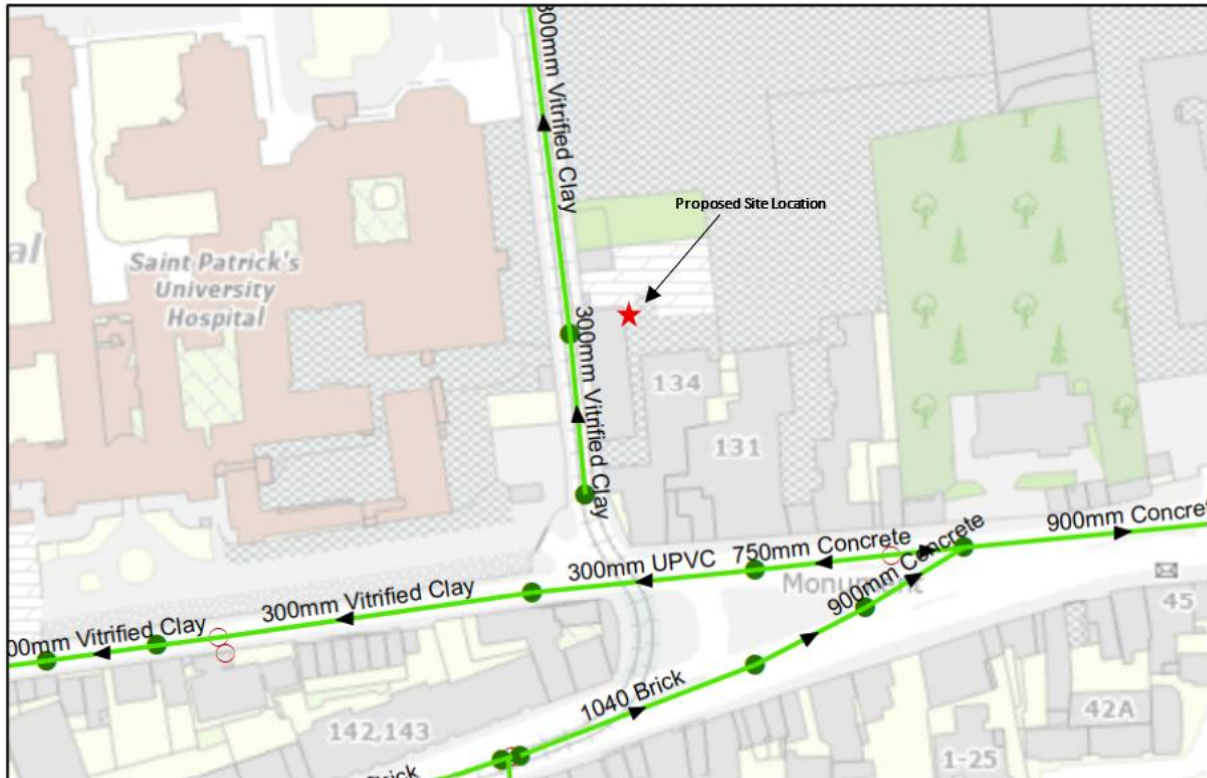


Figure 4-2: Existing Foul Water Network, Uisce Eireann

4.5.2 Proposed Surface Water Drainage

The surface water drainage proposals have been developed to reduce the peak discharge currently entering the combined sewer on Steeven's Lane. A hydrobrake is proposed to restrict surface water runoff to a maximum discharge rate of 2 l/s.

Due to the nature of the Proposed Development, which comprises an unmanned electrical substation accommodating critical electrical infrastructure on a physically constrained site, the incorporation of green or blue roofs as a nature-based SuDS measure for surface water management is not considered feasible. This is due to electrical safety considerations and site-specific technical and engineering constraints. Accordingly, a derogation from Dublin City Council's Green and Blue Roof Policy has been sought for the Proposed Development.

Surface water attenuation will instead be provided via a permeable paving system with an underlying stone sub-base to facilitate stormwater storage.

Further details of the proposed drainage strategy and derogation are provided in the Engineering Services Report (refer to **Appendix 2**), together with the drainage drawings included within the Suite of Planning Drawings accompanying this planning application.

A Confirmation of Feasibility letter has been obtained from UÉ in respect of the proposed surface water discharge.

4.5.3 Proposed Foul Water Drainage

The facility will typically be unmanned. There will be visits to the site for scheduled and unscheduled inspections, maintenance and repairs as necessary. Typically, scheduled inspections and maintenance works would generate, on average, two to four visits a month. A two-person crew visiting site for three days a week would be the most that would be expected on the site during particular periods of maintenance.

Foul connections have been designed for the GIS building within the site which provides welfare services. It is intended to maintain the separation of foul and storm drainage within the site until the final discharge manhole. This will allow a simple transition to any potential future separated system on Steeven's Lane.

The estimated loading has been estimated as: design daily flow rate of 100 litres/person for an industrial setting (office/no canteen).

A Confirmation of Feasibility letter has been obtained from Uisce Éireann in respect of the proposed foul water discharge.

4.6 Water Supply

4.6.1 Existing Water Supply

Figure 4-3 shows the existing water supply network obtained from Uisce Éireann GIS mapping, which shows an existing 50mm Diameter water supply to the site being fed by a 180mm HDPE pipe on Steeven's Lane.

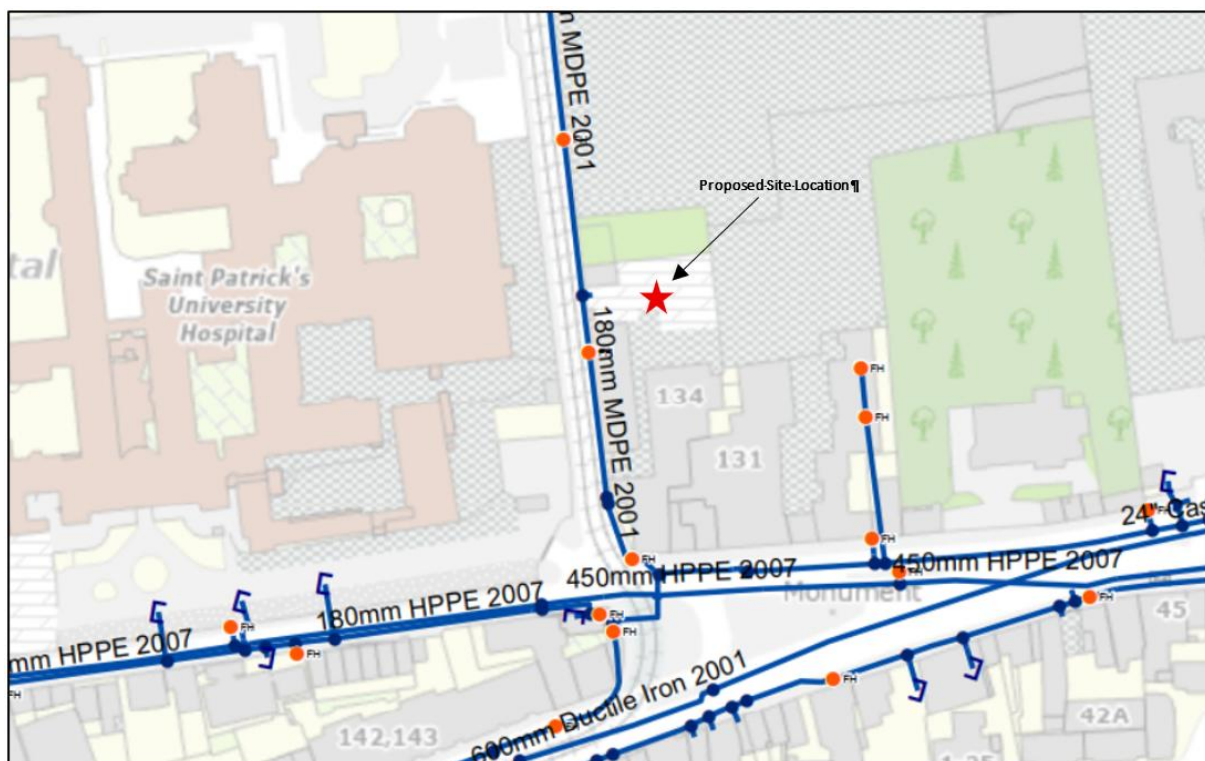


Figure 4-3: Existing Water Supply Network, Uisce Eireann

4.6.2 Proposed Water Supply

Based on the assessed low water demand for the site, the existing 50 mm watermain is sufficient to meet the proposed on-site water requirements. It is proposed to connect to this main to supply the GIS building welfare facilities. All connections, including the provision of water meters and sluice valves, will be designed and installed in accordance with Uisce Éireann's Code of Practice.

An initial Pre-connection enquiry has been submitted to Uisce Eireann under the reference number CDS26002769.

4.7 CCTV and Lighting

As the station will be unmanned, Closed Circuit Television (CCTV) cameras will be installed strategically around the compound for site security purposes. The cameras will monitor key access points, the perimeter and critical infrastructure to deter theft, vandalism and unauthorised access. All cameras will be oriented within the compound and away from nearby residential properties. All security measures will comply with GDPR and relevant data protection regulations.

The lighting design for the substation compound will prioritise minimising light pollution, particularly given its location within a residential area. All external lighting will be mounted and directed inwards, facing the buildings and internal operational areas, to avoid light spill beyond the site boundary and reduce visual impacts on nearby residential receptors. The buildings will have external lighting installed for operational and safety purposes. However, this will be limited to façade-mounted, downcast fixtures to ensure lighting is contained within the compound perimeter and security lighting will also be provided, designed to operate on motion sensors or timers where appropriate to limit unnecessary continuous illumination.

4.8 Construction Phase Activities

4.8.1 Construction Overview

The construction phase of the Proposed Development will be carefully managed to minimise disruption to the surrounding area and ensure the safety of workers, the public, and adjacent infrastructure, within the site boundary as illustrated on the Red Line Boundary Figure 4-4 below.

The commencement date for construction is subject to the date of grant of planning permission, pre-commencement obligations, and progression of the design to construction stage.

The construction work will take place in two broad phases:

- Civil Construction
- Electrical Installation

Table 4-1 provides a non-exhaustive list of the works to be undertaken during the construction phase.

Further details are provided in the oCEMP, including the Demolition and Construction Management Plan (DCMP), which forms part of the accompanying documentation of the planning application. The DCMP should be read in parallel with this section for further detail regarding the proposed construction methodology, demolition works, and sequencing of the development works.

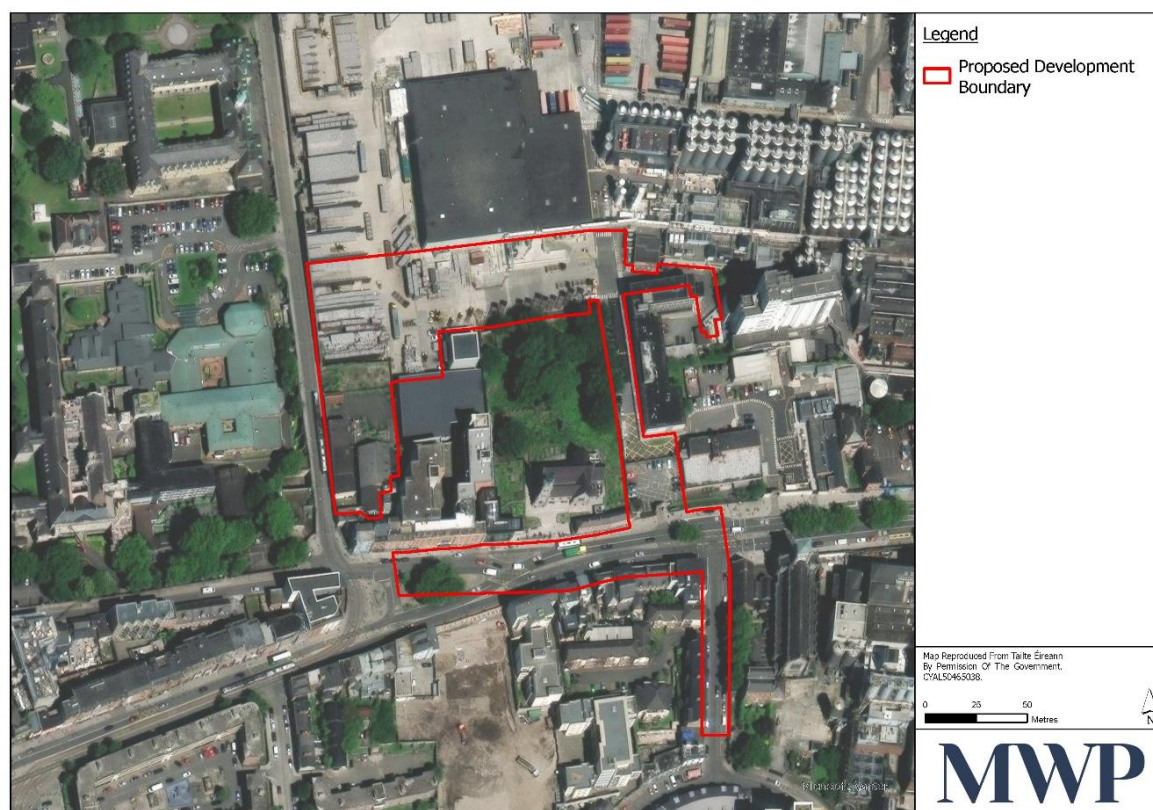


Figure 4-4: Proposed Red Line Boundary

Table 4-1: Summary of Main Construction Activities

Phase	Key Activities
Pre-construction and Site Preparation	• Site establishment, including welfare facilities and site offices • Demarcation of the construction works area and installation of temporary fencing • Enabling works and formation of construction access routes • Site clearance and demolition of existing structures. • Propping and demolition of retaining walls along the northern and eastern boundaries of the proposed substation site • Site levelling and preparation works • Installation of temporary drainage and temporary site infrastructure
Civil Construction Works	• Excavation, foundation and piling works • Reconstruction of retaining walls along the northern and eastern boundaries of the proposed substation site • Installation of the substation earth grid • Construction of permanent drainage infrastructure • Construction of underground 110 kV cable ducts and associated cable trenches • Construction and installation of loop-in connection joint bays • Construction of the GIS building, including foundations, structural steelwork, cladding, and building finishing works • Construction of civil bases and infrastructure for transformers, transformer bunds, lighting monopoles, lighting columns, and LV cable ducts

Phase	Key Activities
	- Road opening, trenching, duct installation, backfilling, and reinstatement works associated with underground cable installation - Compound surfacing, stoning, and paving works
Electrical Installation Works	- Delivery and installation of six 110 kV underground cable circuits - Cable pulling, jointing, and cable terminations - Installation of underground cable connections to the existing distribution network and future Diageo substation - Delivery and installation of 110 kV/MV GIS switchgear and transformers - Electrical and mechanical fit-out of buildings - Installation of ducting infrastructure, LV cabling and wiring associated with protection and control systems - Installation of compound lighting and security systems
Testing, Commissioning and Completion	- Testing and commissioning of all installed electrical equipment - Site reinstatement, boundary treatments, and completion works

All works will be carried out in accordance with the building regulations and up-to-date design codes at the time of mobilisation.

4.8.2 Site Preparation & Enabling Works

The proposed 110kV Substation works site will be developed on a phased basis in order to minimise disruption during the construction process. The site is constrained by existing retaining walls, adjacent protected structures, proximity to the Luas line and pedestrian routes along Steeven's Lane. The site is also known to contain areas of potentially contaminated ground associated with the historical industrial use of the wider site. All preparatory works will be carefully planned and sequenced having regard to these constraints.

Initial works will include site establishment, erection of temporary hoarding and secure perimeter fencing, and the establishment of a temporary construction compound within the site boundary.

Existing buildings on site form part of the perimeter hoarding. Where visible to the public, hoarding will comprise a 3.0 m high timber-framed structure faced with plywood and finished in high-quality coatings. Internal hoardings and barriers will comprise suitable boundary treatments to ensure adequate segregation between construction personnel, construction traffic, brewery staff, and operational traffic. All hoarding and temporary barriers will be designed by suitably qualified and competent engineers, as appropriate.

Given the level differences across the site (including an approximate 5m level change from the keg store area to the proposed building footprint), localised excavation, regrading and retaining structure works will be required. New retaining walls boarding the site will be constructed in advance of the main building works.

Excavations associated with grid entry and underground services will be undertaken with consideration of minimising excavation depths and reducing the mobilisation of contaminated material. Potential measures may include the use of temporary sheet piling or dig-and-replace methodologies, as appropriate.

All works will be undertaken in accordance with a detailed Construction Environmental Management Plan (CEMP), incorporating appropriate mitigation measures to control dust, noise, surface water runoff and traffic management.

These enabling works will facilitate the safe and efficient construction of the proposed substation while ensuring that potential environmental effects are appropriately managed and mitigated from the outset of the Proposed Development .

4.8.3 Temporary Construction Area

An area to the north of the site, has been identified for use as a construction compound, as shown in Figure 4-5 below. The area is currently undeveloped hardstanding.

The extent of the compound and facilities required by the Main Contractor will vary throughout the duration of the works. During demolition works, a small-scale site compound and welfare facilities may be accommodated within the site. During the excavation works and construction of the substation, it is envisaged that the temporary construction compound will serve as the main contractor laydown area for the storage of materials, plant, and deliveries.

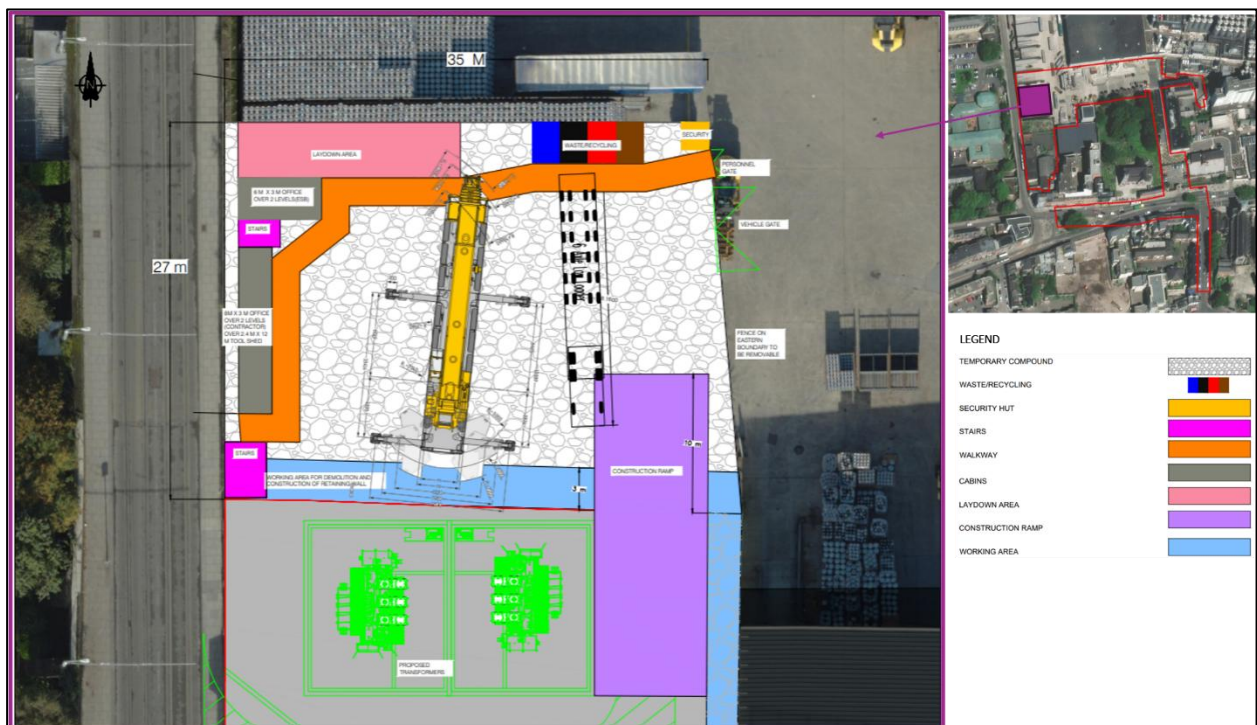


Figure 4-5: Preliminary Layout of Temporary Construction Compound (subject to detailed design)

During Construction stage, a temporary ramp access will be installed from the temporary construction compound into the north side of the substation compound to allow safe and efficient access to the site from the existing ground level.

The designated area will facilitate truck deliveries and allow vehicles to turn and exit the site. All truck movements will be strictly controlled in accordance with the Contractor's approved traffic management measures for the Proposed Development.

Storage of fuels and refuelling activities will be carried out within a bunded hardstand area to prevent contamination. Water will be delivered to the site as required, and foul waste will be removed off-site using appropriate facilities. Temporary power will be provided using a suitably bunded generator if necessary.

The layout has been designed to segregate pedestrian and vehicle access, with designated personnel and vehicle gates to ensure safe entry and egress.

4.8.4 Site Access

During construction, the proposed access point to the substation development site will be via the existing Victoria Quays entrance to the Diageo site, as agreed with Diageo. Refer to Figure 4-6 below. If required, a wheel-wash will be installed within the site compound to wash dirt from the wheels of road trucks exiting the site. The access route will be monitored to ensure no dirt accumulates on the public road due to the construction traffic and will be cleaned if required.

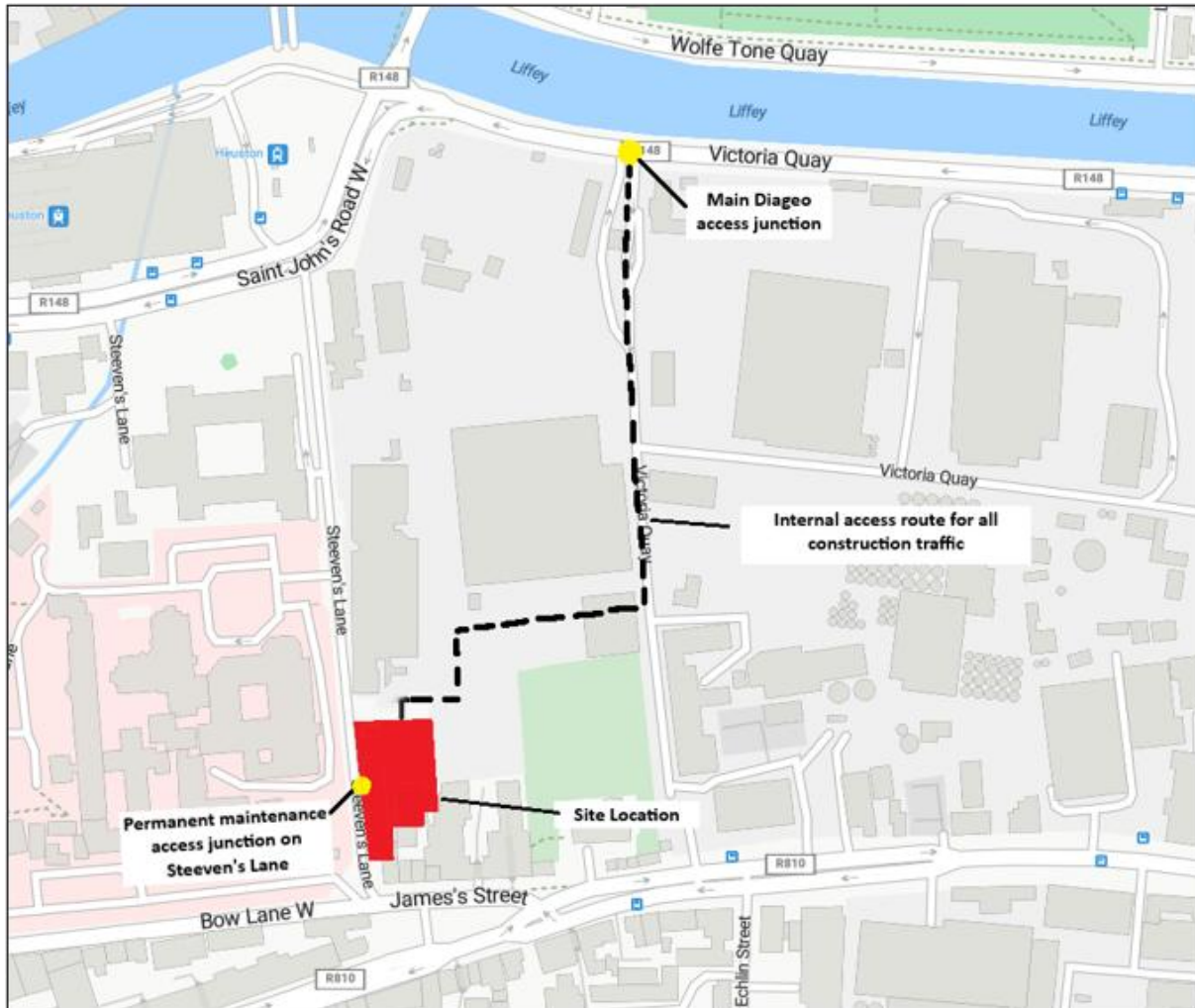


Figure 4-6: Proposed Access Routes to Substation Compound

4.8.4.1 Steeven's Lane Pedestrian Access Closures

The Proposed Development will necessitate temporary closure of pedestrian access along the eastern extent of Steeven's Lane for approximately six months during a defined phase of the construction works, primarily to facilitate the demolition works and subsequent construction of a new boundary wall and entrance, as described in Section 4.8.5 below. Any such closure will be subject to the approval of a Temporary Road Closure Permit from Dublin City Council.

A pedestrian traffic survey and comfort level assessment has been undertaken to inform the design of appropriate temporary pedestrian management measures and to maintain safe pedestrian circulation in the vicinity of the works. The assessment considered existing pedestrian flows on both eastern and western footways and assessed the impact of temporarily closing the eastern footway during the construction phase. The assessment concludes that, with the implementation of the recommended temporary crossing points, signage and pedestrian

management measures, safe pedestrian movement can be maintained throughout the construction period despite the temporary closure of the eastern footway. Further details of the assessment are provided in Section 8.8.1 and **Appendix 3**.

4.8.5 Demolition Works

4.8.5.1 Existing Buildings and Boundary Wall

The Proposed Development will require the demolition and clearance of a number of existing structures located within the site boundary. These structures currently comprise vacant and derelict buildings together with associated yard areas, which are no longer in active use. The buildings proposed for demolition are identified in Figure 4-7 below.

It is noted that the existing site boundary wall is partly integrated with, and in sections formed by, one of the existing buildings proposed for demolition. Accordingly, the demolition works will include the controlled removal of the existing boundary wall in its entirety. A new boundary treatment will be provided as part of the Proposed Development to ensure the continued security and integrity of the site boundary.



Figure 4-7: Existing Buildings to be demolished (in orange) within the proposed substation location

A detailed survey of the existing buildings and structures, refer to **Appendix 4**, has been undertaken to identify any structural considerations, service connections, or potential environmental constraints. In addition, a separate asbestos survey has been carried out, which confirmed the presence of asbestos-containing materials within certain elements of the existing buildings.

All demolition activities will be carried out in accordance with relevant health and safety regulations and best practice construction management procedures and the Demolition and Construction Management Plan prepared

for the Proposed Development. Further details are set out in the Outline Construction Environmental Management Plan (oCEMP), which forms part of the planning application documentation and includes the DCMP.

Demolition activities will generally be carried out using a controlled top-down approach to ensure the safe and systematic removal of existing structures. Works will be phased and sequenced to maintain structural stability throughout the demolition process and to minimise disruption within the constrained urban environment.

Due to the proximity of the site to the Luas Red Line and surrounding public areas, works will be carefully managed to avoid impacts on adjacent infrastructure, pedestrian routes, and neighbouring properties. Any necessary approvals, protective measures, and operational controls associated with the Luas infrastructure, including monitoring, will be agreed with the relevant stakeholders in advance of the works. Further details in relation to public realm management, Luas protection measures, and the temporary closure/diversion of the eastern pedestrian route to facilitate demolition of existing buildings are provided in Section 4.8.4.1.

Where required, asbestos removal and soft-strip works will be undertaken by appropriately licensed specialist contractors in accordance with relevant legislation and best practice procedures. Traceable records relating to the removal and disposal of hazardous materials will be maintained.

Given the site's constrained urban context and proximity to neighbouring properties and infrastructure, appropriate measures will be put in place to minimise potential impacts associated with noise, dust, vibration, and debris during the demolition process. Temporary site hoarding, dust suppression measures, and monitoring procedures will be implemented to protect the surrounding environment and neighbouring properties.

Demolition materials arising from the works are expected to comprise primarily concrete, masonry, metals, timber, glass, cabling, and mixed non-hazardous construction and demolition waste. Materials will be segregated, managed, and, where practicable, reused or recycled in accordance with relevant waste management legislation and best practice. Demolition waste management procedures are set out further in the Resource Waste Management Plan (RWMP), which is included within the Outline Construction Environmental Management Plan (oCEMP) forming part of the planning application documentation.

On completion of the demolition phase, the site will be cleared and prepared for the subsequent construction works, including removal of redundant foundations and services where required.

The demolition phase will be undertaken in accordance with the Demolition Strategy, oCEMP and outline Construction Traffic Management Plan (oCTMP) submitted as part of this planning application. These documents set out detailed procedures relating to demolition sequencing, environmental controls, traffic management and site safety.

4.8.5.2 Ground Floor / Retaining Wall Elements

The Proposed Substation Site is bounded along its northern and eastern edges by existing retaining walls. These structures will be demolished as part of the enabling works due to their poor state of repair. Their removal will also facilitate the Proposed Development by enabling the revised site levels and structural loadings associated with the new substation infrastructure. New retaining walls will be constructed in their place, designed to suit the proposed finished ground levels and to appropriately resist the increased imposed loads arising from the substation platform, equipment, and associated infrastructure. The extent of the existing and proposed boundary walls is illustrated in Figure 4-8 and Figure 4-9.

Demolition of ground floor/retaining elements will be undertaken at a later stage of the demolition sequence, once it has been confirmed that no reliance exists from adjacent structures or infrastructure. Temporary shoring or support measures will be implemented where required, particularly where excavations are undertaken or interfaces with existing structures are present.



Figure 4-8: Existing Retaining Wall to the East



Figure 4-9: Existing Retaining Wall to the North

4.8.6 Excavations and Sub-Soil Management

The Proposed Development will require excavation works to facilitate foundations, underground services, and associated infrastructure. Given the site's constrained urban context and existing level differences across the site, excavation activities will be carefully planned and sequenced to ensure safe construction and to minimise impacts on adjoining properties and infrastructure.

Excavations will be undertaken in accordance with a detailed construction methodology, taking into account ground conditions, structural requirements, and proximity to neighbouring structures and services. Temporary works, including excavation support systems and retaining structures, may be required to ensure stability during construction. Appropriate monitoring measures will be implemented where necessary to manage potential risks associated with ground movement, vibration, and settlement, particularly in areas close to existing buildings and transport infrastructure.

Material arising from excavation works will be managed in accordance with best practice construction and waste management principles. It is unlikely that any excavated materials will be reused within the site. It is proposed that excavated materials will be removed from the site by licensed waste contractors and transported to authorised recovery or disposal facilities in accordance with relevant environmental and waste management regulations.

Measures will also be implemented to minimise environmental impacts during excavation, including dust suppression, appropriate storage of excavated materials, and the prevention of sediment or debris entering the public drainage network. These measures are set out in the oCEMP submitted with the planning application.

Overall, excavation and material management activities will be undertaken in a controlled and coordinated manner, ensuring the safe progression of construction works while minimising disruption to the surrounding area.

4.8.7 Piling Works

The substructure of the Proposed Development will comprise piled foundations supporting the main substation structures. The use of piling is required to provide adequate load-bearing capacity and to address the site ground conditions.

Taking account of the constrained urban environment and proximity to adjacent structures and infrastructure, including the Luas corridor, piling will be installed via the Continuous Flight Auger (CFA) piling method with no requirement for dewatering.

4.8.8 New Retaining Wall

Prior to the installation of the piled substructure for the GIS building and transformer bund, the proposed retaining walls will be constructed as an in-situ reinforced concrete cantilever retaining walls. The eastern side retaining wall will be supported on piled foundations whilst the northern side retaining wall will be founded directly on competent ground and will not require piled foundations. Once the retaining wall has sufficiently cured and gained enough strength, backfilling of material to original level at the upper side of the retaining wall can commence.

Temporary propping will be provided to the existing boundary wall along Steeven's Lane prior to and during demolition to maintain its stability until the permanent retaining structures are in place.

4.8.9 Superstructure Construction

It is expected that the superstructure of the transformer bund will be of reinforced concrete construction. The substation building will be a structural steel frame. The first floor of the building will comprise a reinforced concrete slab cast on profiled composite metal decking supported by structural steel beams. The external facade of the substation building will consist of a insulated cladding panels as per architect's recommendations. The site

boundary along Steeven's Lane will be defined by a brick-faced boundary wall, providing an appropriate architectural treatment along the public frontage.

Specific management of deliveries of steel and concrete will be outlined in detail in the Contractors' particular proposals, based on their preferred supply routes and construction sequencing. This arrangements can be agreed with DCC prior to the commencement of the relevant construction works, where required by a planning condition.

4.8.10 Underground Cabling

Underground electrical cabling works will be carried out in a phased manner, including route verification, trenching, duct installation, cable laying, jointing and reinstatement. Prior to construction, surveys will be undertaken to confirm the location of existing services and establish baseline road and infrastructure conditions. Appropriate traffic management and permitting will be implemented to facilitate safe and efficient delivery of the works.

Cable installation will predominantly utilise open-cut trenching within public roads. This will involve excavation of the trench, installation of ducting on a prepared bedding layer, placement of suitable surround and backfill materials, and provision of warning tape. Works will typically progress in short sections to minimise disruption, with temporary reinstatement undertaken as works advance.

Joint bays will be constructed at intervals along the route to facilitate cable installation and connection, along with associated communication chambers for fibre infrastructure. Following installation of ducts, cables will be pulled through between joint bays and jointed in controlled conditions prior to final reinstatement.

Where constraints are encountered, including existing utilities, road crossings or sensitive areas, alternative methods such as trenchless installation (e.g. horizontal directional drilling) may be employed. Appropriate clearances from third-party services will be maintained throughout.

4.8.10.1 Car park Wall

To facilitate the section of the underground cable route between the Diageo site and James's Street, a section of an existing car park boundary wall, to the east of the graveyard, will be temporarily removed to allow the cables to pass through. Refer to Figure 4-10. The works will be undertaken in a controlled manner, with temporary support provided as required, and the wall will be reinstated following completion of the cabling works. Detailed methodologies will be developed by the appointed Contractor and agreed with Diageo prior to commencement.



Figure 4-10: Car park boundary wall to be temporary removed

4.8.11 Drainage Management

Given the varying site conditions, interfaces, and drainage sensitivities across the development area, the drainage management strategy during construction has been divided into three distinct zones:

- Substation site
- Diageo site
- Public roads (James's Street and Echlin Street)

This approach ensures that the specific drainage risks and management requirements associated with each area are appropriately addressed during the construction phase.

4.8.11.1 Substation Site

Surface water runoff within the substation site will be retained within the development area utilising water barriers and the existing surrounding walls. Temporary stockpiles and exposed soils will be managed to minimise the risk of silt laden runoff during heavy rainfall events. All existing pipes and gullies which are within the site are to be removed/blanked at the beginning of the works to ensure there are no unmonitored drainage routes. Runoff will be directed through silt removal measures prior to discharge via an existing manhole within the site which is connected to Uisce Éireann's combined drainage network. All existing gullies within the works area will be protected, isolated, or temporarily sealed as required for the duration of the construction works to prevent the ingress and uncontrolled discharge of silt-laden water or other contaminants to the existing drainage network.

4.8.11.2 Diageo Site

Construction activities within the Diageo site will be managed to prevent contaminated or sediment-laden runoff from entering existing Diageo drainage gullies and surface water systems. During periods of heavy rainfall, appropriate silt mitigation and filtration measures, including settlement controls, will be implemented for any

water requiring removal from excavations prior to discharge. Surface water will then be conveyed via the existing Diageo drainage network to the approved discharge point for treatment at Ringsend Wastewater Treatment Plant.

4.8.11.3 Public Roads (James's Street and Echlin Street)

Works within the public road corridor will be carried out using temporary drainage and runoff control measures to prevent the migration of sediment, debris, or contaminated water into the public drainage network. Excavations will be temporary and of limited duration, with any accumulated water managed through controlled pumping and discharge arrangements incorporating silt control measures as required.

4.8.12 Construction Plant & Machinery

Construction traffic will vary throughout the programme, with the highest levels expected during demolition and early civil works, when the removal of material and delivery of bulk construction materials will occur. Peak HGV movements are estimated to be in the order of 30 trips per day, with total HGV movements over the duration of the works estimated at approximately 4,250. These movements will be temporary in nature and largely confined to the initial stages of the programme. Estimated construction traffic movements are summarised in Table 4-2.

Table 4-2: Estimated construction traffic (loads and vehicle movements)

Activity	Phase	Loads	Movements	Duration (months)
Building Demolition	Demolition	100	200	3
Retaining Wall Demolition	Demolition	16	32	1
Site excavation (cut)	Civils	725	1450	9
Road material import	Civils	4	8	1
Building material import	Civils	122	244	3
Footpath construction	Civils	3	6	1
Compound formation (FFL)	Civils	480	960	3
Transformer bund	Civils	75	150	2
Retaining wall reconstruction	Civils	16	32	2
Temporary ramp	Civils	15	30	1
Delivery of Equipment	Electrical Installation works	30	60	3
Delivery of Ancillary Items	Electrical Installation works	50	100	3
Abnormal Load (girder-frame trailer)	Electrical Installation works	2	4	3
Abnormal Load (mobile cranes)	Electrical Installation works	2	4	3

Activity	Phase	Loads	Movements	Duration (months)
Excavation works	Cable Routing	100	200	3
Material Deliveries	Cable Routing	40	80	3
Reinstatement Works	Cable Routing	345	690	3
Total		2,125	4,250	

A peak construction workforce of approximately 30 personnel is anticipated on site. Given the site's central location and accessibility by public transport, walking and cycling will be encouraged and staff vehicle movements are expected to be limited. Based on typical construction travel patterns and vehicle occupancy rates, staff-related vehicle movements are estimated to be in the order of approximately 10-20 trips per day, with higher levels possible during peak periods.

Typical plant and machinery required during demolition and construction of the substation will include excavators, tipper trucks, concrete mixers, cranes and general site plant associated with demolition, earthworks, structural construction and electrical installation activities. The typical plant to be utilised during construction of the Proposed Development is presented in Table 4-3.

Traffic during construction will be managed by the Appointed Contractor in line with the submitted oCEMP accompanying this planning application.

Table 4-3: Construction Plant & Machinery

Plant and Machinery	Demolition Phase	Civils Construction Stage	Electrical Installation Stage	Total Construction Vehicles	Duration (months)
Long-Reach Excavator demolition excavator	1			1	3
Standard tracked excavator for piece-meal masonry demolition	1			1	3
Excavator-mounted hydraulic breaker	1			1	3
Telescopic Handler	1		1	2	5
Mobile Crane		1	1	1	5
15-30T Excavator		3	2	5	17
12T Roller		2	1	3	8
Tractor & Trailer			1	1	3

Plant and Machinery	Demolition Phase	Civils Construction Stage	Electrical Installation Stage	Total Construction Vehicles	Duration (months)
3-10T mini digger		2		2	10
Diesel Generator		1	2	2	17
CFA Piling Rig		1		1	1
Total	4	10	8	20	

4.8.13 Construction Programme

The commencement date for the development is subject to the date of grant of planning permission, pre-commencement obligations, and completion of the tender process for the selection of the contractor.

The construction works will include site preparation, demolition works, construction of the main GIS building, and the transformer compound, and site finishing works. It is envisaged that the main civil works will take approximately 18 months to complete. Following this, electrical installation and commissioning will take place, and it is envisaged that these works will also take a further ca. 18 months. Some overlap between civil construction and electrical installation is likely to occur. The intensity of the works will vary over the course of the construction programme, with the main works occurring during the civil works phase. The intensity of the works during the commissioning and energisation phases are expected to be minimal.

The grid connection works will include civil works for the trench excavation, the installation of the ducting and the reinstatement. The electrical works will include cable pulling and jointing work. It is envisaged that the civil works will take approximately 20 weeks to complete, with the electrical works requiring an additional 4 weeks.

The timing of the various construction stages and activities is indicative only and has been informed by experience on comparable projects. The programme is intended as a guide rather than a definitive schedule of works. The final construction programme may vary depending on a range of factors, including the availability and timing of outages on the existing 110 kV network, coordination requirements with ESB Networks, seasonal and weather conditions, site-specific constraints, and the availability of specialist plant, equipment, and personnel.

Table 4-4: Outline Construction Schedule

Phase	Activity	Approximate Timeline	Total Duration	Total Programme
Civil Construction	Site Preparation & Enabling Works	4 Weeks	72 Weeks	150 Weeks
	Demolition Works	18 weeks		
	Civil Construction	50 Weeks		
Electrical Installation	Electrical Installation & Pre-commissioning	52 Weeks	78 Weeks	
	Electrical Commissioning	26 Weeks		
Grid Connection Works	Civil Works	20 Weeks	27 Weeks	
	Cable Pulling and Jointing	4 Weeks		

4.8.14 Working Hours

The proposed working hours for the construction phase of the project are tabulated below (Table 3-3). No construction works will take place outside these hours, unless such work:

- Is required for technical reasons (e.g. concrete pouring, UGC trenching and ducting within the public roads) or under exceptional circumstances; or
- Is carried out with the prior written approval of the local authority.

Table 4-5: Normal Construction Working Hours

Day	Working Hours
Monday to Friday	07:00 – 18:00
Saturday	08:00 – 14:00
Sunday or Bank Holiday	N/A

4.8.15 Construction Personnel

A maximum daily workforce of approximately 30 people is expected during the peak period for construction works on site. However, typical daily workforce requirements will be less than this.

The site is very accessible by walking, cycling and public transport and therefore, no car parking for regular construction staff will be provided. Substantial on-street Pay & Display public parking is available from a number of directions, however other modes of transport will be encouraged.

4.9 Decommissioning Phase Activities

Subject to the granting of statutory consent, the Proposed Development will form part of the electrical distribution grid infrastructure. It is anticipated that the substation will remain a permanent part of the electricity distribution network with equipment being replaced as required during the operation and maintenance stage. Therefore, decommissioning is not considered further.

4.10 Use of Natural Resources

4.10.1 Land Take

The 110 kV substation development will require a permanent land take of circa 0.232 ha. This loss is not considered significant, as the area consists of artificial, man-made ground with known contamination.

4.10.2 Aggregate and Materials

The construction of the proposed 110 kV substation and associated underground cable infrastructure will require the use of a range of natural resources and construction materials. These resources will be typical of major electricity transmission infrastructure projects and will be used primarily during enabling, civil engineering, and electrical installation works.

Key natural resources and materials required during the construction phase will include:

- Aggregates and granular fill materials, including crushed stone, sand, and gravel, for trench bedding, duct installation, backfilling of excavations, and general construction works;

It is estimated that approximately 9,930 m³ aggregate materials will be required. Materials will be sourced from authorised and appropriately licensed suppliers, with preference given to locally sourced materials where practicable, to reduce transport distances and associated resource demand.

Other key construction materials will include:

- Concrete and cementitious materials, for the construction of substation foundations, plinths, cable joint bays, and associated structural elements;
- Piling materials, including reinforced concrete, steel reinforcement, steel casings (where required), and grout or slurry materials associated with bored, CFA, or driven piling techniques;
- Structural steel and reinforcing steel, for substation support structures, building frameworks, and reinforced concrete elements;
- Building envelope materials, including architectural and structural components such as cladding systems, roofing materials, insulation, doors, glazing, and internal finishes associated with the substation buildings;
- Bituminous materials, where road opening and reinstatement works are required within the public road network for underground cable installation;
- Structural steel and reinforcing steel, for substation building elements, support structures, and reinforcement of concrete foundations;
- Copper and aluminium conductors, used within underground cables and associated electrical infrastructure;
- Cable ducting and protective materials, typically comprising high-density polyethylene (HDPE) or similar polymer-based products;
- Water, used for concrete production, dust suppression, welfare facilities, and general construction activities;
- Diesel and other fuels, required for construction plant, generators, and delivery vehicles; and

The design and construction approach will seek to optimise material efficiency through appropriate engineering design, minimisation of waste generation, and reuse of excavated material where suitable and compliant with environmental and geotechnical requirements.

No significant use of non-renewable natural resources beyond those typical for electricity transmission infrastructure projects is anticipated. Resource consumption will be temporary in nature and limited to the construction phase of the Proposed Development.

4.11 Production of Wastes

A Resource and Waste Management Plan, included within the Outline Construction Environmental Management Plan (oCEMP) forming part of the planning application documentation, has been developed to address the waste generated by the Proposed Development.

During construction, it is estimated that, approximately to 11,745 m³ of excavated material could potentially be generated. This estimate is based on the in-situ excavation and does not include a bulking factor. All excavated material will be transported off-site by a licensed waste contractor to an authorised waste facility. There is a

potential risk of encountering contaminated land during excavation works. This risk has been considered in the Land and Soils Assessment (Section 8 of this report), and appropriate mitigation measures are proposed, including further assessment, classification, handling, and disposal of any contaminated material in accordance with applicable waste management legislation and best practice guidance.

Other construction phase waste may consist of surplus hardcore, stone, concrete, ducting, electrical wiring, metal off-cuts, shuttering timber, plastic waste and packaging, and unused oil and diesel. These wastes will be stored in the construction compound and collected at intervals and taken off site to be reused, recycled and disposed of in accordance with best practice procedures at an approved facility. All waste to be taken off-site will be collected by an approved contractor and recycled or disposed of at an approved facility. Domestic type waste generated by contractors will be collected on site, stored in an enclosed skip at the construction compounds and disposed of at a licensed landfill facility.

The types of wastes to be generated will be similar to established construction waste streams and will not require unusual or new treatment options. Waste volumes will not be significant as to require new permitted treatment, storage and disposal facilities as there is sufficient capacity at existing licensed disposal or recycling facilities.

The operational aspect of the Proposed Development would produce a minimal amount of waste. Wastes arising from the general operation and maintenance would principally include residual lubricating oils, cooling oils, packaging from spare parts and any interceptor silts and oils. The containment and disposal of residual waste oils and interceptor sludges will be carried out by an approved contractor. Such operations will be carried out in accordance with the Waste Management (Hazardous Waste) Regulations, 1998. The remaining wastes will all be removed from site and reused, recycled or disposed of in an authorised facility in accordance with best practice.

In terms of wastewater, sanitary and welfare facilities will discharge to the existing combined public sewer at Steeven's Lane. Further detail is provided in Section 4.5 of this report.

4.12 Emissions

The anticipated emissions likely to be generated by the Proposed Development are summarised in Table 4-6 below. Each of these emissions have been assessed. Refer to Section 8 of this Report.

Table 4-6: Anticipated Emissions to be generated by the Proposed Development

Project Phase	Aspect	Potential Emission/Nuisance
Demolition	Air	Fugitive dust emissions may arise from demolition activities, including breaking works, excavation, handling of demolition materials, loading/unloading activities, and vehicle movements within the site. Exhaust emissions from demolition plant and machinery may also generate emissions including carbon dioxide (CO ₂), nitrogen oxides (NO _x), sulphur dioxide (SO ₂), carbon monoxide (CO), and particulate matter (PM ₁₀).
	Noise	Demolition activities, including breaking works, removal of structures, excavation works, and the operation of demolition plant and machinery, have the potential to generate temporary noise and vibration emissions.
	Water	Potential surface water run-off arising from demolition activities and exposed surfaces; sediment mobilisation and suspended solids from breaking, removal, and clearance works; accidental spillages of fuels, oils, and demolition-related materials; wash water from plant and equipment; and foul water arising from site welfare facilities.

Project Phase	Aspect	Potential Emission/Nuisance
	Traffic	Demolition activities will generate construction-related traffic, including heavy goods vehicles associated with material removal, waste transport, and delivery of plant and equipment, which may result in temporary disruption to the surrounding road network.
Construction	Air	The main emissions to atmosphere during the construction stage of the project is from fugitive dust associated with the following activities: • Groundworks associated with excavation and construction of the project infrastructure. • Transportation and unloading of crushed stone around the site. • Vehicular movement over potentially hard dusty surfaces. The movement of machinery, construction vehicles and the use of generators during the construction phase will also generate exhaust fumes containing predominantly carbon dioxide (CO₂), sulphur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter (PM₁₀).
	Noise	Traffic flows, excavation works, mechanical machinery, piling and electrical equipment typically used for construction projects would generate noise emissions.
	Water	Potential surface water run-off arising from exposed soils, open excavations, and construction activities associated with the substation and underground cable installation within the public road network; sediment mobilisation and suspended solids within run-off; accidental spillages of fuels, oils, and construction materials; dewatering discharges from excavations and joint bay works; concrete washout water and cementitious run-off from construction activities; and foul water arising from site welfare facilities.
	Traffic	The additional traffic, especially heavy goods vehicles associated with the construction phase, and abnormal loads for the delivery of plant such as cranes and transformers has the potential to cause nuisance to those using the local road networks.
Operation	Air	N/A. No point source emissions would be produced during operation.
	Noise	Noise emissions from the substation plant and transformers. No noise emissions associated with the underground grid connections
	Water	No process effluent or direct discharges to surface water or groundwater will arise from the operation of the Proposed Development. Surface water runoff from the substation will be captured and managed through the site drainage system. Foul wastewater generated from sanitary and welfare facilities will discharge to the existing public sewer network. No water emissions are associated with the operation of the grid connection infrastructure.
	Traffic	The substation will be monitored remotely with only occasional trips generated by maintenance and monitoring personnel. No traffic associated with the grid connection.

5. Alternatives Considered

The following sets out the site selection and reasonable alternatives considered for the proposed substation development. The selection focused on the strategic options available to address identified electricity network capacity constraints in the Dublin Central / South City area. Each alternative was evaluated having regard to technical feasibility, environmental and planning considerations, deliverability, and the ability to meet forecast demand in a timely and sustainable manner.

Site selection and alternatives to the Proposed Development are discussed under the following headings:

- Alternative Locations;
- Alternative Network Solutions; and
- Alternative Site Layouts.

5.1 Alternative Locations

A site selection exercise was undertaken to identify a suitable location capable of accommodating the required infrastructure while minimising environmental, planning and delivery constraints.

The identification of suitable locations for electricity substations is guided by a number of key criteria, including proximity to the existing electricity network, and known load centres, technical feasibility of cable connections, and the availability of sites of sufficient size to accommodate the required infrastructure. Within this established urban area, the availability of suitably sized undeveloped or underutilised land is extremely limited, significantly constraining the range of feasible site options for substation development. Consequently, no other reasonable alternative sites capable of meeting the technical, operational and spatial requirements of the Proposed Development were identified.

As part of the site selection process, a high-level feasibility assessment was carried out for two potential locations within the area: a site at St James's Walk, Dublin 8 (formerly 1–4 Brandon Terrace), and a site located within the Diageo St James's Gate complex (the Proposed Development). The assessment considered planning context, environmental and archaeological constraints, site size, constructability, flooding, and the feasibility of connecting each site to the existing electricity network. Refer to Figure 5-1 for proposed and alternative site location map.

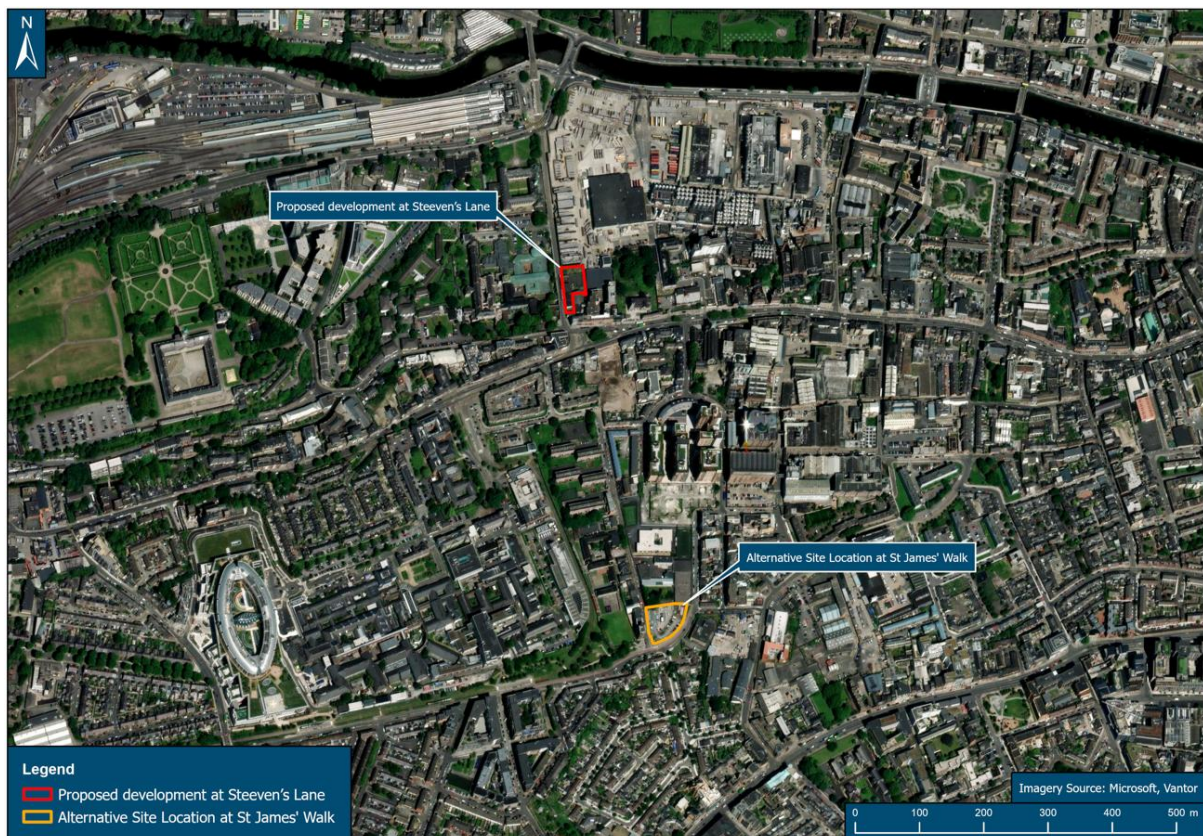


Figure 5-1: Proposed and alternative site location map

The St James's Walk site comprises an undeveloped plot located within a dense urban environment, with a school immediately to the north, residential apartments to the west and further residential and industrial properties nearby. The limited area of the site was considered a constraint, restricting layout flexibility, construction activities and future operational requirements. The surrounding sensitive land uses further limited opportunities to mitigate construction and operational impacts.

A key limitation associated with the St James's Walk site was the absence of a clearly viable cable route to connect the proposed substation to the existing electricity network, representing a significant technical and delivery risk. In addition, potential archaeological and cultural heritage constraints were identified, particularly in relation to the historic Grand Canal wall along the eastern boundary of the site.

Taking account of these cumulative constraints, the St James's Walk site was discounted as a reasonable alternative.

Following the site selection process, the site within the Diageo St James's Gate lands emerged as the best technical option. The site is located in close proximity to the existing 110 kV network, reducing the need for extended cable routes and associated impacts on the local road network. It is also centrally located in relation to the primary load demand within the area.

5.2 Alternative Network Solutions

As part of ESNB's network assessment, a range of upgrade options focusing on existing substations were considered. Upgrades of Camden Row 38 kV, and Marrowbone Lane 38 kV were assessed but rejected due to the absence of physical space for additional transformers and insufficient firm capacity to meet demand without reliance on further reinforcement from adjacent stations.

Newmarket 38 kV substation was also assessed as a potential reinforcement option. The installation of a second transformer would provide a medium-term (2–3 year) improvement by relieving loading on ageing assets and facilitating limited additional connections in this part of the city. However, the upgrade would not provide sufficient capacity to accommodate large individual loads. Furthermore, this option would not adequately offload nearby substations or address long-term capacity requirements. As such, while Newmarket may form part of wider medium-term network planning, it does not remove the need for a new strategic capacity injection.

Watling Street 38 kV and Kingsbridge 38 kV were also examined. While each offered theoretical transformer uprating potential, they would not address the underlying capacity constraints. In addition, Kingsbridge presents significant space and construction constraints.

Heuston Square, Francis Street and Inchicore (110 kV) were similarly discounted due to their distance from the area of need, the high cost and environmental impacts associated with extensive cabling and trenching, and the inability to resolve localised capacity deficits.

Collectively, these options were deemed not technically feasible to provide the required connection capacity and ability to offload existing substations thus providing improved security of supply.

Having discounted reinforcement of existing substations, ESBN identified the best technical solution as the development of a new 110 kV / MV distribution substation within Dublin South West Inner City to provide strategic capacity injection directly into the constrained area.

5.3 Alternative Site Layouts

The proposed substation layout was developed through an iterative design process which considered the constrained nature of the site, environmental factors and operational requirements from an early stage. Alternative arrangements for the positioning and form of the principal infrastructure were examined; however, the limited developable area and the presence of multiple physical and infrastructural constraints significantly influenced the final layout.

The development comprises a compact 110 kV / MV substation compound with a gross area of approximately 0.232 ha, within an overall scheme area of approximately 1.73 ha required primarily to facilitate construction of underground cable infrastructure. Key elements include a two-storey GIS building, transformer bays with fire walls, underground 110 kV and MV circuits and other underground services.

The site has a number of constraints including the level difference to the adjoining Diageo site, an existing right of way in the south-west corner of the site, the proximity to the adjoining buildings along James Street and the adjacent Luas line. The selected layout located the GIS building as central in the site as possible to minimise impact on the surrounding boundaries whilst providing sufficient space for the required underground cable routes. The 110 kV transformers were located on the northern end of the site to maximise the distance to sensitive receptors.

Although alternative site layouts were considered, the GIS building layout is dictated by electrical equipment configuration and safety requirements, limiting the scope for alternative building layouts and heights.

The underground cable route corridors were selected to connect the proposed substation with existing and proposed 110 kV infrastructure using established streets and service corridors, including Bow Lane West, Echlin Street and James's Street. A key factor in the cable routing design was the avoidance of Steeven's Lane due to the Luas line. The proposed cable route design minimises the extent of road openings and associated traffic disruption and represents the most technically feasible and environmentally appropriate option.

5.4 Conclusion

The siting and design of the Proposed Development at the existing brownfield site has been carefully selected based on a consideration of the reasonable alternatives.

In conclusion it is considered that the proposed site and the Proposed Development represent the most appropriate location and design option currently available.

6. Planning Policy Context and Assessment

This section of the PECR sets out a summary of the relevant international, national, regional, and local planning policies, against which the Proposed Development will be assessed. It also demonstrates how the Proposed Development is consistent with these policy and guidance documents. It is set out under the following key headings:

- National Planning Policy Context;
- Regional Planning Policy Context; and
- Local Planning Policy Context.

6.1 National Planning Policy

6.1.1 National Planning Framework (Project Ireland 2040) and the National Development Plan Review 2025

Project Ireland 2040 is the overarching policy guiding the sustainable development of Ireland. This policy is comprised of the National Planning Framework (NPF) First Revision, which sets out a vision for the social and economic growth of the nation to 2040, and the National Development Plan (NDP) Review 2025, which attributes funding to projects which achieve the goals of the NPF.

The development of Ireland's electricity grid is a key part of the NPF, coming under National Strategic Outcome (NSO) 8: *Transition to a Carbon Neutral and Climate Resilient Society*. It is recognised within this NSO that it will be imperative that the national grid is developed and upgraded to accommodate increasing levels of demand and supply, a key element reiterated under National Policy Objective 71:

National Policy Objective 71: *Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.*

The NDP sets out funding priorities for national, regional, and local projects based on the NSOs outlined in the NPF. Investment priorities for the Irish electricity grid are outlined in the NDP in Chapter 5.8. The NDP outlines that investment in grid infrastructure will enable ESB and EirGrid “to significantly increase capital investment to expand electricity transmission and distribution network infrastructure”. The importance of infrastructure development in achieving the wider goals of the NDP and NPF is outlined in Chapter 8.5 of the NDP:

“...this infrastructure is required to underpin the development of all other economic and social infrastructure we need to function as a society. It is also vital to enable the development of the 300,000 homes we need to meet the Government's housing target, and to support our economy's competitiveness.”

6.2 National Sectoral Policies

6.2.1 Climate Action Plan 2025

Electricity has a challenge ahead to achieve a 75% reduction in emissions by 2030, based on a 2018 baseline and its success has knock-on implications for other sectors in reaching their target. Achieving the target heavily relies on the continued deployment of renewable energy generation and supporting electrical grid infrastructure enhancements. The plan outlines the importance of strengthening the grid connection to achieve the goals for the electricity sector:

"This represents an immense challenge as the sector not only has a requirement to reduce emissions, but also to meet the increasing electricity demand required for our economy, ensuring the energy security of the State, and supporting those sectors which are decarbonising through electrification."

The Climate Action Plan 2025 (CAP25) refers to a need for improvements to grid infrastructure which will enable a renewables-led system to radically reduce emissions in the electricity sector, protect our energy security, and ensure our economic competitiveness. CAP25 signifies support for the development of electricity grid enhancements, in order to allow greater capacity on the grid to support the transition to greater renewable generation capacity. The Proposed Development will be in line with CAP25.

The support for the construction of new and upgrades to existing electricity grid infrastructure outlined in the CAP25, is echoed in the revised NPF and NDP. The proposed substation will strengthen the distribution system, providing greater security of electricity supply in the local area, and enabling future development in the South West Dublin Inner City area in line with zoning objectives in the Development Plan.

6.3 Regional Planning Policy Context

6.3.1 Regional Spatial and Economic Strategy (RSES) 2019 – 2031

The Proposed Development is located in the Eastern and Midlands Regional Assembly (EMRA). Regional Assemblies guide the social and economic development of the region, by applying objectives set out by Project Ireland 2040 to the regional context. The EMRA has published the Regional Spatial and Economic Strategy (RSES) 2019 2031 to guide the region's development in line with its expected population growth. It aims to ensure that the services, including energy, within the region are developed to support social and economic growth, and funding is outlined within the document to allow this.

Aligning with the NPF and NDP, the RSES advocates for energy security in the context of increasing demand due to population growth and economic development (10.3 'Energy' pg. 224):

"A secure and resilient supply of energy is critical to a well-functioning region, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity. With projected increases in population and economic growth, the demand for energy is set to increase in the coming years."

The RSES cascades from the themes in the NPF and again reiterates the need to develop the grid in the Dublin region to facilitate the predicted growth in the region and provide security of supply for future industry:

"The Dublin Region is the major load centre on the Irish electricity transmission system. Approximately one third of total demand is located here, similarly the Eastern Region is a major load centre on the Irish transmission system... Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. This

is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality, electricity supply.” (RSES, Pg. 224)

The Proposed Development directly supports the policy set out in the RSES, specifically RPO 10.22:

RPO 10.22: *Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/distribution of a renewable energy focused generation across the major demand centres.*

6.3.1.1 Dublin Metropolitan Area Strategic Plan

The Dublin Metropolitan Area Strategic Plan (the MASP) has been prepared as part of the RSES and sets out a 10 to 12 year strategic planning and investment framework for the Dublin metropolitan area. The MASP outlines a number of guiding principles, including the alignment of growth with enabling infrastructure and seeking to:

“Promote quality infrastructure provision and capacity improvement, in tandem with new development and aligned with national projects and improvements in water and wastewater, sustainable energy, waste management and resource efficiency”.

The MASP highlights the importance of the development of the energy distribution and transmission network in the Region, with RPO 5.1 seeking to:

“Support continued collaboration between infrastructure providers, state agencies and local authorities in the metropolitan area to inform cross sectoral investment plans and capital spending plans to accelerate the development of strategic development areas and secure the best use of public lands in the Dublin Metropolitan Area”.

By investing in the grid infrastructure in Southwest Inner Dublin City, ESB are supporting the future development of the region in line with the policies set out in the RSES.

6.4 Local Planning Policy Context

6.4.1 Dublin City Development Plan 2022-2028

The Dublin City Development Plan 2022-2028 (the CDP) serves as the key planning policy document for the Dublin City Council (DCC) administrative area and includes policy objectives and development standards for all development types. The aim of the CDP is to improve the quality of life for its citizens and ensure that Dublin City is an attractive place to live, work and visit. The following sections considers relevant policies and guidelines from the CDP as relevant to the Proposed Development.

6.4.1.1 Energy Infrastructure and Climate Action

Chapter 9 of the CDP relates to ‘Sustainable Environmental Infrastructure and Flood Risk’ and notes the following as a strategic issue: “facilitating the provision of critical energy utilities and the transition to alternative, renewable, decarbonised and decentralised energy sources”. Relevant objectives regarding energy infrastructure are noted below:

SI49 - Support for Energy Utilities: *To support the development of enhanced electricity gas supplies, and associated transmission and distribution networks, to serve the existing and future needs of the City, and to facilitate new transmission infrastructure projects and technologies including those to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid that might be brought forward in the lifetime of this Plan. In this respect, the City Council will have regard to the ‘Guiding Principles’ for facilitating the provision of energy*

networks set out by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (2019-2031).

SI50 - Undergrounding of Energy Utility Infrastructure: *To require that the location of local energy services such as electricity, telephone and television cables be underground wherever possible, and to promote the undergrounding of existing overhead cable and associated equipment, where appropriate, in the interests of visual amenity and facilitating compact urban development.*

SI51 - Renewable Energy Use and Generation: *To promote renewable energy generation, use and storage at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.*

SI029 -Smart Grid: *To support the roll-out of the Smart Grids and Smart Cities Action Plan (2013) in order to enable new connections, grid balancing, energy management and micro-grid development.*

Having regard for the above, it is considered that the Proposed Development directly supports the achievement of policies SI49, SI50, SI51 and SI029 above, by reinforcing the electrical infrastructure in Dublin. Upgrading of infrastructure is required to cater for the increased electrification of sectors such as transport and housing.

6.4.1.2 Strategic Development Regeneration Area

Chapter 13 of the CDP identifies 17 no. Strategic Development Regeneration Areas (SDRAs) and sets out the overarching framework and guiding principles for the future development of each these areas. The CDP notes that these SDRAs are capable of delivering significant quantities of homes and employment for the city and key supporting infrastructure.

The Proposed Development lies within SDRA 15 'Liberties and Newmarket Square'. While considerable urban consolidation and regeneration of the Liberties area has occurred in recent decades, significant opportunities for regeneration and enhancement still exist, as identified in the guiding principles for this SDRA. It is an objective of the plan to recognise the unique role the Liberties plays in Dublin's character and to ensure that regeneration safeguards the Liberties' strong sense of community identity and cultural vibrancy into the future.

Objective SDRAO1 sets out overarching principles applicable to all SDRAs.

Per Objective SDRAO1 of the CDP *"all development within the SDRAs must be of the highest architectural quality and adhere to the key architectural and urban design principles set out in Chapter 15 [of the CDP] in order to create long term, viable and sustainable communities aligned with the principles of the 15- minute city".*

These principles broadly align with the CDP's design standards and criteria contained in Chapter 15 (of the CDP), which are addressed in Section 6.4.1.4 of this PECR.

In addition, the CPD also identifies area-specific guiding principles for each SDRA, illustrated on an accompanying Guiding Principles Map (see Figure 6-1). Of particular relevance to the Proposed Development are the following objectives that relate specifically to SDRA 15:

Urban Structure

- To recognise the importance of the historical spine of the Liberties and its medieval street network.
- To identify permeability interventions to augment this network and also to restore historic laneways, where appropriate.
- To recognise and enhance the role that civic and historic buildings play in the identity and legibility of the Liberties area.
- To support the regeneration of large blocks in order to provide the opportunity to improve the human scale of the existing urban structure.

- To reinforce a sense of place and identity by promoting the development of distinctive character areas as indicated on the Guiding Principles Map.

Land Use & Activity

- To recognise the varied and historic land-use mix that contributes to the character of the Liberties area.

Height

- To support 6-8 storeys as a benchmark height for new developments in the SDRA area where conservation and design considerations permit.

Design

- To identify and protect the distinctive heritage of the area and encourage sustainable and innovative reuse of historic spaces and structures.
- To ensure that the individual character of different areas within the Liberties is protected and enhanced by contemporary and high-quality design of new buildings.
- To ensure that new buildings respond to the scale and grain of the prevailing character of the particular street.

Movement and Transport

- To facilitate the delivery of the permeability interventions identified in the Guiding Principles Map which seek to increase accessibility throughout the area and in particular, to the identified network of walking and cycling infrastructure that is emerging throughout the SDRA.

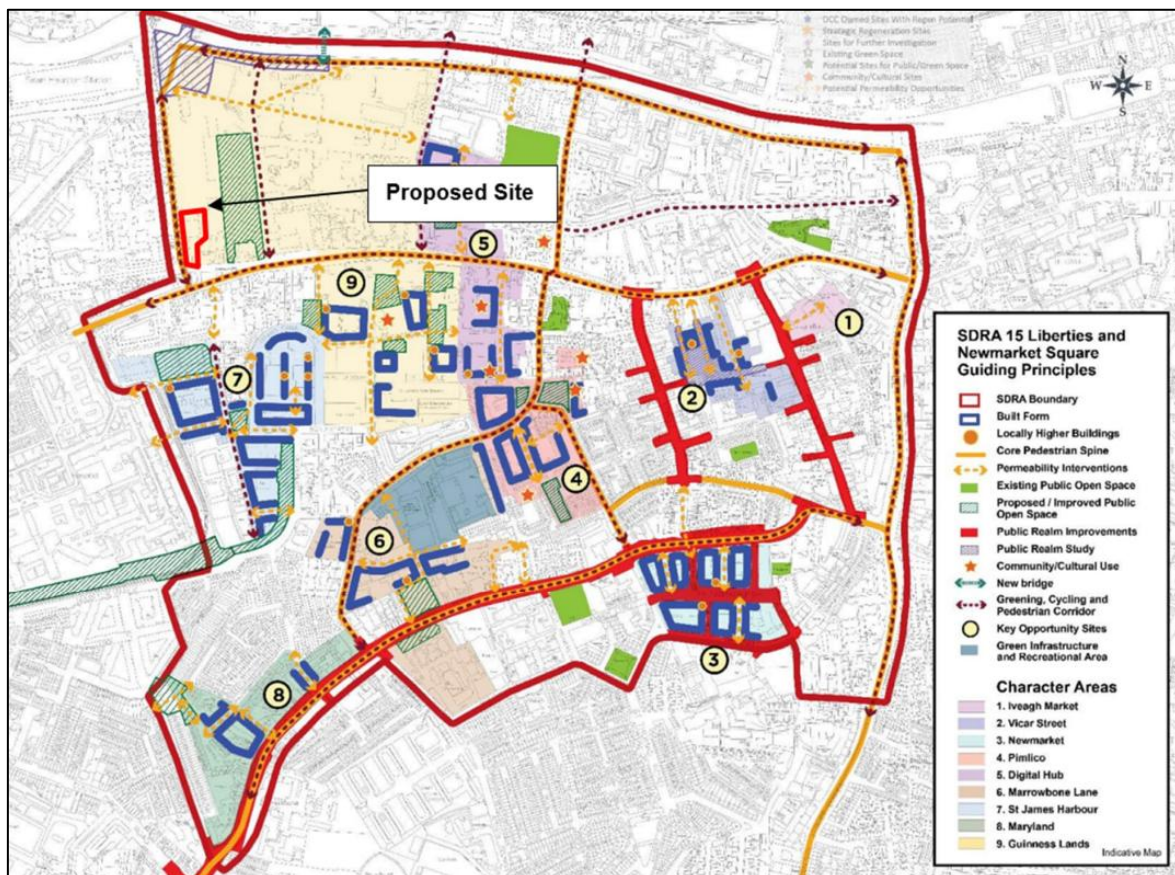


Figure 6-1: Site within context of SDRA

As illustrated in Figure 6-1 above, the site is located within the 'Guinness Lands' Character Area. It is worth noting the presence of a 'Public Realm Strategy' at the north-west corner of the wider Diageo site and partially along Victoria Quay. Victoria Quay and Steeven's Lane are both identified as being part of the 'Core Pedestrian Spine', as well as being 'Greening, Cycling and Pedestrian Corridor(s)'. In addition, permeability interventions are proposed within the northern portion of the Diageo lands to improve connectivity.

Specific Guinness Lands Principles

While the operational requirements of the Guinness Lands to the north of Thomas Street are expected to remain in place beyond the term of the development plan, the CDP recognises that opportunities for redevelopment of smaller land parcels may arise in the medium term. The guiding principles for these lands are intended to inform any future redevelopment proposals and ensure compatibility with the ongoing operational requirements of the brewery.

Key principles include:

- Enhancing the pedestrian and amenity quality of the connection between Heuston Station and St James's Hospital.
- Ensuring that any redevelopment along Steeven's Lane contributes positively to this improved connection.
- Supporting base heights of 6–8 storeys, where heritage considerations allow, with locally higher elements of 12–14 storeys at identified locations.
- Requiring the preparation of a masterplan in advance of major redevelopment proposals to address urban structure, connectivity and phasing.
- Incorporating a community or cultural facility of significance as part of any major redevelopment of the lands.

In this context, the Proposed Development will not prejudice the delivery or operation of existing or future pedestrian, cycling or transport connections along Victoria Quay or Steeven's Lane. Given the scale and nature of the proposed infrastructure development, careful attention has been given to design quality to ensure compatibility with the urban structure and design principles outlined above. Engagement with Dublin City Council through pre-application consultation confirms alignment with the relevant SDRA objectives.

With reference to the Guinness Lands specific principles, the Proposed Development is considered compatible with the ongoing operational requirements of the brewery. The proposed height is modest in comparison to the benchmark heights identified for the area. While the CDP indicates that a masterplan should accompany major redevelopment proposals within the Guinness Lands, it is considered that such a requirement does not apply to a standalone substation development.

Having regard to the above SDRA objectives, and as outlined in Section 6.4.1.4 of this PECR, the Proposed Development incorporates a series of public realm improvements. These include an architecturally designed boundary treatment to assist in screening the substation structures, soften the interface with the public realm and enhance visual interest along Steeven's Lane.

Having regard to the above, the Proposed Development is considered to be consistent with the objectives of the CDP for SDRA 15 – Liberties and Newmarket Square. Further details relating to the proposed layout, design, scale, massing, boundary treatments, materials and finishes are set out in the Architectural Design Statement prepared by Ryan&Lamb Architects, submitted as part of the subject SID planning application.

6.4.1.3 Land Use Zoning

Chapter 14 of the CDP sets out the general land-use and zoning policies and objectives of the plan and provides an explanation of the land use categories and the zoning objectives which apply.

The zoning designation of the site has been identified from Map Set E3, an extract of which is presented below in Figure 6-2. The Proposed Development is located on lands zoned 'Z4: Key Urban Villages/Urban Villages'.

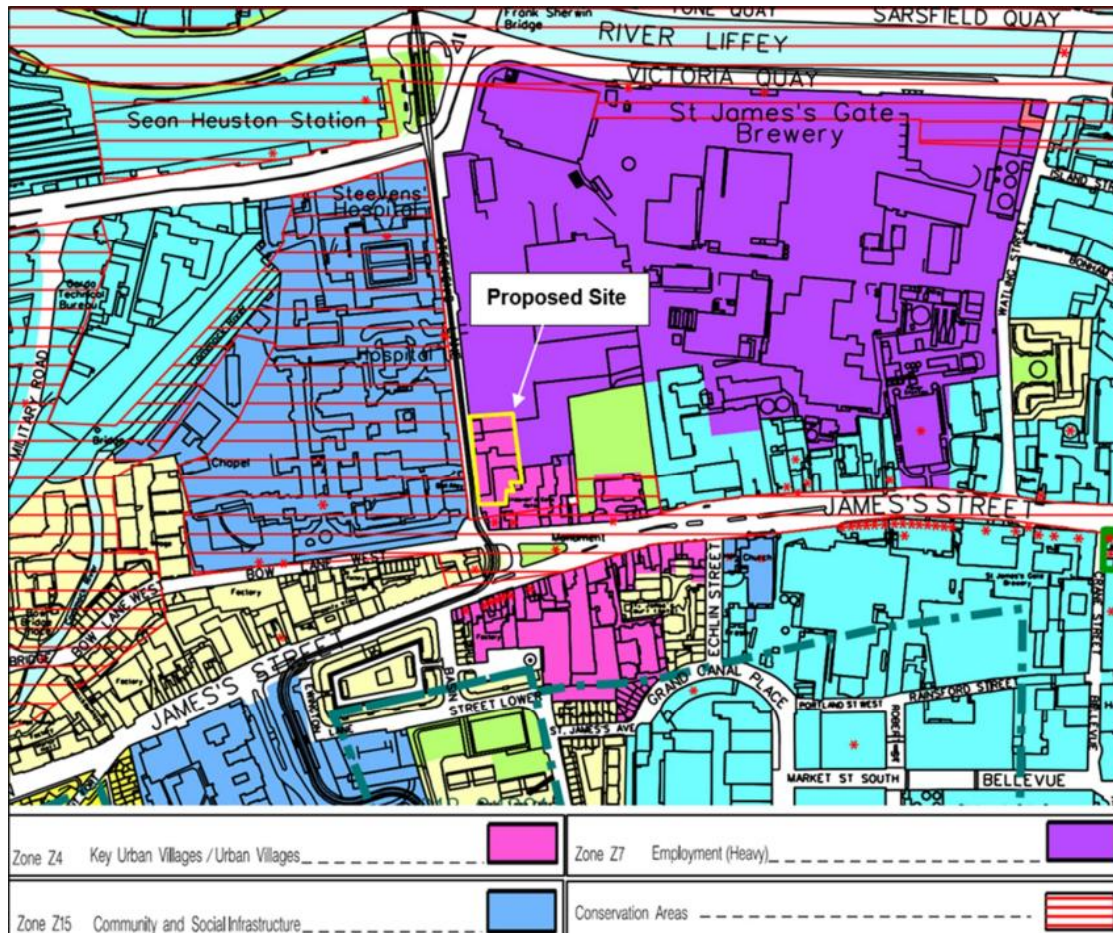


Figure 6-2: Land Use Zoning Provisions (extract from Map Set E of the CDP)

The objective of Z4 zoning is “to provide for and improve mixed-services facilities.”

Key Urban Villages and Urban Villages (formerly District Centres) “function to serve the needs of the surrounding catchment by providing a range of retail, commercial, cultural, social and community functions that are easily accessible by foot, bicycle or public transport; in line with the concept of the 15-minute city”.

Proposals for development within these areas should be in accordance with the below principles in addition to complying with the land-use zoning:

- Mixed-Use: Promote an increased density of mixed-use development including residential development with diversity in unit types and tenures capable of establishing long-term integrated communities.
- Prioritise the primacy of pedestrian and cyclist movement and address the issue of parking facilities and parking overflow. Ensure that enhanced connectivity and permeability is promoted.
- Promote the creation of a vibrant retail and commercial core with animated streetscapes.

- Encourage the development/redevelopment of under-utilised sites and intensification of underutilised areas such as surface parking. Opportunity should be taken to use the levels above ground level for additional commercial/retail/services or residential use.
- Community and Social Services: Encourage these centres to become the focal point for the integrated delivery of community and social services.
- Built Environment: Ensure the creation of high-quality, mixed-use urban districts with a high-quality public realm, distinctive spatial identity and coherent urban structure of interconnected streets and child-friendly, accessible public spaces and urban parks. Development should have regard to the existing urban form, scale and character and be consistent with the built heritage of the area.

Under this zoning objective, a 'public service installation' is a permissible use. This use is defined in Appendix 15 – Land Use Definitions of the CDP as follows:

A building, or part thereof, a roadway or land used for the provision of public services including those provided by statutory undertakers. Public services include all service installations necessary for electricity, gas, telephone, radio, telecommunications, television, data transmission, drainage, including wastewater treatment plants.

In this regard, it is considered that the Proposed Development is fully compliant with the land use zoning objective for the subject site.

Surrounding Zone Context

The lands surrounding the subject site comprise a variety of zoning designations, reflecting the mixed-use character of the wider area. Lands to the northeast are zoned Z7 – Employment (Heavy Industry), while lands to the west are zoned Z15 – Community and Social Infrastructure. In addition, adjoining lands immediately to the south and west, while not a zoning designation, they are also identified as being within a 'Conservation Area'.

Dublin City Council is committed to the protection and enhancement of Conservation Areas. **Policy BHA9** of the CDP seeks to:

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

Development proposals within or affecting a Conservation Area should therefore:

- Respect the existing setting and character of the surrounding area.
- Protect the amenities of the surrounding properties and spaces.
- Provide for an assessment of the visual impact of the development in the surrounding context.
- Ensure materials and finishes are in keeping with the existing built environment.
- Positively contribute to the existing streetscape.
- Retain historic trees.

In this regard, the Proposed Development has been designed with careful consideration of the surrounding context and the proximity of the Conservation Area. The design approach incorporates appropriate boundary treatments and architectural detailing to ensure that the development integrates appropriately with the surrounding built environment. Further details regarding the design response to the local context are set out in the Architectural Design Statement and Conservation Report prepared by Ryan & Lamb Architects, included in **Appendix 5** and **Appendix 6** respectively.

Transitional Zones

The subject site is located in proximity to a number of different zoning objectives and therefore represents a transitional location between varying land-use sensitivities.

Chapter 14.6 of the CDP notes that while zoning objectives indicate the uses permitted within each zone, it is important to avoid abrupt transitions in scale and land use between adjoining zones. In this regard:

"In dealing with development proposals in these contiguous transitional zone areas, it is necessary to avoid developments that would be detrimental to the amenities of the more environmentally sensitive zones".

In recognition of this varied land-use context, the Proposed Development incorporates design measures including high-quality boundary treatments and careful consideration of building form, scale and massing to ensure that the development integrates appropriately with the surrounding urban fabric. These measures ensure that the development responds sensitively its transitional context.

Accordingly, the Proposed Development is considered to be consistent with the land-use zoning objectives of the CDP and appropriate to the wider zoning context of the area.

6.4.1.4 Development Standards

Chapter 15 of the CDP sets out development standards and criteria to be considered in the development management process so that development proposals can be assessed both in terms of how they contribute to the achievement of the core strategy and related policies and objectives.

Architectural and Urban Design Parameters

Section 15.4.2 of the CDP has regard for architectural and urban design and notes that:

"Imaginative, innovative and contemporary architecture is encouraged in all development proposals, provided that it respects Dublin's heritage and local distinctiveness and enriches the city environment. Through its design, use of materials and finishes, development will make a positive contribution to the townscape and urban realm, and to its environmental performance.

Through the use of high-quality materials and finishes and the appropriate building form, the architectural quality of development should positively contribute to the urban design and streetscape, enhancing the overall quality of the urban environment. In particular, development should respond creatively to and respect and enhance its context".

The CDP notes that underutilised lands and brownfield sites should be developed with consideration for the following inter alia:

- *"To encourage innovative, high quality urban design and architectural detail in all new development proposals.*
- *To analyse and review the surrounding built environment to ensure the new development is consistent with the character of the area.*
- *To contribute to the streetscape creating active and vibrant public realm.*
- *To provide for appropriate materials and finishes in the context of the surrounding buildings.*
- *To carefully integrate appropriate landscape planting and trees and retain and ecological features on the site".*

Section 15.5.7 of the CDP relates to materials and finishes and notes that developments the following are required of all new developments:

- *"To ensure materials and finishes complement the existing pallet of materials in the surrounding area.*

- *Promote durability to ensure a good visual appearance over time.*
- *The design and layout of buildings, together with the robustness of materials used in their construction, should be such as to discourage graffiti, vandalism and other forms of anti-social activity.*
- *To support the use of structural materials that have low to zero embodied energy and CO2 emissions as well as the use of sustainably sourced building materials and the reuse of demolition and excavated materials."*

Section 15.6.13 of the CDP relates to boundary treatment and notes that:

- *"Walls, fences, metal railings and gates used to define spaces and their usage all impact on the visual character and the quality of a development. These should be selected so as to be an integrated part of overall design".*

Having regard for the above, it is noted that the subject site is located in a transitional area between Guinness Brewery-related uses, established residential areas and commercial properties. The urban form is defined by strong edges, continuous boundary treatments and limited permeability along Steeven's Lane and as such there is a need for new development to be designed with consideration for surrounding land uses. It was acknowledged at an early stage in the design process that the Proposed Development would need to be carefully integrated into the existing environment, with particular attention given to ensuring an appropriate interface is provided between the proposed substations and the public realm. Particular regard was also given for the proximity of the subject proposals to the surrounding built environment, including nearby institutional and heritage-sensitive uses.

In this context, the proposed substation building has been designed to incorporate architectural articulation and façade composition and materials and finishes that break up the scale and massing of these forms and provide visual interest to the streetscape. To the front of the site, the required security fencing is integrated within a carefully articulated boundary treatment, which provides visual interest while maintaining necessary security requirements. (see Figure 6-3 below).

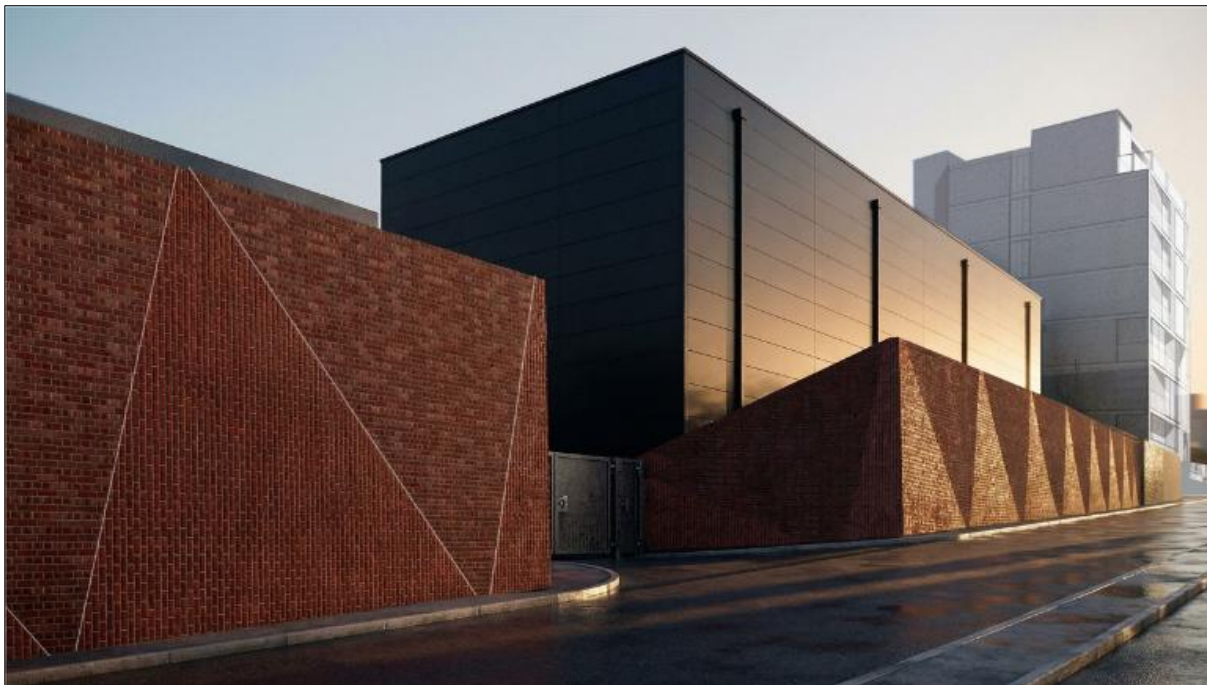


Figure 6-3: Proposed Substation Building Concept Design (Source: Ryan&Lamb Architects)

The proposed materials and finishes for both the substation buildings and the site boundary and external surfaces have been carefully selected to complement the existing palette of materials in the area and have particular regard

for the site's historic industrial context. The selected materials and finishes have been chosen for their durability and appearance over time while delivering a distinctive contemporary character that sits comfortably in this established urban context.

In this regard, it is considered that the Proposed Development is consistent with the above development standards and criteria and positively responds to its setting and the character of the area.

Further details relating to the proposed layout, design, scale, massing, boundary treatments, and materials and finishes are set out in the Architectural Design Statement prepared by Ryan&Lamb Architects and enclosed as part of the subject SID planning application package. An assessment of the visual impact is also set out in Section 8.7 of this PECR with accompanying photomontages in **Appendix 7**.

Surface Water Management and Flood Risk

Chapter 9 of the CDP refers to Sustainable Environmental Infrastructure and Flood Risk and requires Sustainable Urban Drainage Systems (SuDS) in all new developments, where appropriate, in order to reduce the quantity of surface water run-off, improve water quality, and contribute to climate change adaptation. In this regard the following policies are of particular relevance to the subject proposals:

SI21 - Managing Surface Water Flood Risk: "To minimise flood risk arising from pluvial (surface water) flooding in the City by promoting the use of natural or nature-based flood risk management measures as a priority, by requiring the use of sustainable drainage systems (SuDS) to minimise and limit the extent of hard surfacing and paving, and requiring the use of sustainable drainage techniques, where appropriate, for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risk and to deliver wider environmental and biodiversity benefits, and climate adaption."

SI22 - Sustainable Drainage Systems: "To require the use of Sustainable Drainage Systems (SuDS) in all new developments, where appropriate, as set out in the Greater Dublin Strategic Drainage Study (Vol 2: New Development)/ Greater Dublin Regional Code of Practice for Drainage Works and having regard to the guidance set out in Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas, Water Sensitive Urban Design Best Practice Interim Guidance Document (DHLGH, 2021). Sustainable Drainage Systems (SuDS) should incorporate nature-based solutions and be designed in accordance with the Dublin City Council Sustainable Drainage Design & Evaluation Guide (2021) which is summarised in Appendix 12. SuDS should protect and enhance water quality through treatment at source while enhancing biodiversity and amenity".

SI23 - Green Blue Roofs: "To require all new developments with roof areas in excess of 100 sq. metres to provide for a green blue roof."

Having regard for the above, it is highlighted that the proposed electrical infrastructure is subject to several technical and safety requirements which limit the potential for including SuDS or nature based flood risk management measures. In particular, the Proposed Development comprises an unmanned electrical substation accommodating critical electrical infrastructure on a physically constrained site. As a result, the incorporation of green or blue roofs as a nature-based SuDS measure for surface water management is not considered feasible due to electrical safety considerations and site-specific engineering and operational constraints. Accordingly, a derogation from Dublin City Council's Green and Blue Roof Policy has been sought for the Proposed Development (refer to **Appendix 2** for further details).

Notwithstanding this, the Proposed Development incorporates appropriate sustainable drainage measures that can be delivered on site, taking account of the site particular specific constraints. Further details in relation to proposed surface water management are set out in the Engineering Services Report prepared by MWP and enclosed as part of the SID planning application documentation.

With regard for the assessment of flood risk, the CDP seeks the following:

SI14 – Strategic Flood Risk Assessment: “To implement and comply fully with the recommendations of the Strategic Flood Risk Assessment prepared as part of the Dublin City Development Plan 2022-2028, including all measures to mitigate identified climate change and flood risks, including those recommended under Part 3 (Specific Flood Risk Assessment) of the Justification Tests, and to have regard to the Flood Risk Management Guidelines (2009), as revised by Circular PL 2/2014, when assessing planning applications and in the preparation of statutory and non-statutory plans.”

SI15 – Site Specific Flood Risk Assessment: “All development proposals shall carry out, to an appropriate level of detail, a Site-Specific Flood Risk Assessment (SSFRA).”

Having regard for the above, it is noted that the Proposed Development site is located within Flood Zone C as identified within the CDP's Strategic Flood Risk Assessment and is categorised as 'highly vulnerable development (including essential infrastructure)'. Table 3.2 of Flood Risk Management Guidelines notes that 'highly vulnerable development' is appropriate for development in areas located in Flood Zone C, and a justification test is not required. Notwithstanding this, a Site-Specific Flood Risk Assessment (SSFRA) has been prepared by MWP and is submitted as part of the SID planning application.

Built Heritage and Archaeology

Chapter 11 of the CDP relates to Built Heritage and Archaeology and notes that *“city's heritage contributes significantly to the collective memory of its communities and to the richness and diversity of its urban fabric. It is key to the city's character, identity and authenticity and is a vital social, cultural, and economic asset for the development of the city”*.

The CDP notes that Dublin's industrial heritage is closely associated with the development of the city, *“encompassing sites and structures of engineering heritage related to the evolution of the city's transport networks and public utilities, as well as its manufacturing heritage”*.

In this regard, it is noted that the site is located within an area of archaeological potential associated with historic development of the city. In the interests of protecting this historic area, it is proposed that all excavation work will be monitored by a suitably qualified archaeologist. Further details in relation to cultural heritage are set out in Section 8.6 of this PECR.

Light and Noise

The CDP seeks to minimise the impact of external lighting and noise with the following policies being of particular relevance to the subject proposals:

GI18 – Minimise Impact – Light and Noise: *“To minimise the environmental impact of external lighting and noise at sensitive locations to achieve a sustainable balance between the needs of an area, the safety of walking and cycling routes and the protection of sensitive species such as bats (see also Section 9.5.9 Public & External Lighting).”*

SI42 – Light Pollution: *“To not allow unnecessary, inappropriate or excessive artificial lighting and to ensure that the design of public and external lighting proposals minimises light spillage or pollution and has due regard to the character, environmental sensitivity and residential amenity of the surrounding area.”*

SI35 – Ambient Noise Quality: *“To seek to preserve and maintain noise quality in the City in accordance with good practice and relevant legislation.”*

Having regard for the above, it is noted that the Proposed Development is located within a mixed urban context and, as such, careful consideration has been given to minimise impacts in terms of external lighting and noise emissions.

Where external or operational lighting is required for safety, access or maintenance purposes, it will be low-level, minimal in nature and carefully positioned to direct illumination inward toward circulation and operational areas only. Lighting design will seek to minimise glare, overspill and upward light spill beyond the site boundary, thereby protecting the residential amenity of adjoining properties and avoiding unnecessary impacts on the wider environment. In this regard, the proposed approach is consistent with Policies GI18, SI42 and SI35 of the City Development Plan, which seek to minimise light pollution, protect environmental quality and maintain an appropriate balance between operational requirements, public safety and the amenity of the surrounding area.

With regard for noise impacts, the Proposed Development includes noise attenuation measures to protect public amenity and ensure minimal disruption to nearby residents. The impact of noise on the local population is assessed in Section 8.5 of this PECR.

Having regard for the above, it is considered that the Proposed Development is consistent with the CDP's policies regarding light and noise.

6.4.2 Climate Neutral Dublin 2030 – Dublin Climate Action Plan 2024-2029

Dublin City Council's Climate Action Plan 2024 - 2029 (the Action Plan), titled Climate Neutral Dublin 2030, sets out the actions how Dublin City Council will mitigate greenhouse gas emissions and contribute the global effort to limit warming to below 1.5°C, and includes a series of actions to be taken. The following objective is relevant to the Proposed Development:

R3 - Climate Resilient Critical Infrastructure: *The city's infrastructure that enables us to live, work and play needs to be resilient. Ensuring that our drainage system, utilities, roads, public lighting and communications networks are maintained and upgraded is essential. This requires working in partnership with Uisce Éireann, the OPW, ESB, EirGrid, NTA, and DECC. Together we will insure that these critical systems are prepared for the future.*

In accordance with the objectives of the Action Plan, the Proposed Development will provide essential upgrades to the electricity grid to prepare for future growth and demand.

6.5 Sectoral Policy

6.5.1 Commission for Regulation of Utilities (CRU) – Price Review 6

The CRU is responsible for the economic regulation of the electricity network companies in Ireland. To do this, the CRU sets Price Reviews which limit the revenues that the relevant licensees can recover from electricity customers. Price Reviews are set every 5 years and the upcoming Price Review Six ("PR6") will cover the period, 2026-2030.

The CRU has set the following three outcomes that it expects electricity network companies to deliver throughout PR6:

- Decarbonised electricity;
- Secure and resilient networks and supplies; and
- Empowered customers.

To ensure delivery of the three key outcomes, the CRU has set the following objectives for all network companies for PR6:

- Deliver infrastructure at pace; o Enhance system efficiency;
- Ensure compliance with security of supply standards;
- Drive smarter, flexible, more digitally enabled networks; and

- Customers at the heart of business planning and decision making.

ESB Networks business plan for PR6 outlines the planned investments in the network between 2026-2030 to address the strategic objectives and outcomes identified by the CRU in PR6. The Proposed Development of a new 110 kV / MV substation at the Steeven's Lane is one of the 27 new 110 kV substations included in ESNB's delivery plan for PR6.

6.5.2 ESB Strategy 2024 – Driven to Make a Difference: Net Zero by 2040

Strategy 2040 builds upon ESB's 2017 Brighter Future Strategy and provides a strategy toward achieving net zero by 2040. The strategy was developed in line with ESB's Strategy Framework to ensure consistency across the organisation and sets a target of net zero emissions by 2040. The strategy outlines three strategic objectives, which are core to achieving this net zero target:

- Decarbonised Electricity: Develop and connect renewables to decarbonise the electricity system by 2040
- Resilient Infrastructure: Provide resilient infrastructure for a reliable low carbon electricity system
- Empowered Customers: Empower, enable and support customers and communities to achieve net zero

The Strategy notes that "electricity networks are playing an increasingly important role in enabling the mass adoption of low carbon technologies including heat pumps, electric vehicles and microgeneration, and the connection of large volumes of renewable generation". Furthermore, it is noted that ensuring the electricity network is robust and stable will be vital in ensuring security of supply and to underpin widespread electrification of transport and heating.

6.5.3 ESB Networks Distribution Network Development Plan (DNDP)

Under its *Networks for Net Zero* strategy, ESB Networks has committed to delivering a net zero ready electricity distribution network by 2040 to enable Ireland to achieve its legally binding net zero target by 2050. ESNB has published its *Ten-Year Distribution Network Development Plan (DNDP)* to provide information on the existing distribution network capacity, assess future capacity to accommodate customer needs and identify areas of the distribution network that requires investment to provide the necessary capacity and security supply across the distribution grid.

As outlined in the DNDP, significant investment is required over the coming decade to facilitate both the connection of renewable generation and the anticipated increase in electricity demand arising from population growth, new housing delivery, economic expansion, and the electrification of heat, transport, and industry. In the Dublin Central area, forecast peak distribution system demand growth is estimated to range between 3.8% and 5.7% for the period 2025–2030.

The Proposed Development will provide a 110 kV / MV substation which is a critical reinforcement project is required to address existing capacity constraints, accommodate committed and forecast demand growth, and ensure a resilient and future-ready electricity distribution network for the area to support the transition to net zero. The Proposed Development directly aligns with the CRU and ESB's policies for decarbonising electricity, providing resilient infrastructure and empowering customers to achieve net zero.

6.6 Planning Policy Context Conclusions

Having regard to the above, it is considered that the principle of the Proposed Development is supported by national, regional, and local planning policies. There is a pressing need to provide infrastructure to support and strengthen the security of energy supply in Dublin. The Proposed Development will help to meet the growing and

changing electricity needs of Dublin, which is vital to allow for the planned and continued growth of the city. The Proposed Development has been carefully designed to align with urban design policies as set out in the CDP.

7. Environmental Impact Assessment (EIA)

7.1 Legal Requirement for EIA

1. EIA comes from EU environmental policy. The initial Directive of 1985 and its three amendments have been codified by Directive 2011/92/EU of 13 December 2011. Directive 2011/92/EU has been amended in 2014 by Directive 2014/52/EU. Together these comprise the EIA Directive.
2. The EIA Directive requires that public and private projects that are likely to have significant effects on the environment be made subject to an assessment prior to development consent being given. Screening for EIA requires consideration whether the project is likely to have significant effects on the environment.
3. Article 2(1) of the Directive makes specific reference to Article 4 for the definition of those projects which must undergo an assessment of their effects.
4. Article 4 distinguishes between two categories of projects.
 - Article 4(1) requires that projects listed in Annex I of the Directive must always be subject to EIA.
 - Article 4(2) requires that projects listed in Annex II of the Directive must be subject to EIA if it is determined, either by case-by-case examination or on the basis of thresholds and criteria set by the Member State, that they are likely to have significant effects on the environment.
5. Therefore, in order for a project to be subjected to an assessment of its environmental effects, in accordance with the procedural requirements of the EIA Directive it must be:
 - i. A project of a type listed in Annex I; or
 - ii. A project of a type listed in Annex II which either meets thresholds or criteria set by the Member State; or
 - iii. A project of a type listed in Annex II which is under the threshold, but following case by case examination, is likely to have significant effects on the environment.
6. In Ireland, a number of pieces of legislation have been used to implement the EU Directive, but for the majority of projects in Ireland it is the Planning and Development Acts 2000 (as amended) (the "Planning Acts"), Planning and Development Regulations 2001 (as amended), insofar as they continue to have effect pending the phased commencement of the Planning and Development Act 2024; and European Communities (Environmental Impact Assessment) Regulations 1989 (as amended) that are the key legal instruments at present.
7. EIA provisions in relation to planning consents are currently contained in the Planning Acts, (Part X) and in Part 10 of the Planning and Development Regulations, 2001, as amended. Schedule 5 Part 1 and 2 of the Planning and Development Regulations 2001 (as amended) set out the prescribed classes of development requiring EIA in accordance with Article 4 of the EIA Directive 2014/52/EU.
8. Schedule 5 Part 1 of the Planning and Development Regulations 2001 (as amended) set out projects which require a mandatory EIA.
9. Schedule 5 Part 2 of the regulations lists other types of development for which an EIA is required when certain thresholds and criteria are met.

10. Article 92 of the Planning and Development Regulations 2001 (as amended) interprets “sub-threshold development” as development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development.

7.2 EIA Screening Methodology

To determine if an EIA is required, this EIA screening exercise firstly assesses the development for Mandatory EIA to determine whether the Project is a class set out in Annex I or II of the Directive. These Annexes have been broadly transposed into Schedule 5 (Part 1 and 2) of the Planning and Development Regulations 2001, as amended, with national thresholds included for many of the Annex II classes.

Where a project that falls below mandatory EIA size or activity threshold, screening advances to Sub-Threshold Development Assessment, to determine the likelihood of the project having significant effects on the environment. Criteria are included in Annex III of the EIA Directive (transposed into Irish Law in Schedule 7 of the Planning and Development Regulations 2001, as amended).

Regard was had to the following guidance documentation when carrying out the screening exercise:

- Department of Housing, Planning and Local Government (August 2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Department of the Environment, Heritage and Local Government (August 2003), Environmental Impact Assessment (EIA) Guidelines for Consent Authorities regarding Sub-threshold Development;
- Environmental Protection Agency (2022) Guidelines on the Information to be contained in Environmental Impact Assessment Reports;
- European Commission (2017) Environmental Impact Assessment of Projects. Guidance on Screening; and
- European Commission (2024) Interpretation of definitions of project categories of Annex I and II of the EIA Directive.

7.3 Screening for Mandatory EIA

The development for which planning permission is being sought is a 110kV substation with associated electrical equipment and underground grid connection cabling. The development is to provide grid support services to the wider southwest inner Dublin city area including the consented Energy Centre associated with the Diageo Decarbonisation and Water Recovery Project at St James's Gate granted under Planning Ref: WEB2472/24.

The various elements of the proposed Steeven's Lane 110kV substation development, in combination with all of the associated project elements (as described in Section 4), have been considered to determine if they fall within a class of development specified in Schedule 5 of the Planning and Development Regulations 2001 (as amended) and for which a mandatory EIA may be required.

7.3.1 Part 1 of Schedule 5 of the Planning and Development Regulations

The Proposed Steeven's Lane 110kV substation Development either alone or in combination with other related developments does not meet the description of any of the types of development listed in Part 1 of Schedule 5 of the Planning and Development Regulations 2001 (as amended). Therefore, the Proposed Development does not require mandatory EIA.

7.3.2 Part 2 of Schedule 5 of the Planning and Development Regulations

The potentially applicable development classes listed in Part 2 of Schedule 5 relative to the Proposed Development are set out in Table 7-1 below.

Table 7-1: Potentially Applicable Schedule 5 Part 2 Development Classes

Schedule 5 Planning and Development Regulations 2001 (as amended)		Appraisal
Part 2 – Class 3(b)	Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more."	The proposed Steeven's Lane 110kV substation development is not of a development type within the meaning of Class 3(b). The Proposed Development comprises of substation infrastructure, including the 1 no.110kV GIS substation, 2 no. transformers and installation of underground electrical cables. There are no overhead cables, and therefore does not meet the definition of transmission of electrical energy as per the meaning of Class 3(b). Accordingly, mandatory EIA is not required.
Part 2 Class 10(b)(iv)	Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.	The proposed Steeven's Lane 110kV substation development site is approximately 0.232 ha, within an overall scheme area of approximately 1.73 ha required primarily to facilitate construction of underground cable infrastructure, which is below the applicable thresholds. Accordingly, mandatory EIA is not required.
Part 2 Class 13(a)	Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:- (i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and (ii) result in an increase in size greater than – 25 per cent, or – an amount equal to 50 per cent of the appropriate threshold, whichever is the greater.	The proposed Steeven's Lane 110kV substation development, subject of the current planning application, comprises a new and standalone item of electricity distribution infrastructure. The substation is designed to operate as part of the wider electricity network and is not functionally dependent on any specific third-party development, nor is its delivery contingent on any other project. Accordingly, the Proposed Development does not constitute a change to, or extension of, any existing or consented development. In these circumstances, the Proposed Development does not fall within the scope of Schedule 5, Part 2, Class 13(a) of the Regulations. Accordingly, mandatory EIA is not required. For context, the site is in proximity to the consented Diageo Decarbonisation project (Dublin City Council Planning Ref. WEB2472/24). While that project makes provision for an electrical connection to support its operation, the proposed substation is not reliant on the Diageo Energy Centre and does not form part of that consented development.
Part 2- Class 14	Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	The proposed Steeven's Lane 110kV substation development requires the demolition of existing onsite buildings to facilitate the construction of the substation infrastructure. However, this demolition does not comprise works carried out in order to facilitate a project listed in Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended).

Schedule 5 Planning and Development Regulations 2001 (as amended)		Appraisal
		Accordingly, the demolition works do not fall within the scope of the Schedule 5, Part 2, Class 14 of the Regulations. On this basis, sub-threshold screening having regard to the criteria set out in Schedule 7 is not triggered.
Part 2- Class 15	Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	The proposed Steeven's Lane 110kV substation development may be regarded as a class of activity within Part 2 of the regulations, but falls below any of the thresholds for which an EIA is mandatory. Sub-threshold Screening for EIA is required in respect of this category.

Preliminary Conclusion:

In the case of the proposed substation, the proposal is not of a description or type listed in any of the project categories in Annex I and II of the EIA Directive or their equivalents in Irish legislation (Planning and Development Regulations 2001 (as amended), Schedule 5, Parts 1 and 2) and is thus not of a prescribed class of development listed in the Regulations requiring mandatory EIA or mandatory EIA screening in accordance with Annex III of the Directive.

In the case of the associated underground electrical grid connection cables, the proposal is not of a description or type listed in any of the project categories in Annex I and II of the EIA Directive or their equivalents in Irish legislation (Planning and Development Regulations 2001 (as amended), Schedule 5, Parts 1 and 2) and is thus not of a prescribed class of development listed in the Regulations requiring mandatory EIA or mandatory EIA screening in accordance with Annex III of the Directive.

Notwithstanding the above, the proposed substation development could potentially be considered under Part 2 Class 10 (b)(iv) but falls below the threshold. Consequently, the Proposed Development is to be assessed as a sub-threshold development under Part 2 Class 15 using the criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended), and as prescribed by Annex III of the 2014 Directive, for determining whether or not a sub-threshold development is required to be subject to EIA.

7.3.3 Sub-Threshold EIA Screening

Sub-threshold development is defined at Part 10 Section 92 in the Planning and Development Regulations 2001 (as amended) as "development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development".

It has been identified that the proposed substation development may potentially fall within the categories of EIA development under Part 2 Class 13(c), Part 2 Class 14, and Part 2 Class 15.

Schedule 7 of the Planning and Development Regulations 2001 (as amended) provides a list of criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an EIA. The criteria are grouped under three broad headings:

- Characteristics of Proposed Development.

- Location of Proposed Development.
- Types and characteristics of potential impacts.

The appraisal against the criteria included in Schedule 7 is set out in Table 7-2 below.

The information and outcome of the following assessments have been taken into consideration in the screening assessment:

- St James's Gate De-carbonisation and Water Recovery Project EIAR (Malone O'Regan, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Planning Report (John Spain Associates, 2024)
- St James's Gate De-carbonisation and Water Recovery Project AASR and NIS (Malone O'Regan, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Water Framework Directive Assessment (Malone O'Regan, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Construction and Demolition Resource and Waste Management Plan (Arup 2024)
- St James's Gate De-carbonisation and Water Recovery Project Demolition and Construction Management Plan (Arup, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Flood Risk Assessment (Arup, 2024)
- St James's Gate Decarbonisation and Water Recovery Project Architectural Design Statement (RKD, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Transport Statement (Arup, 2024)
- St James's Gate De-carbonisation and Water Recovery Project Conservation Report (Nov. 2024)
- St James's Gate De-carbonisation and Water Recovery Project Drainage and Watermain Report (Arup, 2024)

Table 7-2: Schedule 7 Criteria Assessment

1. Characteristics of Proposed Development The characteristics of Proposed Development, in particular -	Appraisal
(a) the size and design of the whole of the Proposed Development;	The Proposed Development is considered a small-scale project, with a total area of approximately 1.73 ha size, scale and design of the Proposed Development are not considered significant.
(b) cumulation with other existing development and/or development the subject of a consent for Proposed Development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment;	There are a number of other existing developments in proximity to the Proposed Development site with which cumulative effects could occur. These include Luas Red Line and the Guinness Brewery site. A desktop review of existing and permitted planning applications was undertaken in August 2026. The search considered applications within a period dating back to 2019. See Appendix 1 for further detail on the planning history. Refused, invalid, or withdrawn applications were excluded from the review. In addition, small-scale residential developments (such as extensions and modifications to existing dwellings), and minor amendments, were excluded as these are not considered likely to give rise to significant cumulative environmental effects in combination with the Proposed Development. The following developments were identified as potentially relevant for cumulative assessment: • Redevelopment of a protected structure at 134 James's Street to provide a 7-storey apartment building. • Decarbonising and water recovery improvement works at the Guinness Brewery (Diageo site). • Liffey Valley to City Centre BusConnects.
(c) the nature of any associated demolition works;	The Proposed Development requires the demolition and clearance of a number of existing structures located within the site boundary. These structures currently comprise vacant and derelict buildings together with associated yard areas, which are no longer in active use. The nature of these works are limited and small scale.
(d) the use of natural resources, in particular land, soil, water and biodiversity;	The Proposed Development will not require an extensive use of natural resources. The permanent land take associated with the Proposed Development is approximately 0.232 ha of brownfield lands adjacent to an existing industrial site currently in use as the Guinness Brewery. Biodiversity surveys do not indicate the likelihood of significant loss of valuable ecological habitats or the presence of protected plant or animal species within the development footprint. Construction materials will consist of ready-mix concrete, reinforced steel and imported stone. Where required, construction materials will be sourced from authorised suppliers. The quantity of material required is not considered unusual for a development of this nature and scale and is not expected to affect regional availability of construction materials. Water requirements during construction and operation will be minimal. Other than land take, limited use of construction materials and minimal water demand, the operational development will not require the ongoing use of natural resources.
(e) the production of waste;	Construction Phase: Given the scale and nature of the Proposed Development, the overall volume of construction waste generated is expected to be moderate and typical of a development of this type. However, it is acknowledged that hazardous waste materials, including asbestos-containing materials and potentially contaminated soils, may arise during demolition and groundworks. The following waste streams will be generated during the construction phase: • Waste arising from the demolition of existing buildings and enabling works, including asbestos-containing materials, where present; • Excavated soils and made ground, including potentially contaminated material;

1. Characteristics of Proposed Development
The characteristics of Proposed Development, in particular -

Appraisal

- Waste arising from the construction of the substation and cable installation; and
- General construction and packaging waste.

All asbestos removal will be carried out by licensed and suitably qualified contractors, with materials removed off-site to appropriately permitted hazardous waste facilities. Similarly, any contaminated soils encountered will be appropriately classified, segregated, and disposed of or treated in accordance with applicable waste management and environmental regulations.

A Detailed Construction Resource and Waste Management Plan (RWMP) will be prepared by the appointed contractor prior to construction. The RWMP will include:

- Procedures for the segregation, storage, and disposal of all waste streams (including hazardous waste);
- Measures to maximise reuse and recycling;
- Protocols for the handling and disposal of asbestos and contaminated materials;
- Measures to prevent environmental pollution during waste handling and storage.

All waste will be removed from site by licensed waste contractors and taken to suitably authorised recycling, recovery, or disposal facilities.

With the implementation of the above measures, the management of construction and demolition waste, including hazardous materials, is not expected to give rise to significant environmental effects.

Operational Phase:

Operational waste arising from the substation will be negligible and limited to occasional maintenance-related materials. This waste will be managed in accordance with standard operational procedures and relevant waste legislation. Accordingly, the operational phase is not considered likely to result in significant environmental effects.

(f) pollution and nuisances;

Potential pollution and nuisance effects may arise during the demolition, site clearance and construction phases of the Proposed Development. These may include the following:

- Traffic and Transport: Temporary disturbance to road users due to increased Heavy Goods Vehicle (HGV) movements associated with demolition and construction activities. These effects will be short-term in nature. Appropriate traffic management measures will be implemented to minimise disruption and ensure the safe movement of vehicles, pedestrians and cyclists.
- Soils, Groundwater and Surface Water: Potential for localised impacts on soils and water quality arising from excavation works, the disturbance of made ground or contaminated soils, and surface water runoff from exposed ground or temporary stockpiles. There is also a potential risk of pollution from the temporary storage and handling of construction materials, fuels and oils. These potential impacts would be localised and temporary, with standard construction management measures implemented to prevent contamination of soils, groundwater and surface water.
- Air Quality and Dust: Minor, short-term air emissions and dust generation associated with demolition works, excavation activities and the operation of construction plant and machinery. These emissions are expected to be temporary and localised in nature and are unlikely to result in measurable or long-term impacts on ambient air quality.
- Noise and Vibration: Localised and temporary noise and vibration generated by demolition and construction activities, including the use of plant and machinery. Best practice noise and vibration control measures will be implemented to minimise potential disturbance to nearby sensitive receptors.

1. Characteristics of Proposed Development The characteristics of Proposed Development, in particular -	Appraisal
	Overall, any potential pollution or nuisance effects associated with the demolition and construction phases of the Proposed Development will be temporary, localised and capable of being effectively managed through the implementation of appropriate construction environmental management measures. Potential operational pollution and nuisance effects include: - Noise emissions associated with operational plant, including transformers. These effects have been assessed as part of the Noise Impact Assessment and are not considered significant. - Limited artificial lighting associated with security and maintenance activities. Lighting will be designed and operated to minimise light spill and glare beyond the site boundary. There will be no operational emissions to air from the development. Traffic associated with the operational phase would be minimal.
(g) the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	During the construction phase, the potential for major accidents or disasters is considered to be low. Construction works are standard and not unduly complex. The Proposed Development will comply with the Safety, Health and Welfare at Work Act 2005, the Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI No. 291 of 2013) and all relevant health and safety legislation. Standard site management measures will be implemented to control risks associated with construction traffic, plant operation, storage of fuels and materials, and the management of potentially contaminated soils. During the operational phase, the Proposed Development will form part of the electricity transmission and distribution network and will be designed, constructed and operated in accordance with applicable national and international electrical safety standards. Potential risks associated with substation infrastructure may include electrical faults, fire associated with electrical equipment, or the release of insulating oil from transformers. However, such risks are considered to be low given the design and operational controls typically incorporated into modern substation facilities, including containment measures, fire protection systems, and routine inspection and maintenance regimes. The Proposed Development is not located within an area identified as being at significant risk from natural disasters such as flooding, landslides or seismic activity. Furthermore, the development does not involve the storage or use of hazardous substances in quantities that would trigger requirements under the Seveso III Directive. Having regard to the nature and scale of the Proposed Development, the implementation of standard construction and operational safety procedures, and the regulatory framework governing electricity infrastructure, the risk of major accidents or disasters occurring and resulting in significant environmental effects is considered to be very low.
(h) the risks to human health (for example, due to water contamination or air pollution).	The Proposed Development is not expected to give rise to significant risks to human health. Potential pathways for exposure include air, water, noise, traffic, and accidental events during both construction and operation. Construction Phase: Temporary, localised effects such as dust, noise and construction traffic may occur, but will be managed through best practice measures, including a Construction Environmental Management Plan (CEMP), traffic management, dust suppression and standard health and safety procedures. Risks to water quality from accidental spills or runoff will be controlled via appropriate storage, spill prevention, and drainage measures. Any effects are expected to be short-term, reversible, and imperceptible. Operational Phase: The substation will be largely unmanned, with limited traffic, noise and negligible emissions to air or water. Operational noise is predicted to remain within guideline values, and fire and safety risks will be managed in line with relevant standards.

1. Characteristics of Proposed Development The characteristics of Proposed Development, in particular -		Appraisal
		Therefore, with mitigation measures in place, the Proposed Development is not expected to result in significant adverse effects on human health during construction or operation.
2. Location of Proposed Development The environmental sensitivity of geographical areas likely to be affected by the Proposed Development, with particular regard to -		Appraisal
(a)	the existing and approved land use;	The Proposed Development site is located on unoccupied brownfield land, which comprises a number of vacant and derelict buildings, together with an associated yard area. Under the Dublin City Council Development Plan, the site is zoned Z4 – Key Urban Villages/Urban Villages, the objective of which is “to provide for and improve mixed-services facilities.” The surrounding land use is predominantly urban in nature. The immediate north and northeast of the site is bounded by the industrial lands of the Guinness Brewery. Steeven's Lane borders the western boundary of the site. The lane is primarily used by cyclist, pedestrians and the Luas Red Line, with vehicle access from this road limited to the Proposed Development site and St Patrick's University hospital, which is located on the opposite side of Steeven's Lane. To the south, the Proposed Development site is bordered by mixed-used and residential properties, including 132-134 James's Street and Steeven's Gate Apartments.
(b)	the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	The Proposed Development will not significantly impact the relative abundance, availability, quality or regenerative capacity of natural resources. There are no areas within the site, including underground resources, which contain important, high-quality or scarce natural resources which could be affected by the proposal. The Proposed Development does not involve the use or destruction of natural resources in a manner that would pose a significant threat to their regenerative capacity.
(c)	The absorption capacity of the natural environment, paying particular attention to the following areas:	
i.	wetlands, riparian areas, river mouths;	The closest watercourses are the River Liffey (09L01), approximately 400 m to the north and flowing west to east, and the River Camac (09C02), located approximately 205m to the west of this site and flowing south to north. Preventative measures will be implemented during construction, operational and decommissioning phases of the Proposed Development in order to reduce the risk of pollution to surface waters, including the application of appropriate monitoring, management and control procedures.
ii.	coastal zones and the marine environment;	n/a - None of the Proposed Development elements are directly located at or near coastal or marine environment.
iii.	mountain and forest areas;	n/a - None of the Proposed Development elements are directly located in a forest or mountainous area.
iv.	nature reserves and parks;	n/a - None of the Proposed Development elements are directly located within or adjacent to a nature reserve or park.

2. Location of Proposed Development The environmental sensitivity of geographical areas likely to be affected by the Proposed Development, with particular regard to -		Appraisal
v.	areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive;	No Natura 2000 designated sites are located immediately adjacent to the Proposed Development. As identified in the AA Screening relevant designated protected sites within 5 km include: • South Dublin Bay SAC (000210). • North Dublin Bay SAC (000206). • South Dublin Bay and River Tolka Estuary SPA (004024). • North Bull Island SPA (004006). A Natura Impact Statement (NIS) has been completed for the Proposed Development and is submitted as a standalone report as part of this planning application. The assessment concludes that, with the implementation of the recommended mitigation measures, the development, either alone or in combination with other plans or projects, is not expected to have significant adverse effects on the integrity of any Natura 2000 site.]
vi.	areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;	n/a - None of relevance to the characteristics of the Proposed Development.
vii.	densely populated areas;	The Proposed Development site is located within a predominantly urban environment in inner south-west Dublin. The site itself comprises unoccupied brownfield land. The immediate northern and north-eastern boundaries of the site adjoin the industrial lands of the Guinness Brewery. Steeven's Lane forms the western boundary of the site. To the south, the site is bordered by a mix of residential and mixed-use properties, reflecting the established urban character of the surrounding area. Given the urbanised nature of the receiving environment and the limited scale and footprint of the Proposed Development, the environmental sensitivity of the geographical area in relation to densely populated areas is considered low to moderate, and no significant effects are anticipated.
viii.	landscapes and sites of historical, cultural or archaeological significance.	The archaeological and cultural heritage context of the Proposed Development is assessed in detail within the Archaeological Assessment (Appendix 8) and summarised in Section 8.6 below. The site itself does not contain any known archaeological monuments, protected structures, or recorded heritage assets. However, it is located within the Recorded Monuments and Places (RMP) zone for Dublin City (DU018-020), an area recognised as having significant archaeological potential. • A review of the Record of Monuments and Places (RMP) identified a number of recorded monuments and protected archaeological sites within and adjacent to the wider study area, including: DU018-440 — House (18th century) located approximately 20 m from the site. • DU018-020346 — Church located approximately 100 m from the site. • DU018-474 — Graveyard located approximately 100 m from the site. These features are located outside the Proposed Development site boundary. Due to the limited footprint and nature of the Proposed Development, no impacts on the setting or integrity of these heritage assets are anticipated. The proposed ESB cable trench works will extend along the perimeter of St James's Graveyard, a designated National Monument. Previous archaeological investigations in the surrounding area, including within the Diageo North Campus, have identified archaeological remains dating from the prehistoric, medieval, post-medieval, and industrial periods, including medieval deposits, structural remains, cobbled surfaces, and human remains. The Archaeological Assessment concludes that, given the archaeological sensitivity of the site and the scale of the proposed ground disturbance works,

2. Location of Proposed Development
The environmental sensitivity of geographical areas likely to be affected by the Proposed Development, with particular regard to -

Appraisal

there is potential for previously unrecorded archaeological remains to survive within the development area. Accordingly, archaeological mitigation measures, including archaeological testing and archaeological monitoring of all groundworks, are recommended.

Subject to the implementation of these mitigation measures, and agreement with the Dublin City Archaeologist and the National Monuments Service, the Proposed Development is not expected to result in significant adverse effects on archaeological, architectural, or cultural heritage resources.

3. Type and Characteristics of potential impacts

Appraisal

- (a) the magnitude and spatial extent of the impact (for examples geographical area and size of the population likely to be affected);

The extent of any impact during the construction or operational phase of the Proposed Development will be local in character. Construction activities are not of a sufficient magnitude, nature or duration and are not likely to give rise to significant effects. During the operational phase, potential impacts will be limited in frequency and extent, reflecting the largely unmanned nature of the facility and the absence of ongoing emissions or intensive activities. Any operational effects will remain localised to the site and its immediate surroundings.

- (b) the nature of the impact;

Population and Human Health

During the construction phase, the Proposed Development may give rise to localised and temporary effects associated with noise, dust and increased construction traffic. These effects will be short term and confined to the period of active works. Best practice mitigation measures, as set out in the CEMP, including traffic management, dust suppression and noise control measures, will be implemented to minimise disturbance to nearby receptors. No significant adverse effects on human health are anticipated.

During the operational phase, the development will be largely unmanned and will not generate emissions to air. Noise emissions from operational plant will not exceed EPA guideline limits at the nearest noise-sensitive receptors, and operational traffic will be limited to infrequent maintenance visits. As a result, no significant effects on population or human health are anticipated during operation.

Biodiversity

The Proposed Development is located within an urban, brownfield area of the existing Diageo brewery site, comprising predominantly man-made ground with limited ecological value. No high-value habitats are present on-site, and no direct land-take of Natura 2000 sites or other protected areas will occur.

During the construction phase, the main potential impacts on biodiversity arise from temporary disturbance, increased human activity, and the risk of sediment or pollutant runoff.

The site lies approximately 5 km from:

- South Dublin Bay and River Tolka Estuary SPA (IE0004024)
- pNHA 002104 – Grand Canal (not a Natura 2000 site, but of local conservation interest)

3. Type and Characteristics of potential impacts

Appraisal

The site is hydrologically connected via the local drainage network to the River Liffey (approximately 400m north of the proposed site). A Natura Impact Statement (NIS) has been prepared and is submitted as a standalone report with this planning application. The NIS concludes that, with the implementation of standard mitigation measures—such as pollution prevention, surface water controls, and measures to avoid disturbance to any nearby sensitive species—the Proposed Development, alone or in combination with other plans or projects, is not expected to have significant adverse effects on the integrity of any Natura 2000 site.

Water

The Proposed Development has the potential to affect water quality through pollution, primarily from accidental spills or runoff during construction and operation. The site is located approximately 400 m south of the River Liffey (09L01) and near the River Camac (09C02), but there are no direct watercourses within the site boundary.

A combined sewer runs along Steeven's Lane to the west of the site, which conveys wastewater to Ringsend Wastewater Treatment Plant. During construction, any stormwater runoff from the site will be directed into Diageo's existing stormwater collection system, which also discharges to the Ringsend treatment works. In the operational phase, all site drainage will continue to be collected and treated via the same sewer system, preventing direct discharges to local watercourses.

Industry best-practice pollution prevention measures will be implemented during construction, including containment of fuels and chemicals, runoff management, and adherence to CIRIA guidelines C532 and C648. With these measures in place, it is not anticipated that the Proposed Development will result in significant adverse effects on surface water or groundwater during either construction or operation.

Land and Soils

The Proposed Development is located on an urban brownfield site with predominantly man-made ground, which may contain residual contaminants from previous industrial activity. Construction activities will include demolition, excavation, trenching, and earthworks. In the absence of mitigation, potential risks include soil erosion, mobilisation of contaminants, increased siltation, and accidental spills.

These risks will be minimised through adherence to best-practice measures and environmental controls set out in the Construction Environmental Management Plan (CEMP) and the Construction Resource and Waste Management Plan (RWMP). With these measures in place, no significant adverse effects on soils or land quality are anticipated during the construction phase.

During the operational phase, potential impacts are primarily associated with the storage and use of fuels for transformers and the backup generator. These assets will be bunded and managed in accordance with relevant safety and environmental standards, making significant effects on soils or land quality from accidental spills highly unlikely.

Air and Climate

Potential air quality effects will be limited to temporary dust generation during construction activities and emissions from construction traffic and plant. The implementation of standard dust suppression and vehicle management measures will minimise these effects. No significant air quality impacts are anticipated. The operational phase of the Proposed Development will not generate air emissions.

During the construction phase, there will be a temporary increase in greenhouse gas emissions associated with construction traffic, plant, and embodied carbon in construction materials. However, during operation the Proposed Development will support and reinforce the electricity grid,

3. Type and Characteristics of potential impacts

Appraisal

facilitating the integration and transmission of renewable energy. As such, it will contribute to national climate policy objectives and support Ireland's transition to a net-zero carbon economy by 2050.

Noise and Vibration

Construction activities have the potential to generate temporary noise and vibration associated with earthworks, machinery operation and construction traffic. Noise limits and control measures set out in the noise management provisions of the CEMP will be implemented to minimise disturbance. With these measures in place, no significant effects on nearby sensitive receptors are anticipated during construction. A Noise Impact Assessment (refer to **Appendix 9**) has been undertaken and confirms that noise emissions from operational plant will not exceed EPA guideline limits at the nearest sensitive receptors during the operational phase.

Landscape and Visual

The Proposed Development site is located within an urban, brownfield setting at the corner of Steeven's Lane and James's Street, forming part of existing industrial lands. There are no sensitive landscape designations or protected views associated with the site.

During construction, temporary visual effects may arise from machinery, material storage, and works activity. These effects will be localised and short-term, limited to the immediate vicinity of the site.

In the operational phase, the introduction of a 14.1 m substation building and associated infrastructure into an already industrialised streetscape represents a minor change to the urban landscape. Given the context, scale, and surrounding built environment, the Proposed Development is not expected to result in significant adverse impacts on landscape character or visual amenity. Residual effects are anticipated to be imperceptible to slight.

Cumulative effects with nearby developments are not expected to be significant due to the urban setting and intervening buildings, which provide natural screening.

Cultural Heritage

There are no protected structures or recorded monuments within the Proposed Development site. While a number of cultural heritage assets are located in the wider vicinity, it is not anticipated that these will be physically impacted by the construction or operation of the Proposed Development. While the site is previously developed, and the likelihood of encountering archaeological material is considered low, recorded remains in the vicinity to the east of the site (associated with a graveyard area) indicate that there is some potential for previously unrecorded archaeological features to be encountered during excavation works.

To address this, a programme of archaeological monitoring will be undertaken during groundworks by a suitably qualified archaeologist. In the event of a discovery, works will cease in the affected area and appropriate mitigation measures will be implemented in consultation with the relevant authorities.

These measures will be incorporated into the Construction Environmental Management Plan (CEMP). With their implementation, the Proposed Development is not expected to result in significant impacts on cultural heritage.

Overall, the Proposed Development is not expected to result in significant effects on cultural heritage, either during construction or operation.

3. Type and Characteristics of potential impacts	Appraisal
	Material Assets Given the scale and nature of the Proposed Development, no significant impacts on existing utilities, infrastructure or material assets are anticipated. Construction traffic and material deliveries will be managed to avoid undue pressure on the local road network, and operational demands on infrastructure will be minimal.
(c) the transboundary nature of the impact;	n/a - There will be no potential for transboundary impacts from any element of the Proposed Development.
(d) the intensity and complexity of the impact;	Potential impacts are primarily associated with the construction phase and include typical construction-related effects, such as noise, traffic, runoff and dust. These impacts are generally straightforward and common to construction projects, with standard construction practices applied. With the implementation of best practice measures, the construction-related effects are not expected to be severe or complex. Operational impacts are neither intense nor complex. Noise is the only potential operational effect, and compliance with EPA noise limits has been demonstrated in the Noise Impact Assessment.
(e) the probability of the impact;	The likelihood of significant environmental impacts is low. Temporary construction-related effects will be mitigated through measures set out in the PECR and implemented via the CEMP, which will remain a live document subject to regular review. Operational noise emissions are likely but will remain within acceptable limits and will not result in significant effects.
(f) the expected onset, duration, frequency, reversibility of the impact;	It is expected that construction works will commence, subject to receipt of the necessary statutory approvals, and the duration of the works will be approximately 3 years. Normal working hours during the construction period are expected to be Monday to Friday 07:00 to 18:00, and Saturday 08:00 to 14:00. During the development it may be necessary to carry out some work outside of normal working hours however, this will be kept to a minimum and only undertaken following approval from Dublin City Council. The noise and air quality impact peaks during construction will be intermittent with a potential background level of nuisance as they will depend on the construction activities which are for their nature variable and not continuous. With best practice mitigation in place, no significant risks are anticipated. Operational noise will be long-term but compliant with relevant guidelines and will not result in significant adverse effects.
(g) the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment; and	As the Proposed Development is within the vicinity of the approved Diageo's development (Planning Ref: 247224), this may contribute to cumulative noise, dust and traffic impacts arising. However, due to the nature, scale and location of the Proposed Development, any such effects are expected to be temporary, limited to the construction period, and not significant. On this basis, no significant cumulative effects on the environment are anticipated when the Proposed Development is considered alone or in combination with other permitted or proposed projects. Operational noise has been assessed in combination with the existing developments in the area. The assessment has determined that the cumulative noise effect will be compliant with relevant guidelines and will not result in significant adverse effects. Having regard to the scale, nature, and location of the Proposed Development, the characteristics of the surrounding developments, and the mitigation measures to be implemented, the potential for significant cumulative environmental effects is considered to be moderate and temporary, in line with EPA guidance.

3. Type and Characteristics of potential impacts	Appraisal
(h) the possibility of effectively reducing the impact.	The Proposed Development is not anticipated to result in any significant effects on the existing environment. Where temporary impacts may occur, these can be effectively mitigated through standard best practice measures.

7.3.4 EIA Screening Conclusion

It is concluded that, based on the findings of this EIA screening assessment, the Proposed Development is not defined in Schedule 5 of the Planning and Development Regulations 2001 as amended, as a class of development that would require EIA, therefore neither mandatory nor sub-threshold EIA are required.

Furthermore, following a detailed evaluation of the Proposed Development it is concluded that the Proposed Development in consideration of the size, nature, location and characteristic of the potential impacts, it is considered that the Proposed Development either alone or in combination with other existing and permitted developments would not give rise to impacts of a significant or adverse nature such as to have a significant effect on the environment or warrant an EIA.

It is noted that this is a recommendation to support the final determination by the Competent Authority.

8. Environmental Appraisal

The following sections provide an environmental appraisal of the Proposed Development and considers both the construction and operational phase. Where necessary, mitigation measures have been identified to avoid, prevent or reduce potential adverse effects. This approach ensures that environmental considerations have been appropriately integrated into the design and assessment of the Proposed Development.

8.1 Biodiversity

An Ecological Impact Assessment (EclA) of the Proposed Development has been carried out, refer to **Appendix 10**. The conclusions of the EclA is as follows:

This EclA has considered the potential effects of the Proposed Development on habitats, flora and fauna within the receiving environment, in accordance with the guidelines set out by CIEEM (2018), EPA (2022) and NRA (2009).

The Proposed Development site comprises a highly urbanised brownfield environment, dominated by buildings, hardstanding and localised areas of recolonising bare ground. No habitats of more than Local Importance (Lower Value) were identified, and no Annex I habitats or rare or protected plant species were recorded.

The Important Ecological Features identified in the context of the Proposed Development comprise nesting birds associated with existing buildings on site, bats and off-site aquatic ecological receptors (including fish, otter and waterbirds) connected to the Proposed Development through an indirect hydrological pathway to the River Liffey. Other ecological receptors, including terrestrial mammals, amphibians and reptiles, were considered during the assessment; however, the site was found to provide negligible suitability for these groups and no significant effects were identified.

Potential ecological effects are limited to the construction phase and relate primarily to potential disturbance of nesting birds during demolition or site-clearance works and localised disturbance to bats and other nocturnal fauna arising from construction lighting. These effects are short-term, slight and localised in nature.

With the implementation of standard mitigation measures, including appropriate timing of works, pre-construction nest checks and controls on construction lighting, no significant residual effects on nesting birds or bats are predicted.

Potential pathways for cumulative effects, including those associated with construction-phase drainage and surface water management via the existing public sewer network to the downstream receiving environment, have been considered in alignment with the accompanying Appropriate Assessment documentation. Given the limited scale of the Proposed Development, the indirect nature of the pathway and the implementation of standard construction-phase pollution-prevention measures, no significant cumulative effects are predicted.

Overall, no significant adverse ecological effects are predicted as a result of the Proposed Development, either alone or in-combination with other plans or projects.

8.2 Land and Soils

8.2.1 Receiving Environment

8.2.1.1 Topography

The topography within the substation site is generally flat, with a gentle downward gradient sloping from south to north. The majority of the site is shown to lie between 10mOD and 12.5mOD. Immediately north and east of the

site there is a significant topographical change with a step of 5-6m observed between the proposed substation site and the adjoining Diageo lands, which are at a lower level.

8.2.1.2 Bedrock Geology

According to the GSI mapping, the site lies on a bedrock formation comprised of Palaeozoic, Lower Carboniferous, Mississippian age dark grey to black, fine-grained, occasionally cherty, micritic limestones described as Calp dark limestone and shale called the 'Lucan Formation' (GSI, 2026). Refer to Figure 8-1.

There is no obvious faulting within a 2km radius of the site, with the closest fault being approximately 5.5km northwest.

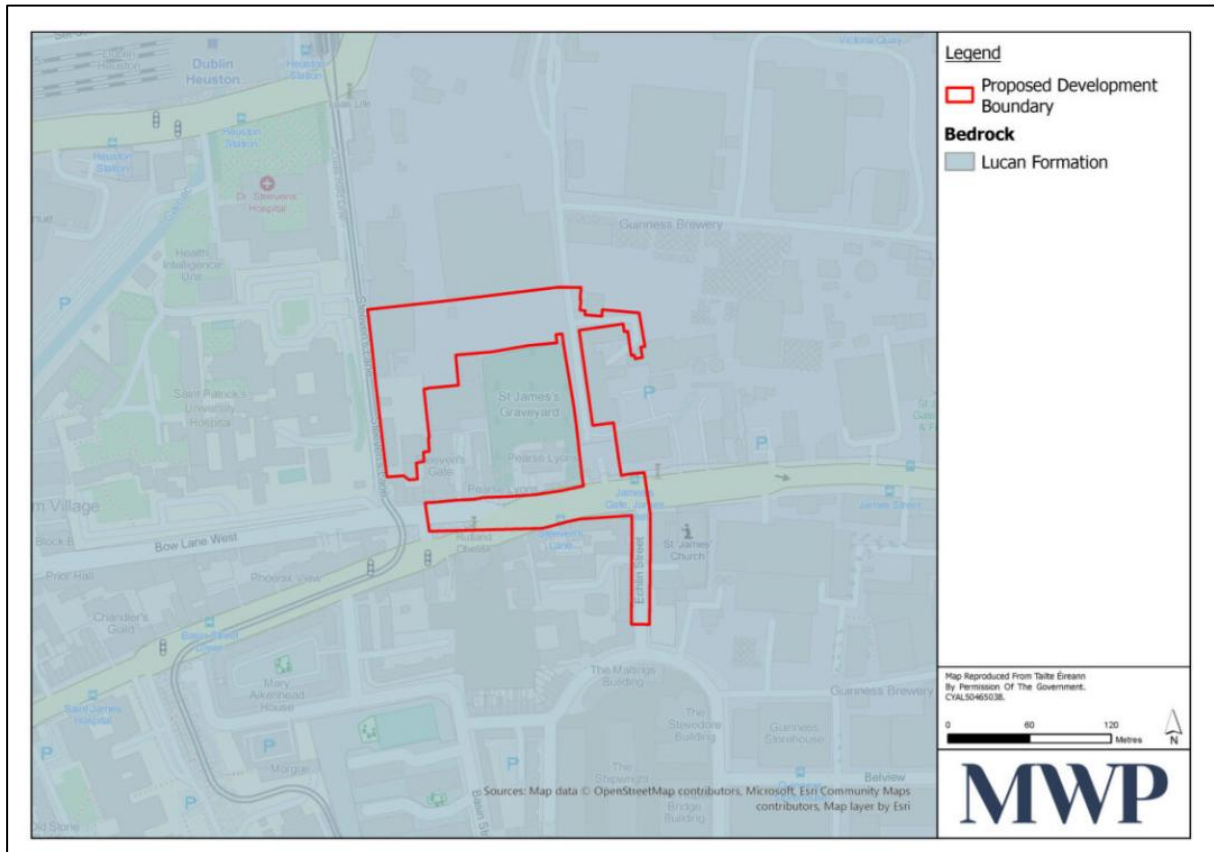


Figure 8-1: Bedrock Geology Map

8.2.1.3 Quaternary Geology

According to the GSI mapping, the majority of the area surrounding the site, including the site itself, is described as 'Urban' (made ground). Localised areas of other quaternary sediments occur in the vicinity, including TLs (till derived from limestones) and GLs (gravels derived from limestones) (GSI, 2026). The easternmost section of the map is underlain by Alluvium (A), while the southern portion transitions into TLs. Gravelly Alluvium (Ag) is present to the west of the site. Refer to Figure 8-2.

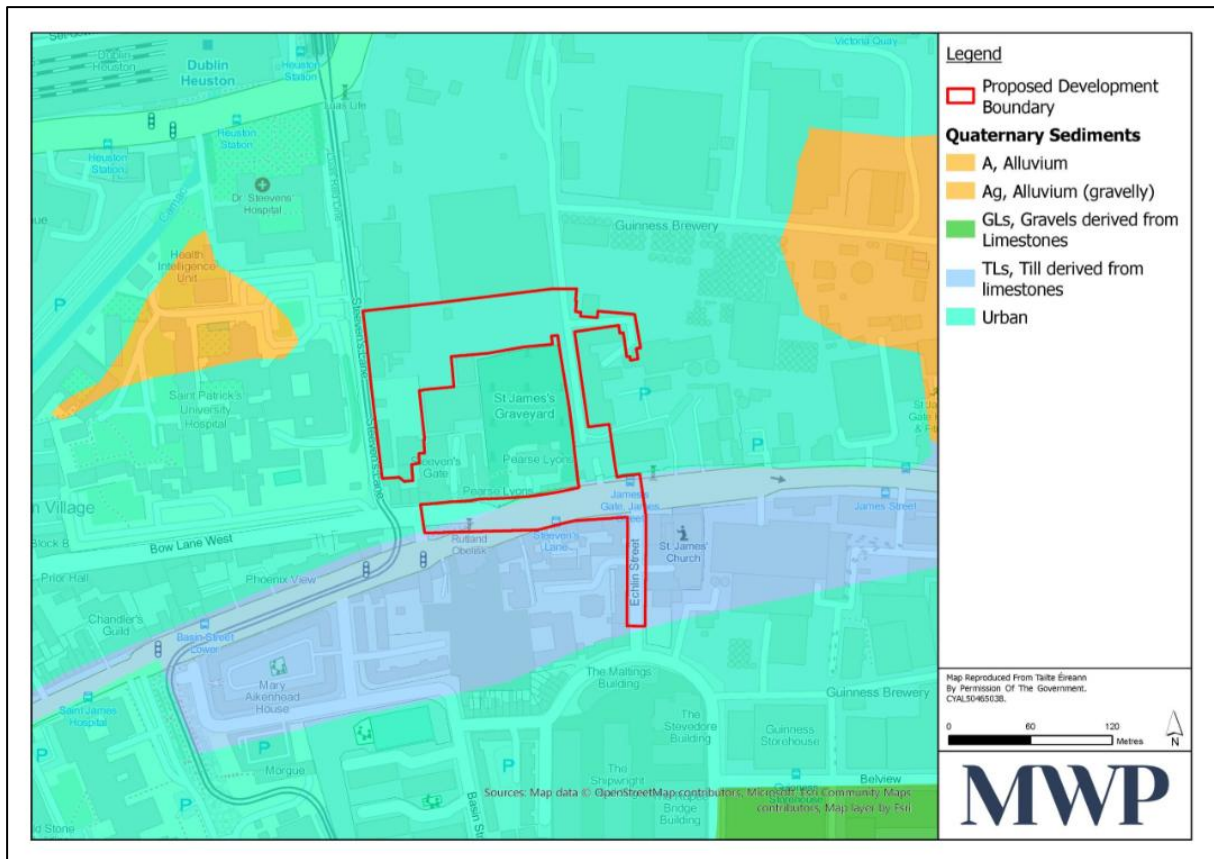


Figure 8-2: Quaternary Geology Map

8.2.1.4 Geological Heritage

According to the GSI mapping, the Guinness Wells (Site Code: DC005) is a County Geological Site (CGS) that sits at the western boundary (approximately 30 m from the red line boundary) located within the Guinness Brewery complex at St James's Gate, which is notable as wells such as these are unusual in Dublin City. According to the GSI mapping, The Guinness Wells are of 'High' importance and were drilled through deposits from the former River Liffey channel into the underlying Lower Carboniferous Limestone bedrock. All excavations associated with the Proposed Development will be confined to the red line boundary and cable routes shown on the planning drawings, and no works are proposed within the Guinness Wells CGS. No dewatering is proposed as part of the development and no groundwater was encountered during the site investigations. Consequently, the Proposed Development is not anticipated to adversely affect the geological or hydrogeological integrity of the Guinness Wells CGS.

Three other 'High' importance CGSs are located within the vicinity of the Proposed Development – Phoenix Park (Site Code: DC009) approximately 0.6 km northwest, the River Poddle (Site Code: DC011) approximately 1.25 km southeast, and the Temple Bar Street Wall (Site Code: DC 012) approximately 1.75 km east (GSI, 2026). Given their separation from the Proposed Development and distance from the RLB, no impacts on these CGSs are anticipated.

The Dublin City Walls (Site Code: DC002), General Post Office (Site Code: DC003), and the Trinity College Museum Building (Site Code: DC006) are CGS located within a 2.5 km radius of the Site. However, these sites are of significance primarily due to their archaeological and architectural value rather than their geological or geomorphological importance. Refer to Figure 8-3.

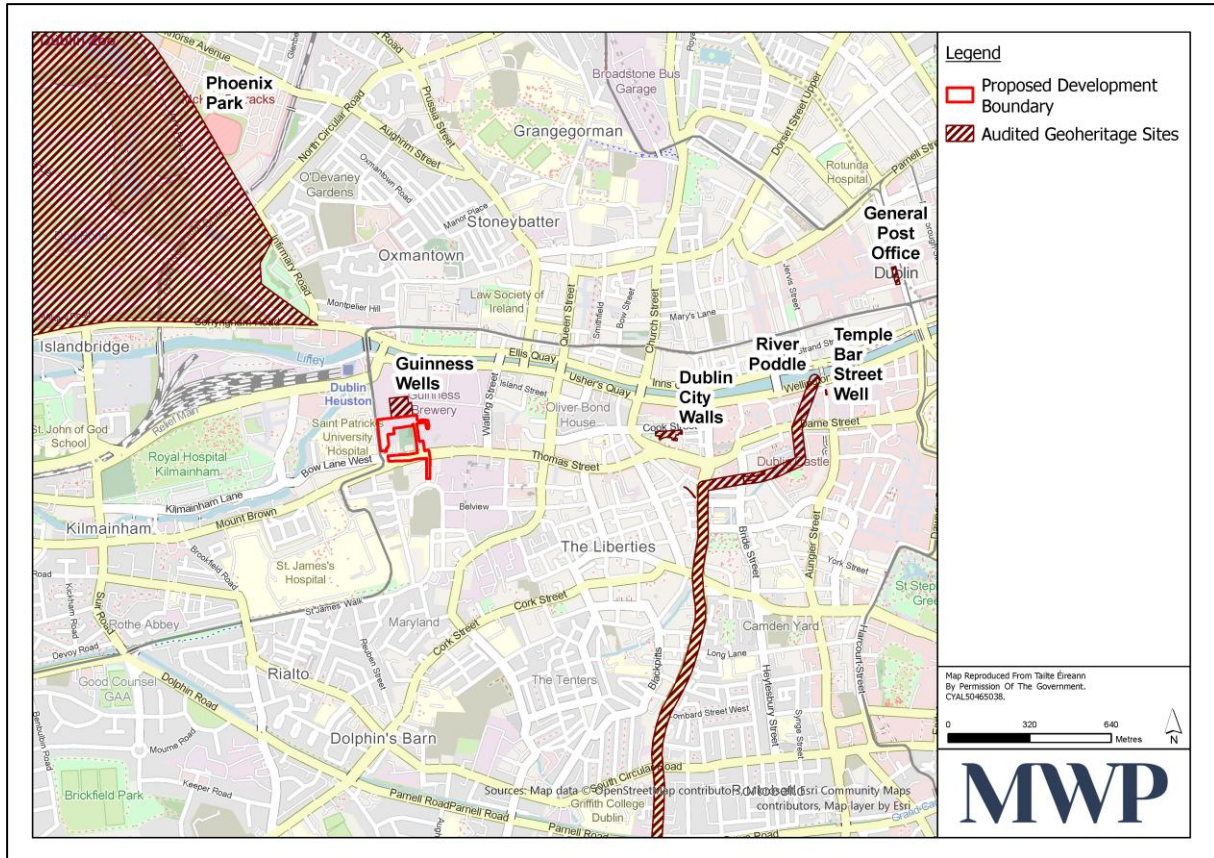


Figure 8-3: Geological Heritage Map

8.2.1.5 Glacial Landforms

According to GSI mapping, seven deglacial landforms occur within an approximate 2 km radius of the proposed site, all exhibiting an east–west orientation. Two glaciofluvial terraces are present: one approximately 0.6 km wide located 0.8 km northeast of the Site, and another approximately 0.5 km wide situated 0.9 km to the west. A prominent 1.2 km wide assemblage of hummocky moraines lies 0.4 km southeast of the Site, while an additional moraine measuring approximately 0.5 km in width occurs 1.9 km to the southwest. Smaller hummocky moraine features, each less than 0.3 km wide, are located 0.9 km southwest, 1.2 km east, and 1.2 km southeast of the Site. Further GSI mapping confirms the presence of these seven deglacial landforms within the study area, including glaciofluvial terraces up to 0.6 km in width.

Several meltwater channels are also identified within 2 km of the Site, predominantly oriented west to east. A pre-glacial meltwater channel, broadly aligned with the River Liffey, crosses the northern portion of the Site. This feature is interpreted as a paleo-channel, largely infilled during subsequent marine transgression, and is estimated to lie at depths of approximately 20–25 mbgl. In addition, three meltwater channels trending toward the River Liffey terminate upstream of the Site: two are located north of the river within Phoenix Park, and one lies to the south.

Approximately 0.5 km northwest of the Site boundary, within Phoenix Park, there is a 1.4 km long crag-and-tail subglacial lineation-oriented northwest to southeast. Another subglacial lineation (striae) is located 1.7 km southwest of the Site.

The glacial landforms within Phoenix Park are designated as a County Geological Site and are therefore considered to be of geological significance. However, they are not anticipated to be affected by the Proposed Development at the Site. Refer to Figure 8-4.

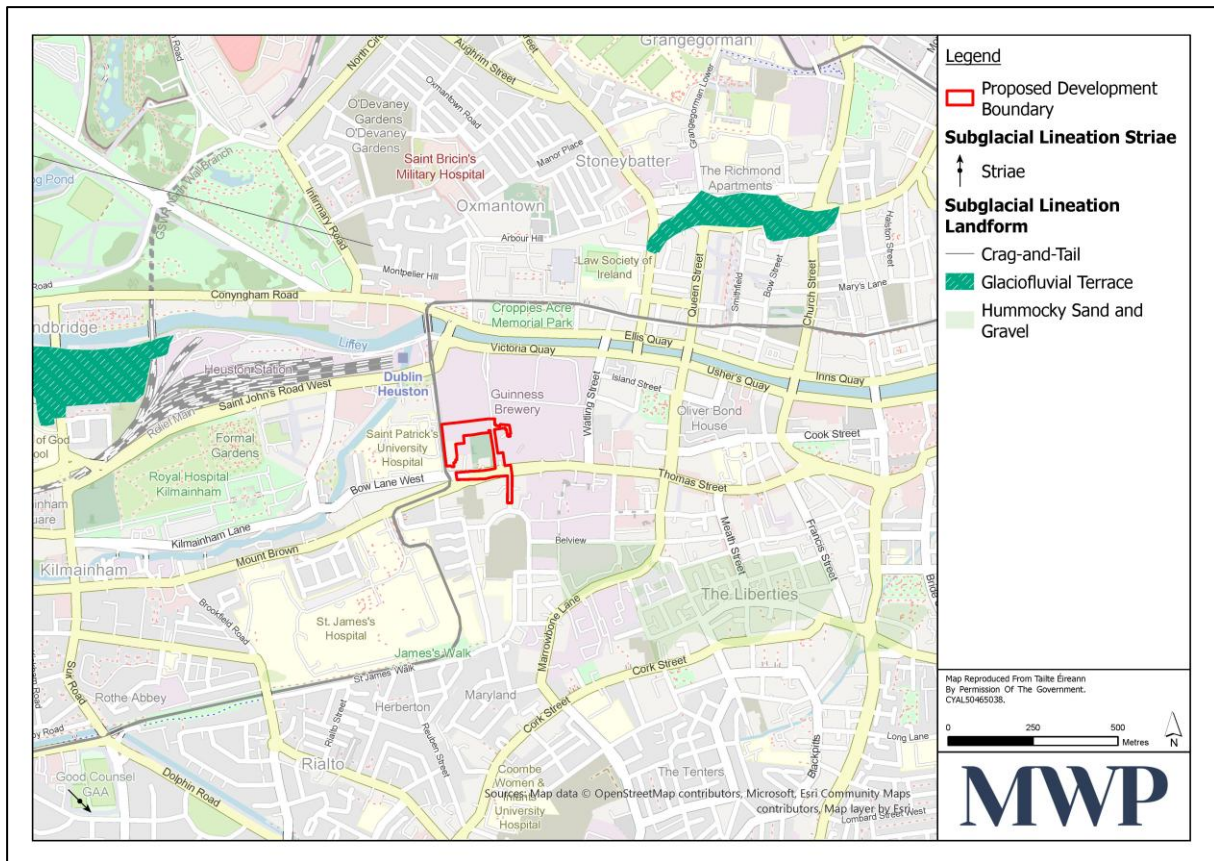


Figure 8-4: Glacial Landforms Map

8.2.1.6 Soils and Subsoils

The site and its surrounding area are characterised by made ground and built land, in accordance with the GSI Teagasc soil map database (GSI, 2026).

Regionally, soils to the north of the site are mapped as mineral alluvium (AlluvMIN), comprising undifferentiated estuarine alluvium typically consisting of sands and gravels, with the potential for thin interbedded layers of fine-grained clays and silts. Approximately 0.3 km to the west, along the banks of the Camac River, alluvial deposits are also present. Further west, at approximately 0.1 km beyond the riverbank, the soils transition to limestone till, characterised by calcareous parent material and grey-brown podzolic soils that are generally deep, basic, and well-drained. Refer to Figure 8-5.

Ground investigation data for the substation site indicates that subsurface conditions at the site are dominated by made ground, extending to depths of approximately 7.5 mbgl in the investigation boreholes drilled within the site. (See Section 8.2.1.8 for further details.) The made ground comprises a heterogeneous mixture of cohesive and granular materials, with inclusions of anthropogenic debris such as red brick, concrete, timber, and mortar.

Underlying the made ground, the natural strata consist of very stiff brown sandy, slightly gravelly, silty clay with a low cobble content. Borehole termination was recorded upon encountering obstructions interpreted as possible boulders at depths of 8.0 mbgl in BH02 and 9.0 mbgl in BH01.

No groundwater ingress was observed in either borehole during the period of fieldwork.

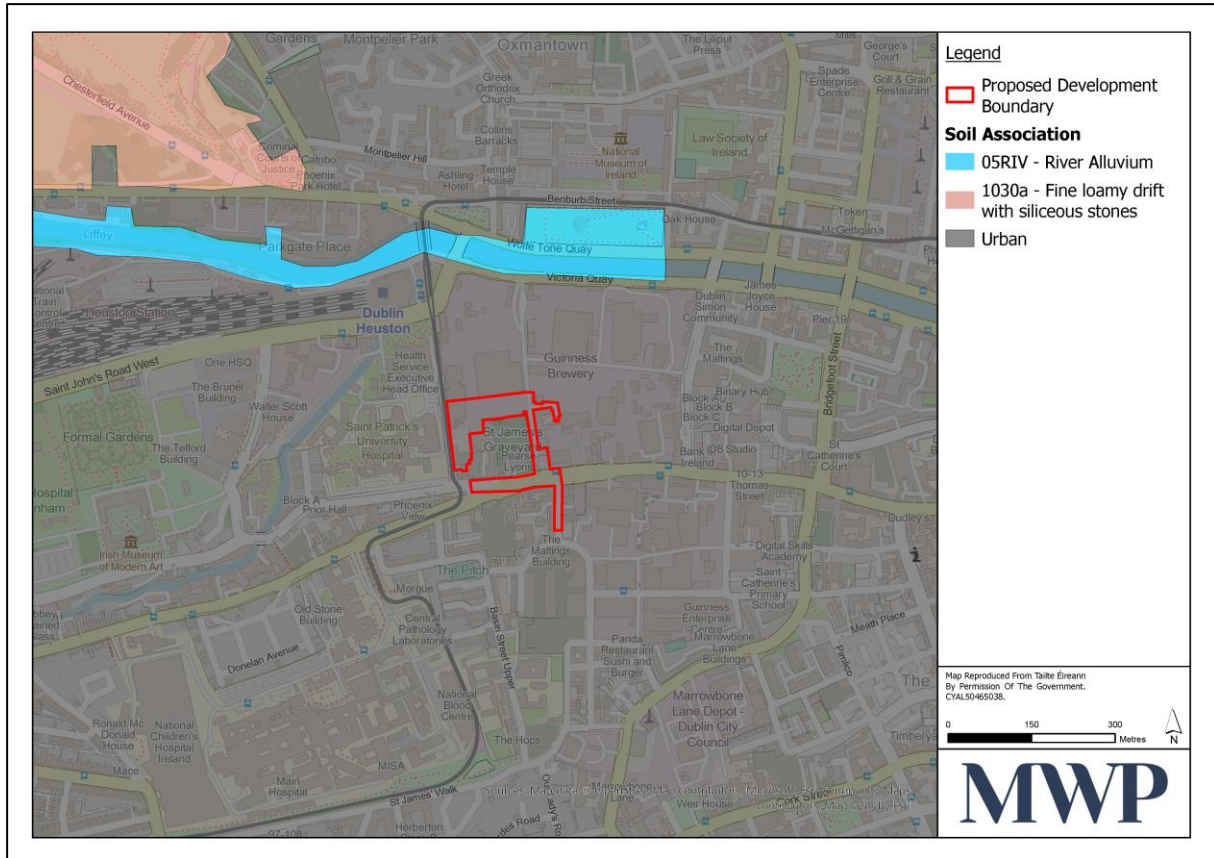


Figure 8-5: Subsoils Map

8.2.1.7 Current and Future Land Use

According to GSI CORINE and cover mapping, the land use at the site 'artificial surfaces' (Code: 111), with a further description of 'continuous urban fabric' in which >80% of the surface area is covered by impermeable feature including buildings, roadways, and artificial surfaces (EPA, 2026). Land to the west, south, and southwest of the site is 'discontinuous urban fabric' (Code: 112), where 30-80% of the surface area is covered by impermeable features. There are 'green urban areas' approximately 1 km northwest and 1.3 km northeast of the site respectively. Refer to Figure 8-6.

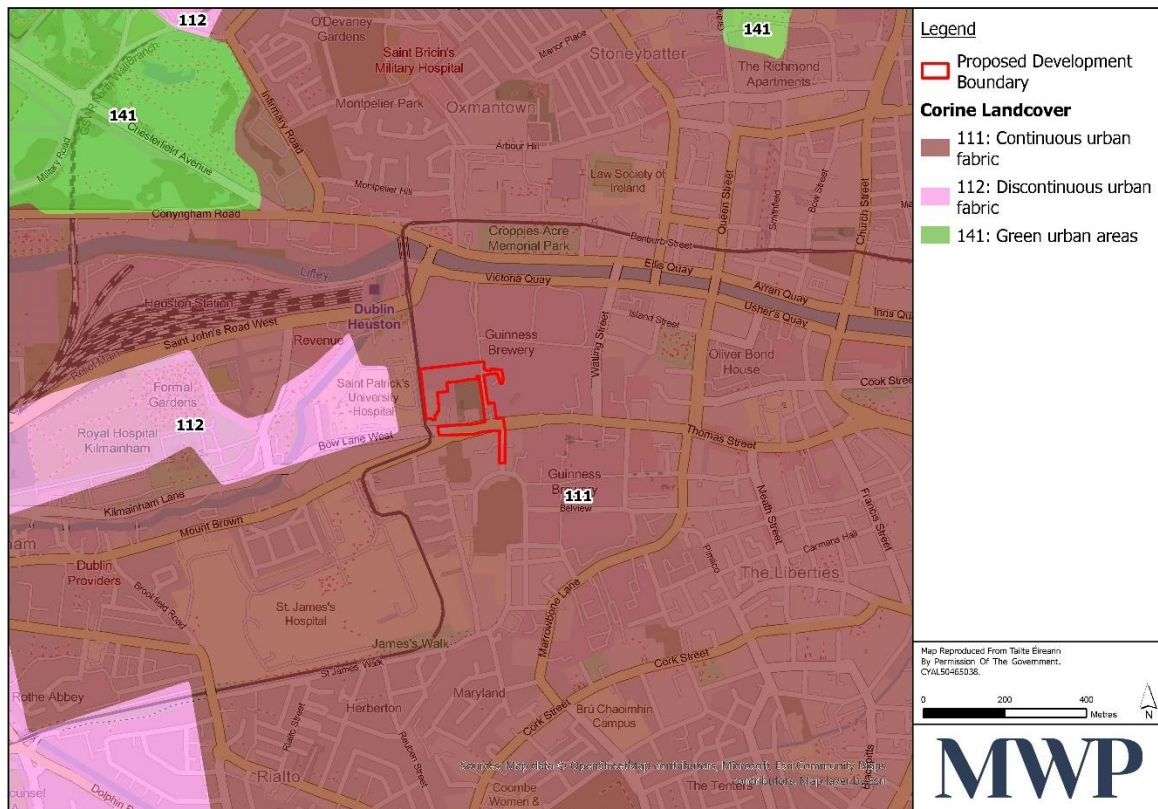


Figure 8-6: CORINE 2018 Map

8.2.1.8 Previous Intrusive Site Investigation (S.I.) Campaigns

Two phases of intrusive site investigation have been completed on the site:

- The first phase comprised a ground investigation campaign carried out by Site Investigations Ltd in 2020, which included the drilling of 2 No. boreholes, the excavation of 3 No. window samples, and the completion of 3 No. dynamic probing tests. Borehole depths were recorded during the works. Soil samples were recovered and subsequently tested for saturation, strength, geochemical parameters, and material characterisation.
- The second phase was completed by Site Investigations Ltd in 2022 and involved the excavation of 4 No. trial pits. Soil samples obtained during this phase were tested for geochemical parameters.
- Access to undertake the intrusive site investigations was constrained by the existing buildings and structures on the site.

Copies of the SI reports including environmental test results are included in **Appendix 11**.

2020 Ground Investigation

2 No. cable percussion boreholes were carried out by Site Investigations Ltd in June, 2020. The boreholes, designated BH01 and BH02, were drilled to depths of 9.0 m and 8.0 mbgl, respectively. Drilling in both boreholes was terminated upon encountering obstructions, interpreted as possible boulders.

Ground conditions encountered in both boreholes were dominated by made ground, with fill material recorded to a depth of approximately 7.5 mbgl. The made ground comprised a mixture of cohesive and granular soils with inclusions of red brick, concrete, timber, and mortar. The underlying natural strata consisted of very stiff brown

sandy, slightly gravelly, silty clay with low cobble content, extending to borehole termination. Refer to the boreholes logs contained in **Appendix 11**.

No groundwater ingress was observed in either borehole during the fieldworks. A groundwater monitoring standpipe was installed in BH01. However, no groundwater was encountered during drilling or subsequent monitoring, and the borehole remained dry throughout the investigation period.

Environmental soil sampling was undertaken in both boreholes. Three samples were collected from BH01 at depths of 1.0 m, 6.0 m and 8.0 mbgl, and four samples were collected from BH02 at depths of 1.0 m, 3.0 m, 5.0 m and 7.9 mbgl. These samples were submitted for geotechnical testing, including soil classification and particle size analysis.

Two environmental soil samples only were selected for chemical analysis, comprising one sample from BH01 at 1.0 mbgl and one sample from BH02 at 1.0 mbgl.

Three window samples with associated dynamic probe testing were completed across the site; however, no environmental soil samples were collected from the window sample locations. Refer to the Window Sample and Dynamic Probe Log contained in **Appendix 11**. The locations of the boreholes and window samples are shown on Figure 8-7.

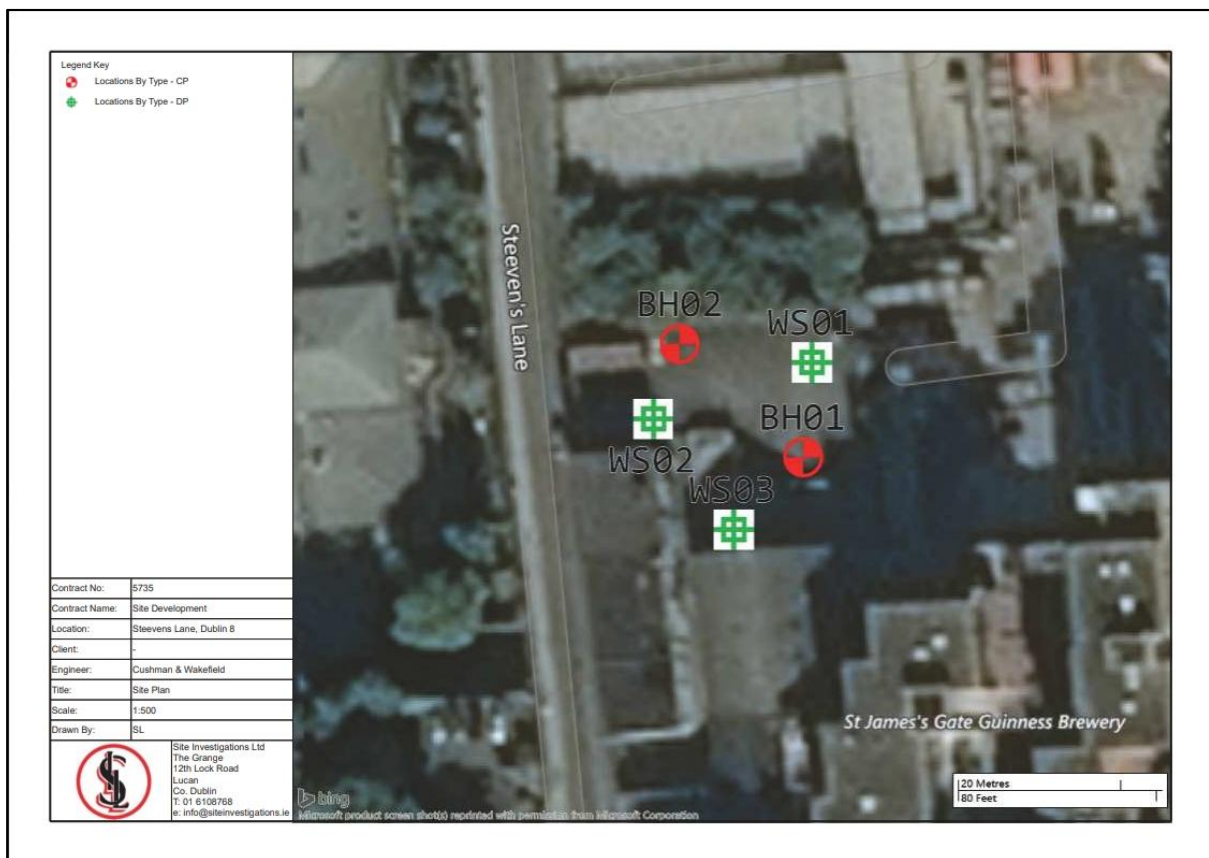


Figure 8-7: Borehole and Window Sample Locations

2022 Ground Investigation

4 No. trial pits were excavated at the site by Site Investigations Ltd on the 2nd December 2022. Refer to Figure 8-8 for trial pit locations. 1 No. soil sample was taken from each trial pit at a depth of 0.5 mbgl for environmental testing.

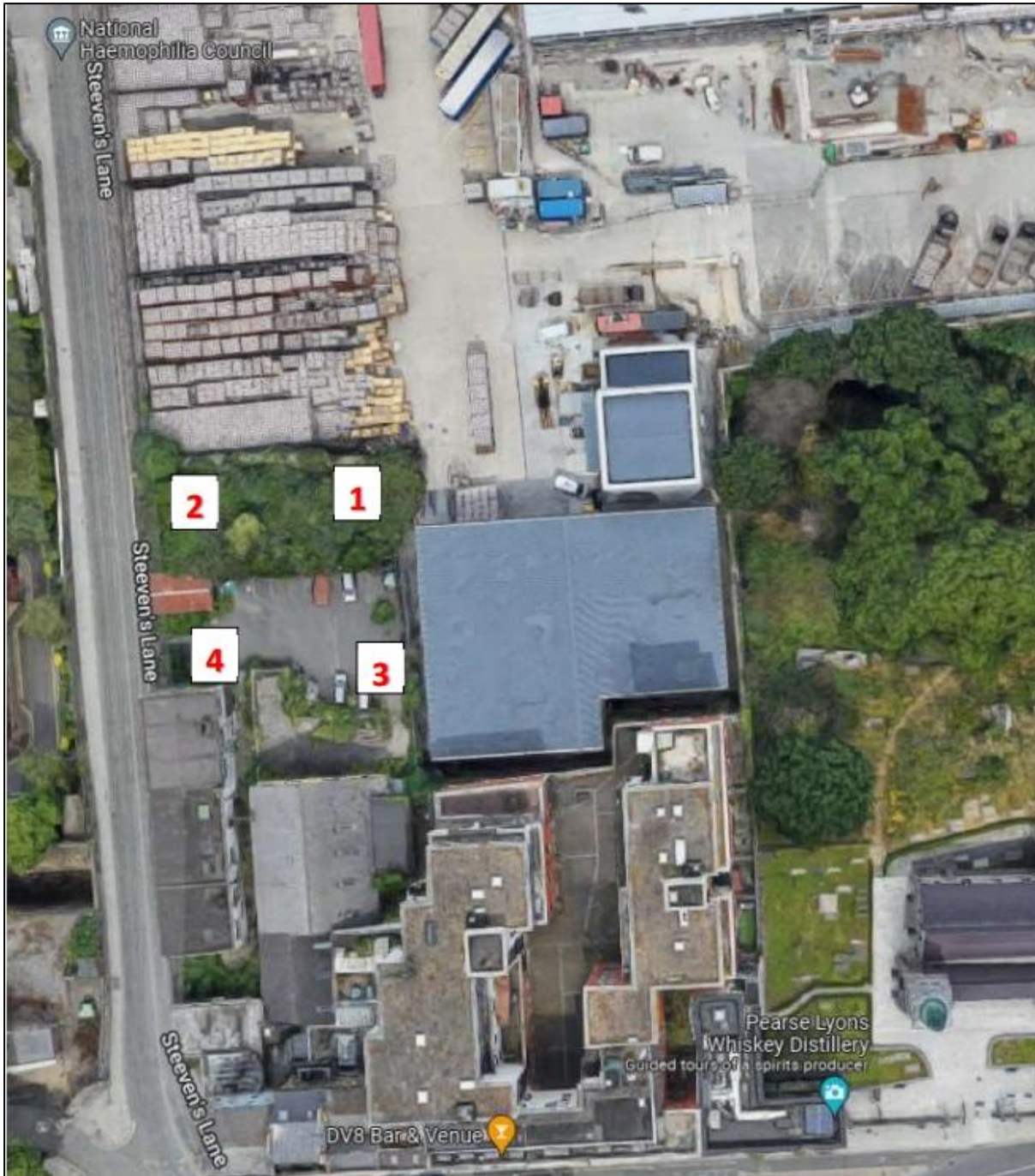


Figure 8-8: Snippet of Trial Pit Locations

Environmental Soil Sampling and Testing Results

Environmental soil sampling was undertaken during the intrusive site investigations to assess soil quality and inform waste classification in accordance with relevant Irish and EU waste legislation. Sampling was carried out during both the 2020 borehole investigation and the 2022 trial pit investigation.

Soil samples were collected and analysed for geotechnical, geochemical and environmental parameters including the following:

- Moisture Content;
- Particle size distribution;

- Geochemical parameters:
 - Total/Dissolved Organic Carbon;
 - TPH / BTEX;
 - MTBE;
 - PCBs;
 - Mineral Oil (DRO/EPH);
 - Speciated PAHs;
 - Metals;
 - Loss on ignition; and
 - Asbestos detection.

The 2 no. soil samples taken at 1 mbgl in BH01 and BH02 in 2020 and the 4 no. soil samples taken at 0.5 mbgl in the four trial pits in 2022 detected hydrocarbon contamination. The results were screened using waste classification criteria and using the Haz Waste online tool. Mineral oil, Polyaromatic Hydrocarbons (PAHs) and Total Petroleum Hydrocarbons (TPHs) were present within the made ground at levels that classify the material as potentially hazardous. This indicates that some of the made ground requiring excavation and off-site removal, may not be suitable for landfill in Ireland and may require alternative off site treatment and/or disposal. Full results of the laboratory analyses are provided in **Appendix 11**.

8.2.2 Potential Impacts

8.2.2.1 Demolition Phase

The demolition phase will involve the removal of existing buildings and associated hardstanding within the site. Demolition will be undertaken on a phased basis, with one building demolished at a time, in order to accommodate site constraints and temporary stockpiling requirements. These activities will result in short-term disturbance of near-surface soils and made ground where existing slabs, foundations, and underground services are removed.

The site is a brownfield site with a history of industrial use, and hazardous soils have previously been identified within the site. As a result, demolition activities have the potential to expose contaminated soils and historically deposited materials that are currently sealed beneath existing structures. There is potential for localised mobilisation of contaminants through dust generation, surface runoff, or handling of demolition arisings during this phase.

Overall, demolition-related impacts on land and soils are expected to be short-term and localised. With the implementation of appropriate mitigation measures as set out in the oCEMP, demolition activities are not expected to give rise to significant adverse effects on land and soils.

8.2.2.2 Construction Phase

Earthworks will be required as part of the proposed construction works. The Proposed Development will involve excavation works associated with general site preparation, piled foundations and underground services which have the potential to impact soils and geology. Approximately 7,250 m³ of material will be excavated from the main substation site, with a further c. 4,500 m³ generated from trenching works for underground cabling within the Diageo complex and adjoining public road network. This estimate is based on the in-situ excavation and does not include a bulking factor. Excavation depths across the site will vary in response to existing ground levels and proposed formation levels. Shallow excavations of approximately 0.9 mbgl will occur where open hardstanding

space is proposed. Typical excavation depths across the main substation footprint range from approximately 3.0–5.8 mbgl, with maximum localised excavations of up to approximately 7.9 mbgl required in areas of significant level change. Excavated materials, expected to comprise made ground and sandy gravelly clay, will be removed off-site to appropriately licensed waste facilities in accordance with relevant waste classification requirements.

These activities have the potential to disturb any existing contamination, potentially resulting in the mobilisation or spread of contaminants and leading to impacts on soil quality depending on the nature and extent of contamination encountered.

Construction will also require the importation of fill (approximately 6,500 m³ for the main site and 3,430 m³ for trench reinstatement) and the use of piling to accommodate site ground conditions and load requirements.

Works in the northern section will include temporary removal of part of the existing retaining wall to facilitate access and construction of the substation. This will involve staged demolition, excavation, and installation of temporary support systems, followed by construction of a new retaining structure founded on competent ground. These activities introduce potential risks of soil disturbance and localised ground instability during excavation and reconstruction phases.

In addition, the use of fuels, oils, and chemicals during construction introduces a risk of accidental spills or leaks of substance such as fuel, waste oil or chemicals which could result in localised soil contamination. Concrete works, including pouring and curing, also present a potential risk to soils due to the highly alkaline nature of fresh concrete and associated runoff, which may adversely affect soil chemistry if not properly controlled. Refer to the oCEMP accompanying this planning application for further information.

8.2.2.3 Operational Phase

During the operational phase of the development, there will be potential for impact on land and soils. Potential operational impacts on soils are primarily associated with the presence of electrical infrastructure and associated equipment within the compound. In the event of equipment failure or accidental release, there is potential for localised contamination of soils from insulating oils or other electrical fluids. Such impacts would be confined spatially to the immediate vicinity of the source and would not be expected to affect wider site soils.

Once construction is complete, no routine excavation or soil disturbance is anticipated, as all underground electrical infrastructure, foundations, ducting, and drainage systems will be fully installed and sealed.

8.2.3 Mitigation Measures

8.2.3.1 Demolition Phase

Mitigation measures will be implemented during the demolition phase to minimise potential adverse impacts on land and soils arising from the removal of existing buildings, foundations, and hardstanding.

Demolition works will be undertaken on a phased basis, with one building demolished at a time, to accommodate site constraints and to allow for the controlled handling and temporary storage of demolition arisings. This approach will minimise the extent of exposed ground at any one time and reduce the risk of disturbance to underlying soils and made ground.

Demolition activities will be carefully managed to prevent the uncontrolled release of dust, debris, or contaminants to soils. Where existing slabs, foundations, or underground structures are removed, exposed soils will be managed to limit disturbance and prevent the spread of contaminated material beyond the demolition footprint.

Demolition waste will be segregated, handled, and stored in designated areas away from sensitive site boundaries and drainage features. Temporary stockpiling of demolition materials will be limited in extent and duration, with

materials removed from site for reuse, recycling, or disposal at authorised facilities in accordance with applicable waste legislation and the procedures set out in the oCEMP and RWMP.

Prior to demolition works, an asbestos audit will be undertaken of all buildings scheduled for demolition. Any asbestos-containing materials identified will be removed by specialist contractors in accordance with relevant legislation and disposed of at appropriately licensed facilities. This will prevent the contamination of soils arising from asbestos disturbance during demolition.

Measures will be implemented to control runoff and prevent sediment-laden or contaminated water generated during demolition from entering the surrounding environment. Demolition activities will be planned with regard to weather conditions, with works reduced or suspended during periods of heavy rainfall where there is an increased risk of pollution.

In the event that contaminated soils or historically deposited waste materials are encountered during demolition works, activities in the affected area will be halted and appropriate procedures will be implemented in accordance with the oCEMP, including further assessment, segregation, and controlled removal of materials as required.

Regular monitoring and site inspections will be undertaken throughout the demolition phase to ensure that mitigation measures are implemented effectively and that any issues are identified and addressed promptly.

8.2.3.2 Construction Phase

Mitigation measures will be implemented during the construction phase to prevent, minimise, and manage potential adverse impacts on land and soils arising from excavation, earthworks, material handling, surface water runoff, the storage and use of fuels and oils, concrete-related activities, and the generation of construction and demolition waste.

Due to current site constraints associated with existing buildings and substructures, additional intrusive ground investigations cannot be undertaken prior to the demolition phase. Once the demolition phase has been complete and the site has been cleared of all obstructions, supplementary site investigation and soil sampling and testing will be undertaken to adequately classify the material which will require excavation and off-site removal. Waste classification will be undertaken in accordance with legislative requirements and any material requiring off site removal will be taken to appropriate fully authorised waste facilities.

Excavation and earthworks will be planned, managed, and supervised in accordance with relevant best practice guidance, including BS 6031:2009 (Code of Practice for Earthworks) and applicable waste management legislation. A Soil Waste Management Plan setting out the waste classification material to be excavated, the planned manner of excavation and designated stockpiling and site supervision and record keeping of off-site disposal will be implemented throughout the earthworks phase. The extent of exposed ground will be minimised, and excavation will not advance beyond the rate of construction. Works will be programmed with regard to prevailing weather conditions, with excavation activities reduced or suspended during periods of prolonged or intense rainfall to limit erosion and sediment mobilisation. Temporary stockpiling of excavated materials will be minimised where practicable. Where required, stockpiles will be located within designated areas away from drainage features and formed to shed water. Stockpiles will be protected using covers, bunding, or similar measures where necessary to prevent erosion, dust generation, and sediment runoff. Materials not reused immediately will be stored on impermeable surfaces within designated areas.

Surface water runoff arising during construction and earthworks will be managed to prevent sediment-laden or contaminated water entering the drainage network or surrounding environment. Erosion and sediment control measures will be implemented in accordance with best practice pollution prevention guidance. Temporary controls such as silt fencing, silt traps, or equivalent systems will be installed where required and maintained for the duration of the works. The storage, handling, and use of fuels, oils, and chemicals during construction will be managed to prevent contamination of soils and groundwater. Refuelling and fuel storage will be undertaken in designated areas using controlled procedures and appropriate containment measures. Fuels, oils, and chemicals

will be stored on impermeable surfaces within bunded areas designed to provide adequate secondary containment. Construction plant and equipment will be maintained in good working order, with regular inspections undertaken to identify leaks or defects.

Concrete materials will be managed during the construction phase to prevent contamination of soils, surface water, and groundwater. The handling, placement, and removal of concrete will be undertaken in a controlled manner to minimise the risk of alkaline runoff, dust generation, and accidental release to ground. Concrete pours will be supervised by suitably qualified personnel, and concrete waste and wash water will be managed and removed from site in accordance with waste management requirements.

The management of construction materials and waste arising during demolition and construction will be undertaken in accordance with the Resource and Waste Management Plan (RWMP), which forms an integral component of the oCEMP.

Regular inspections will be undertaken throughout the construction phase to ensure that soil protection measures, erosion and sediment controls, fuel and oil management procedures, concrete management controls, and waste management practices are implemented effectively.

Following the completion of confirmatory soil sampling and the application of appropriate mitigation measures, the impact on soils and geology during the construction phase is not expected to be significant.

8.2.3.3 Operational Phase

During the operational phase, mitigation measures will be implemented to minimise the potential for adverse impacts on land and soils associated with the operation of the electrical infrastructure.

All electrical equipment will be installed and maintained in accordance with relevant industry standards to ensure structural integrity and minimise the risk of leaks or failures. Equipment containing oils or other liquids will be designed and installed with appropriate containment measures to prevent accidental releases to ground.

The substation compound and associated infrastructure will be constructed with hardstanding surfaces and drainage systems to limit direct interaction with underlying soils. Routine inspection and maintenance of plant, equipment, and infrastructure will be undertaken to identify and address any defects that could give rise to contamination.

In the event of an accidental spill or leak during operation, appropriate response procedures will be implemented to contain and manage the incident, and any contaminated material will be removed and disposed of in accordance with relevant waste management requirements.

Overall, standard operational practices and maintenance procedures will ensure that the potential for impacts to land and soils during operation is minimised.

8.2.4 Conclusion

While contamination has been identified within the soils at the site, the implementation of the proposed mitigation measures will address potential adverse effects and reduce the risk of further contamination.

Operational impacts on soils are expected to be low and limited to the unlikely event of localised contamination from electrical equipment failure. As no routine excavation or soil disturbance will occur during operation, impacts are not considered significant. As a result, land and soils impacts during operation are not expected to be significant.

8.3 Water

8.3.1 Receiving Environment

The Proposed Development is located within a highly urbanised area of Dublin City, where the natural hydrological regime has been extensively modified by urban development and engineered drainage infrastructure. This section describes the existing water environment in the vicinity of the Proposed Development, including the hydrological setting, surface water and groundwater receptors, which together form the receiving environment for the assessment.

8.3.1.1 Hydrology

Catchment Description

The Proposed Development site lies within Hydrometric Area (HA) 09 (Liffey and Dublin Bay) and is within the River Liffey catchment. The Liffey and Dublin Bay Catchment Summary (Liffey Catchment Assessment 2010 – 2015 HA 09) (EPA 2018) describes this catchment as including the area drained by the River Liffey and by all streams entering tidal waters between Sea Mount and Sorrento Point in County Dublin, draining a total area of 1,616km². The Liffey and Dublin Bay catchment contains the largest population (approximately 1,255,000) of any catchment in Ireland and is characterised by a sparsely populated, upland southeastern area underlain by granites and a densely populated, flat, low lying limestone area over the remainder of the catchment basin. The catchment area is heavily urbanised and industrialised.

Information pertaining to the Liffey and Dublin Bay catchment is presented in Table 8-1 below. The major catchment is Hydrometric Area 09 and more specifically falls within Sub-catchment 09_15 and 09_16. Under the Water Framework Directive (WFD), these are designated as Liffey_SC_090 and Dodder_SC_010, respectively.

These sub-catchments are subdivided into individual river basins. The application site is situated within the Camac River Basin (CAMAC_040), which covers an area of approximately 25.9 km², and the Poddle River Basin (Poddle_010), which extends over approximately 16.4 km².

Table 8-1: Catchment Details

WFD Catchment (Hydrometric Area)	Area (km ²)	WFD Sub-catchment ID	WFD Sub-catchment Name	WFD River Basin	River Basin Area (km ²)
09	1,624	09_15	Liffey_SC_090	Camac_040	25.9
09	1,624	09_16	Dodder_SC_010	Poddle_010	16.4

WFD Waterbody Overview

The water bodies identified in the vicinity of the Proposed Development site are illustrated in Figure 8-9 and summarised in Table 8-2. These water bodies have been classified under the Water Framework Directive (WFD) in terms of their ecological status and risk classification.

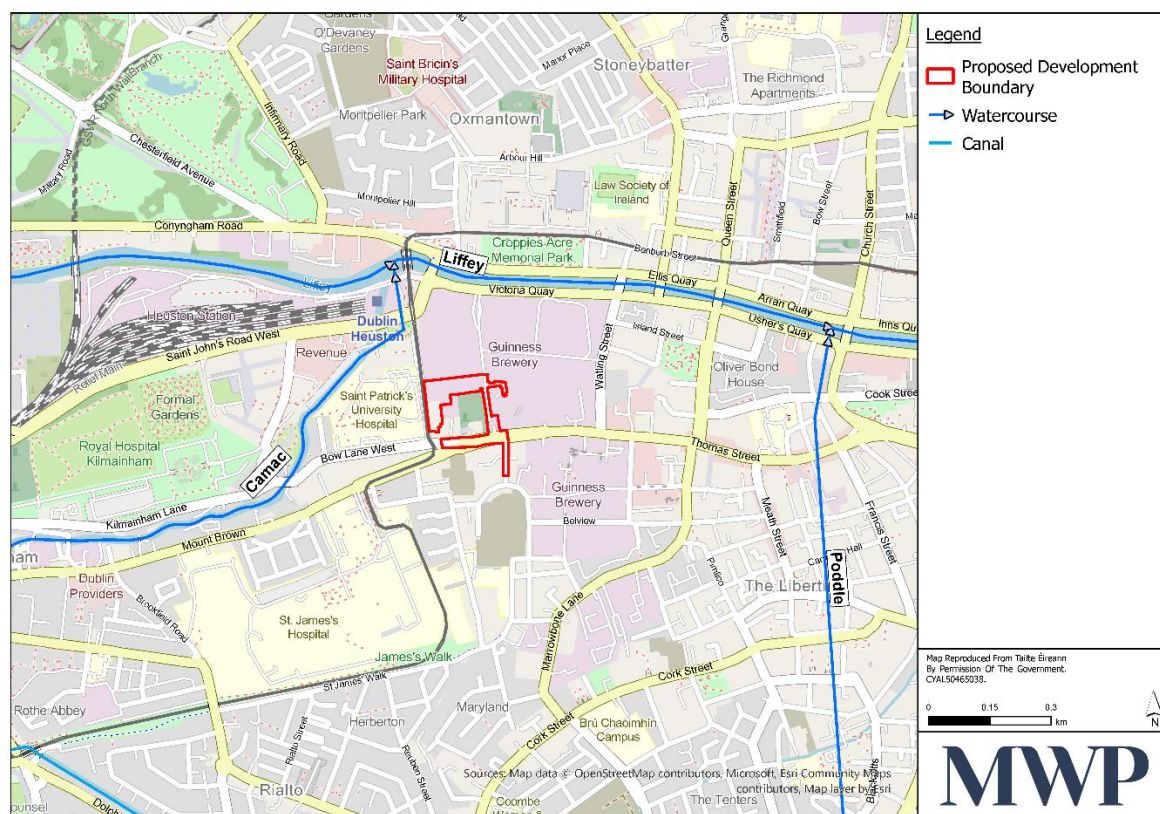


Figure 8-9: Surrounding Waterbodies

Table 8-2: Surrounding Surface Water Body Status

Waterbody Name	Code	Type	Status 2019-2024	At Risk of Not Achieving Good Status	Pressures
Camac	IE_EA_09C020500	River	Poor	At risk	Urban run-off, Urban Waste Water
Poddle	IE_EA_09P030800	River	Poor	At risk	Urban run-off
Liffey Estuary Upper	IE_EA_090_0400	Transitional	Moderate	Review	None Indicated
Liffey Estuary Lower	IE_EA_090_0400	Transitional	Moderate	At risk	Urban Waste Water
Tolka Estuary	IE_EA_090_0200	Transitional	Poor	At risk	Urban Waste Water
Dublin Bay	(IE_EA_090_0000)	Coastal	Good	Not at risk	None Indicated
Grand Canal Main Line	IE_09_AWB_GCMLE	Canals	Good	Not at risk	None Indicated

8.3.1.2 Hydrogeology

The Groundwater Body (GWB) underlying the site is Dublin (GWB) (EU Code: IE_EA_G_008). The current round of monitoring 2019-2024 has the GWB classified as 'Good' overall groundwater Status, but the GWB risk is deemed as requiring 'Review'.

The aquifer underling the site, according to GSI online map viewer, is a Locally Important (LI) Aquifer whereby bedrock is moderately productive only in local zones.

Groundwater vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated generally by human activities. The GSI have mapped vulnerability as ranging from moderate in the immediate vicinity of the site to low beneath the surrounding lands. Groundwater vulnerability maps are based on the types and thickness of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features.

Table 8-3 provides a summary of the WFD status for the groundwater aquifer under the Proposed Development site. The water quality has remained good from 2013 to the latest results in 2024 and the aquifer was at risk in terms of WFD status. This groundwater body has no recorded significant pressures. This means that the water quality standards are at risk of not meeting their environmental objective.

Table 8-3: Groundwater Status

Waterbody Name (Code)	Type	Status 2013-2018	Status 2016-2021	Status 2019-2024	WFD Risk
Dublin (IE_EA_G_008)	Groundwater	Good	Good	Good	Review

8.3.1.3 Drinking Water

According to the EPA maps (Article 7 Abstraction for Drinking Water) there are no surface water drinking water sources at the Proposed Development or within 2 km of the Proposed Development .

8.3.1.4 Bathing Waters

Bathing Waters are designated under Regulation 5 of Directive 2006/7/EC. Designated Bathing Waters exist under S.I. No. 79/2008 and S.I. No. 351/2011 Bathing Water Quality (Amendment) Regulations 2011. EC Bathing Water Profiles – Best Practices and Guidelines 2009. The closest designated Bathing Water location is Sandymount Strand c. 5.3 km east of the Proposed Development . This site has a bathing water quality status of 'Sufficient'.

8.3.1.5 Existing Site Drainage Regime

As outline in Section 4.5.1, surface water runoff from the proposed substation site is collected via downpipes and rainwater gullies and is conveyed, together with foul water flows, via a 100 mm diameter outfall to an existing UÉ combined manhole on Steeven's Lane. Similarly, along James's Street where the proposed underground cable works will occur, surface water currently also drains to the public combined sewer network. These mixed foul and surface water flows are then conveyed within the combined UÉ-operated public network before being ultimately discharged to Ringsend Wastewater Treatment Plant (WWTP).

SW-1 Discharge Point to River Liffey

A section of the proposed UGC infrastructure, refer to Section 3.1.1, is encompassed within the landholding that makes up Diageo's Industrial Emissions Licence (IEL) site boundary (Licence Number: P0301-04). Surface water from within this part of the Proposed Development site is discharged in controlled manner into the River Liffey at Gate 6 on Victoria Quay via an existing stormwater outfall, namely SW-1, in accordance with the IEL.

8.3.2 Potential Impacts

8.3.2.1 Flood Risk Assessment

A Flood Risk Assessment (FRA) was undertaken for the Proposed Development to evaluate the potential for flooding from fluvial, pluvial, coastal, groundwater and other localised sources, and to inform the design and layout of the proposed works.

The FRA was prepared in accordance with the principles and methodology set out in the *Planning System and Flood Risk Management Guidelines for Planning Authorities* (2009). The assessment included a review of available historical flood records, CFRAM and NCFHM mapping, LiDAR topographic data, hydrological and hydrogeological conditions, and climate change scenarios.

The FRA concluded that the Proposed Development site is located within Flood Zone C, where the probability of flooding is low. The proposed substation development is classified as a “Highly Vulnerable Development” under the Guidelines; however, such development is considered appropriate within Flood Zone C. The assessment confirmed that the site itself is not predicted to be impacted by fluvial or coastal flooding during either present-day or mid-range future climate scenarios, with mapped flood extents remaining outside the site boundary.

The FRA also determined that the Proposed Development would not result in a significant increase in flood risk elsewhere. Surface water drainage infrastructure associated with the Proposed Development will be designed in accordance with Sustainable Drainage Systems (SuDS) principles and will, insofar as practicable, replicate existing greenfield runoff characteristics and natural drainage patterns. This will ensure that post-development runoff rates are appropriately controlled and that the receiving drainage network and surrounding environment are not adversely affected.

Overall, the FRA concluded that the Proposed Development is not subject to significant flood risk and can be developed in accordance with national planning and flood risk management policy, subject to the implementation of the proposed drainage and mitigation measures outlined in the assessment. Refer to **Appendix 13** for further information.

8.3.2.2 Water Framework Directive

A Water Framework Directive (WFD) compliance assessment has been undertaken for the Proposed Development. (refer to **Appendix 12**).

The key focus of the assessment was to ensure that the construction and operation of the Proposed Development does not result in a deterioration in the current WFD status of the water bodies within the WFD study area, and also to ensure that the Proposed Development does not compromise the achievement of the WFD objectives for the improvement in the overall status of these water bodies. The assessment also considers the protected areas linked to the water bodies in question and ensures that the protected area objectives are also unaffected. A summary of the assessment is provided below.

The scoping stage of the WFD compliance assessment has concluded that there were a number of components and activities associated with the Proposed Development that could represent a potential risk to the WFD status and objectives and therefore were scoped into the assessment. The relevant quality elements contributing to the overall status were considered and how each potential impact could affect these. Mitigation measures included within the Proposed Development design and the application of best practice mitigation measures will ensure that there will be no significant effects on the WFD status of the water bodies within the study area. The overall conclusion of this WFD compliance assessment is that there will be no risk of deterioration in status from the Proposed Development nor will it prevent the achievement of the objectives for the relevant water bodies including the protected area objectives.

8.3.2.3 Construction Phase

During the construction period, the Proposed Development has the potential to lead to temporary impacts on hydrology and water quality unless appropriate mitigation is applied.

As established in Section 8.3.1.5 above, the existing combined drainage system at the proposed substation site and along James's St discharges mixed foul and surface water flows to Ringsend WWTP. Within Diageo's IE Licensed (P0304-04) landholding, the area relevant to the proposed development discharges surface water to the River Liffey via existing discharge point SW-1. Other discharge points exist within the wider Diageo landholding but are not relevant to the proposed development.

During demolition of the existing retaining walls on the northern and eastern boundaries of the proposed substation site and during installation of the UGC on Diageo's IEL site (P0304-04), a temporary surface water pathway will exist linking the construction site with the River Liffey via discharge point SW-1 at Victoria Quay.

The construction of the Proposed Development will require control of surface water during the construction works to ensure sediment and other construction related debris does not enter the receiving waterbodies.

No groundwater was encountered in the site investigation. The cable percussive boreholes extended 8-9 mbgl. Groundwater conditions at greater depth remain uncertain. As piled foundations are required for the Proposed Development, the piles installation could extend beyond the investigated depth and encounter previously unidentified groundwater-bearing strata.

The following are additional potential impacts on hydrology due to the construction of the Proposed Development;

- Inappropriate site management of excavations could lead to the discharge of suspended solids to surface waters.
- The construction of new infrastructure has the potential to obstruct existing overland flow.
- Use of machinery during construction could result in spillages of fuel, oils, lubricants and other hydrocarbons to surface waters, with potentially adverse impacts on local groundwater quality and surface water quality in downstream areas. A film of oil on a waterbody can prevent gaseous exchange and prevent re-oxygenation, with deleterious effects on aquatic ecology.

8.3.2.4 Operational Phase

Once operational, the proposed substation will be unmanned and remotely controlled with the primary risk to water quality arising from the potential contamination of surface waters during substation maintenance duties such as filling/topping up oil and the potential this presents for ingress of hydrocarbons and/or other pollutants into the public drainage system. However, with the embedded design measures incorporated into the Proposed Development design, no significant pathway for operational pollutants to impact the receiving water environment has been identified.

Surface water runoff from the proposed substation site will be collected and conveyed to the existing combined sewer in Steevens Lane, which ultimately drains to Ringsend WWTP. The underground cable (UGC) elements of the Proposed Development will be reinstated following construction and will not alter the existing operational surface water drainage regime.

Therefore, the potential for operational activities to result in adverse effects on water is not anticipated.

8.3.3 Mitigations

8.3.3.1 Construction stage

The following mitigation measures will be implemented to protect the water environment during the construction phase.

Groundwater Protection

The site investigation report recommends that piling design is undertaken by a specialist and that further investigation or groundwater monitoring may be required where deeper foundations are proposed. These recommendations will be incorporated into the detailed design of the Proposed Development.

Should groundwater be encountered during excavations, temporary dewatering will be undertaken using appropriately designed sumps and mechanical pumps. Sumps will be carefully located and constructed to minimise groundwater ingress and facilitate efficient dewatering while avoiding unnecessary disturbance of surrounding ground conditions.

Surface Water Protection

Demolition Phase

Existing surface water drainage infrastructure within and adjacent to the site, including gullies, manholes and underground pipework, will be identified prior to the commencement of demolition and construction works. Where existing drainage assets are affected by the works, appropriate protection or temporary diversion measures will be implemented to maintain drainage functionality.

Where required, silt traps, bunding and over-pumping may be utilised by the Contractor to ensure stormwater run-off is adequately contained and managed on site. The Appointed Contractor will be required to develop a stormwater management plan prior to commencement of any works, which will detail the proposals to collect and discharge stormwater runoff, all in accordance with the necessary DCC approval.

At Proposed Substation Site

- Construction-phase surface water runoff from within the substation site will be retained within the development area utilising water barriers and the existing surrounding walls.
- Runoff will be directed through silt removal measures prior to discharge via an existing manhole within the site connected to UÉ's combined drainage network before ultimate discharge to Ringsend WWTP and, therefore, with no outfall to the River Liffey.
- All existing site pipes and gullies within the works area will be protected, isolated, or temporarily sealed as required for the duration of the construction works to prevent the ingress and uncontrolled discharge of silt-laden water or other contaminants to the existing drainage network.

At Public Roads

- Works within the public road corridor will be carried out using temporary drainage and runoff control measures to prevent migration of sediment, debris or contaminated water to the existing public drainage network.
- Excavations will be temporary and of limited duration, with any accumulated water managed through controlled pumping and discharge arrangements incorporating silt control measures as required.
- Runoff will be directed through silt removal measures prior to discharge via an existing manhole within the site connected to UÉ's combined drainage network before ultimate discharge to Ringsend WWTP and, therefore, with no outfall to the River Liffey.

At Diageo's Complex

- Temporary surface water management measures, including silt fencing and silt traps (or similar systems), will be implemented to control sediment laden runoff.
- Any existing surface water drainage connections (SW discharges) within the active work area will be temporarily isolated or shut down, where practicable and agreed with Diageo, to prevent sediment-laden runoff entering the drainage network. Any water requiring discharge from the works area will be appropriately treated prior to controlled discharge.
- During demolition and construction activities, all stormwater discharges from the Site to the Liffey or public rain sewer will be re-directed to SE-1 for discharge into the public sewer for treatment at Ringsend WWTP. This will prevent any potentially contaminated water onsite discharging directly or indirectly into the receiving surface waterbody.
- Monitoring will be carried out throughout the construction phase through regular visual inspections. The Environmental Manager will conduct inspections to ensure that all runoff, erosion and sediment control measures are in place and functioning effectively. Any defects or failures identified will be addressed promptly to prevent environmental impact.

Environmental Management and Monitoring

An Environmental Manager will be appointed by the Contractor and will be responsible for overseeing the implementation of water quality protection measures as outlined in the oCEMP accompanying this application.

Measures relating to pollution prevention, fuel and chemical storage, refuelling procedures, spill response, concrete management, wastewater management, environmental incident response and associated staff training will be implemented in accordance with the relevant provisions of the oCEMP and associated method statements.

8.3.3.2 Operational phase

The Proposed Development incorporates a number of embedded design measures that form an integral part of the project design and reduce the potential for impacts on surface water and groundwater quality during the operational phase.

- The proposed transformers will be installed within appropriately designed bunded areas to provide containment in the event of an accidental release of transformer insulating oil. The bunding will prevent the migration of oil into the surface water drainage system, underlying ground or groundwater, thereby reducing the potential for impacts on the receiving water environment.
- Oil-sensitive detection systems, alarms and remote monitoring will be incorporated to provide early identification of potential leaks or spills. Regular inspection and maintenance of transformers, bunding and associated systems will be undertaken to ensure their continued effectiveness.
- The proposed permeable paving system will incorporate an impermeable liner beneath the underlying stone storage layer. This design measure prevents downward migration of surface water runoff and associated pollutants into the underlying ground and groundwater body, thereby reducing the potential for impacts on groundwater quality.
- Surface water runoff will be managed through the proposed drainage system and discharged to the existing public drainage infrastructure.

8.3.4 Conclusion

8.3.4.1 Construction Phase

The construction phase, specifically demolition works, underground cable trenching, and piling activities, has the potential to result in temporary impacts on surface water and groundwater through sediment runoff and accidental pollution events. With the implementation of the mitigation measures outlined above and ongoing

environmental monitoring, these impacts will be minimised, resulting in no significant effects on the receiving water environment.

8.3.4.2 Operational Phase

The operational phase presents limited potential for impacts on the water environment due to the embedded design measures incorporated into the Proposed Development.

Once all of the above mitigations have been implemented it is considered that the potential effects identified will not have a significant impact on the hydrology or hydrogeology of the surrounding area.

8.4 Air Quality

8.4.1 Receiving Environment

The Proposed Development is located within an urban setting immediately adjacent to the Diageo Guinness Brewery at James Street.

Influences on local air quality are primarily attributed to traffic on local roads, industrial activities and domestic emissions from fuel combustion.

The EPA monitors air quality through its Air Quality Index for Health (AQIH), which divides the country into six regions: Dublin, Cork, Munster, Leinster, Connaught, and Ulster. The AQIH is calculated on an hourly basis using representative monitoring data from each region. Air quality is rated on a scale from 1 to 10, where 1 indicates 'Good' air quality and 10 indicates 'Very Poor,' based on the worst-case pollutant within that region. According to EPA mapping, the region in which the site is located is currently classified as having 'Good' air quality.

The nearest air quality monitoring station to the Proposed Development site is located on St John's Road West, Dublin 8, opposite Heuston Station (Station 57). The station forms part of the national ambient air-quality monitoring network and is operated by Dublin City Council in conjunction with the Environmental Protection Agency (EPA). Monitoring is carried out using continuous monitors for oxides of nitrogen and particulates (PM₁₀ and PM_{2.5}). Monitoring data indicate that the daily PM₁₀ limit value of 50 µg/m³ was exceeded on 12 days during the previous seven-month period². Nitrogen oxide concentrations remained within the applicable air quality standard, with a maximum recorded concentration of 108 µg/m³, well below the hourly limit value of 200 µg/m³.

8.4.2 Potential Impacts

8.4.2.1 Construction Phase

The demolition, excavation, and construction phases of a development have the potential to generate localised air quality impacts, primarily through the release of dust and particulate matter (PM₁₀ and PM_{2.5}). Demolition activities can produce significant quantities of fine dust due to the breaking down of building materials, while excavation works may expose and disturb soils, leading to wind-blown dust emissions, particularly during dry and windy conditions. Construction activities, including material handling, vehicle movements, and on-site machinery operation, can further contribute to airborne particulates as well as exhaust emissions such as nitrogen oxides

² The EPA air-quality monitoring webpage ([Readings | AirQuality.ie](#)) currently displays available monitoring data for 2026 only. The assessment period and reported exceedance data are therefore based on the data available through the EPA online monitoring portal for the specified 2026 period.

(NO_x) and carbon monoxide (CO). Without appropriate mitigation measures, these emissions may temporarily affect nearby sensitive receptors. However, such impacts are typically short-term and can be effectively managed through best practice measures such as dust suppression, the use of well-maintained plant, and good site management practices.

The subsequent section outlines the potential impacts of these emissions on local air quality and on nearby sensitive receptors during the demolition and construction of the Proposed Development.

Asbestos Containing Materials (ACM)

The proposed works will involve the demolition of existing structures, some of which are known or presumed to contain asbestos-containing materials (ACMs). The level of risk depends on factors such as the type and condition of the ACM, the extent of disturbance, and the duration and intensity of exposure. Intact and undisturbed ACMs generally present minimal risk; however, activities such as demolition, cutting, drilling, or breaking materials can significantly increase the likelihood of fibre release.

These materials will however be carefully managed in accordance with all relevant health, safety, and environmental legislation and guidance to prevent the release of asbestos fibres into the air. Prior to demolition, any ACMs will be removed by licensed contractors using controlled methods. Strict procedures, including enclosure, dampening techniques, and air monitoring, will be implemented to minimise potential emissions. With these measures in place, the risk to construction workers, nearby receptors, and the wider environment will be effectively controlled and reduced to an acceptable level.

Dust Emissions

Due to the nature of the activities involved, airborne dust will be a key air pollutant of concern during the demolition and construction phase of the Proposed Development. Construction-related dust may cause localised impacts, including nuisance at nearby residential properties and potential effects on sensitive ecosystems.

TII has issued guidance for evaluating dust impacts arising from road construction projects in its document 'Air Quality Assessment of Proposed National Roads – Standard (PE-ENV-01107, December 2025)', which also makes reference to the UK IAQM guidance is 'Guidance on the assessment of dust from demolition and construction (V2.2)' (IAQM, 2024).

The criteria used to determine the dust emission magnitude are summarised in Table 8-4, while the receptor sensitivity classifications adopted for the assessment are presented in Table 8-5.

Table 8-4: Step 2A – Potential for Dust Emission Magnitude (Source: IAQM, 2024)

Activity	Large Dust Emission Magnitude	Medium Dust Emission Magnitude	Small Dust Emission Magnitude
Demolition	Total building volume >75,000 m ³ ; potentially dusty construction materials (e.g. concrete); on-site crushing and screening; demolition activities >12 m above ground level.	Total building volume 12,000–75,000 m ³ ; potentially dusty construction materials; demolition activities 6–12 m above ground level.	Total building volume <12,000 m ³ ; construction materials with low potential for dust release (e.g. metal cladding or timber); demolition activities <6 m above ground level; demolition undertaken during wetter months.
Earthworks	Total site area >110,000 m ² ; potentially dusty soil type (e.g. clay prone to suspension when dry); >10 heavy earth-moving	Total site area 18,000–110,000 m ² ; moderately dusty soil type (e.g. silt); 5–10 heavy earth-moving vehicles active	Total site area <18,000 m ² ; soil type with large grain size (e.g. sand); <5 heavy earth-moving vehicles active

Activity	Large Dust Emission Magnitude	Medium Dust Emission Magnitude	Small Dust Emission Magnitude
	vehicles active at any one time; formation of bunds >6 m in height.	at any one time; formation of bunds 3–6 m in height.	at any one time; formation of bunds <3 m in height.
Construction	Total building volume >75,000 m ³ ; on-site concrete batching; sandblasting activities.	Total building volume 12,000–75,000 m ³ ; potentially dusty construction materials (e.g. concrete); on-site concrete batching.	Total building volume <12,000 m ³ ; construction materials with low potential for dust release (e.g. metal cladding or timber).
Trackout	>50 HDV (>3.5 tonnes) outward movements per day; potentially dusty surface material; unpaved road length >100 m.	20–50 HDV (>3.5 tonnes) outward movements per day; moderately dusty surface material; unpaved road length 50–100 m.	<20 HDV (>3.5 tonnes) outward movements per day; surface material with low potential for dust release; unpaved road length <50 m.

Table 8-5: Step 2B – Sensitivity of the Area (Source: IAQM, 2024)

Receptor Type	High Sensitivity	Medium Sensitivity	Low Sensitivity
Dust Soiling (People and Property)	Dwellings, museums, culturally important collections, high amenity areas, long-term car parks, car showrooms.	Parks, places of work and locations where amenity expectations are moderate.	Playing fields, farmland, footpaths, short-term car parks and roads.
Human Health (PM ₁₀)	Residential properties, hospitals, schools, care homes and locations where people may be exposed for ≥8 hours per day.	Offices, shops and workplaces where workers may be exposed for relevant periods.	Locations with transient exposure such as public footpaths, parks and shopping streets.
Ecological Effects	International or national designated sites, or habitats containing highly dust-sensitive species.	Nationally designated sites with potentially affected features or species with uncertain sensitivity.	Locally designated sites with potentially affected features.

Based on the assessment criteria above, the resulting dust emission magnitude classifications are presented in Table 8-6. The classification reflects the relatively small scale of the Proposed Development, which occupies a site area of approximately 0.23 ha, with demolition and construction volumes well below the IAQM thresholds for large developments.

Although the overall development is relatively small, peak construction traffic is estimated at approximately 30 HGV outward movements per day. In accordance with the IAQM guidance this corresponds to a Medium dust emission magnitude for track-out.

Table 8-6: Potential dust emission magnitude associated with the Proposed Development

Activity	Dust Emission Magnitude
Demolition	Medium (demolition activities approximately 11m above ground level and total building volume is >12,000m ³)
Earthworks	Small (estimated excavated material volume of 1,745 m ³)
Construction	Small (estimated construction volume < 12,000 m ³)
Track-out	Medium (estimated peak of 30 HGVs daily)

The sensitivity of the surrounding area was assessed in accordance with the IAQM methodology, taking account of the type, number and proximity of nearby receptors, local background PM₁₀ concentrations and the presence of ecological receptors. The assessment is summarised in Table 8-7.

Residential receptors represent the most sensitive human health receptors in proximity to the Proposed Development, with more than 100 receptors located within 20m of dust-generating activities. Healthcare receptors, including St. Patricks Hospital, were also considered as part of the assessment as this facility is located approximately 20m from the Proposed Development boundary. The sensitivity classification for human health is therefore governed by both the nearby residential and healthcare receptor population.

Table 8-7: Sensitivity of Surrounding Area

Impact Pathway	Assessment Considerations	Sensitivity of Surrounding Area
Dust soiling	>100 receptors less than 20m away from dust generating activities	High
Human health (PM ₁₀)	>100 receptors less than 20m ways from dust generating activities, with an average PM10 <24 µg/m ³	Medium
Ecological effects	No designated ecological sites or sensitive habitats within 50m of dust generating activities.	Low

Combining the dust emission magnitude with the sensitivity of the surrounding area, in accordance with the IAQM (2024) methodology, results in Medium dust risk for dust soiling and human health during demolition and track-out activities, reflecting the proximity of sensitive receptors and the predicted construction traffic movements. The risk associated with earthworks and construction activities is assessed as Low, while the potential risk to ecological receptors is Low for demolition and track-out and Negligible for earthworks and construction. The resulting dust risk classifications are summarised in Table 8-8.

Table 8-8: Potential Impacts for the Proposed Development

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Track-out
Dust Soiling	Medium Risk	Low Risk	Low Risk	Medium Risk
Human Health	Medium Risk	Low Risk	Low Risk	Medium Risk
Ecological	Low Risk	Negligible	Negligible	Low Risk

The risk of uncontrolled dust emissions during the demolition and construction phase is primarily influenced by local wind conditions, both in terms of speed and direction, as well as the frequency and duration of rainfall. During dry conditions, wind may entrain and disperse dust from exposed ground, stockpiles and other disturbed surfaces associated with the construction works. Additionally, wind speed will influence the dispersion of exhaust emissions from construction vehicles and equipment. Damp weather significantly mitigates the likelihood of dust and PM₁₀ emissions from exposed areas such as roads.

Overall, dust emissions from the construction activities of the Proposed Development will be temporary and localised. Provided dust mitigation measures are effectively implemented, in accordance with best construction practices incorporated into the oCEMP, as detailed in Section 8.4.3 below, dust emissions are not expected to result in any significant adverse effects on local air quality.

8.4.2.2 Operational Phase

Once the Proposed Development is operational there will be no significant direct emissions to the atmosphere. The substation does not produce emissions as there is no combustion process. The Proposed Development will mostly be monitored remotely. Maintenance of the Proposed Development will be minimal, comprising of maintenance and servicing visits to ensure that all electrical infrastructure is working properly. No emissions from maintenance operations are envisaged.

Fire risk assessments undertaken at other similar substations indicate these facilities would be considered a Low fire risk. While the risks associated with a fire involving electrical equipment cannot be completely eliminated, the level of monitoring and controls proposed for this facility provide a level of safety that reduces the potential for the outbreak of a fire to a level that would be considered to be as low as reasonably practicable. In the event of an electrical anomaly within the compound, the control systems will provide measures to reduce the chance of fire ignition. Should a fire develop within the compound, the limited combustibility of the structure and its contents would reduce the risk of fire spread to adjacent units or adjacent properties.

8.4.3 Mitigation Measures

Potential air quality impacts during the construction phase can occur from uncontrolled or fugitive dust emissions and Particulate Material (PM), including PM₁₀ emissions. Construction phase generated dust can be minimised by the following the best standard practice measures:

- The appointed Contractor shall undertake a site-specific dust risk assessment prior to commencement of construction works. The findings of the assessment shall inform the implementation of appropriate dust control measures, which shall be incorporated into the site-specific Construction Environmental Management Plan (CEMP) and implemented throughout the construction phase.

- Dust-generating activities, including demolition, excavation and material handling, shall be managed through the implementation of appropriate suppression measures, including the use of water bowsers, misting or spraying systems, particularly during dry or windy conditions.
- Visual dust inspections will be undertaken during the demolition, earthworks and construction phases in accordance with the oCEMP. Given the urban setting of the site and proximity to sensitive receptors, daily visual monitoring will be carried out by the appointed Environmental Manager. The inspection locations will be detailed within the CEMP prior to commencement of works. Where excessive dust emissions are observed or dust-related complaints are received, corrective measures such as increased water suppression, covering of stockpiles, enhanced road sweeping and review of site activities will be implemented.
- Demolition activities with the potential to generate significant dust shall be undertaken using controlled techniques, including localised water suppression at the point of dust generation. Drop heights for demolition arisings, excavated materials and other dust-generating materials shall be minimised where practicable.
- Excavated and demolition materials shall be managed to minimise dust generation, including minimisation of stockpiling, prompt removal from site where practicable, and appropriate covering or positioning of stockpiles where required. Stockpiles shall be located to minimise exposure to wind and sensitive receptors.
- Construction and demolition materials, waste materials and dust-generating materials transported off-site shall be securely covered. Skips and storage areas containing fine or dust-prone materials shall be covered when not in use, with enclosed skips used where appropriate.
- Temporary screens, solid site hoarding, debris netting or other suitable barriers shall be installed where required to minimise the dispersion of dust beyond the site boundary.
- Construction traffic shall be managed in accordance with the Traffic Management Plan incorporated within the CEMP. Measures shall include the control of vehicle speeds, maintaining clean site access routes, ensuring HGV wheels are cleaned prior to leaving the site, and undertaking road sweeping within the site and on surrounding public roads where required.
- Dust-generating activities shall be monitored throughout the construction period, particularly during dry or windy conditions, with additional mitigation measures implemented where necessary. Regular site inspections shall be undertaken to assess the effectiveness of dust control measures and ensure ongoing compliance.

8.4.4 Conclusions

With the implementation of the mitigation measures outlined above, including best practice dust suppression, demolition controls, and site management procedures, dust generation and associated effects on nearby sensitive receptors are expected to be effectively controlled. Whilst demolition works, excavation and potential disturbance of made ground or contaminated material have the potential to give rise to temporary dust emissions, these will be short-term in nature and will be managed in accordance with good practice guidance. On this basis, and assuming full implementation of the proposed mitigation measures, residual air quality impacts during the construction phase are not expected to be significant.

During the operational phase, no significant sources of air emissions are anticipated. Emissions will be limited to those associated with occasional maintenance vehicle movements. As a result, air quality impacts during operation are not expected to be significant.

8.5 Noise and Vibration

A Noise and Vibration Impact Assessment has been prepared as supporting information for the application seeking full planning permission for a 110kV substation at Steeven's Lane – see **Appendix 9**. The main conclusions of the study are as follows:

The assessment has been carried out in accordance with recognised national and international guidance, including BS 5228, BS 4142, and EPA Guidance Note NG4, and is informed by site-specific baseline noise monitoring, strategic noise mapping, and historic noise data. The results confirm that the receiving environment is characterised by an established, transport-dominated urban noise climate, with relatively high and consistent ambient and background noise levels arising primarily from road traffic, Luas operations, and surrounding commercial activity.

During the demolition and construction phases, temporary increases in noise levels are anticipated, particularly at the closest receptors located within approximately 5 m of the site boundary. Predicted noise levels indicate that, while certain short-duration activities such as demolition and piling may approach or marginally exceed the adopted daytime construction noise thresholds, these effects will be intermittent, localised, and limited in duration. With the implementation of Best Practicable Means, including careful selection of plant, acoustic screening, programming of works, and real-time noise monitoring with a Trigger Action Response system, demolition and construction noise levels are expected to be effectively controlled. As such, demolition and construction noise impacts are considered temporary and not significant.

Construction and demolition phase vibration has also been assessed. Owing to the adoption of low-vibration construction techniques, including controlled top-down demolition and Continuous Flight Auger piling, vibration levels are expected to remain well below thresholds associated with cosmetic or structural damage. While vibration may be perceptible at nearby receptors during certain activities, these effects will be short-term and intermittent. A precautionary approach has been adopted for the protection of the adjacent Luas infrastructure, including the application of conservative vibration limits and implementation of monitoring and control measures, ensuring no adverse effects on railway operations or infrastructure integrity.

During the operational phase, the principal noise source will be continuous transformer hum from the substation compound. Noise modelling indicates that predicted operational noise levels at all assessed NSLs are significantly below both the baseline background noise levels and the applicable criteria derived in accordance with EPA NG4 guidance. Assessment in accordance with BS 4142 further confirms that operational noise levels are below background levels and are therefore unlikely to give rise to adverse impacts. No significant tonal or impulsive characteristics are expected to alter this conclusion. Operational vibration effects are predicted to be negligible and are not expected to extend beyond the site boundary.

A review of cumulative impacts has also been undertaken, considering nearby permitted and proposed developments. The assessment concludes that, with standard mitigation measures in place, cumulative noise and vibration effects during both construction and operational phases will not be significant.

In summary, the Proposed Development has been designed and assessed in line with current best practice to ensure that noise and vibration effects are appropriately managed. Subject to the implementation of the mitigation measures outlined in this report, the development is not expected to give rise to significant adverse noise or vibration impacts and is considered acceptable from a noise and vibration perspective.

8.6 Cultural Heritage

An Archaeological Impact Assessment was undertaken by Aisling Collins Archaeology Services (ACAS) to evaluate the potential effects of the Proposed Development on the archaeological and historical resource of the site and its environs. The full assessment is included as a standalone report as part of this application, with the key findings summarised below. For further information, please refer to **Appendix 8**.

8.6.1 Receiving Environment

The Proposed Development is located within a highly sensitive archaeological environment, forming part of the designated Zone of Archaeological Potential for Dublin City (RMP DU018-020). The surrounding study area (within

c. 500m) contains approximately 24 recorded monuments, including ecclesiastical, industrial and post-medieval sites. Of particular note is St James's Church and Graveyard (DU018-020346), a designated National Monument located in proximity to sections of the proposed underground cable route.

The site also lies within the zone of notification for additional Recorded Monuments, including an 18th-century structure (DU018-440), while the proposed cable routes extend into zones associated with St James's Church (DU018-474) and its graveyard.

No recorded monuments are located within the footprint of the proposed substation site. However, archaeological investigations undertaken in the surrounding area, including within the adjoining Diageo lands, have identified a range of archaeological remains dating from the prehistoric through to the post-medieval period. These include prehistoric wooden structures, medieval ditches and garden soils, post-medieval industrial features, and human remains associated with burial activity.

Cartographic analysis indicates that the site has been occupied by structures since at least the 18th century, suggesting the potential for surviving subsurface remains associated with earlier phases of development.

A site inspection undertaken in March 2026 confirmed that the subject site comprises a brownfield area containing derelict structures and made ground, with no visible surface evidence of archaeological features. Notwithstanding this, the site is considered to have moderate to high archaeological potential.

8.6.2 Potential Impacts

Construction of the Proposed Development will involve ground excavation across parts of the site, including excavation for building foundations (up to c. 1.8m depth), construction of a transformer bund (up to c.6m depth), service installations, and the excavation of underground cable trenches extending for approximately 2km.

These works give rise to the potential for direct, permanent and irreversible impacts on previously unrecorded archaeological remains, should such remains be present within the development footprint.

Given the known archaeological sensitivity of the wider area, and evidence from previous excavations in close proximity, the magnitude of potential impact is assessed as high, while the significance of effect is assessed as moderate to significant, in the absence of mitigation.

In particular, groundworks associated with the cable trench routes in proximity to St James's Graveyard have the potential to impact archaeological deposits and, potentially, human remains. Any such impact on archaeological material would constitute a negative, significant and permanent effect on the archaeological resource.

8.6.3 Mitigation Measures

In order to avoid or reduce potential impacts, a programme of archaeological mitigation is proposed, in line with national policy and best practice. This will include:

- Pre-construction archaeological testing (under licence) within the footprint of the proposed substation and associated infrastructure, to establish the presence, extent and significance of any subsurface archaeological remains.
- Archaeological monitoring of all groundworks associated with the development, including cable trench excavation, service installations, and site clearance works.
- Provision for resolution of archaeological remains, where identified, through preservation in situ (where feasible) or preservation by record (archaeological excavation), subject to agreement with the Dublin City Archaeologist and the National Monuments Service.

- Implementation of a stop works procedure in the event that archaeological material or human remains are encountered, pending appropriate consultation and agreement on further mitigation.

8.6.4 Residual Impacts

Subject to the implementation of the above mitigation measures, any potential impacts on the archaeological resource will be reduced to slight to moderate adverse, and will not be significant. The proposed mitigation strategy will ensure that any archaeological remains affected by the development are appropriately recorded and preserved, thereby mitigating the loss of archaeological information.

8.7 Landscape and Visual

This section has considered the potential effects on the landscape and visual environment arising from the introduction of the Proposed Development as described in Section 4 above. The assessment predicts the potential landscape and visual effects on the surrounding environment arising from the construction and operation of the Proposed Development and, where appropriate, specifies mitigation measures that may be required to reduce potential effects.

8.7.1 Methodology

8.7.1.1 Guidelines and Best Practice

This landscape and visual impact assessment report has been prepared in accordance with the following references:

- The Institute of Environmental Assessment / Landscape Institute publication entitled 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA 3rd Ed 2013).
- Scottish Natural Heritage (SNH) Environmental Assessment Handbook–Guidance on the Environmental Impact Assessment Process Appendix 2: Landscape and Visual Impact Assessment (5th Ed 2018).
- Environmental Protection Agency document entitled 'Guidelines on the Information to be Contained in Environmental Impact Statements' 2022.

8.7.1.2 Landscape and Visual Assessment Scope

Landscape and visual impact assessments are related but are different concepts.

Landscape Impact Assessment (LIA) is about the appraisal of components of the landscape including fabric and *character* and how changes may affect these. The landscape fabric typically comprises features such as vegetation, landform and built elements. Landscape character is the distinctive pattern of elements that occurs consistently in a particular landscape. An evaluation of these features and the overall character will highlight the quality and principal sensitivities of the landscape and measures its ability to accommodate the type of change associated with the development.

The **Visual Impact Assessment (VIA)** considers the visual amenity of the site and the surrounding area, and identifies potentially sensitive visual receptors and the approximate extent of visibility of the development. Visual impacts are the effects on visual receptors of the changes in available views through intrusion or obstruction and whether opportunities to enjoy views are improved or reduced.

Note: The landscape context of the Proposed Development site is more appropriately characterised as townscape, reflecting the predominantly urban nature of the surrounding environment. The *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3, 2013) define townscape as follows (Section 2.7):

“Townscape” refers to areas where the built environment is dominant. Villages, towns and cities often make important contributions as elements in wider open landscapes, but townscape means the landscape within the built-up area, including the buildings, the relationships between them, the different types of urban spaces, including green spaces, and the relationship between buildings and open spaces. There are important relationships with historic dimensions of landscape and townscape, since evidence of the way villages, towns and cities change and develop over time contributes to their current form and character.

In this context, the Proposed Development is situated within an established urban environment where built form, infrastructure, streetscapes, and public spaces are the principal components of visual character. Accordingly, the assessment focuses on the potential effects of the development on the surrounding townscape and visual amenity, rather than on the wider landscape resource.

8.7.2 Study Area

The Proposed Development consists of a 110kV substation compound to be developed within the boundaries of an existing disused site and an 110kV grid cable which will be laid underground within the substation site itself, the adjoining Diageo complex and public road network. According to Section 5.2 of the GLVIA (2013) *“The study area should include the site itself and the full extent of the wider landscape around it, which the Proposed Development may influence in a significant manner.”*

Given the urban context of the site and the nature and scale of the Proposed Development, the proposed substation would not be readily discernible beyond its immediate setting and is unlikely to give rise to significant landscape/townscape, or visual effects beyond approximately 500m. Conservatively, the landscape and visual assessment adopts a study area extending 1km from the proposed substation site.

The proposed 110kV grid cable will be installed entirely underground and will not result in any permanent above-ground features. Consequently, landscape/townscape and visual effects are limited to temporary construction activities, including excavation works, plant movement, traffic management measures and reinstatement works. To appropriately capture these temporary and localised effects, the study area for the underground cable considers a corridor extending approximately 50 m on either side of the proposed cable route. This extent is considered proportionate to the nature of the works, which involve the installation of an underground cable within a trench largely located within existing developed lands and the public road network. Given the temporary nature of these construction activities, the urban context of the receiving environment and the absence of any permanent above-ground infrastructure, significant landscape, townscape and visual effects are considered unlikely to extend beyond this distance.

8.7.3 Desktop Study

Desk studies and site surveys were undertaken to determine the baseline landscape and visual conditions. The baseline conditions provide a description and evaluation of the existing site and its surroundings. Initially a desk study was undertaken to assemble relevant information on landscape fabric, landscape character and the overall visibility of the site on the surrounding area. The following outlines the documents that were referenced and the resources utilised for the desk study. Information collated in the desk study was confirmed by field studies

- Dublin City Development Plan 2022-2028.
- GIS datasets.
- Corine landcover mapping.

- OSI aerial photography.
- Google maps.
- Computer Generated Images and Photomontages.

8.7.4 Assessment Criteria

The evaluation of the effects of the development has been undertaken in accordance with the recommended assessment methodology outlined in 'The Institute of Environmental Assessment Guidelines for Landscape and Visual Impact Assessment' (3rd Ed 2013).

For each effect, the sensitivity of the landscape and visual receptors and the magnitude of the effect on the landscape and visual receptors have been considered.

Sensitivity is considered in terms of susceptibility to change and the value attached to landscape receptor or view experienced.

Table 8-9: Sensitivity Criteria

Sensitivity	Description
Very High	Receptors of exceptional value and highly susceptible to change. Includes nationally designated landscapes, highly distinctive townscapes, protected views, and residents with direct views where the existing view is a primary amenity.
High	Receptors of high value and high susceptibility to change. Includes valued urban areas, conservation areas, important public viewpoints, recreational users and residents.
Medium	Receptors of moderate value and medium susceptibility to change. Includes typical urban landscapes or townscapes with some distinctive characteristics and views experienced by road users, workers or local pedestrians.
Low	Receptors of limited value and low susceptibility to change. Includes heavily modified urban or industrial environments where change is common and expected.
Negligible	Receptors of very limited value and very low susceptibility to change. Includes degraded industrial areas or locations where the existing landscape/townscape character is of little significance.

Magnitude is considered in terms of size or scale, the geographical extent and duration and reversibility of the effect.

Table 8-10: Magnitude Criteria

Magnitude	Description
High	A fundamental alteration to landscape/townscape character or a substantial change to a view. Effects are clearly apparent, widespread and/or long-term.
Medium	A noticeable alteration to landscape/townscape character or a moderate change to a view. Effects are readily apparent but do not fundamentally alter the receptor.
Low	A minor alteration to landscape/townscape character or a small change to a view. Effects are discernible but limited in extent.
Negligible	A very slight change that is barely perceptible and does not materially affect the receptor.
No Change	No discernible effect.

In determining the overall significance of the effect, judgement is made in accordance with the criteria set out in Table 8-11 and Table 8-12. These criteria set out how sensitivity and magnitude have been linked in the determination of overall significance.

Table 8-11: Criteria for determining Significance of Landscape Effects

Significance	Definition
Severe Adverse	The proposed scheme would result in effects that:- Are at a complete variance with the landform, scale and pattern of the landscape- Would permanently degrade, diminish or destroy the integrity of valued characteristic features, elements and /or their setting- Would cause a very high quality landscape to be permanently changed and its quality diminished
Major Adverse	The proposed scheme would result in effects that:- cannot be fully mitigated and may cumulatively amount to a severe adverse effect- Are at a considerable variance to the landscape degrading the integrity of the landscape- Will be substantially damaging to a high quality landscape
Moderate adverse	The proposed scheme would:- Be out of scale with the landscape or at odds with the local pattern and landform- Will leave an adverse impact on a landscape of recognised quality
Minor adverse	The proposed scheme would:- Not quite fit into the landform and scale of the landscape- Affect an area of recognised landscape character
Neutral	The proposed scheme would:- Complement the scale, landform and pattern of the landscape- Maintain existing landscape quality
Minor Beneficial	The proposed scheme has the potential to:- Improve the landscape quality and character- Fit in with the scale, landform and pattern of the landscape- Enable the restoration of valued characteristic features partially lost through other land uses
Moderate beneficial	The proposed scheme would have the potential to:- Fit in well with the landscape character- Improve the quality of the landscape through the removal of damage caused by existing landuses
Source: 'Guidelines for Landscape and Visual Impact Assessment' (2ND Ed 2002). (Based on criteria of Nicholas Pearson Associates)	

Table 8-12: Criteria for determining Significance of visual effects

Significance	Definition
Severe	The proposal become the dominant feature of the scene to which other elements become subordinate and they significantly affect and changes its character
Substantial	The proposal forms a significant and immediately apparent part of the scene that affects and changes its overall character
Moderate	The proposals may form a visible and recognisable new element within the overall scene and may be readily noticed by the observer or receptor
Slight	The proposals constitute only a minor component of the wider view, which might be missed by the casual observer or receptor. Awareness of the proposals would not have a marked effect on the overall quality of the scene
Negligible	Only a very small part of the proposals is discernible and/or they are at such a distance that they are scarcely appreciated. Consequently they have very little effect on the scene
None	No part of the development, or work or activity associated with it, is discernible

Source: 'Guidelines for Landscape and Visual Impact Assessment' (2ND Ed 2002). (Based on criteria of Terence O'Rourke plc)

8.7.5 Receiving Environment

8.7.5.1 Landscape Baseline

The Proposed Development site is situated within a densely developed urban environment characterised by a combination of large-scale industrial facilities, transport infrastructure, residential neighbourhoods, commercial premises and institutional buildings. The adjoining Diageo brewery complex is a defining feature of the local

townscape and contributes significantly to the area's established industrial character. As such, the character of the receiving environment is strongly influenced by built form and urban infrastructure, with relatively limited presence of natural or semi-natural landscape elements.

While the area is predominantly urban and industrial in character, it forms part of a historically significant townscape that has evolved through successive phases of industrial, commercial, civic and residential development. This historic evolution has created a distinctive urban character that contributes to the identity and sense of place of the area. The historic context of the receiving environment is therefore an important consideration in understanding the townscape character and associated conservation sensitivities of the locality (refer to the Conservation Report in **Appendix 6** for further details).

Having regard to the highly developed nature of the receiving environment, its long-established industrial use, the substantial degree of urban modification, and the limited contribution of natural landscape features, the receiving townscape is considered to be of **medium-low sensitivity**. This sensitivity rating recognises the area's historic and cultural significance while reflecting its capacity to accommodate change within an evolving urban context.

The townscape baseline has been informed by the provisions of the Dublin City Development Plan and the identified character of the Liberties area (refer to Section 6.4.1.2 above), which recognises the area's mixed historic and industrial evolution and its ongoing transformation within the urban fabric.

Landscape Policy Context and Designations

Zoning

As described in Section 6.4.1.3, the local land-use zoning designations are derived from the Dublin City Development Plan, with the zoning context in the vicinity of the Proposed Development illustrated in Figure 6-2.

Views and Prospects

For a substation project such as the Proposed Development, the key consideration is whether the development would adversely affect the setting, visibility or appreciation of important heritage landmarks or protected views.

Figure 4-1 of the CDP identifies the key views and prospects subject to protection under Policy GI20, which seeks to "protect and enhance views and prospects which contribute to the appreciation of landscape and natural heritage." None of the mapped views or prospects are orientated towards, or include views of, the site.

However, there are a number of local landmarks and publicly accessible viewpoints from which views of the Proposed Development site are available. These viewpoints have been considered as part of the landscape and visual assessment. (Refer to VP 5 and VP6 in **Appendix 7**)

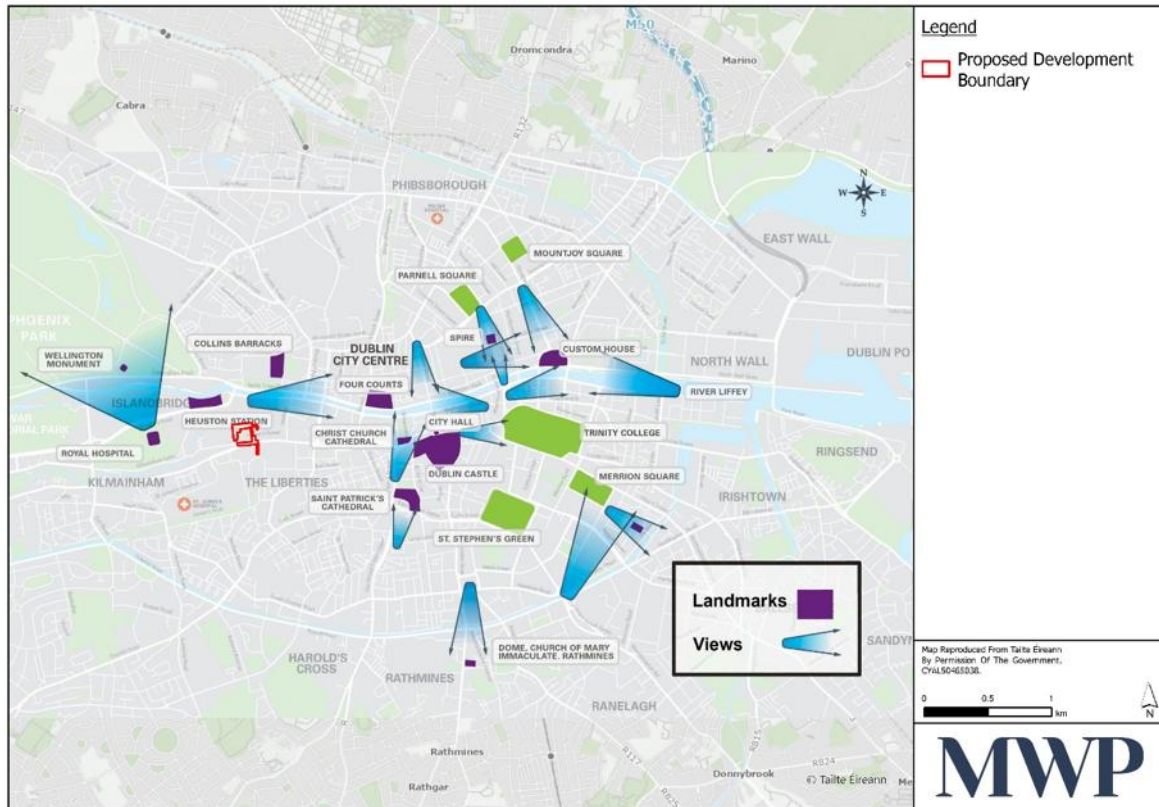


Figure 8-10: Adopted from Figure 4-1 of the Dublin CDP 2022-2028

Urban Development, Building Heights and Built Heritage

Urban development, building height considerations, and built heritage matters are addressed in Section 6.4.1.4, which outlines the relevant design principles, policies and standards for urban design, architecture, and development, having regard to the provisions of the Dublin City Development Plan in the context of the Proposed Development.

The Architectural Design Statement and Conservation Report, provided as **Appendices 5 and 6** respectively, should be read in conjunction with this section for further information and detail in relation to the architectural approach, design rationale, and built heritage considerations.

8.7.5.2 Visual Baseline

The study area is located within a highly urbanised environment characterised by a dense pattern of existing buildings, transport infrastructure, and established street corridors. Views are generally experienced in a structured urban context, where visual amenity is influenced primarily by built form, street enclosure, and movement through defined transport routes rather than expansive open landscape views.

The surrounding urban fabric creates a generally enclosed visual environment, with the continuity of streetscapes and building frontages providing a strong degree of visual definition and containment. While some locations offer more open or distant views along key corridors and river crossings, the prevailing character of the area is urban and built-up in nature.

Only those parts of the receiving environment that potentially afford views of the Proposed Development are of concern to this section of the assessment. A computer-generated Zone of Theoretical Visibility (ZTV) map has been prepared to illustrate where the Proposed Development is potentially visible.

The ZTV modelling has been undertaken using terrain data together with the existing built environment, thereby accounting for the screening effect of surrounding buildings within the urban context. Given the highly urbanised nature of the receiving environment and the scale of the Proposed Development, a study area of 1 km has been adopted as appropriate and proportionate to the scale and nature of the Proposed Development.

The proposed GIS building will be the highest structure of the development, at 14.1m above existing ground level.

The ZTV has been used to inform and focus the assessment on locations where potential visibility may occur. Site inspections and field verification were subsequently undertaken to confirm the extent of visibility and ensure that the assessment accurately reflects existing on-site conditions.

The findings of the ZTV assessment are shown in Figure 8-11 below.

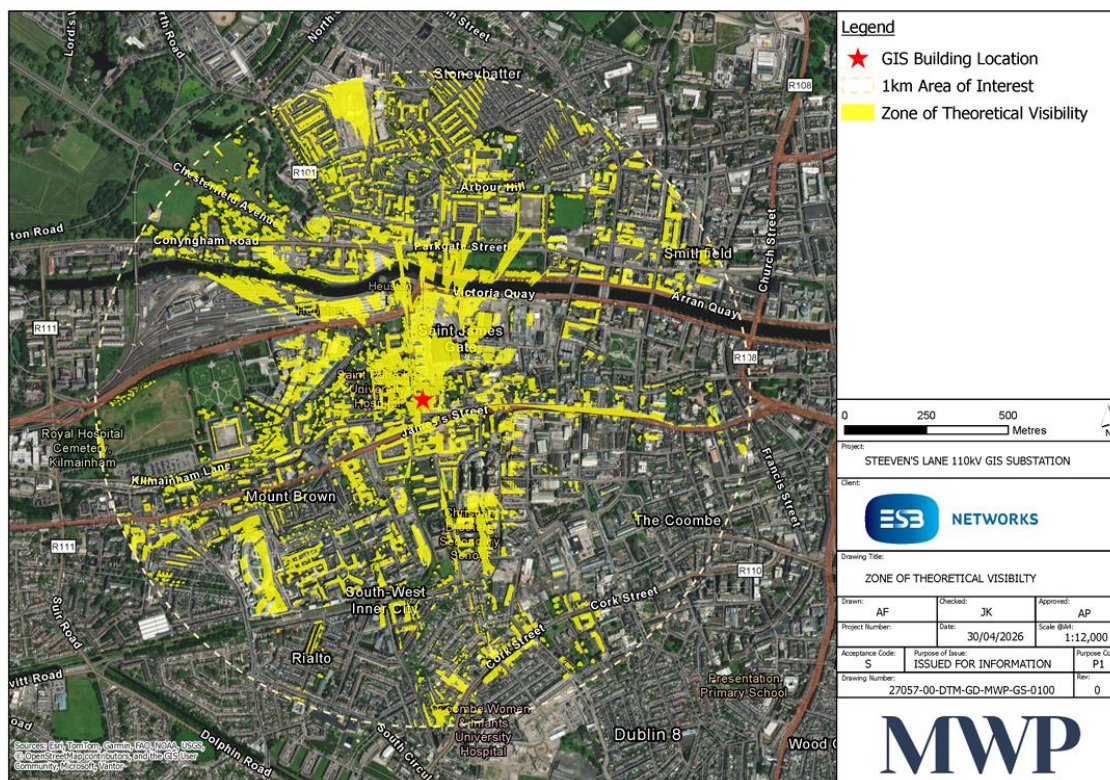


Figure 8-11: DMS ZTV map

Viewpoint locations were selected to facilitate detailed study of the potential visual effects of the Proposed Development. Not all potential viewpoints are included, as this would make the assessment unwieldy and dilute key impacts. Selected viewpoints instead represent a range of receptor types, distances, and angles. The viewpoint locations selected in this instance are set out in Figure 8-12 and Table 8-13 below.

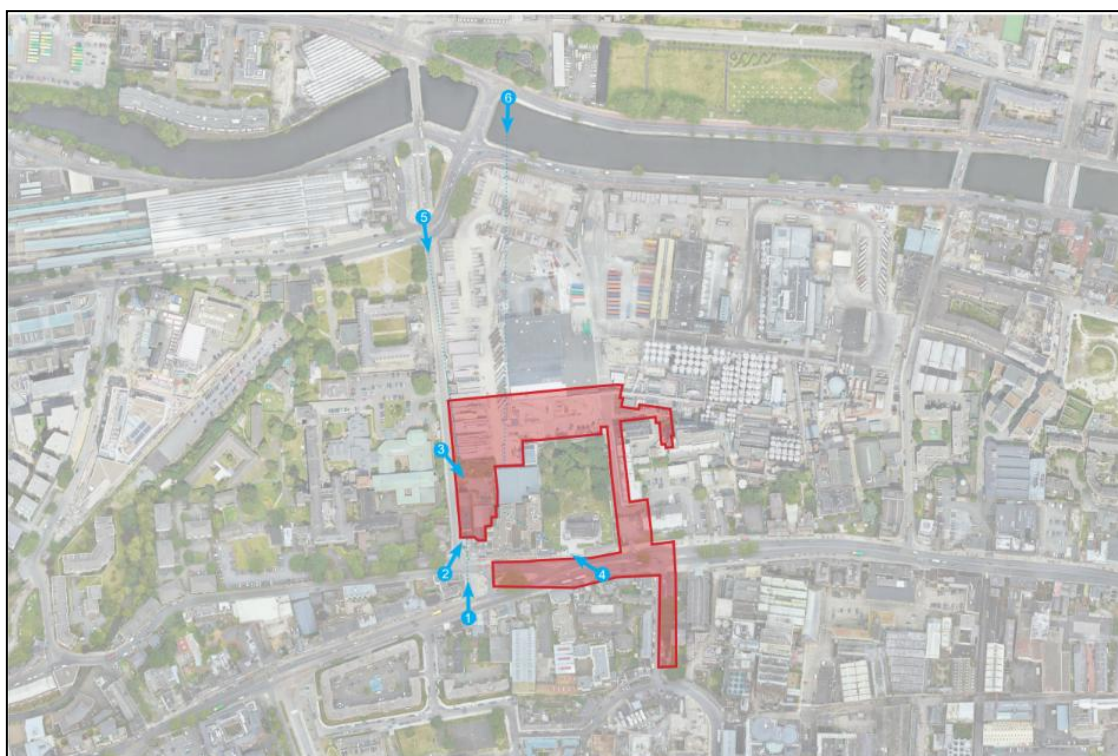


Figure 8-12: Viewpoint location map

Table 8-13: Viewpoint Locations

VP No.	Description of Existing View	Direction of View	Viewpoint Representative of	Receptor Sensitivity
1	View from R810 James's Street.	North towards proposed substation development site	Generally representative of the prevailing views in the local area to the south of the site. Also, sensitive Architectural receptor.	High-Medium
2	View from Junction of Bow Lane West and Steeven's Lane.	North east towards proposed substation development site	Close-range views from the local road network to the south-west of the site, an area characterised by high pedestrian activity.	High-Medium
3	View from Steeven's Lane.	South East towards proposed substation development site	Close-range views from the local road network to the south-west of the site, an area characterised by high pedestrian activity.	Medium
4	View from R810 James's Street.	North West in the direction of the proposed substation development site	Generally representative of views towards the site from the south east from important inter urban road network. Also, sensitive Architectural receptor.	High
5	View from Heuston Station Luas Platform.	South towards proposed substation development site	Generally representative of close to medium-range views experienced by large numbers of rail passengers, commuters, pedestrians, and road users. Also, notable landmark.	Medium

VP No.	Description of Existing View	Direction of View	Viewpoint Representative of	Receptor Sensitivity
6	View from Wolfe Tone Quay. Direction of View	South towards proposed substation development site	Generally representative of medium-range views experienced by large numbers of commuters, pedestrians, and road users. Broadly representative of potential views experienced from Collins Barracks.	Medium

8.7.6 Potential Impacts

8.7.6.1 Construction Phase

The construction phase of the Proposed Development will comprise a range of activities including site establishment, temporary site hoarding and security fencing, excavation and earthworks, trenching for underground electrical connections, piling and foundation works, construction of the substation building and associated infrastructure, installation of plant and equipment, material deliveries, and general construction traffic movements. Temporary welfare facilities, plant, machinery, cranes and material storage areas will also be present within the construction site for the duration of the works.

Construction activities have the potential to give rise to temporary landscape, townscape and visual effects through the introduction of construction compounds, equipment, partially completed structures, increased movement and activity, and temporary changes to the appearance of the site and its surroundings. Such effects are characteristic of the construction phase of most developments and are generally most noticeable within the immediate vicinity of the site and along nearby streets and public spaces.

Construction-related effects are inherently temporary and transient in nature, occurring only for the duration of the construction programme. As works progress, the nature and extent of visible activity will change over time, with effects generally reducing following completion of the principal construction activities and the removal of temporary facilities. Given the urban context of the Proposed Development, where existing buildings, infrastructure, traffic and ongoing development activity already influence the character and visual environment, construction-phase effects will be experienced within a dynamic and evolving townscape setting.

While construction activities may result in temporary changes to local townscape character and views, these effects will not permanently alter the landscape structure or urban form of the receiving environment. Following completion of construction and reinstatement of temporary working areas, any construction-related landscape and visual effects will cease, leaving only those effects associated with the completed development.

Landscape Impact

The construction of the Proposed Development will involve below-ground trenching works for the installation of electrical services connecting to the main substation. These works will be confined to defined corridors within adjacent site lands, primarily within the Diageo property, and limited sections of the adjoining public road network, including James's Street and Echlin Street. The works will result in localised, short-term disturbance to existing hardstanding. Given the urban nature of the receiving environment, these impacts will not materially alter the overall landscape fabric or character of the wider area.

The main substation construction works will involve the establishment of a secure site compound, including temporary perimeter hoarding, welfare facilities, material storage areas, and construction access arrangements. Piling will be required for building foundations and associated infrastructure.

During the construction phase, there will be a temporary alteration to the local townscape character arising from the presence of construction activity, including plant movement, deliveries, and partially completed structures. These activities will represent a noticeable but temporary change within the immediate urban context and will be consistent with typical construction-phase conditions in an urban environment of this nature.

Construction activities are of limited duration and will be confined to the site and its immediate environs. While there will be a perceptible increase in activity levels locally, the magnitude of effects on the wider landscape are expected to be negligible due to the enclosed urban context and limited intervisibility beyond the immediate streetscape.

During the construction phase, there is potential for cumulative landscape and townscape effects to arise where the Proposed Development overlaps temporally with other permitted, approved or reasonably foreseeable developments within the surrounding urban area. Such cumulative effects would principally relate to the combined presence of construction compounds, temporary hoarding, plant, construction traffic and associated activity, which could contribute to a short-term increase in the perception of urban change and construction-related disturbance within the local townscape. However, given the highly urbanised character of the receiving environment, the prevalence of ongoing redevelopment and infrastructure works within the wider city context, and the generally contained and temporary nature of construction activities, any cumulative landscape effects are expected to be localised and short-term in duration. The proposed substation works would not result in a significant alteration to the overall urban landscape structure or character when considered in combination with other known developments, and cumulative landscape effects are therefore anticipated to be no greater than minor and temporary.

Overall, during the construction-stage cumulatively the magnitude of landscape effects are assessed as medium in the immediate vicinity of the site, reducing rapidly to negligible within the wider study area, where construction activity will be largely screened by existing built form and urban infrastructure. These effects are temporary in nature and will cease upon completion of the construction phase. The overall significance of construction phase landscape effects is therefore deemed to be minor adverse to neutral.

Visual Impact

During the construction phase, temporary visual effects will arise as a result of the presence of construction activity, plant, hoarding, cable route installation works and associated works within and immediately adjacent to the site.

Visual effects will occur both within the main development site and along sections of the cable route where trenching, excavation, traffic management measures, temporary fencing, construction compounds, and reinstatement activities may be required.

The most significant construction-related visual effects are anticipated at receptors in closest proximity to these works, in particular residential occupiers of nearby apartment developments, including St James's Gate Apartments, where views are likely to be direct and at relatively short range. Similar temporary visual effects may also be experienced by receptors located adjacent to the cable route corridor. These effects are considered to be temporary in nature, associated with the duration of the construction period, and are typical of development of this scale within a dense urban environment.

At a wider scale, visual effects are expected to be limited. The Proposed Development is located within a highly urbanised and intensively developed part of Dublin characterised by a strong industrial and commercial presence.

The surrounding urban area is also characterised by ongoing regeneration and redevelopment, with construction activity frequently evident within local townscape views. Cranes, construction compounds, temporary hoarding and active development sites are established features of the existing visual environment and contribute to the baseline character of the area. As a result, the introduction of construction activity associated with the Proposed

Development will be viewed in the context of an environment where such activity is already a common and expected component of the townscape.

While construction activities will introduce a noticeable change in the immediate visual context for nearby receptors, these effects will be transient and will diminish progressively as works advance, particularly where cable route sections are reinstated and permanent elements of the Proposed Development are completed. Overall, construction-phase visual effects are assessed as locally moderate and short-term for receptors in close proximity to the works, reducing rapidly with distance and resulting in negligible to minor effects on the wider receiving environment within the context of the existing urban and industrial setting.

8.7.6.2 Operational Phase

Landscape Impact

The Proposed Development will result in permanent physical changes within the application site through the removal of existing derelict and underutilised structures and their replacement with a modern electrical substation and associated infrastructure. These changes will not be readily reversible and will establish a long-term utility use at the site. However, the site is already developed and located within an established urban and industrial setting; therefore, the Proposed Development will not result in the loss of any significant landscape features or undeveloped land.

A permanent change to the existing streetscape along Steeven's Lane will also occur through the removal of the existing boundary wall, which includes sections of derelict built fabric, and its replacement with a new architecturally designed boundary treatment. The proposed boundary treatment has been designed in accordance with the industrial and urban character of the surrounding area and will provide a more coherent and visually considered edge to the site compared to the existing condition.

The principal landscape effect will arise from the introduction of new built elements, including the GIS building, boundary treatments, and associated electrical infrastructure. The Proposed Development does not introduce additional massing within the wider receiving environment, as it replaces existing derelict-built structures of a comparable or greater volumetric presence. Accordingly, the overall built form intensity of the site is not materially increased, and the development maintains the established scale and industrial character of the area.

While these structures will alter the immediate townscape character of the site, they will be viewed in the context of the surrounding industrial, commercial, transport, and utility infrastructure, including the adjacent Diageo lands. The architectural design has been carefully developed to respond to the established character of the area, drawing on the site's industrial and urban context through its scale, materiality, façade treatment, and overall composition. As such, the Proposed Development will integrate appropriately within the receiving environment and will not appear incongruous within the existing townscape.

The Proposed Development also represents the redevelopment of a previously developed site that currently contains derelict buildings and areas of visual deterioration. The removal of these elements and their replacement with a purpose-designed facility will improve the visual condition and presentation of the site. Consequently, while the development will introduce new infrastructure, it will also contribute positively to the overall townscape quality of the immediate area.

Underground cable connections associated with the Proposed Development will be installed within defined corridors in adjacent lands and sections of the adjoining public road network. Following reinstatement, these works will not give rise to any discernible operational landscape effects and will not materially alter the character of the receiving environment.

Taking account of the established urban context, the compatibility of the Proposed Development with surrounding land uses, and the redevelopment of an existing brownfield site, the magnitude of operational landscape impact

is assessed as Low within the immediate vicinity of the site, reducing to Negligible within the wider study area. The resulting landscape effect is considered Neutral to Slight Positive in nature.

Having regard to the Medium-Low sensitivity of the receiving landscape and the Low magnitude of operational landscape impact, the overall significance of landscape effects is assessed as Slight. Given the redevelopment of a derelict and underutilised site, certain aspects of the Proposed Development may be considered locally beneficial in townscape terms.

Operational landscape effects will be permanent in duration.

Visual Impact

Operational phase visual effects have been assessed from a series of representative viewpoints within the surrounding publicly accessible areas as shown in Figure 8-12 above.

Visual receptor sensitivity varies according to receptor type, viewing distance, and duration of exposure. Residential receptors are considered to be of high sensitivity, particularly where views are direct and experienced on a prolonged basis. In contrast, transient receptors associated with transport corridors and movement routes are generally of lower sensitivity due to the short duration of views.

Existing built form, boundary treatments, and intervening structures provide a degree of visual containment, such that views of the Proposed Development are generally limited to short-range or partially screened perspectives. Where visible, the Proposed Development will be experienced as a functional infrastructure element consistent with the prevailing urban and industrial context. The use of appropriate material finishes, boundary treatments, and controlled lighting design will further assist in reducing visual prominence.

In this context, visual receptor sensitivity ranges from Low to High, with the highest sensitivity associated with residential receptors in closest proximity to the site (VP1, VP2 and VP4), and lower sensitivity associated with transient transport-related viewpoints (VP3, VP5 and VP6).

Photomontages have been prepared to support the assessment of visual effects at each representative viewpoint.

For each viewpoint, three images are presented: the existing baseline view; a rendered photomontage showing the proposed development; and a rendered photomontage showing the proposed development in the context of other known permitted developments in the vicinity, including the consented development at 134 James's Street. Where the proposed development is not directly visible from a representative viewpoint, an outline representation is provided to illustrate its location and extent relative to the intervening buildings, and other screening elements.

These provide a representative visualisation of the Proposed Development within the existing and potentially future urban context and are based on a geo-referenced three-dimensional model to ensure accurate positioning, scale, and orientation. Further detail is provided in **Appendix 7**.

Table88-14: Visual Impact Assessment

VP No.	Description of Existing View	Receptor Sensitivity	Description and Magnitude of Visual Impact	Significance/ Quality/ Duration of Visual Impact
1	View from R810 James's Street. Direction of view N	High-Medium	The Proposed Development will be largely screened from this location by existing built form within the surrounding urban context. As a result, the magnitude of change is assessed as Low. In addition, once the permitted residential development at 134 James's Street is constructed, the Proposed Development will be fully screened from view from this receptor, and the resultant magnitude of visual impact will be Negligible.	Slight to Negligible/ Neutral/ Long term
2	View from Junction of Bow Lane West and Steeven's Lane. Direction of view NE	High-Medium	The main substation is located approximately 40 m to the northeast. The existing derelict building and associated boundary wall within the view will be removed and replaced as part of the Proposed Development, resulting in an improvement in the overall visual condition of the site and its immediate context. The upper portions of the 110 kV GIS building and the boundary wall will be more visible than the existing derelict structure in the middle ground. The magnitude of change is assessed as Medium. Once the permitted residential development at 134 James's Street is constructed, views of the Proposed Development from this receptor will be largely screened, with only the boundary wall and the north-western corner of the GIS building likely to remain visible.	Moderate/ Neutral / Long term
3	View from Steeven's Lane. Direction of view SE	Medium	The Proposed Development will be fully visible from the assessed viewpoint. However, it will introduce a high-quality architectural form that is designed to integrate with the existing urban and industrial character of the area. It will replace an underutilised and visually degraded site, currently characterised by derelict structures and graffiti, which contributes to a sense of visual disorder and reduced amenity for passing pedestrians. The redevelopment will therefore result in a positive improvement in the local townscape and perceived environmental quality. The overall magnitude of change is assessed as High	Substantial/ Positive/ Long term
4	View from R810 James's Street. Direction of View NW	High	The Proposed Development will be fully screened from this location by existing built form within the surrounding urban context. As a result, the magnitude of change is assessed as No Change.	None/ Neutral/ Long term

VP No.	Description of Existing View	Receptor Sensitivity	Description and Magnitude of Visual Impact	Significance/ Quality/ Duration of Visual Impact
5	View from Heuston Station Luas Platform. Direction of View S	Medium	The Proposed Development will be partly screened from this location by existing built form within the surrounding urban context. As a result, the magnitude of change is assessed as Medium.	Moderate/ Neutral / Long term
6	View from Wolfe Tone Quay. Direction of View S	Medium	The Proposed Development will be partly screened from this location by existing built form within the surrounding urban and industrial context of Diageo's site. As a result, the magnitude of change is assessed as Medium.	Slight / Neutral / Long term

In addition to the representative viewpoints assessed, specific attention has been given to residential receptors located immediately to the south and southeast, of the Proposed Development, as these receptors are considered most likely to experience perceptible changes in outlook.

The redevelopment of the existing derelict site as an electrical substation would result in a noticeable change in the visual characteristics of the site when viewed from nearby residential properties. The current site is characterised by vacant and underutilised land, deteriorating structures, and an overall appearance of neglect. While properties with open and unobstructed views may experience moderate visual effects associated with the introduction of functional utility infrastructure, the development would also provide the benefit of regenerating a long-derelict site, replacing its current neglected appearance with a well-maintained and managed facility that would contribute to an overall improvement in site condition and visual order.

In addition to visual effects, potential impacts on nearby residential receptors may include changes relating to daylight availability and overshadowing arising from the proposed structures. A dedicated assessment exercise has been undertaken to verify potential effects on these receptors, including a daylight and overshadow assessment (refer to **Appendix 14**). The assessment demonstrates a high level of conformity with BRE daylight and sunlight guidance, with neighbouring properties and outdoor amenity areas retaining acceptable levels of daylight and sunlight access. All assessed outdoor amenity spaces were found to exceed the relevant BRE sunlight criteria, confirming that the Proposed Development will not give rise to any undue overshadowing impacts on neighbouring properties or open spaces.

8.7.7 Mitigation Measures

8.7.7.1 Construction Phase

A range of mitigation measures will be implemented during the construction phase to minimise adverse effects on landscape character, visual amenity, and the residential environment surrounding the Proposed Development.

- Temporary site hoarding and security fencing would be maintained in a tidy condition and, where appropriate, designed to present a neat appearance to surrounding receptors.
- Construction materials, plant, and waste would be stored in an organised manner to avoid unnecessary visual clutter.
- Temporary construction lighting would be directional, hooded, and designed to avoid unnecessary light spill onto adjacent residential properties and surrounding streets.
- Lighting would be used only where required for health and safety purposes.

8.7.7.2 Operational Phase

The operational design of the proposed substation incorporates a range of measures intended to reduce visual prominence, integrate the Proposed Development within the urban townscape, and enhance the appearance of the site.

- Boundary walls and fencing have been designed to provide security while also contributing positively to the appearance of the site.
- Finishes, materials, and colours have been selected to complement the character of the surrounding urban environment and reduce visual contrast.
- Operational lighting would be limited to that required for safety, security, and maintenance purposes.
- Lighting fixtures would be designed and directed to minimise light spill and glare, particularly towards nearby residential properties.

8.7.8 Conclusions

During the construction phase, temporary effects on the landscape and visual environment will arise from excavation works, plant, machinery and the storage of materials. These effects will be localised and, short-term in nature. Sensitive receptors may include residents, road users, recreational users and nearby businesses with views of construction activities.

Once constructed and operational the proposed substation development would result in a change to the existing landscape and visual environment through the introduction of electrical infrastructure within an urban setting. While some localised visual effects would occur, particularly for receptors in close proximity to the site, these would be balanced by the redevelopment of a derelict site and the creation of a well-maintained, operational facility that would contribute to an overall improvement in the appearance, management, and visual quality of the site. The proposed boundary treatments, and careful consideration of building materials, colours, and lighting assist in reducing the visual prominence of the development and integrating it into the surrounding townscape. Accordingly, the residual landscape and visual effects are considered to be Neutral and Moderate within the context of the receiving urban environment.

The Proposed Development also comprises the installation of a 110kV underground electricity cable generally located within existing road corridors and disturbed lands. As the cable will be installed below ground level and the permanent infrastructure will not be visible following reinstatement, the Proposed Development will not result in any significant long-term effects on landscape character or visual amenity.

8.8 Material Assets

This section assesses the material assets relevant to the Proposed Development, with particular regard to traffic and transport infrastructure, utilities, and resource and waste management systems that may be affected during the construction and operational phases.

8.8.1 Traffic and Transport

A Traffic and Transport Impact Assessment, refer to **Appendix 3**, was undertaken by Systra to evaluate the potential effects of the Proposed Development on the traffic and transport network and its environs. The conclusions of this assessment are as follows:

During construction, all vehicular access will be via the Diageo site from R148 Victoria Quay, with no construction vehicles accessing the site from Steeven's Lane. Construction traffic will be limited (approximately 30 two-way HGV movements and 20 two-way car/van movements during the peak construction period), resulting in traffic increases well below the TII 5% assessment threshold. Construction traffic will not affect the Luas line. Temporary closure of the eastern footway on Steeven's Lane will be managed through pedestrian diversion measures informed by a Pedestrian Comfort Level Assessment, while temporary traffic management will be implemented in the James's Street, Bow Lane West and Echlin Street area during cabling works. Further details of construction phase mitigation measures are provided in the accompanying outline Construction Traffic Management Plan (refer to Appendix 2 of the oCEMP).

During operation, traffic generation will be negligible, typically limited to 2–4 maintenance visits per month. A compliant access on Steeven's Lane will accommodate routine maintenance while maintaining pedestrian priority and appropriate visibility. Occasional large maintenance deliveries will access the site via the Diageo site from Victoria Quay.

Overall, the assessment concludes that the Proposed Development will have negligible traffic and transport effects during both construction and operation. Potential impacts relating to pedestrian and road user safety, interaction with the LUAS line, and temporary construction activities will be appropriately managed through the project

design, implementation of the Construction Traffic Management Plan, detailed pedestrian management measures on Steeven's Lane, and temporary traffic management for the cabling works.

8.8.2 Utilities

8.8.2.1 Receiving Environment

The Proposed Development site is located within an established urban area served by a comprehensive network of underground utilities, including electricity, telecommunications, water supply and drainage infrastructure. These services are typical of a central Dublin streetscape and are present both within and adjacent to the site.

The proposed site is served by the existing ESB electricity distribution network, with connection infrastructure located within the adjacent public road corridor at James's Street and Echlin Street, providing the nearest point of connection for the Proposed Development.

In terms of water supply, the site is served by an existing public mains water network within the surrounding road infrastructure, which provides potable water supply to the wider area and can accommodate the limited demand associated with the Proposed Development.

Foul and surface water drainage infrastructure is also present in the vicinity of the site. The substation site is served by an existing combined sewer connection located with the adjoining Steeven's Lane. This combined sewer conveys both foul and surface water runoff from the site, as well as flows from the surrounding area.

The site also lies within the zone of influence of the Luas Red Line along Steeven's Lane. This operational light rail corridor forms part of the existing infrastructure in the area and is managed by Transport Infrastructure Ireland.

8.8.2.2 Potential Impacts

Construction Phase

During the construction phase, there is a potential risk of contaminated discharges entering the surface water drainage system as a result of accidental spills or poor management of construction-related materials, including fuels, oils, concrete washout, sanitary waste, and other hazardous substances. If uncontrolled, such discharges could adversely affect the drainage network and downstream receiving environments.

There is also the potential for temporary disruption to existing utility services during connection and excavation works. These activities may affect electricity, water, wastewater, and telecommunications infrastructure, with the potential to impact nearby operational facilities and businesses.

As outlined in the oCEMP, wastewater from welfare facilities will be collected in a sealed holding tank and removed by a licensed contractor for disposal at an approved licensed facility. No silty or contaminated construction water will be discharged to the surface water drainage network. Fuels and other hazardous substances will be stored within bunded hardstand areas, and refuelling activities will be undertaken in designated bunded locations to minimise the risk of spills. Excavation works in the vicinity of existing utilities will be carried out in accordance with the relevant utility providers' codes of practice to protect existing infrastructure and minimise the risk of service interruptions.

Operational Phase

When operational, foul discharges and water consumption requirements for the Proposed Development will be related to the use of the proposed welfare and eye wash facilities located within the substation compound. Due to the typically unmanned nature of the proposed substation, foul discharges and water consumption levels will be minor and will have no potential to impact the public network.

Surface water runoff from the proposed substation development will be collected on site by a dedicated drainage network and will discharge to the existing combined sewer network. A flow control device will limit the flow exiting the site to 2l/s/ha therefore no negative impacts are anticipated as result of surface water during operations.

Once operational, the proposed substation will play a key role in strengthening energy security across the Dublin city area. It will also assist in alleviating loading pressures and supply constraints on the medium-voltage network, resulting in a positive impact on the area's electrical infrastructure.

8.8.2.3 Mitigation Measures

Adherence to the mitigation strategies presented in the oCEMP prepared for the Proposed Development, will ensure the minimisation, as far as practicable, of potential negative impacts on the foul and surface water drainage infrastructure, water supply infrastructure and on the electrical infrastructure during the construction phase of the development.

During the operational phase, the electrical substation will be equipped with oil-sensitive protection, alarm systems, and remote monitoring to enable the early detection of faults or abnormal operating conditions and facilitate a rapid response where required. These measures will support the reliable operation of the electrical infrastructure and minimise the potential for service interruptions. The foul and surface water drainage infrastructure and water supply infrastructure will be operated and maintained in accordance with the requirements of the relevant utility providers to ensure the continued provision of services.

8.8.2.4 Conclusions

The Proposed Development is located within an established urban environment where underground utilities and transport infrastructure, including the Luas Red Line, are an integral part of the receiving environment. These elements have been fully considered and incorporated into the servicing and construction strategy for the Proposed Development.

Subject to standard construction management practices, utility coordination, and compliance with statutory requirements, no significant adverse effects on utility infrastructure are anticipated. Residual effects are considered negligible.

8.8.3 Resources and Waste

The Proposed Development is located on a brownfield site within a highly urbanised area of Dublin, surrounded by commercial, residential and industrial land uses. The site is largely comprised of hardstanding and derelict structures with some vegetation.

Potential environmental impacts during construction and waste management activities include contaminated soils, generation of demolition and construction waste and handling of hazardous material such as fuels, chemicals, asbestos and waste electrical and electronic equipment (WEEE). Waste management for the Proposed Development will be undertaken in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects issued by the Department of the Environment, Community and Local Government, and all relevant waste management legislation will be complied with.

A Resource and Waste Management Plan (RWMP) has been for the Proposed Development (refer to the accompanying oCEMP) and will be further developed and implemented by the appointed contractor to minimise waste generation throughout the construction phase, with a strong emphasis on waste prevention and segregation at source. Construction wastes will be separated on site into appropriate streams, including timber, metal, general waste and recyclable materials, using dedicated skips or containers. All waste arising will be removed from site by suitably authorised waste contractors holding valid waste collection permits issued by the

National Waste Collection Permit Office (NWCPO), and disposal will be carried out only at appropriately licensed or permitted facilities.

By implementing mitigation measures and adherence to best practice and regulatory requirements, the potential environmental impacts associated with the Proposed Development are expected to be effectively controlled and minimised.

8.9 Cumulative Effects

A review of planning records on the An Coimisiún Pleanála and Dublin City Council planning portals identifies a number of permitted and proposed developments within the wider vicinity of the Proposed Development. A schedule of these developments is provided in **Appendix 1**.

An assessment has been undertaken to identify those projects with the greatest potential to give rise to cumulative effects during the construction and operational phases. On this basis, the following nearby developments are considered most relevant due to their scale, nature, and potential construction timelines:

- Diageo St James's Gate Decarbonisation and Water Recovery Project, Diageo Ireland **Planning Reference: WEB2472/24**
- Redevelopment of a protected structure and demolition of an existing workshop to facilitate the construction of a seven-storey apartment building comprising 15 residential units, together with all associated site works **Planning Reference: 3912/23**
- Liffey Valley to City Centre Core Bus Corridor Scheme **Planning Reference: ACP 314056**

Other permitted or proposed developments in the immediate vicinity are generally small in scale and are not considered likely to result in meaningful cumulative interactions.

8.9.1 Diageo St James's Gate Decarbonisation and Water Recovery Project

The Diageo St James's Gate Decarbonisation and Water Recovery Project represent the most significant potential for cumulative interaction with the Proposed Development due to its proximity and the scale of planned works. Potential cumulative effects during the construction phase may arise in relation to traffic management within the Diageo's site and road network, temporary noise and dust emissions, surface water management, and short-term visual impacts associated with construction activity.

Notwithstanding this, both developments will be subject to detailed Construction and Environmental Management Plans (CEMPs) and Construction Traffic Management Plans (CTMPs), which will include measures to control and coordinate construction activities. In addition, liaison and coordination between project teams, including engagement with the relevant statutory authorities where required, will assist in managing interface activities and minimising disruption.

Having regard to the urban context, the temporary nature of construction works, and the implementation of standard mitigation and coordination measures, no significant cumulative environmental effects are anticipated.

No operational phase cumulative impacts are predicted.

8.9.2 Apartment at 134 James Street

Construction works associated with the Proposed Development have the potential to interact cumulatively with the permitted seven-storey residential development at 134 James's Street, due to the close proximity of the two sites. Any potential interactions would relate primarily to construction-phase activities, including temporary noise, dust generation and visual effects associated with demolition and construction works.

However, given the relatively small scale and constrained nature of the permitted residential development, together with the temporary and localised nature of construction activities and the implementation of standard Construction Environmental Management Plan (CEMP) mitigation measures for both schemes, no significant cumulative effects are anticipated.

8.9.3 Liffey Valley to City Centre Core Bus Corridor Scheme

The Liffey Valley to City Centre Core Bus Corridor Scheme represents a strategic infrastructure project within the wider urban area. Based on the current programme, this scheme is anticipated to be largely progressed ahead of the Proposed Development. In the unlikely event that both projects are constructed concurrently, potential interactions may arise primarily in relation to temporary traffic management and localised impacts on network capacity within the surrounding road network.

In such circumstances, coordination with the National Transport Authority (NTA) and Dublin City Council would be required, including compliance with any Road Opening Licence conditions and associated traffic management requirements. Subject to such coordination and standard statutory controls, any cumulative effects are not anticipated to be significant within the context of the existing urban transport network.

No operational phase interactions or cumulative impacts are predicted.

9. Appropriate Assessment

An Appropriate Assessment (Stage 1) Screening Report has been prepared for the Proposed Development in accordance with the requirements of the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC). The screening process concluded that of the seven European sites located within a potential ZOI for the Proposed Development, five were neither hydrologically or ecologically connected to the Proposed Development and that significant direct or indirect effects, either individually or in combination with other plans or projects, were not likely. However, the same conclusion could not be reached with regards two European sites within the ZOI, namely South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA, and significant effects because of the Proposed Development could not be ruled out. Consequently, the project proceeded to Stage 2 of the AA process and an NIS was produced.

This NIS (Stage 2) has considered the impact of the Proposed Development on the integrity of South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA, either alone or in combination with other plans or projects, in relation to the structure, function and conservation objectives of each site. Following an examination, analysis and evaluation of the relevant information and best scientific knowledge, including in particular the nature of the predicted impacts from the Proposed Development, and with the implementation of the mitigation measures proposed, it has been determined the proposed construction and operation of a 110 kV substation and associated UGC circuits in Dublin City will not adversely affect (either directly or indirectly) the integrity of two European sites, namely South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA, or any other European site, either alone or in combination with other plans or projects, in light of the specific conservation objectives of each site.

10. Conclusions

The Proposed Development comprises a new electricity distribution substation and associated infrastructure within an established urban and industrial area at James's Street, Dublin 8. The Proposed Development forms a critical element of the electricity network and is required to reinforce local distribution capacity, improve security of supply, and facilitate existing and future demand within Dublin City.

The need for investment in electricity infrastructure is recognised at national, regional, and local policy levels. The continued growth of Dublin City, together with increasing electrification across the residential, commercial, institutional, and transport sectors, requires the provision of resilient and modern electricity infrastructure to ensure a secure and reliable power supply. The Proposed Development will contribute to these objectives by strengthening the local distribution network and supporting the sustainable development of the city.

The Proposed Development has been designed having regard to its urban context and historic setting. Although the scale and massing of the building are dictated by the operational requirements of the electrical equipment, the development has been designed to sit comfortably within the established scale and character of the surrounding area through appropriate architectural detailing, materials and boundary treatment. The proposal will redevelop a previously developed site containing derelict and underutilised structures, thereby improving the visual condition and presentation of the site while providing essential strategic infrastructure.

The Planning and Environmental Considerations Report has assessed the likely effects of the Proposed Development on the receiving environment. The assessment has considered, as relevant, landscape and visual effects, architectural heritage and conservation, biodiversity, traffic and transportation, noise and vibration, flood risk, drainage, and other environmental topics. The findings demonstrate that the Proposed Development will not give rise to significant adverse environmental effects during either the construction or operational phases.

An iterative design process involving the engineering, architectural, planning, and environmental teams has enabled mitigation measures to be incorporated into the design from an early stage. As a result, potential effects have been avoided or reduced through design development, site layout, material selection, lighting strategy, and boundary treatments. Residual environmental effects are generally assessed as slight or negligible and are considered acceptable within the context of the receiving environment.

An Appropriate Assessment Screening exercise was undertaken for the Proposed Development. In light of the potential for pathways to European sites, likely significant effects could not be excluded at the screening stage and, accordingly, a Natura Impact Statement (NIS) was prepared to inform Stage 2 Appropriate Assessment.

The Natura Impact Statement assessed the potential effects of the Proposed Development, both alone and in combination with other plans and projects, on the conservation objectives of relevant European sites. The assessment concluded that, subject to the implementation of the mitigation measures and controls described therein, the Proposed Development will not adversely affect the integrity of any European site, either alone or in combination with other plans or projects. Accordingly, no significant effects on European sites are predicted to arise.

The Proposed Development is consistent with the objectives of the Dublin City Development Plan and with wider national and regional policy relating to the provision of critical infrastructure, urban regeneration, sustainable development, and the enhancement of electricity network capacity. The Proposed Development is compatible with the existing pattern of development and surrounding land uses and will not adversely affect the character or amenity of the area.

Having regard to the strategic need for the Proposed Development, the characteristics of the site, the findings of the environmental assessments, and the mitigation measures incorporated into the design, it is concluded that the Proposed Development is consistent with the principles of proper planning and sustainable development.

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