

MWP

Outline Construction and Environmental Management Plan

Steeven's Lane 110kV Substation

The Electricity Supply Board (ESB)

August 2026

Contents

1.	Introduction	1
1.1	CEMP Purpose and Objectives	1
2.	Development Setting	2
2.1	Site Location and Context	2
2.2	Existing Site Sensitivities	3
2.2.1	Interaction with Diageo IEL Site Boundary	3
2.2.2	Substation Location	4
2.2.3	Underground Cable Route	5
3.	Characteristics of the Proposed Development	6
3.1	Proposed Substation Development	6
3.2	Proposed Connection to Electricity Grid	7
3.3	Programme	7
3.4	Working Hours	8
4.	Construction Works	8
4.1	Site Establishment	10
4.1.1	Construction Site Compound	10
4.1.2	Site Hoarding	11
4.1.3	Site Access	11
4.1.4	Enabling Works	12
4.2	Demolition Works	12
4.2.1	Retaining Walls	12
4.2.2	Asbestos Removal and Soft Strip	12
4.2.3	Demolition of Existing Buildings	13
4.3	Construction Works	13
4.3.1	Excavations and Earthworks	13
4.3.2	Substructure Construction	13
4.3.3	Superstructure Construction	13
4.3.4	Underground Cabling Works	14
5.	Environmental Management	14
5.1	Relevant Legislation, Guidance & Implementation Requirements	14
5.2	Demolition and Construction Management Plan	15
5.2.1	Site Establishment Management	16

5.2.1.1	Construction Compound Management	16
5.2.1.2	Site Hoarding and Public Interface Management	16
5.2.1.3	Site Access Management.....	16
5.2.1.4	Consents, Permits & Notifications	17
5.2.2	Management of Demolition Works.....	17
5.2.2.1	Interface Management	17
5.2.2.2	Pedestrian and Public Safety Management.....	18
5.2.2.3	Management of Retaining Wall Works.....	18
5.2.2.4	Management of Demolition of Existing Building Works	18
5.2.3	Management of Construction Works.....	20
5.2.3.1	Management of Excavation Works	20
5.2.3.2	Management of Substructure Construction.....	20
5.2.3.3	Management of Superstructure Construction	20
5.2.4	Management of Electrical Works	20
5.2.4.1	Underground Cabling Works	21
5.3	Resource & Waste Management Plan.....	21
5.4	Construction Traffic Management Plan.....	22
5.5	Noise and Vibration Management Plan.....	23
5.6	Air Quality and Dust Management Plan	24
5.7	Surface Water and Pollution Prevention Management Plan	24
5.8	Fuel, Oil and Chemical Management Plan.....	25
5.9	Concrete Management Plan	25
5.10	Ecological Management Plan	26
5.11	Archaeological and Cultural Heritage Management Plan	26
5.12	Luas Vibration and Settlement Management Plan	27
6.	Implementation of oCEMP	28
6.1	On Site Organisational Structure & Responsibility.....	28
6.2	Site Environmental Training and Awareness.....	28
6.3	Duties and Responsibilities.....	29
6.3.1	Project Manager	29
6.3.2	Construction Manager	30
6.3.2.1	General	30
6.3.2.2	Site-Specific Method Statements.....	31

6.3.3	Design Engineer.....	31
6.3.4	Environmental Manager	31
6.3.4.1	General	31
6.3.4.2	Site Specific Method Statements	32
6.3.4.3	Third Party Consultations	32
6.3.4.4	Licensing	32
6.3.4.5	Waste Management Documentation	33
6.3.4.6	Legislation.....	33
6.3.4.7	Specialist Environmental Contractors.....	33
6.3.4.8	Environmental Induction Training and Environmental Toolbox Talks	33
6.3.4.9	Environmental Incidents / Spillages.....	33
6.3.4.10	Site Environmental Inspections and Auditing.....	34
6.3.4.11	Environmental Records.....	34
6.3.5	Other Roles	34
6.3.5.1	Health and Safety Personnel	34
6.3.5.2	Project Archaeologist.....	35
6.3.5.3	Temporary Works Coordinator (TWC) / Temporary Works Designer (TWD)	35
6.3.5.4	Community Liaison Officer	36
6.3.5.5	Waste and Contaminated Land Specialist	36
6.3.5.6	All Site Personnel	37
6.4	Contacts.....	38
6.4.1	Appointed Contractor Contacts	38
6.4.2	Employer Contacts	38
6.4.3	Third Party Contacts.....	39
7.	Environmental Commitments	39
8.	Environmental Monitoring and Audit.....	47
8.1	Auditing, Monitoring and Response	47
8.2	Environmental Performance Indicators.....	50
8.3	Response Procedure / Corrective Action	50
8.4	Emergency Response Plan	51
9.	References	53

Tables

Table 3-1: Outline Construction Schedule 8

Table 4-1: Summary of Main Construction Activities 9

Table 6-1: Appointed Contractor Contacts 38

Table 6-2: Employer Contacts 38

Table 6-3: Third Party Contacts 39

Table 8-1: Sample of Environmental Monitoring Schedule 48

Figures

Figure 2-1: Proposed Site Location 2

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

Figure 3-1: Proposed Development Footprint..... 6

Figure 4-1: Preliminary Layout of Temporary Construction Compound (subject to detailed design) 10

Figure 4-2: Proposed Access Routes to Substation Compound 11

Figure 6-1: Contractor’s Organisational Structure 28

Appendices

Appendix 1 – Resource and Waste Management Plan

Appendix 2 – Outline Construction Traffic Management Plan

Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Acceptance Code / Status
27057	27057-ZZ-ZZZ-RP-MWP-SE-6004	A	10/08/2026	NB / APC	IB	CF	S-1

MWP, Engineering and Environmental Consultants

Address: Reen Point, Blennerville, Tralee, Co. Kerry, V92 X2TK, Ireland

www.mwp.ie



Disclaimer: This Report, and the information contained in this Report, is Private and Confidential and is intended solely for the use of the individual or entity to which it is addressed (the “Recipient”). The Report is provided strictly on the basis of the terms and conditions contained within the Appointment between MWP and the Recipient. If you are not the Recipient you must not disclose, distribute, copy, print or rely on this Report (unless in accordance with a submission to the planning authority). MWP have prepared this Report for the Recipient using all the reasonable skill and care to be expected of an Engineering and Environmental Consultancy and MWP do not accept any responsibility or liability whatsoever for the use of this Report by any party for any purpose other than that for which the Report has been prepared and provided to the Recipient.

1. Introduction

This outline Construction Environmental Management Plan (oCEMP) has been prepared by Malachy Walsh and Partners (MWP), to support a planning application for the construction of the proposed Steeven's Lane 110kV substation in Dublin 8.

The oCEMP outlines construction practices and minimum environmental management measures which shall be implemented during the construction phase, in order to ensure that the Proposed Development is constructed in accordance with best practice, with the minimum impact on the surrounding environment.

1.1 CEMP Purpose and Objectives

The purpose of a CEMP is to outline how the Appointed Contractor shall implement a Site Construction Management System to meet the specified requirements which include Contractual, Regulatory and Statutory Requirements, Environmental Mitigation Measures and Planning Conditions.

The primary objectives of a CEMP are to:

- Minimise environmental impacts during construction.
- Ensure compliance with Irish environmental legislation and local authority requirements.
- Protect the health and wellbeing of nearby residents and businesses.
- Control pollution (air, water, noise, and land).
- Promote sustainable construction practices.

This oCEMP¹ achieves this by providing the environmental management framework to be adhered to during the pre-commencement and construction phases of the Proposed Development. In essence, this oCEMP provides the Appointed Contractor with a practical guide to ensure compliance by all parties with Regulatory and Environmental requirements. It outlines the work practices, construction management procedures, management responsibilities, mitigation measures and monitoring proposals that are required to be adhered to in order to construct the works in an appropriate manner.

All site personnel shall be required to be familiar with the plan's requirements as related to their role on site.

This oCEMP is a 'live' document and shall be updated by the contractor as project progresses and construction methodologies are finalised including the roles and responsibilities of those appointed on the site for the construction of the project. In particular, the oCEMP shall be updated to ensure the minimum requirements of all relevant planning conditions are incorporated.

¹ Nothing stated in this document shall supersede or be taken to replace the terms of the Contract or the detailed design description issued with the Contract tender or the conditions of planning. Similarly, the issues covered within this document may be amended or added to by the Appointed Contractor, in accordance with their specific works proposals, sequencing and procedures, subject to agreement with the Local Authority.

2. Development Setting

2.1 Site Location and Context

The Proposed Development comprises the construction of a 110kV substation at a site fronting onto Steeven's Lane, Dublin 8, together with associated underground grid connection works located within the Diageo site complex and the public road network along Bow Lane West, James's Street, and Echlin Street, Dublin 8.

The substation site is located within lands associated with the Diageo complex and fronts onto Steeven's Lane. The surrounding area is characterised by a mix of industrial, commercial, institutional, and residential land uses. Steeven's Lane forms the western boundary of the site and accommodates pedestrian, cyclist, Luas Red Line, and limited vehicular movements. The wider area includes the Diageo Guinness Brewery lands, residential developments, commercial premises, and healthcare facilities, including St James's Hospital.

The associated underground grid connection works extend from the proposed substation site through lands within the Diageo complex and along sections of the public road network comprising Bow Lane West, James's Street, and Echlin Street.

The site location within the greater Dublin area is shown in Figure 2-1 below.

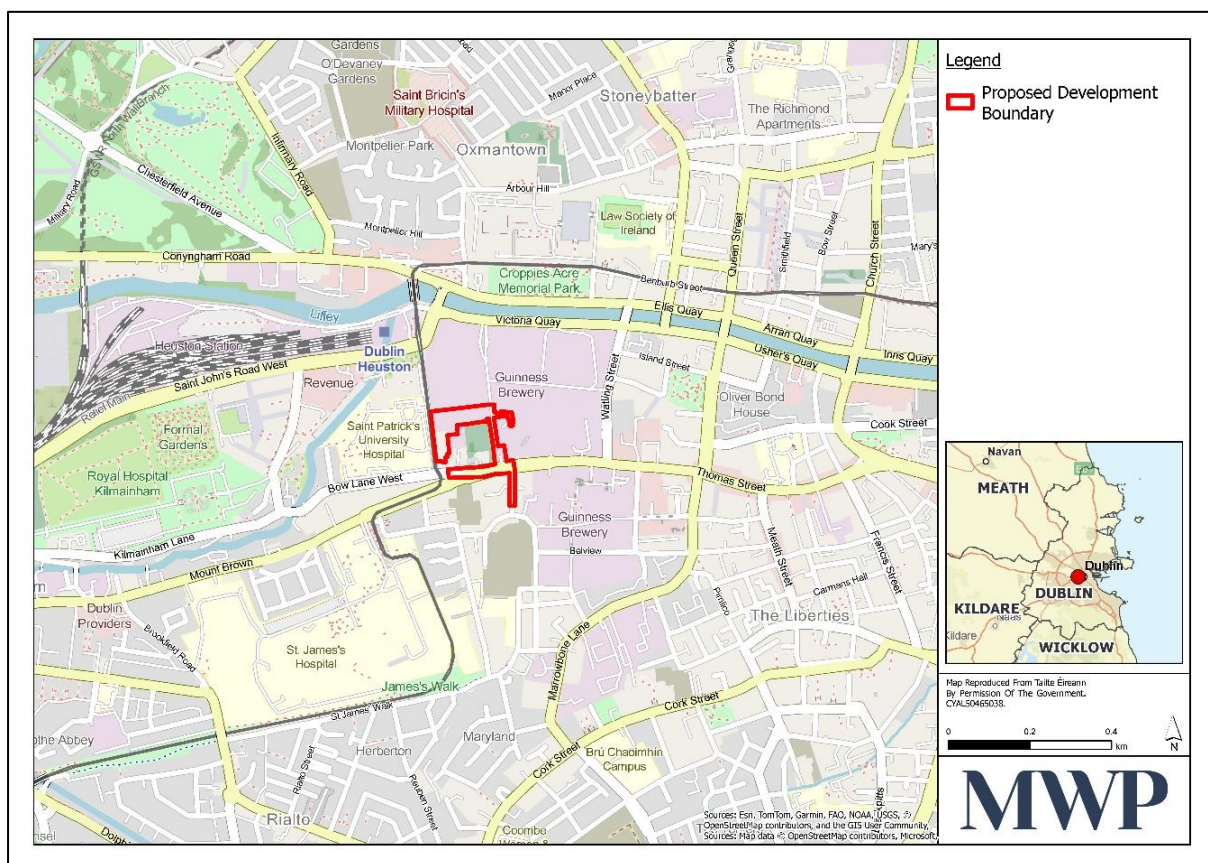


Figure 2-1: Proposed Site Location

2.2 Existing Site Sensitivities

The proposed red line boundary comprises two distinct elements: the proposed substation location, which is a discrete development site within a constrained urban environment, and the underground cable route, which extends through operational industrial lands (Diageo's Industrial Emissions License (IEL)) and the surrounding public road network. While there is overlap in the general environmental context, the sensitivities and constraints differ depending on the nature and location of the works.

2.2.1 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 2-2). 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 2-2.

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.

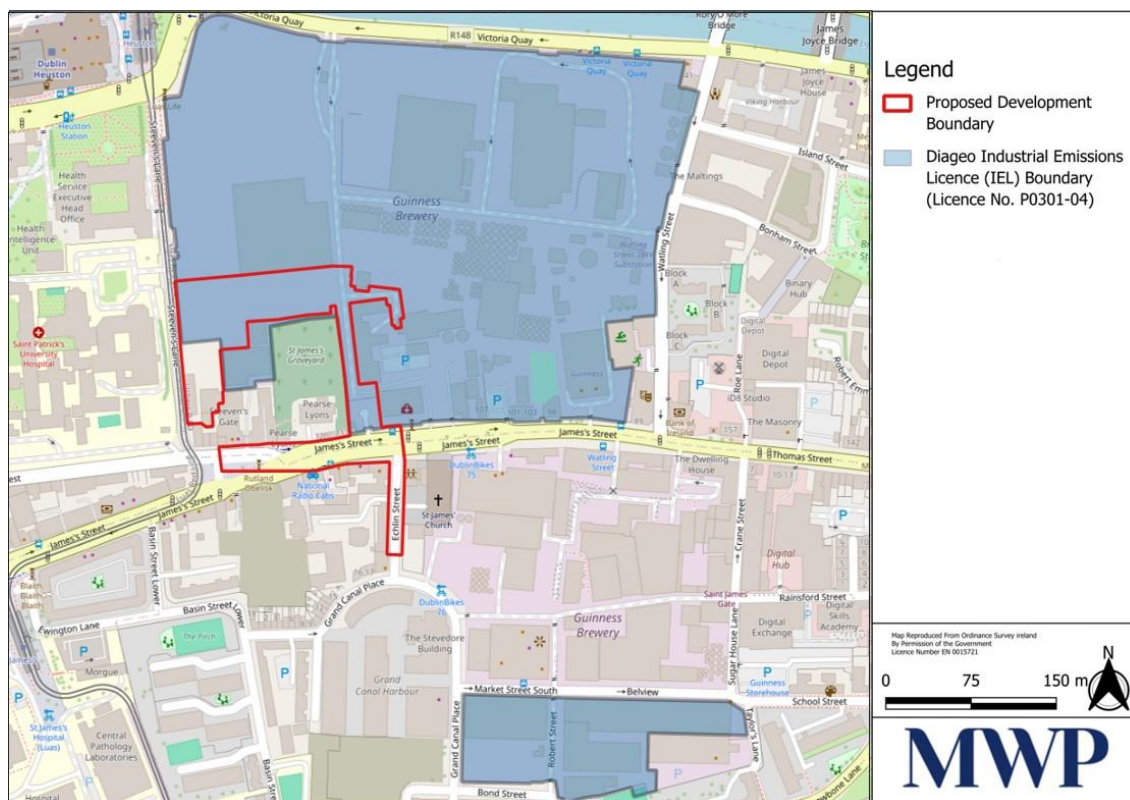


Figure 2-2: Proposed Development Site and Diageo IEL Boundary Interface

2.2.2 Substation Location

The proposed substation site is located in a highly urbanised setting influenced by adjacent infrastructure, including the Luas corridor, adjoining operational industrial lands, and nearby residential properties, and its location within the curtilage of a protected structure at 134 James Street. These constraints will influence construction planning and delivery, particularly in relation to working space limitations, site access, and coordination with transport operators and statutory bodies. A notable level difference of approximately 5–6m between the proposed substation development area and the adjacent lands to the north within the Diageo complex will further influence site access arrangements and construction logistics.

Works in proximity to the Luas infrastructure will require appropriate permitting, including a Luas Work Safety Permit. Method statements, risk assessments, and associated documentation will be required in advance of works, with all activities coordinated through the Luas Network Management Centre. In addition, a Dublin City Council hoarding/scaffolding permit and Traffic Management Plan will be required for any occupation of the public realm, with full compliance required with all associated conditions.

In terms of biodiversity, the site is of low ecological value and is dominated by buildings and hardstanding, with only small, fragmented areas of ruderal vegetation present. No watercourses, drainage features or significant habitats are located within the site boundary, and the surrounding area is characterised by urban land uses with limited ecological connectivity.

Ground conditions within the site comprise made ground associated with previous development, consistent with the surrounding CORINE land classification of continuous urban fabric. Existing drainage infrastructure serves the site, with surface water and foul flows conveyed to the combined sewer network on Steeven's Lane, ultimately discharging to Ringsend Wastewater Treatment Plant.

The site is underlain by a locally important aquifer of moderate productivity, with groundwater vulnerability ranging from low to moderate. Groundwater quality in the wider area is classified as good, although subject to ongoing review under the Water Framework Directive.

Air quality in the area is influenced by traffic, urban activities and nearby industrial operations, with available monitoring data indicating generally good ambient conditions. The baseline noise environment reflects a typical city centre setting, with moderate to high ambient noise levels influenced by traffic, Luas movements and general urban activity. Sensitive receptors in the vicinity include residential properties and healthcare facilities.

From an archaeological perspective, the site is located within the Zone of Archaeological Potential for Dublin City (RMP DU018-020) and has a known history of development from the 18th century onwards. While no recorded monuments are present within the site boundary, there remains potential for subsurface archaeological features. In addition, the site is located within the curtilage of a protected structure (RMP DU018-474), which contributes to the cultural heritage sensitivity of the receiving environment and will require consideration during the design and construction phases.

The landscape character of the area is strongly urban and industrial, with large-scale built development and established infrastructure defining the setting. The site is visually contained within this context, with limited views from surrounding streets due to existing buildings and boundary treatments.

The site and surrounding area are representative of a dense inner-city environment, comprising established infrastructure, predominantly built form, and a range of nearby sensitive receptors.

2.2.3 Underground Cable Route

The underground cable route extends through the IEL Diageo facility, as well as along established public road corridors. Compared to the substation site, sensitivities along the cable route are primarily associated with maintaining continuity of the operations of Diageo and other businesses, managing third-party interfaces, minimising nuisance to local residents and minimising disruption within constrained transport corridors.

Within the IEL Diageo lands, works will require careful coordination with ongoing industrial operations, including access management, health and safety controls, and phased construction planning to avoid disruption to critical processes and logistics. Interface agreements and method statements will be required to ensure compatibility with site-specific operational requirements.

Along public roads, works will be subject to detailed traffic management planning, including lane closures, pedestrian management, and coordination with Dublin City Council. Temporary occupation of the public realm will require appropriate permits, and works will need to be sequenced to maintain access to adjacent properties, emergency services, and public transport routes.

Environmental constraints along the cable route are generally consistent with an urbanised corridor. Biodiversity value is low, reflecting the dominance of hardstanding and existing infrastructure. However, the linear nature of the works increases the potential for cumulative disturbance, particularly in relation to traffic, noise, and temporary disruption to local receptors.

Ground conditions along the route are expected to comprise variable made ground associated with historic road construction and utility installation, requiring appropriate management of excavation and reinstatement works. Existing utilities are likely to be present within the corridor, necessitating detailed utility mapping and coordination to avoid service conflicts.

Hydrogeological conditions are consistent with the wider area, with moderate groundwater vulnerability and no significant surface water features directly affecting the route. However, standard pollution prevention measures will be required during excavation and trenching works.

The proposed underground ESB cable trench extends into the zone of notification for RMP DU018-474 (St James's Church) and the associated National Monument, St James's Graveyard (DU018-020346). Accordingly, the cable installation works will be undertaken in accordance with the archaeological licensing process. Monitoring and appropriate mitigation measures may be required in accordance with the archaeological licensing process.

3. Characteristics of the Proposed Development

The characteristics of the Proposed Development are fully described in the Planning and Environmental Considerations Report (PECR) accompanying this planning application, and this outline Construction Environmental Management Plan (oCEMP) should be read in conjunction with it. 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 3-1 shows the Proposed Development footprint and illustrates the positions of the Proposed Development components and infrastructure within the development boundary.

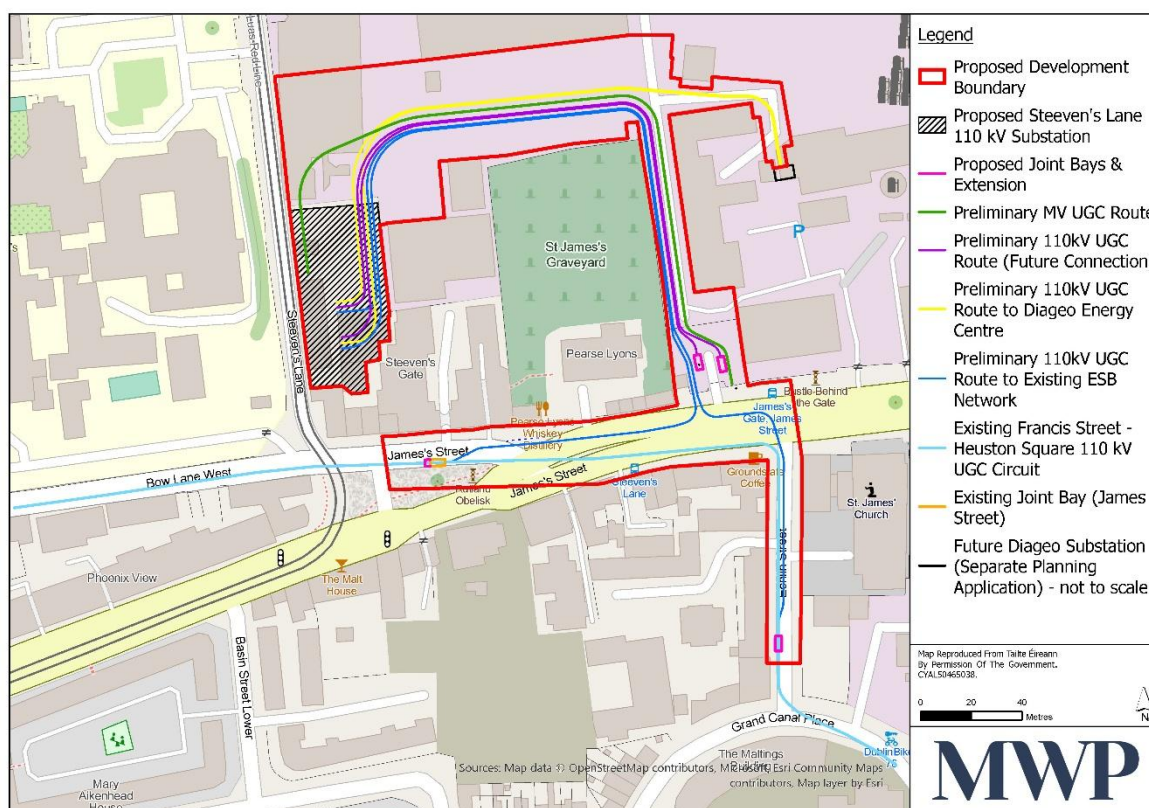


Figure 3-1: Proposed Development Footprint

3.1 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.

3.2 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.

And 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' Street.

3.3 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 3-1: 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		

3.4 Working Hours

It is envisaged that construction operations on site will generally be between the following hours:

- Monday to Friday - 07:00 to 18:00; and
- Saturday - 08:00 to 14:00.

It may be necessary for some construction operations to be undertaken outside these times. Out of hours works may include activities such as concrete pouring, underground cable installation, trenching and ducting within the public roads, where extended or restricted working hours may be required to minimise disruption to traffic and surrounding buildings. In these circumstances, works outside the above hours will only be undertaken with prior agreement with DCC. In addition, abnormal load deliveries for the electrical equipment will have to be outside of these hours.

4. Construction Works

The construction for the Proposed Development will be undertaken on a phased basis and will comprise a series of enabling and demolition works, civil engineering, building, and electrical installation activities associated with the development of the proposed 110 kV substation and associated underground cable infrastructure.

The principal construction activities to be undertaken as part of the Proposed Development are summarised in Table 4-1 below. This list is not exhaustive and is intended to provide an overview of the key construction activities anticipated during the construction phase.

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 • 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

4.1 Site Establishment

4.1.1 Construction Site Compound

During the construction phase, temporary facilities will be required to support construction activities and site personnel.

A temporary construction compound will be located to the north of the proposed substation site, within the Diageo Site complex, as illustrated in Figure 4-1. The compound area comprises an existing hardstanding area and will serve as the principal construction support area during the works.

The extent and use of the compound may vary throughout the construction programme. During demolition works, a smaller-scale site compound and welfare facilities may be accommodated within the development site. During excavation and construction of the substation, the temporary construction compound will function as the main contractor laydown area for the storage of materials, plant and equipment, deliveries, construction-phase car parking, waste segregation, and site accommodation units.

Due to an existing 5-6m level difference between the compound and the proposed substations site, a temporary access ramp will be installed from the north side of the compound via the adjacent Diageo keg storage area to facilitate safe and efficient access. The compound will also accommodate a crane to lift material and equipment including large plant in and out of the Proposed Development site.

The detailed layout, operation and management of the temporary construction compound will be developed by the Appointed Contractor prior to commencement of the works and incorporated within the final Construction and Demolition Management Plan for agreement with the Planning Authority.



Figure 4-1: Preliminary Layout of Temporary Construction Compound (subject to detailed design)

4.1.2 Site Hoarding

A 3m high perimeter hoarding will be erected around the site boundary to provide a secure barrier between the construction site and the public. The hoarding will comprise a timber framed structure faced with plywood, finished in high quality coatings. It will incorporate lockable access points, anti-tamper fixings and a smooth public-facing finish. Appropriate signage and lighting will be provided to ensure public safety.

During the demolition stage, additional protective hoarding will be installed along the western site boundary adjacent to Steeven's Lane and the Luas corridor. This hoarding will extend to a minimum height of 1.2m above the adjacent demolition levels to provide enhanced protection for the Luas infrastructure and pedestrians.

Where required, temporary protection measures including scaffolding, debris netting, protection fans and crash decks will be installed to safeguard adjacent infrastructure and members of the public.

4.1.3 Site Access

Construction access to the substation site will be provided via the existing Victoria Quay entrance to the Diageo site, as agreed with Diageo.

If required, a wheel-wash will be installed within the site compound to wash dirt from the wheels of road trucks exiting the site.

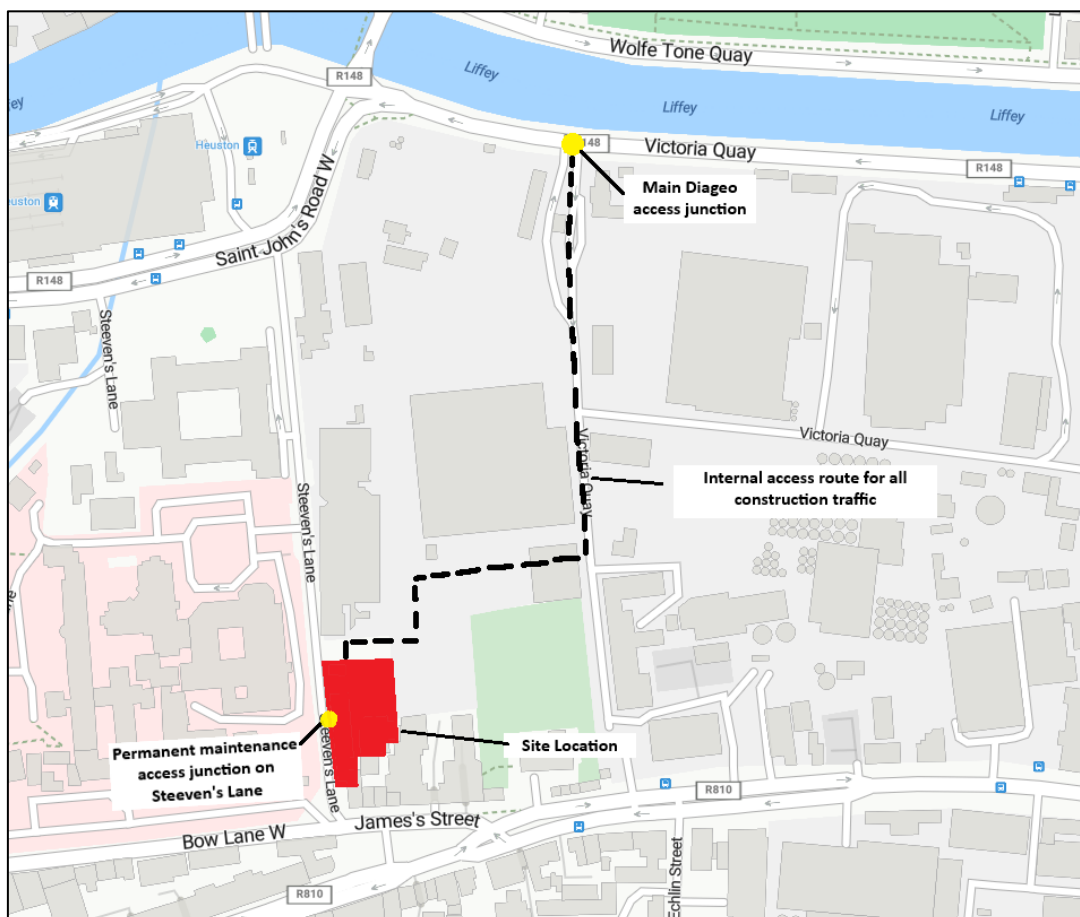


Figure 4-2: Proposed Access Routes to Substation Compound

4.1.4 Enabling Works

Prior to the commencement of demolition works, a programme of enabling works will be undertaken to facilitate the safe and controlled demolition of the existing structures.

Detailed pre-condition surveys will be undertaken during the site establishment phase. These will include photographic, topographical, and crack surveys of Steeven's Lane, adjacent properties, and surrounding public roads to establish baseline conditions and record any existing defects. Structural investigations will also be undertaken to establish key information on the existing buildings, including load paths, floor diaphragm action, and any party wall or shared structural elements. Existing utilities will be identified, verified, and either safely disconnected or protected prior to demolition to avoid conflicts during the works.

The findings of these surveys will inform the project monitoring strategy, with appropriate monitoring measures established and maintained throughout the demolition works.

4.2 Demolition Works

4.2.1 Retaining Walls

The existing retaining walls along the northern and eastern boundaries of the proposed substation site will be demolished due to their poor state of repair and replaced with new retaining walls 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.

A section of the retaining wall to the north will be temporarily omitted to permit the ramp access from the temporary construction compound to the substation site to function.

Prior to demolition, temporary support works will be installed to maintain the stability of the retained ground and adjacent infrastructure. This temporary works may include sheet piling, ground anchors, or braced shoring systems. It is envisaged that staged excavation or benching may be required to safely relieve pressure acting on the wall. Drainage controls will also be implemented to prevent water ingress and potential slope instability during the works.

The existing retaining wall will then be demolished in a controlled top-down sequence, removing wall elements in manageable sections while maintaining the integrity of the temporary support system.

Following demolition, excavation and construction for the replacement retaining walls will proceed. The northern retaining wall will be founded on competent ground, while the eastern retaining wall will be supported on piled foundations. Following completion and achievement of the required design strength, the retaining walls will be backfilled in a controlled manner.

4.2.2 Asbestos Removal and Soft Strip

Prior to demolition of existing buildings, all asbestos-containing materials identified during the asbestos survey will be removed by a suitably licensed specialist contractor in accordance with the Safety, Health and Welfare at Work (Asbestos) Regulations 2006–2010. Traceable records of this activity including the disposal licence will be kept.

Following completion of asbestos removal, a soft strip of each building will be undertaken to remove non-structural elements, including electrical wiring, ceiling tiles, mechanical and electrical services, fixtures, fittings and redundant plant.

4.2.3 Demolition of Existing Buildings

Demolition of the existing buildings will be undertaken on a phased basis, generally progressing on a building-by-building basis to maintain safe working areas and minimise temporary stockpiling of demolition arising.

Structural demolition will be carried out using a controlled top-down methodology, progressing on a floor-by-floor basis to ensure the to maintain structural stability throughout the works, with particular care taken at sensitive interfaces, including the Luas corridor and adjoining properties where manual demolition techniques will be employed. Strict exclusion zones will be established and enforced at all times to protect site personnel and the public during demolition operations.

Temporary propping and structural support will be installed where required as structural elements are removed. Where demolition interfaces with retained structures or adjacent properties, engineered temporary support systems, including façade retention where necessary, will be installed to maintain stability throughout the demolition process.

Works adjacent to the Luas corridor will initially be undertaken away from the railway interface before progressing towards constrained areas using manual or controlled demolition techniques as required, under enhanced protection measures and permit conditions.

4.3 Construction Works

4.3.1 Excavations and Earthworks

The Proposed Development will require excavation works to facilitate piled foundations, underground services, cable installation and associated infrastructure, as well as general site preparation and level adjustments.

Temporary excavation support systems and retaining structures will be required to installed where required to maintain the stability of excavations during construction.

4.3.2 Substructure Construction

The substructure of the Proposed Development will comprise piled foundations supporting the substation structure. Piling has been selected to provide adequate load-bearing capacity and to sit the prevailing ground conditions.

4.3.3 Superstructure Construction

The transformer bunds will be constructed in reinforced concrete.

The substation building will comprise 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 face of the building will compromise insulated cladding panels as per architect's recommendations.

The boundary wall along Steeven's Lane will be constructed using brickwork, providing an appropriate architectural treatment along the public frontage.

4.3.4 Underground Cabling Works

The proposed works comprise the installation of 110 kV underground cable (UGC) circuits connecting the proposed Steeven's Lane 110 kV substation to joint bays on the existing Francis Street – Heuston Square 110 kV circuit at Bow Lane West and Echlin Street/James's Street, as well as connections to the proposed Diageo 110kV substation (subject to separate consent) and future connection ducting. The works will also include the installation of 14 medium voltage (MV) underground cable circuits between the proposed substation and new joint bays at the St James's Gate Medical car park, north of James's Street. This will involve works within the Diageo site complex and within the public road network.

Cable installation will predominantly utilise open-cut trenching. 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.

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.

5. Environmental Management

A number of Environmental Management measures are proposed for managing the impacts of construction activities associated with the Proposed Development. Refer to **Section 5.2 to Section 5.12** below. These measures are to be implemented by the Appointed Project Manager and/or Project Contractor(s) as relevant.

The environmental management measures shall be read in conjunction with **Section 7**, which identifies specific environmental commitments associated with the Proposed Development.

Once appointed, it is the Appointed Contractor's responsibility to update and add (where required) project specific control measures relevant to environmental management and procedures. The Appointed Contractor shall ensure that measures/procedures are communicated to all site staff, including sub-contractors, through induction, training and at relevant meetings. Where a specific management plan is required, it may be provided as an appendix to the CEMP or integrated directly within the CEMP.

5.1 Relevant Legislation, Guidance & Implementation Requirements

The Appointed Contractor shall comply with the requirements associated with this Construction Environmental Management Plan (CEMP), any planning conditions imposed by An Coimisiún Pleanála (ACP) and all relevant documentation required by the Employer and the planning authority.

The Appointed Contractor shall comply with all relevant legislation, including environmental, waste management, health and safety, and planning requirements.

The Appointed Contractor shall have regard to and implement best practice guidance, including but not limited to the following:

- CIRIA C532 – Control of water pollution from construction sites;
- CIRIA C648 – Control of water pollution from linear construction projects;

- CIRIA C679 – Invasive species management for infrastructure managers;
- CIRIA C811 – Environmental Good Practice on Site (current edition);
- CIRIA C753 – The SuDS Manual;
- Invasive Species Ireland – Best Practice Management Guidelines;
- Transport Infrastructure Ireland (TII) – Environmental and ecological guidance documents (as applicable); and
- Relevant EPA guidance on waste management, emissions and environmental protection.

All construction activities shall be planned and executed in accordance with the above legislation and guidance, as appropriate to the nature of the works.

The Appointed Contractor shall prepare and implement method statements for all construction activities. These method statements shall demonstrate how compliance with the above legislation, guidance, and describe how the requirements of this OCEMP will be implemented and achieved.

Method statements shall, as a minimum, include measures for:

- Prevention of water pollution, including surface water management and control of silt and contaminated runoff;
- Dust, noise, and vibration control during construction activities;
- Storage, handling, and bunding of fuels, oils, and hydrocarbons;
- Waste management in accordance with applicable regulatory requirements and best practice;
- Protection of ecological, fisheries, and sensitive environmental receptors;
- Management and control of invasive species, where applicable;
- Environmental protection during earthworks, excavation, and construction sequencing; and
- Emergency response procedures for environmental incidents, spills, or pollution events.

All method statements shall incorporate relevant controls derived from best practice guidance listed above.

5.2 Demolition and Construction Management Plan

This section outlines the proposed approach to the management of the demolition and construction phases of the Proposed Development.

The methodologies and measures described herein are indicative and are intended to inform the planning application. The appointed Contractor will be responsible for preparing the final detailed Construction and Demolition Management Plan (CDMP), Construction Environmental Management Plan (CEMP), and associated method statements prior to commencement of works. These documents shall incorporate site-specific methodologies, detailed sequencing, traffic management arrangements, environmental protection measures, and assigned personnel responsibilities, as agreed with the relevant statutory authorities.

5.2.1 Site Establishment Management

5.2.1.1 Construction Compound Management

The temporary construction compound shall be managed to support the safe and efficient delivery of the Proposed Development throughout the demolition and construction phases.

Temporary accommodation facilities are expected to include site offices, meeting rooms, welfare facilities, a canteen, drying room and sanitary facilities for site personnel.

A bunded containment area shall be provided within the construction compounds for the storage of lubricants, oils and site generators, and all refuelling activities shall be undertaken within designated bunded areas to minimise the risk of contamination. Washing of concrete mixer barrels shall not be permitted.

A temporary water connection will be provided for the duration of the works, a feasibility agreement has been confirmed by Uisce Éireann. A self-contained port-a-loo with an integrated waste holding tank shall be used on site for toilet facilities and wastewater removed by a licensed contractor for disposal at an approved licensed facility. This shall be maintained by the Contractor on a regular basis and shall be removed from the site on completion of the construction phase.

The compound layout shall be designed to facilitate the safe movement of personnel, plant and vehicles, with clearly defined pedestrian and vehicular routes, designated access points and appropriate segregation measures. Areas for material storage, plant laydown, deliveries and waste segregation shall be organised to support the efficient operation of the site.

All construction traffic shall be managed in accordance with the Contractor's approved Traffic Management Plan.

5.2.1.2 Site Hoarding and Public Interface Management

The perimeter hoarding shall be maintained throughout the construction period to provide site security and protect the public.

Temporary closure of a section of the eastern footpath along Steeven's Lane shall be implemented, in accordance with the oCTMP (refer to **Appendix 2**), with appropriate signage, barriers, and pedestrian diversions provided to ensure public safety.

Protective hoarding and temporary protection systems adjacent to the Luas corridor shall be inspected and maintained throughout the demolition and construction phases.

In addition to the raised hoarding, further protective measures shall be implemented, as required, to safeguard the Luas system during the works, including maintaining required clearances from the Luas and Overhead Contact System (OCS).

5.2.1.3 Site Access Management

Construction vehicle movements shall be managed in accordance with the Construction Traffic Management Plan.

The site access route shall be routinely inspected to ensure that mud or debris is not deposited on the public road. Where necessary, the wheel wash facility shall be operated and the public road cleaned to maintain safe conditions.

5.2.1.4 Consents, Permits & Notifications

Appropriate consents, permits and stakeholder engagements shall be undertaken in advance of the works, particularly due to the close proximity of the site to the Luas Red Line and associated infrastructure. A Luas/Transdev Work Safety Permit shall be required for any works within or adjacent to the light rail environment, including demolition, plant operations and construction activities near the running rail and overhead contact system (OCS).

The permit application shall be supported by relevant documentation including method statements, risk assessments, insurance details and planning references. The type of permit required, whether an Occupation, Possession or Possession with Isolation, will be determined based on the nature and proximity of the works, and agreed in advance with Luas along with appropriate working windows to ensure safe operation of the network.

In addition to obtaining permits and preparing supporting documentation, early engagement shall be undertaken with Transport Infrastructure Ireland (TII) to agree the approach to monitoring and control of potential impacts on Luas infrastructure. This shall include agreement of vibration and settlement monitoring requirements, trigger thresholds and response actions, as well as the definition of any required exclusion zones and acceptable working periods for activities undertaken in close proximity to the railway corridor.

The Appointed Contractor shall coordinate with DCC required for temporary traffic management arrangements and public realm licences, including hoarding and scaffold permits, in accordance with Construction and Demolition Good Practice guidance.

Where works relate to protected structures or sensitive heritage elements, engagement shall be undertaken with the Dublin City Council Conservation Officer to agree pre-condition surveys, monitoring requirements and the overall temporary works approach. In addition, the Environmental Protection Agency (EPA) shall be notified in advance of the commencement of works within the Industrial Emissions Licence (IEL) boundary, and agreement shall be obtained on the proposed start date and any associated requirements.

5.2.2 Management of Demolition Works

Prior to commencement of demolition activities, the Appointed Contractor shall prepare detailed demolition method statements, temporary works designs and risk assessments informed by the pre-demolition surveys and existing site information.

Demolition sequencing shall be developed to maintain structural stability throughout the works while minimising impacts on adjacent infrastructure and surrounding land uses.

5.2.2.1 Interface Management

Due to the proximity to the Luas Red Line, demolition activities shall be coordinated with the relevant stakeholders throughout the works.

Prior to commencement, the necessary Luas Work Safety Permits shall be obtained by the appointed Contractor and all protective measures agreed with the Luas Operator. Protective measures may include demolition barriers, temporary footway closures, scaffolding, debris netting along roadway and other temporary protection systems.

Plant and equipment associated with demolition works shall be carefully controlled and operated within defined limits to prevent encroachment into Luas safety zones. Any plant required to operate in proximity to, or cross, the Luas alignment will do so only with prior approval and under controlled conditions, ensuring all equipment is configured and operated safely.

Demolition of retaining walls shall be coordinated with Diageo to ensure that their ongoing daily operational activities are not disrupted. Construction logistics associated with all demolition activities, including delivery of plant and removal of demolition materials, shall be coordinated through the Diageo site in accordance with the Construction Traffic Management Plan.

A monitoring regime, including movement, vibration and dust monitoring, shall be established in advance of demolition activities. Baseline readings shall be recorded prior to the commencement of works, with ongoing monitoring maintained throughout the demolition phase to ensure compliance with agreed thresholds and to safeguard adjacent infrastructure.

5.2.2.2 Pedestrian and Public Safety Management

The Proposed Development will result in temporary impacts on the surrounding public realm, particularly during the demolition and early construction phases along the eastern extent of Steeven's Lane. Due to the proximity of demolition works to the public footpath and the Luas corridor, temporary pedestrian management measures will be required, including the temporary closure of sections of the footpath. Any such closure will be subject to the approval of a Temporary Road Closure Permit from DCC.

A pedestrian traffic survey and comfort level assessment has been undertaken to inform the design of appropriate management measures. The findings of this assessment, together with the Traffic and Transport Assessment (TTA) (refer to the PECR accompanying this planning application) demonstrates that, with the implementation of the proposed mitigation measures, pedestrian movement and access to surrounding properties, commercial premises and public transport links can be maintained safely throughout the construction period.

Where closures are implemented, clearly defined alternative pedestrian routes shall be provided and communicated through appropriate safe signage and wayfinding, to maintain access to adjacent properties, commercial premises and public transport routes. Appropriate temporary barriers, directional signage and wayfinding measures shall be installed to safely separate pedestrians from demolition activities and ensure continued access to surrounding properties, businesses and public transport facilities.

The appointed Contractor shall ensure that pedestrian safety measures are maintained throughout the demolition and construction phases.

5.2.2.3 Management of Retaining Wall Works

Retaining wall demolition and reconstruction shall be undertaken in a controlled, phased manner to maintain ground stability and minimise risks to adjacent infrastructure.

Temporary support works shall remain in place until the replacement retaining walls have achieved the required structural capacity. Ground movement and stability shall be monitored throughout the demolition, excavation and reconstruction phases, particularly where works are undertaken adjacent to sensitive infrastructure.

Demolition arisings shall be progressively removed from the site, with materials managed in accordance with the Resource and Waste Management Plan.

5.2.2.4 Management of Demolition of Existing Building Works

The demolition of the existing buildings shall be carried out on a phased basis, with one building demolished at a time. This approach would ensure that adequate space is available for the temporary stockpiling of demolition waste, if required, outside the 6 m restricted zone adjacent to the site retaining boundary wall to the north and east, with materials to be removed from site at the earliest practicable opportunity. This methodology would be

applicable to any demolition works that would be scheduled in advance of the reconstruction of the existing retaining wall.

Demolition activities shall be undertaken using a controlled top-down approach to ensure the safe and systematic removal of existing structures. Works shall be carried out sequentially to maintain structural stability throughout the process, with particular care taken at sensitive interfaces, including the Luas corridor and adjoining properties where manual demolition techniques shall be employed. Strict exclusion zones shall be established and enforced at all times to protect site personnel and the public during demolition operations.

Each structure shall be progressively demolished on a floor-by-floor basis, maintaining overall stability at all times. Temporary propping and support measures shall be installed where required as structural elements are removed. Demolition shall initially be undertaken away from sensitive interfaces, progressing in a controlled manner toward constrained areas such as the Luas corridor, under enhanced protection measures and permit conditions.

Works adjacent to the Luas shall be undertaken in accordance with agreed permits, with appropriate barriers, hoarding and netting installed in advance. Plant movements and lifting operations shall be strictly controlled, and any crossings of the Luas alignment shall only occur under agreed and supervised conditions.

Where works interface with retained structures or adjacent properties, demolition shall proceed in a controlled sequence without pre-weakening, with temporary support systems and monitoring implemented as required. Where required, engineered façade retention or support systems shall be installed, independent of demolition plant loads, to maintain stability. Temporary works and monitoring shall be implemented throughout these operations.

Construction logistics, including delivery of plant and materials, shall be coordinated with Diageo, with primary access via the Diageo site.

Following completion of demolition works, remaining ground-level elements, including slabs and foundations, shall be removed where required, and the site shall be made safe. This shall include controlled backfilling and preparation for subsequent construction activities. Temporary works shall be removed once risks are eliminated, and final reinstatement be carried.

Detailed proposals to control waste, dust, noise and vibration shall be developed in accordance with the relevant Management Plans (refer to **Section 5.3**, **Section 5.6** and **Section 5.5** respectively) and shall ensure compliance with agreed limits and all relevant planning conditions. These measures shall be set out in the Demolition Contractor's site-specific method statement.

Prior to the Demolition Subcontractor finishing on site, the site shall be fully cleared and left ready for the construction phase. This may include the grubbing up of foundations and ensuring redundant utilities are fully removed, as well as probing and clearing the pile locations. This final stage is important to ensure that all site conditions are confirmed in full while the site is clear and before infrastructure for the main construction is put in place.

Monitoring during Demolition

Monitoring shall be undertaken throughout the demolition phase to protect adjacent structures and infrastructure.

Baseline monitoring shall be completed prior to commencement of demolition works, with ongoing monitoring of ground movement, settlement, vibration and dust undertaken throughout the demolition programme. Monitoring results shall be reviewed regularly to confirm compliance with agreed trigger levels and to identify any requirement for corrective action.

5.2.3 Management of Construction Works

5.2.3.1 Management of Excavation Works

All excavation and earthworks shall be undertaken in accordance with BS 6031:2009 Code of Practice for Earthworks and relevant best practice guidance. Earthworks shall be planned having regard to weather conditions, with excavation activities reduced or suspended during periods of prolonged or heavy rainfall where there is an increased risk of erosion, sediment runoff or pollution. The extent of exposed ground shall be minimised, and excavations shall not progress beyond the rate of construction.

Given the site's constrained urban context and existing level differences across the site, excavation activities shall be carefully planned and sequenced to ensure safe construction and to minimise impacts on adjoining properties, utilities and transport infrastructure. Appropriate monitoring measures shall be implemented, where required, to manage potential risks associated with ground movement, vibration and settlement, particularly in areas adjacent to existing buildings and transport infrastructure.

Material arising from excavation works shall be managed in accordance with best practice construction and waste management principles. Excavated materials shall not be reused within the site. Instead, they shall 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. Where contaminated ground is encountered, material shall be appropriately assessed, segregated and managed in accordance with the relevant waste management procedures (refer to **Appendix 1**).

Measures to control dust, protect surface water and drainage infrastructure, shall be implemented in accordance with the Dust Management Plan (**Section 5.6**), Surface Water Management Plan (**Section 5.7**)

Appropriate monitoring measures shall 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.

5.2.3.2 Management of Substructure Construction

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

5.2.3.3 Management of Superstructure Construction

Specific management of deliveries of steel and concrete shall be outlined in detail in the Contractors' particular proposals, based on their preferred supply routes and sequencing of construction on the site. This shall be agreed with DCC through submittal at Construction Stage.

5.2.4 Management of Electrical Works

Electrical installation works associated with the Proposed Development shall be undertaken in accordance with the ESB requirements, applicable electrical standards, and relevant statutory health, safety requirements.

The electrical works shall include the installation of substation equipment, electrical infrastructure, cabling, protection and control systems, earthing systems, and associated testing and commissioning activities. All works shall be planned and coordinated to ensure safe access, segregation of construction activities, and protection of installed equipment.

Electrical works shall be undertaken by suitably qualified and competent personnel. Appropriate controls shall be implemented to prevent unauthorised access to electrical work areas, protect partially completed installations, and ensure that electrical systems remain isolated and safe until commissioning and energisation.

The installation and testing of electrical equipment shall be coordinated with the overall construction programme to minimise interface risks with civil works and other contractors. Temporary storage, handling and installation of electrical equipment shall be managed to prevent damage, contamination or deterioration prior to commissioning.

All electrical testing, inspection and commissioning activities shall be undertaken in accordance with the relevant standards, manufacturer requirements and project specifications. Records of inspections, testing and commissioning shall be maintained as part of the project handover documentation.

Environmental controls associated with electrical works, including the management of fuels, oils, lubricants, transformer oils, waste materials and potential spill risks, shall be implemented in accordance with the relevant environmental management measures contained within this CEMP.

The Project Manager and Electrical Contractor shall ensure that electrical works are appropriately coordinated with other construction activities and that all environmental, health and safety requirements are implemented throughout the works.

5.2.4.1 Underground Cabling Works

Underground electrical cabling works shall be carried out in a phased manner, including route verification, trenching, duct installation, cable laying, jointing and reinstatement. Prior to commencement of these works, utility surveys and site investigations shall be undertaken to verify the location of existing underground services.

Cable installation works shall be managed and sequenced to minimise disruption to existing operations, adjacent infrastructure and the surrounding road network. Construction activities shall be programmed to maintain, where practicable, the safe movement of pedestrians, cyclists, public transport and general traffic throughout the construction period.

All works within the public road network shall be undertaken under the appropriate Road Opening Licence and in accordance with an approved Construction Traffic Management Plan. The works shall be coordinated with utility providers, Dublin City Council, Diageo and other relevant stakeholders to manage interfaces and minimise conflicts during construction. Particular coordination shall be required with the National Transport Authority's Liffey Valley to City Centre BusConnects Scheme to ensure that construction activities are appropriately programmed and do not adversely affect the operation of the transport network.

Within the Diageo site, construction activities shall be coordinated with ongoing Diageo's operations to maintain access and minimise operational disruption.

Within the public road network, cable installation works shall be undertaken on a phased basis to limit the extent of temporary traffic restrictions and maintain access for residents, businesses and emergency services.

Temporary reinstatement shall be completed as cable installation progresses to minimise disruption. Permanent reinstatement of roads, footpaths and other affected surfaces shall be completed in accordance with the requirements of Dublin City Council following completion of the cable installation works.

5.3 Resource & Waste Management Plan

A Resource and Waste Management Plan has been prepared for the Proposed Development (refer to **Appendix 1**). The RWMP sets out the procedures for the management, segregation, storage, recovery and disposal of all

materials and waste streams generated during the construction phase. The Plan seeks to ensure that materials are managed in accordance with the waste hierarchy, with opportunities for reuse or recycling implemented where practicable, and that waste requiring off-site management is recovered or disposed of at appropriately authorised facilities, thereby minimising the quantity of waste sent to landfill.

The RWMP shall be reviewed and updated by the appointed Contractor, as necessary, prior to and throughout the construction phase to reflect the final construction methodology, material quantities, waste destinations and any changes to applicable legislation or best practice.

The Resource and Waste Management Plan shall be implemented to manage the environmental risks associated with demolition, ground disturbance, excavation works, material handling and waste management activities. The Plan includes measures for waste prevention, source segregation, documentation of waste movements, tracking of material reuse, identification of authorised waste contractors and facilities, and compliance with all relevant waste management legislation.

Prior to demolition works, any asbestos containing materials identified shall 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.

Excavated materials shall be managed in accordance with the Resource and Waste Management Plan. Materials requiring off-site removal shall be classified and managed in accordance with waste legislation and transported by appropriately authorised contractors to suitably authorised facilities.

A **Contaminated Soils Management Plan (CSMP)** shall be developed prior to the commencement of demolition and excavation works. The CSMP shall set out procedures for the identification, assessment, handling, segregation, storage, reuse, treatment and disposal of any contaminated soils encountered during the works, and shall include appropriate mitigation measures to protect human health and the environment.

Responsibility for implementation of this Plan shall rest with the Construction Manager and Environmental Manager.

5.4 Construction Traffic Management Plan

An outline Construction Traffic Management Plan (oCTMP) has been prepared and is included as **Appendix 2** of this CEMP. The oCTMP establishes the framework for the safe management of construction traffic associated with all phases of the Proposed Development. The Plan has been developed having regard to the constrained urban environment, the operational requirements of the adjacent Diageo facility, the presence of the Luas Red Line, and the need to maintain safe access for all road users throughout the construction period.

Prior to commencement of works, the Appointed Contractor shall prepare a detailed project-specific CTMP for agreement with Dublin City Council. The CTMP shall be implemented throughout the construction phase and shall be reviewed and updated, as necessary, to reflect construction sequencing, stakeholder requirements, traffic conditions and any agreed modifications to the construction programme.

The detailed CTMP shall include construction vehicle routing arrangements, delivery management procedures, temporary traffic management measures, pedestrian and cyclist protection measures, access arrangements, contractor parking arrangements, and procedures for managing abnormal or oversized loads associated with the delivery of electrical equipment and plant. Particular consideration shall be given to maintaining access to adjoining properties, businesses, healthcare facilities, public transport services and emergency services.

Construction traffic shall utilise approved haul routes and all drivers shall be provided with route information and site-specific traffic management requirements. Vehicle movements shall be managed to minimise congestion and

disruption to the local road network. Deliveries shall be coordinated to avoid unnecessary queuing on public roads and to minimise interaction with peak traffic periods where practicable. Appropriate abnormal loads permits shall be sought from the local authority in advance of transporting and particularly heavy or oversized loads.

Temporary traffic management measures shall be designed and implemented in accordance with applicable transport guidance and shall include appropriate signage, barriers, pedestrian diversions and safety measures. Where footpath closures or temporary restrictions are required, suitable alternative routes shall be provided and maintained for pedestrians. Appropriate provision shall also be made for cyclists and persons with reduced mobility.

Regular inspections of site access arrangements, road cleanliness and traffic management measures shall be undertaken throughout the construction phase. Wheel washing facilities, road sweeping and housekeeping measures shall be employed where necessary to prevent the tracking of mud, dust or debris onto the public road network.

The Construction Manager shall be responsible for the day-to-day implementation of the CTMP, while overall monitoring and compliance shall be overseen by the Project Manager and Environmental Manager. Any traffic-related complaints or issues raised by stakeholders shall be recorded, investigated and addressed through the project's community liaison officer and complaint management procedures.

5.5 Noise and Vibration Management Plan

The activities associated with the construction of the Proposed Development have the potential to generate temporary noise and vibration impacts at nearby Noise Sensitive Locations (NSLs). A Noise and Vibration Management Plan (NVMP) shall therefore be implemented throughout the demolition and construction phases of the Proposed Development.

The NVMP shall ensure that works are undertaken in accordance with the mitigation measures and assessment criteria set out within the Noise and Vibration Assessment (Appendix 9 of the PECR), any relevant planning conditions and applicable industry guidance. All works shall be carried out in accordance with the principles of Best Practicable Means (BPM) and the requirements of BS 5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise and BS 5228-2:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Vibration.

Noise and vibration controls shall include the use of modern, well-maintained plant and equipment, avoidance of unnecessary idling, appropriate positioning of static plant, acoustic screening where required, controlled demolition techniques and the use of lower-vibration construction methods where practicable. Construction activities shall generally be undertaken within the approved working hours, with any out-of-hours works subject to prior agreement with Dublin City Council and implementation of additional controls where required.

Noise monitoring shall be undertaken during particularly noise-intensive activities, where works are undertaken in close proximity to sensitive receptors, following receipt of substantiated complaints, or where deemed necessary by the Environmental Manager. Monitoring results shall be reviewed regularly to verify the effectiveness of mitigation measures and determine whether additional controls are required.

Pre-condition surveys shall be undertaken where required at structures considered sensitive to vibration effects, taking account of the nature of the proposed works, proximity to receptors and structural sensitivity. Vibration-generating activities shall be carefully managed throughout appropriate construction techniques and, where required, vibration monitoring and a Trigger Action Response Plan (TARP) shall be implemented. Particular consideration shall be given to works undertaken in proximity to the Luas Red Line infrastructure. All demolition and construction activities with the potential to generate vibration effects at the Luas shall be undertaken in

accordance with the requirements of the Luas Vibration and Settlement Management Plan (refer to Section 5.13) and any applicable requirements of Transport Infrastructure Ireland.

A Community Liaison Officer shall be appointed by the Contractor to act as the primary point of contact for local residents, businesses and stakeholders. Advance notice shall be provided, where practicable, of particularly noisy construction activities. Any complaints relating to noise or vibration shall be recorded, investigated and responded to in accordance with the project complaints procedure. A record of complaints and any corrective actions implemented shall be maintained throughout the construction period.

Implementation of the Noise and Vibration Management Plan shall be responsibility of with the Construction Manager and Environmental Manager, supported by the Community Liaison Officer and any specialist noise and vibration consultants appointed for the project.

5.6 Air Quality and Dust Management Plan

Demolition works, excavation activities, material handling and vehicle movements have the potential to generate dust emissions. A Dust Minimisation Plan shall therefore be implemented throughout the construction phase.

The Plan shall be based on the principles outlined within the BRE Guidance: Control of Dust from Construction and Demolition Activities and relevant EPA guidance.

Mitigation measures shall include water suppression, wheel-washing facilities, road sweeping, sheeting of vehicles transporting dusty materials, covering of stockpiles and minimisation of material handling activities. Vehicle speeds within the site shall be controlled to minimise dust generation.

Visual dust monitoring and inspections shall be undertaken where required, particularly during demolition and dry weather conditions. Additional mitigation measures shall be implemented where monitoring, inspections or complaints indicate that dust emissions are occurring.

Implementation shall be overseen by the Environmental Manager and Construction Manager.

5.7 Surface Water and Pollution Prevention Management Plan

A Surface Water and Pollution Prevention Management Plan shall be implemented throughout the construction phase, setting out the measures to manage surface water runoff and prevent sediment-laden runoff and introduce pollutants to the drainage network if not appropriately managed.

Prior to commencement of construction, all existing drainage infrastructure within the active works areas shall be identified and appropriate protection measures established. Particular regard shall be given to works within the Diageo lands and along the public road network where existing drainage systems are present. All existing gullies within the works area shall 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.

The Plan shall incorporate the mitigation measures identified in the Natura Impact Statement (standalone report accompanying this application), Ecological Impact Assessment (Appendix 10 of the PECR) and Water Framework Directive Assessment (Appendix 12 of the PECR). Any surface water discharges within active work areas shall be isolated during construction activities. Surface water generated during construction shall be controlled through the use of silt traps, settlement controls, filtration measures, temporary bunding and good housekeeping practices.

In order to remove any connection between the Proposed Development site and the River Liffey, surface water run-off from the Diageo site will be managed in accordance with the construction phase surface water management approach established for the adjacent and already permitted Diageo Decarbonisation Project (WEB 2472/24). *'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.'*

Construction activities shall be planned having regard to weather conditions and excavation works shall be reduced or suspended during periods of heavy rainfall where there is an increased risk of pollution. Any water requiring pumping from excavations shall be appropriately treated prior to discharge.

Regular inspections shall be undertaken by the Environmental Manager to verify that all drainage protection and pollution prevention measures remain effective throughout the construction phase.

Implementation of this Plan shall be the responsibility of the Environmental Manager and Construction Manager.

5.8 Fuel, Oil and Chemical Management Plan

All hazardous substances on site shall be controlled in accordance with Code of Practice for Chemical Agents Regulations 2016, as amended. Fuel and oil storage on site, including generator fuel tanks, shall be in tanks that are externally bunded and lockable.

Bunds shall be capable of containing at least 110% of the largest capacity vessel stored therein and have sufficient freeboard. No pipework or other ducting should pass through the bund floor or walls and there should be no direct outlet.

In the unlikely event of a spillage occurring into a bunded area, works shall cease in the affected area and the Emergency Response Plan shall be implemented immediately. The effluent shall be pumped out to a road tanker for re-use or disposed of in accordance with relevant legislative requirements. No tanks or pipework containing liquids such as oils or chemicals shall be stored below ground. All tanks containing liquids whose spillage could be harmful to the environment shall be bunded.

All plant and machinery shall be subject to routine inspection and maintenance to identify leaks or defects. Spill response equipment shall be available at fuel storage and refuelling locations and all personnel involved in the handling of fuels and chemicals shall receive appropriate environmental awareness training.

5.9 Concrete Management Plan

The Proposed Development includes substantial reinforced concrete works. Concrete and cementitious materials represent a potential source of alkaline pollution if not properly managed. All activities shall be undertaken in a controlled manner to minimise the risk of alkaline runoff and dust generation.

A Concrete Management Plan shall be implemented to ensure that concrete pours, storage of cementitious materials and management of wash waters do not result in contamination of soils, groundwater or surface waters.

Concrete pours shall be supervised by the Construction Manager and/or Environmental Manager and works shall not be undertaken during conditions where there is an elevated risk of uncontrolled runoff. Concrete washout shall be undertaken only within designated lined and bunded facilities. Washing of concrete truck barrels shall not be permitted on site.

Appropriate controls shall be in place to prevent the discharge of concrete wash water to drains, gullies or surface water systems. In the event of a concrete spill, affected drainage infrastructure shall be isolated immediately and the Emergency Response Plan implemented.

Concrete breaking and demolition activities also have the potential to generate alkaline dust. Where required, physical barriers shall be installed between the work area and sensitive receptors to prevent the migration of dust. Concrete waste shall be removed to an appropriate authorised facility.

The Environmental Manager shall carry out regular inspections to ensure that controls are in place and functioning effectively, and that any incidents are managed promptly to prevent environmental impact. Refer to Section 7 for applicable mitigation measures.

5.10 Ecological Management Plan

An Ecological Management Plan shall be implemented to ensure compliance with the mitigation measures identified within the Ecological Impact Assessment and Appropriate Assessment process.

Although the site is located within a highly modified urban environment of generally low ecological value, construction activities have the potential to impact ecological receptors indirectly through pollution events, sediment runoff or accidental disturbance.

The Plan shall incorporate all ecological mitigation measures identified during the assessment process, including pre-construction surveys, pollution prevention measures, surface water controls and procedures for the protection of habitats and fauna.

Should protected species or previously unidentified ecological constraints be encountered during construction works, activities shall cease within the affected area and advice shall be sought from a suitably qualified ecologist and, where necessary, the National Parks and Wildlife Service.

The Environmental Manager shall be responsible for implementation of the Ecological Management Plan.

5.11 Archaeological and Cultural Heritage Management Plan

The Proposed Development is located within the Zone of Archaeological Potential for Dublin City and the proposed cable route extends within areas of recognised archaeological sensitivity associated with St James's Church and St James's Graveyard.

An Archaeological and Cultural Heritage Management Plan shall therefore be implemented during the construction phase. The Plan shall incorporate the mitigation measures identified in the Archaeological Assessment Report (Appendix 8 of the PECR).

Prior to commencement of relevant works, all archaeological licences, consents and approvals required by the National Monuments Service shall be obtained. Archaeological testing, monitoring and recording shall be undertaken in accordance with the recommendations of the Archaeological Impact Assessment and any requirements of Dublin City Council and the National Monuments Service.

All excavation works identified as requiring archaeological monitoring shall be supervised by a suitably qualified licensed archaeologist. Should archaeological remains, artefacts or human remains be identified during construction, works shall cease immediately within the affected area and the relevant statutory procedures shall be followed.

Implementation of this Plan shall be the responsibility of the Project Archaeologist, Environmental Manager and Construction Manager.

5.12 Luas Vibration and Settlement Management Plan

Construction activities undertaken in proximity to the Luas infrastructure, including but not limited to the demolition of the existing building acting as boundary wall with Steeven's Lane, and piling works associated with the transformer and GIS building foundations, shall be carefully managed to minimise potential vibration impacts on both the operational railway infrastructure and adjacent sensitive receptors. In accordance with TII Code of engineering practice for works on, near, or adjacent the Luas light rail systems, appropriate vibration monitoring measures shall be implemented during both the demolition and construction works adjacent to the Luas, a comprehensive vibration and ground movement monitoring regime shall be implemented.

Baseline vibration and structural condition surveys shall be undertaken prior to commencement of works, with continuous monitoring of Peak Particle Velocity (PPV) and settlement maintained throughout demolition and construction activities. Monitoring thresholds, trigger levels and associated response actions shall be agreed in advance with TII and implemented through a Trigger Action Response (TAR) system.

A precautionary vibration limit of approximately 5mm/s PPV shall be applied to works in close proximity to the Luas infrastructure, providing a conservative limit below the intervention thresholds outlined in applicable TII guidance. In the event that alert or action levels are approached or exceeded, appropriate measures shall be implemented, including review of construction methodologies, modification of plant or sequencing, or temporary cessation of works where required.

Particular consideration shall be given to demolition activities, piling works and other vibration-generating operations, recognising the increased potential for impact during these phases. Continuous Flight Auger (CFA) piling shall be utilised as the primary foundation method, as it is a low-vibration installation technique and significantly reduces the potential for vibration impacts compared to driven piling methods.

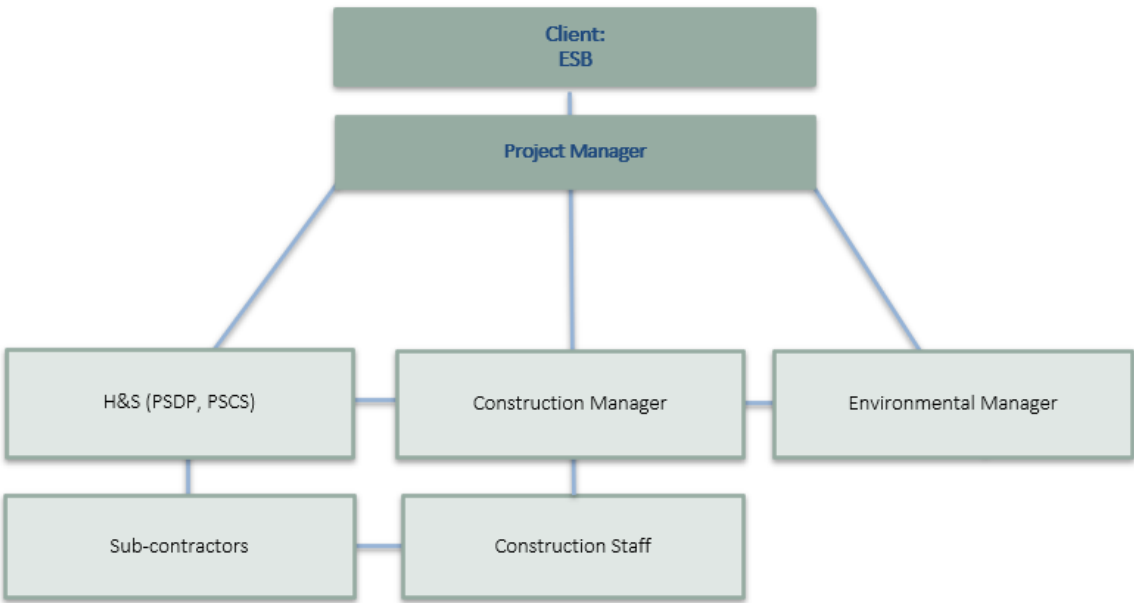
The Appointed Contractor shall be responsible for the preparation and implementation of a site-specific vibration and settlement management plan, as part of the Construction Environmental Management Plan (CEMP). The Plan shall incorporate the mitigation measures identified in the Noise & Vibration Impact Assessment Report (Appendix 9 of the PECR) and shall detail monitoring locations, equipment, thresholds, response procedures and construction methodologies, as agreed with TII. The Contractor shall appoint a designated liaison officer for TII. They will act as the first point of contact for any vibration or settlement related queries/exceedances.

All works will be undertaken in accordance with agreed methodologies and subject to the relevant Luas Work Safety Permit requirements, including the agreement for monitoring locations, exclusion zones, working restrictions and operational interfaces with the Luas network, in consultation with the TII and the Luas operator.

6. Implementation of oCEMP

6.1 On Site Organisational Structure & Responsibility

The Organisational Structure for the Contractor's Project Team is illustrated in Figure 6-1. This structure is defined by the Appointed Contractor and includes the names of the assigned personnel with the appropriate responsibility and reporting structure reflected.



*H&S – Health and Safety
*PSDP – Project Supervisor Design Process
*PSCS – Project Supervisor Construction Stage

Figure 6-1: Contractor's Organisational Structure

The Appointed Contractor shall select the project team for the construction of the Proposed Development. The Appointed Contractor's project team shall include an overall Project Manager, whose duties shall stretch beyond the day-to-day works to budgetary, procurement and scheduling matters. The selected Construction Manager shall have overall responsibility for the construction site personnel carrying out the works and the Construction Manager shall report to the Project Manager.

A competent Environmental Manager shall be appointed for the duration of the works and shall report to the Project Manager. The Construction Manager shall communicate regularly with the Environmental Manager to ensure mitigation measures are applied to specific works. The Environmental Manager shall carry out tasks as required, including installation and maintenance of sediment control measures and implementing and maintaining approved waste management control measures. The use of dedicated staff, under the direction of the Environmental Manager, shall ensure the environmental controls are in situ ahead of the works on site.

6.2 Site Environmental Training and Awareness

Site signage shall be provided at the entrance to the site to inform the public that access to the site is restricted to those directly involved in the construction works.

An initial site environmental induction and ongoing training will be provided to communicate the main provisions of the CEMP including ECs to all site personnel. Two-way communication shall be encouraged to promote a culture of environmental protection.

The following outlines some of the information which shall be communicated to site staff:

- Environmental procedures of the CEMP;
- Housekeeping of materials and waste storage areas; and
- Environmental Emergency Response Plan.

All finalised CEMP policies shall be adhered to, in the management of fuels and oils, concrete and installation of sediment and erosion controls and drainage features. All finalised details shall be communicated with site personnel. Environmental Training including spill kit training, installation of silt fence training is to be provided by the Appointed Contractor(s). Environmental training records shall be retained in the site office.

6.3 Duties and Responsibilities

The general role of key people on site implementing the CDMP shall be:

- ESB as Client;
- The Project Manager – liaises with the project team in assigning duties and responsibilities in relation to the CEMP to individual members of the Appointed Contractor(s)'s project team;
- The Construction Manager – liaises with the Environmental Manager when preparing site works where there is a risk of environmental damage and manages the construction personnel and general works;
- The Design Engineer – undertakes and certifies the design and supervises the standard of works, including geotechnical aspects (geotechnical engineer may need to be consulted); and
- The Environmental Manager – ensures that the CEMP is developed, implemented and maintained.

Other roles include:

- Health and Safety (PSDP and PSCS);
- Project Archaeologist;
- Temporary Works Coordinator / Designer;
- All Site Personnel.

6.3.1 Project Manager

Name: TBC

A Project Manager is to be appointed on behalf of the Appointed Contractor(s) to manage and oversee the entire project. The Project Manager is responsible for:

- Implementing the CEMP;
- Implementing the Health and Safety Plan;
- Management of the construction project;
- Liaison with the Client/developer;

- Liaison with the Project Team;
- Liaison with DCC, TII, NTA, and other relevant stakeholders;
- Assigning duties and responsibilities in relation to the CEMP;
- Production of construction schedule;
- Materials procurement; and
- Maintaining a site project diary.

6.3.2 Construction Manager

Name: TBC

The Construction Manager manages all of the works to construct the Proposed Development, on behalf of the appointed contractor. The Construction Manager reports to the project manager. In relation to the CEMP, the Construction Manager is responsible for:

6.3.2.1 General

- Being aware and ensure full awareness and implementation of all project environmental commitments requirements and the Construction Environmental Management Plan (CEMP);
- Coordinate effectively with the Project Manager, Environmental Manager, Design Engineer, and wider project team to ensure timely communication of project programming, construction methodologies, sequencing, and constraints to support proactive environmental management;
- Lead Construction planning and programming activities, including demolition works, excavation works, lifting operations, traffic management arrangements, and site access planning, ensuring environmental controls and monitoring requirements are fully integrated into the construction sequence;
- Ensuring that adequate resources are provided to design, implementation, and maintenance of any environmental interventions;
- Overseeing execution of the works in accordance with approved method statements, permits, and applicable environmental and construction requirements;
- Supervise daily site activities, including routine inspections of construction operations and environmental control measures, to ensure ongoing compliance with project requirements;
- Ensure that environmental monitoring, inspections, and reporting are carried out effectively by the Environmental Manager and project team, and that corrective actions are implemented where required;
- Review and approve waste management procedures and control measures to ensure compliance with applicable national and international legislation and best practice standards;
- Ensure emergency preparedness procedures are developed, implemented, and maintained across the site; and
- Maintain accurate project records and ensure timely reporting of compliance, environmental performance, and construction activities as required.

6.3.2.2 Site-Specific Method Statements

- Liaising with the Environmental Manager in preparing site-specific method statements for all works activities where there is a risk of environmental damage, by incorporating relevant environmental control measures and referring to relevant environmental control measure sheets;
- Liaising with the Environmental Manager in reviewing and updating site-specific method statements for all works activities where environmental and waste management control measures and environmental control sheets have been altered, and
- Liaising with the Environmental Manager where third party agreement is required in relation to site-specific method statements, environmental & waste management control measures and/or environmental control measure sheets.

6.3.3 Design Engineer

Name: TBC

The Design Engineer is responsible for:

- Design of the works;
- Review and approval of relevant elements of the method statements – assist the Construction Manager with the overall review;
- Participating in third party consultations; and
- Liaising with third parties through the environmental manager.

6.3.4 Environmental Manager

Name: TBC

The Environmental Manager is responsible for:

6.3.4.1 General

- Being familiar with the project environmental commitments and requirements;
- Being familiar with baseline data gathered for the various environmental assessments and during pre-construction surveys;
- Assisting the Construction Manager in liaising with the Design Engineer and the provision of the information on environmental management to the design engineer during the course of the construction phase;
- Liaising with the project team in assigning duties and responsibilities in relation to the CEMP to individual members of the Appointed Contractor's project staff;
- Implementing the environmental procedures of the CEMP;
- Liaising with the Construction Manager to ensure that the control measures set out in the schedule of environmental mitigation are implemented;
- Liaising with the client/developer in relation to environmental issues; and

- Auditing the construction works from an environmental viewpoint.

6.3.4.2 Site Specific Method Statements

- Liaising with the Construction Manager in preparing site specific method statements for all works activities where there is a risk of environmental damage. These site-specific method statements shall incorporate relevant environmental control measures and take account of relevant environmental control measure sheets;
- Liaising with the Construction Manager in reviewing and updating site specific method statements for all works activities where environmental control measures and environmental control sheets have been altered, and
- Liaising with the Construction Manager where third party agreement is required in relation to site specific method statements, environmental control measures and/or environmental control measure sheets.

6.3.4.3 Third Party Consultations

- Overseeing, ensuring coordination and playing a lead role in third party consultations required statutorily, contractually and in order to fulfil best practice requirements;
- Coordinating and overseeing the preparation and submission of documentation required by third parties, including TII, Transdev and Dublin City Council, such as permit applications, method statements, risk assessments, environmental management plans, traffic management documentation and monitoring proposals;
- Ensuring that the minutes of meetings, action lists, formal communications, etc., are well documented and that the consultation certificates are issued to the design engineer as required;
- Liaising with all prescribed bodies during site visits, inspections and consultations;
- Where new environmental control measures are agreed as a result of third party consultation, ensuring that the CEMP is amended accordingly;
- Where new environmental control measures are agreed as a result of third party consultation, liaising with the Construction Manager to update relevant site-specific method statements;
- Where required, liaising with the Construction Manager in agreeing site-specific method statements with third parties; and
- Coordinating inputs from the design team, Temporary Works Designer, Environmental Consultants and other specialists to ensure that all submissions are complete, accurate and issued in a timely manner.

6.3.4.4 Licensing

- Ensuring that all relevant works have (and are being carried out in accordance with) the required permits, licences, certificates, planning permissions, etc.;
- Liaising with the designated licence holders with respect to licences granted pursuant to the Wildlife Act, 1976, as amended (if required); and
- Bringing to the attention of the project, design and construction team any timing and legal constraints that may be imposed on the carrying out of certain tasks.

6.3.4.5 Waste Management Documentation

- Holding copies of all permits and licences provided by waste contractors;
- Ensuring that any operations or activities that require certificates of registration, waste collection permits, waste permits, waste licences, etc., have appropriate authorisation; and
- Gathering and holding documentation with the respect to waste disposal.

6.3.4.6 Legislation

- Keeping up to date with changes in environmental legislation that may affect environmental management during the construction phase;
- Advising the Construction Manager of these changes; and
- Reviewing and amending the CEMP in light of these changes and bringing the changes to the attention of the Appointed Contractor's senior management and subcontractors.

6.3.4.7 Specialist Environmental Contractors

- Identifying requirements for specialist environmental contractors (including ecologists, waste contractors and spill clean-up specialists) before commencement of the project;
- Procuring the services of specialist environmental contractors and liaising with them with respect to site access and report production;
- Ensuring that the specialist environmental contractors are competent and have sufficient expertise to co-ordinate and manage environmental issues; and
- Co-ordinating the activities of all specialist environmental contractors on environmental matters arising out of the contract.

6.3.4.8 Environmental Induction Training and Environmental Toolbox Talks

- Ensuring that environmental induction training is carried out for all the Appointed Contractor's site personnel. The induction training may be carried out in conjunction with safety induction training; and
- Providing toolbox talks on environmental control measures associated with site specific method statements to those who shall undertake the work.

6.3.4.9 Environmental Incidents / Spillages

- Prepare and be in readiness to implement at all times an emergency response plan;
- Notifying the relevant statutory authority of environmental incidents;
- Carrying out an investigation and producing a report regarding environmental incidents. The report of the incident and details of remedial actions taken is to be made available to the relevant authority, the Design Engineer and the Construction Manager and;
- The site Environmental Manager shall notify the client of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services or where any pollution events occur, the client shall be notified within 1 hour.

6.3.4.10 Site Environmental Inspections and Auditing

- Carrying out regular documented inspections of the site to ensure that work is being carried out in accordance with the environmental control measures and relevant site-specific method statements, etc;
- Carrying out inspections of the site drainage system;
- Documenting and maintaining copies of all inspection reports. Records shall be made available for inspection as required and shall be provided to the Client on completion of the project and, where applicable, to statutory bodies or other relevant third parties;
- Liaising with the Construction Manager to organise any repairs or maintenance required following the daily inspection of the site;
- Accommodate audits by the employer and/or independent auditing consultants during the project;
- Accommodate third party environmental auditing when required;
- During audits, the Environmental Site Manager shall make the necessary staff available during each audit and provide access to all documentation and site areas (and provide necessary induction and training to allow access where required);
- If there are any adverse findings arising from the environmental audits, the Environmental Site Manager shall be required to take prompt mitigation actions and provide written reports to the employer detailing such mitigation; and
- The Environmental Site Manager shall notify the employer of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services or where any pollution events occur, the employer shall be notified within 1 hour.

Note: Communication in respect of the project to regulatory or statutory bodies shall be undertaken by the employer, unless otherwise agreed, except in the case of incident notification.

6.3.4.11 Environmental Records

- The Construction Environmental Manager shall provide all CEMP documentation to the client on completion of the site works. Reports arising during the site works, such as verification reports or waste disposal records shall be provided to the client within one month of completion of the activity and may be subject to review.

6.3.5 Other Roles

6.3.5.1 Health and Safety Personnel

The Health and Safety personnel for the construction project is appointed by the Appointed Contractor in line with the construction regulations:

- Carrying out duty of project supervisor construction stage (PSCS);
- Ensure all personnel on site receive appropriate safety induction and ongoing H&S communication;
- Implement, maintain, audit, and update the Health & Safety Plan throughout the duration of the works;

- Incorporating BS 5228 methodologies, Dublin City Council guidance, and the Traffic Activity Routing (TAR) scheme into the Construction Management Plan and relevant Method Statements;
- Ensure that all required health, safety, and environmental control measures are effectively embedded in construction activities and adhered to on site;
- Ensuring appropriate monitoring systems are implemented and maintained for the duration of the works;
- Ensuring that monitoring results and compliance reports are recorded and submitted as required; and
- Fulfil all other statutory and regulatory health and safety duties applicable to the role.

6.3.5.2 Project Archaeologist

The Archaeologist for the construction of the Proposed Development is appointed by the Contractor:

- Developing methodologies for works affecting protected or sensitive structures;
- Ensuring implementation of archaeological mitigation measures;
- Monitoring of archaeological works associated with the Proposed Development;
- Liaison with the Environmental Manager/Construction Manager;
- Liaison with the Project Manager/Client/Developer;
- Preparing and implementing salvage and retention strategies where required;
- Defining and overseeing monitoring triggers and intervention thresholds during construction works;
- Consultation with the County Archaeologist and National Monuments Service (NMS); and
- Ensure all archaeological work is done to the satisfaction of the Department of Housing, Local Government and Heritage (DHLGH) and the National Monuments Service (NMS).

6.3.5.3 Temporary Works Coordinator (TWC) / Temporary Works Designer (TWD)

The Temporary Works Coordinator / Temporary Works Designer will be responsible for:

- Develop and/or coordinate temporary works solutions including scaffolding, façade retention systems, crash decks, and protective barriers in accordance with BS 5975 requirements;
- Ensure temporary works designs are prepared, reviewed, and checked in line with the appropriate design category (CAT 0–CAT 3), particularly for high-risk interfaces such as Luas infrastructure, public areas, and façade retention / protection works;
- Ensuring that all temporary works designs incorporate relevant safety, environmental, and construction-stage constraints, including acoustic screening and vibration-sensitive construction considerations where required;
- Issue and manage design documentation, calculations, and certificates in accordance with project procedures and regulatory requirements (TWD function);
- Maintain and control the Temporary Works Register, ensuring all items are properly tracked, reviewed, approved, and formally closed out;

- Implement and enforce the Permit to Load / Permit to Proceed system, ensuring no temporary works are loaded or used until verification and approvals are in place;
- Define Inspection and Test Plan (ITP) hold points to ensure critical temporary works controls and mitigation measures are implemented prior to key construction activities; and
- Coordinate with the Temporary Works Appointed Persons, designers, contractors, and relevant stakeholders (including transport authorities where applicable) to ensure safe integration of temporary works into the permanent works and construction sequence.

6.3.5.4 Community Liaison Officer

A Community Liaison Officer (CLO) must be appointed by the Contractor. The CLO's main responsibilities include:

- Acting as the first point of contact for all community enquiries, concerns and complaints relating to the construction works.
- Providing advance notification to residents, businesses and stakeholders of upcoming construction activities that may result in temporary disruption, including traffic management measures, utility works, out-of-hours works (where approved), and particularly noisy activities.
- Maintaining effective communication with local residents, businesses, public transport operators, emergency services and other stakeholders, as appropriate.
- Maintaining a register of all enquiries and complaints received, recording the nature of the issue, actions taken and the resolution achieved.
- Liaising with the Site Manager and Environmental Manager to ensure that complaints are investigated promptly and that appropriate corrective actions are implemented where required.
- Coordinating community notifications through appropriate communication channels, including letter drops, email notifications, project webpages and site notices, as appropriate.
- Providing regular updates on construction progress, programme changes and significant milestones that may affect the local community.
- Facilitating engagement with Dublin City Council, Transport Infrastructure Ireland (TII), utility providers and other relevant stakeholders where required.
- Monitoring the effectiveness of community liaison measures and recommending improvements where appropriate.
- Ensuring that all stakeholder engagement is undertaken in accordance with the requirements of the Construction Environmental Management Plan (CEMP).

6.3.5.5 Waste and Contaminated Land Specialist

The Contractor shall appoint a suitably qualified Waste and Contaminated Land Specialist prior to the commencement of construction works. The Specialist shall be responsible for overseeing the management, classification, documentation and disposal of all excavated and demolition materials, ensuring compliance with the Resource Waste Management Plan (RWMP), waste legislation and any relevant planning conditions.

The principal responsibilities of the Waste and Contaminated Land Specialist shall include:

- Preparing, implementing and updating the Resource Waste Management Plan (RWMP) throughout the construction phase, including revising the Plan as necessary to reflect changes in construction activities, waste streams or regulatory requirements;
- Supervising the segregation, temporary storage, classification and handling of excavated materials and demolition waste in accordance with current waste legislation and best practice;
- Assessing excavated materials for reuse on-site where appropriate and identifying materials requiring off-site recovery or disposal;
- Coordinating waste characterisation, sampling and laboratory testing of soils and other materials where required to determine their appropriate management and disposal route;
- Managing the identification, handling and documentation of any contaminated soils or unexpected contamination encountered during the works, including implementation of the Unexpected Contamination Protocol where necessary;
- Maintaining accurate records of all waste movements, including waste classification documentation, waste transfer records, recovery and disposal records, and quantities of materials generated, reused and removed from site;
- Liaising with authorised waste contractors and licensed recovery and disposal facilities to ensure that all waste is transported and managed in accordance with applicable legislation;
- Monitoring compliance with waste management procedures through routine site inspections and audits, identifying any non-conformances and implementing corrective actions where necessary;
- Preparing waste management records and reports required for compliance with planning conditions, environmental commitments and regulatory requirements; and
- Providing advice to the Site Manager and Environmental Manager on waste management, material reuse opportunities and contaminated land issues throughout the construction phase.

6.3.5.6 All Site Personnel

The site personnel appointed by the Appointed Contractor is responsible for:

- Attending site induction, relevant tool box talks and other relevant training;
- Operating within permitted works hours;
- Adhering to the relevant environmental control measures and relevant site-specific method statements;
- Implementing Best Practicable Means², as defined under relevant construction environmental management practice and applicable guidance;
- Adhering to the Health and Safety Plan;
- Responding to alerts;

² Best Practicable Means (BPM), defined as the mitigation measures and operational controls reasonably available to prevent or minimise environmental impacts, taking into account technical feasibility, cost, and site-specific constraints.

- Reporting immediately to the Environmental Manager and Construction Manager any incidents where there has been a breach of agreed procedures including:
 - A spillage of a potentially environmentally harmful substance; and
 - An unauthorised discharge to ground, water or air, damage to a protected habitat, etc.;

6.4 Contacts

6.4.1 Appointed Contractor Contacts

The Appointed Contractor contact details to be provided once they have been confirmed.

Table 6-1: Appointed Contractor Contacts

Position Title	Name	Phone	Email
Appointed Contractor	TBC		
Project Manager	TBC		
Construction Manager	TBC		
Design Engineer	TBC		
Environmental Manager*	TBC		
Safety (PSCS)*	TBC		
Safety Officer*	TBC		
Site Emergency Number*	TBC		
Overall Project PSDP	TBC		

**24 hour contact details required*

6.4.2 Employer Contacts

Refer to Table 6-2 for the employer contractor contact details to be provided once they have been confirmed.

Table 6-2: Employer Contacts

Position Title	Organisation	Name	Phone	Email
Employer	TBC			
Employer's Representative	TBC			

6.4.3 Third Party Contacts

Refer to Table 6-3 for the third-party contact details.

Table 6-3: Third Party Contacts

Organisation	Name/Address	Phone	Email Address
Dublin City Council	Civic Offices, Wood Quay, Dublin 8.	01 222 2222	customerservices@dublincity.ie
Diageo Ireland Ltd	-	-	-
Inland Fisheries Ireland	-	01 8842 600	info@fisheriesireland.ie
National Parks and Wildlife Service	-	01 888 2000	natureconservation@npws.gov.ie
Environmental Protection Agency (EPA)	EPA Headquarters	053 916 0600	info@epa.ie
Health and Safety Authority	-	0818 289 389	Contactus@hsa.ie
An Garda Síochána (Emergency Services)	-	999 or 112	-
Ambulance and Fire Services	-	999 or 112	-
Luas CCR	-	01 4673040	maintenance@luas.ie

7. Environmental Commitments

This section of the oCEMP sets out the environmental mitigation measures for the construction phase of the Proposed Development.

Waste	Responsibility
• All waste shall be managed in accordance with the waste hierarchy, with waste minimised at source and segregated for reuse and recycling where practicable. Ordering procedures shall minimise material wastage, including the use of take-back schemes where available. Where suitable, materials containing recycled content shall be specified, provided they satisfy the required functional, performance and regulatory requirements. • A contaminated soils management plan (CSMP) shall be developed prior to the commencement of demolition and excavation works. The CSMP shall set out procedures for the identification, assessment, handling, segregation, storage, reuse, treatment and disposal of any contaminated soils encountered during the works, and shall include appropriate mitigation measures to protect human health and the environment. • Any asbestos or asbestos-containing materials (ACMs) identified shall be removed by a suitably competent contractor prior to the commencement of works and managed in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) (Amendment) Regulations 2025 (S.I. No. 632 of 2025). • Designated Waste Storage Areas (WSAs) shall be established within the construction compound to facilitate the segregation and temporary storage of waste. All hazardous, non-hazardous and inert wastes shall be appropriately segregated, labelled, stored and removed from site by authorised waste contractors to appropriately authorised recovery or disposal facilities. • Waste management activities within the Diageo's IEL site shall comply with the conditions of the existing Diageo IEL, including: ○ Condition 7: Resource use and energy efficiency, relating to resource efficiency and waste minimisation; and ○ Condition 11: Notification, records and reports, relating to waste records and reporting information to the EPA. • The EPA shall be notified in advanced of the proposed works, and the agreed commencement date for construction activities within the IEL boundary shall be agreed. • Wastewater generated within the IEL boundary shall be management in accordance with the requirements of the Diageo's IEL. • Waste records for generated waste within the IEL shall be provided to Diageo in time for them to do the Annual Environmental Report (AER) & Environmental Performance Report (EPR). • Waste Electrical and Electronic Equipment (WEEE), batteries and other hazardous waste generated during the works shall be stored in designated labelled containers and removed from site by authorised waste contractors. • The appointed contractor shall maintain the records of all waste resources for the duration of the Proposed Development. • Upon completion of construction, the Waste and Contaminated Land Specialist shall prepare a final report (post-project RWMP) summarising the outcomes of resource management processes adopted, the total reuse and recovery figures and the final destinations of all resources taken off-site.	• Environmental Manager. • Construction personnel.

Traffic	Responsibility
• Prior to the commencement of development, and in accordance with the outline Construction Traffic Management Plan (oCTMP) (Appendix 2 of this document), the Appointed Contractor shall prepare the Final Construction Traffic Management Plan (CTMP) for agreement with DCC. • Implement effective delivery planning and control, with all contractors using designated construction routes. • Provide appropriate signage for wayfinding and to warn motorists, pedestrians and other road users of construction activities. • Ensure all HGVs are fitted with compliant safety measures and adhere to appropriate speed limits, particularly within the Diageo site. • Operate a Good Neighbours Policy to keep local businesses, residents and other stakeholders informed of ongoing and planned works. • Implement effective dust and dirt control measures on-site and in surrounding areas. • Restrict construction activities to agreed working hours to minimise disturbance. • Designate parking areas and encourage walking and public transport use where practicable. • Prioritise pedestrian safety throughout construction, particularly within the Diageo site and compound, along Steeven's Lane during eastern footpath closures, and in the James's Street, Bow Lane West and Echlin Street area during cabling works and associated traffic management. • Prepare and implement detailed temporary pedestrian management plans for each construction phase, including footpath closures, diversion routes, crossing points and signage.	• Construction Manager. • Environmental Manager.

Noise and Vibration	Responsibility
• Demolition and construction activities shall be undertaken in accordance with the Noise and Vibration Management Plan (Section 5.5), the mitigation measures identified in the Noise and Vibration Assessment (Appendix 9 of the PECR), and the principles of Best Practicable Means (BPM). • Construction activities shall be undertaken in accordance with BS 5228-1, BS 5228-2, relevant EPA guidance and the Dublin City Council Good Practice Guide for Construction and Demolition. • Construction plant, equipment and methodologies shall be selected and maintained to minimise noise and vibration at source, including the use of quieter plant, acoustic screening where required, and lower-noise construction techniques where practicable. • Hoarding will be constructed of solid materials with sufficient mass (>7 kg/m²) to provide effective sound attenuation. • Localised acoustic screens or hoarded enclosures may be positioned around high-noise activities such as piling rigs, breaking operations and excavation works. • Construction activities shall generally be undertaken within the approved working hours. Any out-of-hours works shall only be undertaken with the prior agreement of Dublin City Council and, where applicable, other relevant stakeholders. • Noise and vibration monitoring shall be undertaken where required to verify the effectiveness of mitigation measures. Where monitoring indicates that trigger levels have been reached or exceeded, appropriate corrective actions shall be implemented in accordance with the project Trigger Action Response Plan (TARP). • Works adjacent to the Luas Red Line shall be undertaken in accordance with the requirements of the Luas Vibration and Settlement Management Plan (refer to Section 5.12), including any permit, monitoring and coordination requirements.	• Construction Manager. • Environmental Manager. • Community Liaison Officer.

Noise and Vibration	Responsibility
The Appointed Contractor shall appoint a Community Liaison Officer (CLO) to act as the primary point of contact for local residents, businesses and stakeholders. Advance notification shall be provided, where practicable, for particularly noisy activities, and any complaints shall be recorded, investigated and addressed in accordance with the project complaints procedure.	

Dust	Responsibility
- 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 monitoring shall be undertaken during construction, particularly during demolition and other dust-generating activities. Additional mitigation measures shall be implemented where monitoring, inspections or complaints indicate that dust emissions are occurring. - 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.	- Construction Manager. - Environmental Manager.

Surface Water	Responsibility
- Existing surface water drainage infrastructure, including gullies, manholes and underground pipework, will be identified prior to the commencement of works. Where affected by the works, drainage assets will be protected, isolated, temporarily sealed or diverted, as appropriate, to maintain drainage functionality and prevent sediment-laden runoff entering the drainage network. - The Contractor will prepare and implement a Construction Phase Stormwater Management Plan prior to commencement of works. - Temporary surface water management measures, including silt fencing, silt traps, bunding, temporary barriers and over-pumping (where required), will be implemented to retain, treat and control construction runoff prior to controlled discharge to the existing drainage network, in accordance with SuDS principles. - During construction, all stormwater discharges from the works area within the Diageo operational site that would otherwise discharge to the River Liffey will be redirected to SE-1 for discharge to the public sewer network and treatment at Ringsend WWTP. - Earthworks and activities in proximity to drainage features will be programmed in accordance with weather conditions and suspended during prolonged or heavy rainfall where there is a risk of pollution. The extent of exposed ground will be minimised to reduce erosion and sediment runoff. - Excavated materials and temporary stockpiles will be managed to minimise erosion and sediment mobilisation. Any contaminated material encountered will be segregated and managed in accordance with the project Waste Management Plan. - All temporary surface water control measures will be maintained in good working order and removed following completion of the works. - The Environmental Manager will undertake regular inspections throughout the construction phase to ensure runoff, erosion and sediment control measures remain effective, with any defects or failures rectified promptly.	- Construction Manager. - Environmental Manager.

Fuel and Oils	Responsibility
- Chemicals will be stored within a storage container with an accompanying Control of Substances Hazardous to Health ("COSHH") Datasheet in accordance with health and safety regulations. All chemicals will be stored in designated bunded areas at least 110m away from any drains. Drainage from the bunded area shall be diverted for collection and safe disposal. All containers within the storage area will be clearly labelled, so that appropriate remedial action can be taken in the event of a spillage. When moving drums from the bunded storage area to locations within the site plot, a suitably sized spill pallet will be used for containing any spillages during transit. - Refuelling of plant and equipment and the addition of hydraulic oils or lubricants to vehicles, will take place in designated areas using double walled mobile bowsters with a minimum capacity of 110%. Refuelling will be carried out over impermeable surfaces or within bunded areas using drip trays or absorbent mats to capture any spills. Spill kits will be available at all refuelling locations, and operatives will be trained in their use. - Hoses, taps, nozzles, valves, tanks and drums will be inspected regularly for leaks, damage and signs of wear and securely locked when not in use. Diesel pumps and similar equipment will be checked regularly, and any accumulated oil removed for appropriate disposal. - All fuels, oils and chemicals will be stored within bunded areas, designed to contain at least 110% of the volume of the largest tank or 25% of the total volume stored, whichever is greater. Storage areas will be located on impermeable surfaces and positioned away from drainage features.	- Construction Manager. - Environmental Manager.

Fuel and Oils	Responsibility
- Drainage within temporary compound areas will be directed through appropriate treatment systems, including oil interceptors where required, to prevent discharge of contaminated water. Additional measures such as plant nappies or absorbent mats will be used beneath static plant and during refuelling to prevent small leaks or drips entering the ground or drainage network. - Only well-maintained plant and equipment will be permitted on site, and all machinery will be subject to regular inspection to identify leaks or defects. Fuel storage and containers will also be inspected regularly to ensure integrity and to prevent loss of product. Quantities of fuel stored on site will be kept to a minimum necessary for the works. - In the event of a spill or leak, the source will be stopped immediately and the spill contained using appropriate spill response equipment. Contaminated materials will be collected and removed off site to an authorised facility. The Environmental Manager will be notified and will oversee the clean-up and any required corrective actions. For significant spills, an appropriate specialist response contractor will be engaged. - Waste oils and other hazardous liquids will not be stored on site for extended periods. These materials will be collected in suitable containers and removed regularly by authorised waste contractors. Where practicable, biodegradable oils will be used in plant and equipment. - All staff handling fuels, oils or chemicals will be trained in the correct procedures and emergency response measures. - Fuel and chemical storage areas, spill response equipment and pollution prevention measures will be inspected regularly throughout the construction phase to ensure all controls remain effective. - An emergency spill kit, including oil booms and absorbent materials, will be maintained on site at all times. Spill response equipment will be inspected regularly, replenished following use, and readily available throughout the construction period. - All emergency pollution response procedures and spill response equipment will be in place prior to the commencement of construction works.	

Concrete	Responsibility
- During concrete breaking and demolition activities, physical barriers will be installed between the work area and sensitive receptors to prevent the migration of dust. Concrete waste will be removed to an appropriate authorised facility. - The use of wet concrete in proximity to drainage features will be carefully controlled. Concrete pours will be continuously supervised by the Construction Manager and/or Environmental Manager to ensure that risks are minimised. Prior to pouring, the work area will be inspected to ensure that it is free from standing water, and pours will not take place during periods of prolonged or heavy rainfall. - Where surface runoff from fresh concrete is encountered, appropriate controls will be implemented to prevent discharge, including blocking drains and containing the runoff until it can be treated or neutralised. In the event of a spill, drainage in the affected area will be isolated and pH levels monitored. Neutralisation will be undertaken where required, and all contaminated materials will be removed from site for appropriate disposal. - Cement and cement-bound materials will be stored in designated areas to prevent contact with rainwater. Bulk materials will be stored in enclosed or covered conditions, or within bunded areas where necessary. Storage locations will be selected to avoid direct pathways to drainage features. - Concrete wash water will be strictly managed. Washout of concrete trucks will not be permitted on site, with vehicles required to return to designated off-site facilities. Where local washdown of equipment or chutes is required, it will take place in a designated, lined and bunded	- Construction Manager. - Environmental Manager.

Concrete	Responsibility
washout area. Wash water will be collected, contained and removed from site by an approved contractor, or treated on site to allow settlement and neutralisation prior to controlled discharge. - Only small volumes of incidental wash water will be managed on site, and these will be contained to allow sediments to settle and pH levels to stabilise before any release or infiltration. Residual solids will be collected and disposed of offsite in accordance with waste management requirements. - All concrete-related activities will be monitored throughout the construction phase. The Environmental Manager will carry out regular inspections to ensure that controls are in place and functioning effectively, and that any incidents are managed promptly to prevent environmental impact.	
Ecology	Responsibility
General Fauna and Flora Protection: - Construction works will, where practicable, be programmed for early autumn or late spring to minimise overlap with the peak bird breeding and wintering periods. - Any vegetation clearance, if required, will be undertaken outside the bird nesting season (1 March to 31 August inclusive), in accordance with Section 40 of the Wildlife Acts. - If a protected species or active nest is identified during pre-construction or construction, works in the affected area will cease immediately, the Environmental Manager will be notified, an exclusion zone established, and advice sought from the NPWS before works recommence. - Temporary construction lighting will be minimised, switched off outside working hours where practicable, and directed inwards towards the works area to minimise light spill onto surrounding habitats. - Where demolition is delayed into a subsequent bird nesting season, appropriate measures will be implemented to prevent birds from establishing nests in structures scheduled for demolition. Invasive Species Management: - Construction personnel will be informed of the location of butterfly-bush (<i>Buddleja davidii</i>) prior to the commencement of works. - All plant, machinery and equipment brought to site will be inspected and cleaned, where necessary, to prevent the introduction or spread of invasive species. - Any butterfly-bush removed during construction will be managed and disposed of appropriately to prevent its spread. - Soils, vegetation and waste containing invasive plant material will be segregated and disposed of in accordance with relevant legislation and waste management requirements. - If additional invasive alien plant species (IAPS) are identified during construction, works in the affected area will cease until appropriate management measures have been agreed with a suitably qualified ecologist. - Areas affected by invasive species will be clearly identified and protected from unnecessary disturbance, where required. - Any accidental spread of invasive plant material during construction will be contained and addressed immediately using appropriate removal and disposal measures.	- Construction Manager. - Environmental Manager.

Ecology	Responsibility
- Disturbed ground will be reinstated as soon as practicable following construction to minimise opportunities for invasive species establishment. - Invasive species management will be undertaken in accordance with recognised best practice guidance, including <i>Management of Invasive Alien Plant Species on National Roads – Standard TII GE-ENV-01104 – (TII, 2020)</i>, where applicable.	

Archaeology	Responsibility
- A suitably qualified archaeologist shall be appointed to oversee and implement the archaeological mitigation measures for the Proposed Development. - Archaeological testing shall be undertaken under licence across the substation and transformer bund site, including the footprints of all proposed buildings and associated groundworks. - Sufficient time shall be allowed in the programme for the archaeological testing licence application, typically 4-6 weeks. - The results of archaeological testing shall be compiled into a report and submitted to the relevant authorities. - Any further archaeological mitigation required following testing shall be agreed with the relevant authorities and may include archaeological monitoring, excavation and/or recording. - All groundworks associated with the Proposed Development shall be subject to continuous archaeological monitoring, including works within the Diageo North Campus, Diageo Medical Centre, James Street, Echlin Street and Bow Lane. - Archaeological monitoring shall apply to all ground disturbance, including site investigations, enabling works, service installation, drainage ESB cable trenching, demolition-related groundworks, slab removal, construction excavations, site clearance, resurfacing and piling. - Where advance archaeological testing is not feasible within operational areas, including the Diageo North Campus or James Street, works shall proceed under continuous archaeological monitoring. - ESB cable trench excavation shall be undertaken in sections, with working areas segregated from the operational campus where required. - If archaeological material, features, deposits, structural remains or human remains are identified during the works, the appointed archaeologist shall notify the client and Dublin City Archaeologist without delay. - Where archaeological remains are identified, further excavation, recording and/or additional archaeological personnel may be required on site. - All archaeological mitigation measures shall be subject to approval by the Dublin City Archaeologist and the National Monuments Section of the Department of Housing, Local Government and Heritage.	- Construction Manager. - Environmental Manager. - Project Archaeologist.

8. Environmental Monitoring and Audit

8.1 Auditing, Monitoring and Response

The environmental monitoring schedule (Table 8-1) shall take cognisance of all mitigation measures outlined in the Planning and Environmental Considerations Report, along with any planning conditions and relevant construction methods. Monitoring during the construction phase shall also include checks on equipment, materials storage, and transfer areas to ensure compliance with specified environmental controls.

The Appointed Contractor shall nominate a full-time Environmental Manager who will be responsible for the implementation and oversight of all environmental monitoring on site. The Environmental Manager shall undertake regular site inspections and audits, coordinate with relevant personnel (including the Design Engineer where required), and ensure that all mitigation measures and environmental controls are effectively implemented and maintained.

Site monitoring shall be undertaken on a day-to-day basis using approved audit checklists. These checklists shall be finalised by the Environmental Manager in consultation with relevant personnel and shall cover, as a minimum, the following:

- Appropriate storage and handling of fuels and chemicals;
- Adherence to resource and waste management procedures;
- Maintenance of environmental buffers and protection measures;
- Surface water and run-off control measures being in place and functioning;
- Implementation of concrete management procedures (including washout practices);
- Inspection and maintenance of dust suppression measures, with dust monitoring undertaken where required;
- Inspection of noise and vibration control measures, including review of monitoring results; and
- Monitoring of settlement at identified structures and infrastructure to verify compliance with project-specific trigger levels.

Checklists shall be aligned with the Contractor's Construction Environmental Management Plan (CEMP) and ESB's construction environmental management procedures and policies.

All environmental records, including completed checklists and audit documentation, shall be retained on site and made available for inspection as required.

Table 8-1: Sample of Environmental Monitoring Schedule

Aspect	Area of Inspection	Monitoring Required	Note/Checks	Frequency	Responsibility
Surface Water Run-off Controls	Weather Forecast	Met Éireann download	Pre-determined rainfall trigger levels (e.g., 1 in 5 year storm event or heavy rainfall at >25mm/hr)	Regular/daily/weekly during the construction phase as well as during and after significant rainfall events	Environmental Manager
	Discharges from on-site sediment and erosion controls	Visual inspection	Colour, presence of silts	Continuous with daily logged inspections	Environmental Manager
Water Quality Monitoring	Discharges from on-site sediment and erosion controls	Visual inspection	Unacceptable level of sediment/silt on the road surface; Presence of waste	Weekly	Environmental Manager
Archaeology	Substation site and ESB Cable Trench (Zones 2–5) including Diageo North Campus, Medical Centre connection, James Street, Echlin Street and Bow Lane	Continuous archaeological monitoring of all excavation works	Monitor trench excavation for archaeological remains, artefacts, structures or human remains	Continuous during excavation works	License Archaeologist
Roads	Internal site road / Site Entrance	Visual inspection	Unacceptable level of sediment/silt on the road surface; Presence of waste; Surface Condition	Daily	Project Manager
	Fuel & Oil Storage areas	Visual inspection	Damage to containers or ancillary equipment; Leakages; Unlocked storage container; Fuels stored within bunded area	Daily	Project Manager
	Construction Materials Storage Areas	Visual inspection	Damage; Untidiness	Daily	Environmental Manager
Noise and Vibration	Luas interface and nearest sensitive structures	Trigger Action Response Plan (TARP) implementation	Alert Level: review works methods, plant and supervision. Action Level: stop works immediately, investigate and revise methodology before recommencing	Continuous during high noise and vibration-generating activities	Site Manager / Environmental Manager
Temporary Site Compound Area	Waste Collection Areas	Visual inspection	Damage; Untidiness; Full skips, incorrect waste segregation	Daily	Environmental Manager

Aspect	Area of Inspection	Monitoring Required	Note/Checks	Frequency	Responsibility
Operation Control	Dry wheel wash	Visual inspection	Build-up of sediment	Daily	Environmental Manager
	Wastewater facilities	Visual inspection	Holding tank requiring emptying	Weekly	Project Manager
	Concrete pours	Visual inspection	Run-off / spills	Constant monitoring while pouring	Project Manager
	Dust generation at site boundary, haul roads, stockpiles, compound area and sensitive receptors	Visual Inspection and housekeeping inspections	Visible dust emissions; mud and debris on public roads; condition of stockpile covers; operation of wheel wash facilities; water suppression measures; weather conditions; complaints received	Daily during active construction and after periods of high winds or dry weather	Project Manager

8.2 Environmental Performance Indicators

The Appointed Contractor shall outline the key performance indicators for the site in gauging successful site management in the prevention of pollution and the protection of the environment.

Environmental performance indicators shall include:

- Number of environmental accident / incidents logged;
- Breach of procedure and corrective actions;
- Number of environmental complaints received;
- Results of monthly water quality monitoring;
- Results of noise and vibration monitoring;
- Visual dust inspection findings; and
- Results of site audits.

The performance indicators shall be communicated to all relevant personnel and sub-contractors. The review periods for analysing site performance indicators must also be specified.

The Appointed Contractor shall hold a Certificate of Registrations for Quality Management System to ISO 9001:2015 and Occupational Health and Safety Management Systems to ISO 45001:2018/Amd 1:2024.

8.3 Response Procedure / Corrective Action

In the event of an environmental incident, or breach of procedure, or where a complaint is received, or in the event of encountering buried waste or contaminated soils/groundwater, the contributing factors are to be investigated and remedial action taken as necessary to prevent recurrence and avoid environmental harm or nuisance to the local community.

All environmental complaints, whether received internally or externally, shall be treated as reportable events and recorded, investigated, and managed in accordance with this procedure. Immediate action shall be taken where required to address and resolve complaints to minimise environmental impact and prevent ongoing nuisance.

- The Environmental Manager or Construction Manager shall be contacted as soon as possible where there is any incident that carries the possibility of negative environmental consequences (e.g. minor oil leakage or blockage of drainage pipe);
- The Emergency Response Plan and standard emergency procedures shall be applied to get the incident under control and prevent injury or loss of life in the first instance;
- Work in the area shall be halted, and the Environmental Manager shall be called to the scene to assess the situation and to decide on initial responses and remedial measures;
- Once the situation is under control, the environmental accident or incident shall be recorded and the cause investigated;
- Corrective actions shall be communicated to personnel and sub-contractors where relevant – particularly where it results to a change in procedure.

The contractor shall ensure that the following respond actions shall take place:

- The Project Manager must be informed of any incident, breach of procedure and/or complaint received, and details must be recorded in the incident / complaint register;
- The Project Manager shall conduct / co-ordinate an investigation to determine the potential influence that could have led to the non-compliance;
- The Project Manager shall notify and liaise with the appropriate site personnel where required, e.g. Site Environmental Manager, etc;
- The Project Manager shall notify the client of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services where any pollution events occur, the client shall be notified within 1 hour;
- If necessary, the Project Manager shall inform the appropriate regulatory authority. The appropriate regulatory authority shall depend on the nature and severity of the incident;
- The details of the incident shall be recorded on an incident / complaints form which is to record information such as the cause, extent, actions and remedial measures used following the incident/complaint. The form shall also include any recommendations made to avoid reoccurrence of the incident; and
- Ongoing communication shall be maintained with complainants, where applicable, to confirm resolution of the issue.

The out of hours contact number for the site is: TBC.

8.4 Emergency Response Plan

Best construction practice, including that for Health and Safety, shall be employed to minimise the risk of any accidents occurring. All work on site shall be carried out in compliance with the Health and Safety Act 2005, the Health and Safety (Construction) Regulations 2013, and all relevant Legislation and Work Practice to ensure that the construction areas, site environs and public roads remain safe for all users. The contingency plan in place during construction and displayed at appropriate locations.

Best construction practice, including that for Health and Safety, shall be employed to minimise the risk of any accidents occurring. All work on site shall be carried out in compliance with the Health and Safety Act 2005, the Health and Safety (Construction) Regulations 2013, and all relevant Legislation and Work Practice to ensure that the construction areas, site environs and public roads remain safe for all users. The contingency plan in place during construction and displayed at appropriate locations. The Appointed Contractor shall prepare and maintain an Emergency Response Plan / Contingency Plan (ERP) for the construction phase of the works. The plan shall be proportionate to the nature, scale and environmental risks associated with the proposed construction activities and shall set out the procedures to be followed in the event of an emergency or incident, including spills or releases of potentially polluting materials, extreme weather events, fire, drainage impacts, risks to sensitive environmental receptors, archaeological or ecological features, and interactions with public road or Luas infrastructure.

The Emergency Response Plan / Contingency Plan shall be communicated to all relevant site personnel through site induction and environmental training and shall be displayed at suitable locations on site. Appropriate emergency response materials and pollution control equipment, including spill kits, shall be available at suitable locations across the site.

In the event of an environmental emergency or incident, the Environmental Manager shall be notified immediately and shall assess the incident, coordinate the required response actions, and ensure that appropriate containment, clean-up, reporting and corrective measures are implemented. All incidents shall be recorded and managed in accordance with the requirements of the Emergency Response Plan / Contingency Plan.

9. References

- British Standards Institution (2009) *BS 5228-1&2:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites*. BSI, London.
- BRE (British Research Establishment) (n.d.) *Control of Dust from Construction and Demolition Activities*. BRE, UK.
- CIRA (Construction Industry Research and Information Association) (n.d.) *Environmental Good Practice on Site*. CIRA, London.
- Department of the Environment, Heritage and Local Government (DoEHLG) (2006) *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*. DoEHLG, Dublin, Ireland.
- Enterprise Ireland (n.d.) *Best Practice Guidelines BPGCS005 – Oil Storage Guidelines*. Enterprise Ireland.
- IFI (Inland Fisheries Ireland) (2010) *Biosecurity Protocol for Field Survey Work*. IFI, Dublin, Ireland.
- IFI (Inland Fisheries Ireland) (2011) *Disinfection of Scuba Diving Equipment*. IFI, Dublin, Ireland.
- IFI (Inland Fisheries Ireland) (2013) *Invasive Species Biosecurity Guidelines for Boaters*. IFI, Dublin, Ireland.
- IEMA (Institute of Environmental Management and Assessment) (n.d.) *Environmental Management Plans*. IEMA, UK.
- IOA (Institute of Acoustics) (2014) *GPG Supplementary Guidance Note 5: Post Completion Measurements*. IOA, UK.
- Luas – Code of Engineering Practice (<https://www.luas.ie/app/uploads/2024/10/Luas-code-of-engineering-practice.pdf>)
- Luas – Code of Practice (https://www.luas.ie/app/uploads/2024/10/Code-of-practice_2020.pdf)
- National Roads Authority (NRA) (n.d.) *Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan*. NRA, Dublin, Ireland.
- Transport Infrastructure Ireland (TII) & Invasive Species Ireland (ISI) (n.d.) *Guidance Documents on Identification, Control and Eradication of Japanese Knotweed*. Provided in Annexes I and II.
- TII PE-PDV-00001 Light Rail Environment – Technical Guidelines (<https://cdn.tii.ie/publications/PE-PDV-00001-01.pdf>)
- Luas Work Safety Permits (<https://www.luas.ie/work-safety-permits/>)
- DCC Construction & Demolition Good Practice Guide (<https://www.dublincity.ie/sites/default/files/2024-09/construction-and-demolition-good-practice-guide-13-08-2024-updated.pdf>)
- Transport Infrastructure Ireland - Code of engineering practice for works on, near, or adjacent the Luas light rail system

Appendix 1

Resource and Waste Management Plan

MWP

Resource Waste Management Plan

Steeven's Lane 110kV Substation

The Electricity Supply Board (ESB)

August 2026

Contents

1.	Introduction	2
1.1	Purpose of the Plan	2
1.2	Applicant Commitment	2
1.3	Legislation and Guidance	2
1.3.1	EU Legislation	2
1.3.2	Irish Primary Legislation & Regulations.....	3
1.3.3	National Policy & Strategy (Ireland)	3
1.3.4	Local Development Planning	3
1.3.5	EPA Guidance & Technical Documents	3
1.3.6	Infrastructure / Construction Sector Guidance	3
1.4	Resource Targets	4
2.	Proposed Development Overview	4
2.1	Interaction with Diageo's Industrial Emissions License Site Boundary	6
3.	Waste Generation.....	6
3.1	Vegetation Removal	6
3.2	Surface Stripping and Excavated Materials	7
3.3	Ground Contamination.....	7
3.4	Demolition of Boundary Walls and Existing Buildings	7
3.5	Fuel, Oil and Chemicals	7
3.6	Hazardous Substances.....	8
3.6.1	Bituminous Material.....	8
3.6.2	Asbestos Containing Materials (ACM)	8
4.	Roles and Responsibilities	8
5.	Design Approach.....	9
6.	Key Materials, Quantities and Costs	11
7.	Site Management	12
7.1	Resource Manager.....	12
7.2	Identifying Suitably Authorised Waste Collection Operations and Waste Destination Sites	13
7.3	Requirements for Resource Efficient Supply Chains.....	13
7.4	Procedures for Record Keeping and Reporting of all off Site Exports of Resources	13
7.5	Requirements for Communications with the Local Authority and Other Stakeholders	14
7.6	Audits and Inspections of Resource Management Practices	15

8. Site Infrastructure 15

8.1 Minimum Requirements for Site Signage on Resource Management 15

8.2 Minimum Requirements for Resource Storage 15

8.3 Handling and Export of Resources 16

Tables

Table 4-1: Roles and Responsibilities 8

Table 5-1: Design Approach..... 9

Table 6-1: Waste Streams, Estimated Quantities and Costs 11

Table 8-1: Example of Waste Register Template 17

Figures

Figure 1-1: Waste Hierarchy (Source: National Hazardous Waste Management Plan 2021-2027, (EPA, 2021)).... 4

Figure 2-1: Proposed Site Location 5

Figure 2-2: Proposed Development Site and Diageo IEL Boundary Interface 5

Figure 8-1: Good Practice Waste Segregation (Source: EPA RWMP Guidelines) 16

Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Acceptance Code / Status
27057	27057-ZZ-ZZZ-RP-MWP-EN-6009	A	06-Aug-2026	VH	APC	CF	P3

MWP, Engineering and Environmental Consultants
Address: Reen Point, Blennerville, Tralee, Co. Kerry, V92 X2TK, Ireland
www.mwp.ie



Disclaimer: This Report, and the information contained in this Report, is Private and Confidential and is intended solely for the use of the individual or entity to which it is addressed (the “Recipient”). The Report is provided strictly on the basis of the terms and conditions contained within the Appointment between MWP and the Recipient. If you are not the Recipient you must not disclose, distribute, copy, print or rely on this Report (unless in accordance with a submission to the planning authority). MWP have prepared this Report for the Recipient using all the reasonable skill and care to be expected of an Engineering and Environmental Consultancy and MWP do not accept any responsibility or liability whatsoever for the use of this Report by any party for any purpose other than that for which the Report has been prepared and provided to the Recipient.

1. Introduction

This Resource and Waste Management Plan (RWMP) has been prepared by Malachy Walsh and Partners (MWP) on behalf of The Electricity Supply Board (ESB), to form part of the Outline Construction and Environmental Management Plan (oCEMP) relating to a planning application for the construction of the proposed Steeven's Lane 110 kV / MV Gas Insulated Switchgear (GIS) Substation in Dublin 8.

The Proposed Development comprises a new 110 kV 'loop-In/loop out' electricity substation, located within the Diageo Complex.

1.1 Purpose of the Plan

The principal purpose of this plan is to ensure efficient use of material resources, reduce waste at source and reduce the quantity of waste that requires final off-site disposal to landfill in accordance with the waste hierarchy. A secondary aim is to facilitate the transition to a more circular economy thereby minimising the need for new inputs of virgin materials and energy, while reducing environmental pressures linked to resource extraction, emissions, and waste management.

The objective of this plan is to provide information necessary to the Appointed Contractor to ensure that the construction waste at the site will be managed in accordance with current legal legislation, guidelines and industry standards.

This RWMP has been prepared for the Proposed Development which is classified as a Tier 2 project having regard to the Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects (EPA, 2021). The RWMP should be viewed as a live document and should be regularly revisited and revised as necessary throughout a project's lifecycle so that opportunities to maximise waste reduction/efficiencies are exploited throughout the project.

1.2 Applicant Commitment

ESB is committed to ensure that the preferred waste management hierarchy of avoidance, minimisation, reuse, recycling and finally disposal is followed, and the appropriate measures are implemented to comply with all relevant legislations and other guidance as outlined in Section 1.3.

1.3 Legislation and Guidance

1.3.1 EU Legislation

- Waste Framework Directive 2008/98/EC, as amended by Directive (EU) 2018/851 (Circular Economy Package);
- Landfill Directive 1999/31/EC, as amended by Decision (EU) 2018/850;
- European Commission Circular Economy Action Plan (2020), updated under the European Green Deal (2022 onwards);
- EU Construction and Demolition Waste Management Protocol (European Commission 2018);

- EU Guidance on the Interpretation of Key Provisions of Directive 2008/98/EC on Waste (2018);
- Guidelines for the Waste Audits Before Demolition & Renovation Works of Buildings (European Commission, May 2018); and
- Action Plan, For a Cleaner and More Competitive Europe (European Commission 2020).

1.3.2 Irish Primary Legislation & Regulations

- Waste Management Act 1996 (as amended), including amendments under the Waste Management (Circular Economy) Act 2022;
- Waste Management (Facility Permit and Registration) Regulations 2007 (as amended);
- Waste Management (Collection Permit) Regulations 2007 (as amended);
- European Communities (Waste Directive) Regulations 2011–2020 (as amended, including S.I. No. 126 of 2011); and
- Litter Pollution Act 1997 (No. 12 of 1997) (as amended in 2022).

1.3.3 National Policy & Strategy (Ireland)

- Waste Action Plan for Circular Economy, Ireland's National Waste Policy 2020-2025 (DCCAE 2020);
- National Waste Management Plan for a Circular economy 2024-2030;
- Circular Economy Programme 2021-2027, (EPA);
- National Hazardous Waste Management Plan 2021 – 2027 (EPA); and
- Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'.

1.3.4 Local Development Planning

- Dublin City Development Plan 2022-2028

1.3.5 EPA Guidance & Technical Documents

- EPA Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction and Demolition Projects (2021); and
- By-Product Guidance Note, A Guide to by-products and submitting a by-product notification under Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) (EPA, 2020).

1.3.6 Infrastructure / Construction Sector Guidance

- The Management of Waste from National Road Construction Projects (TII, December 2017); and
- Guidance Document for the Local Authority Sector: Management of Materials Arising from Roadworks, (CCMA 2020).

1.4 Resource Targets

Following the waste hierarchy considerations shown in Figure 1-1, the Proposed Development lays out identified waste streams and their management techniques in Section 6. The following targets have been established for the management of waste generated during the Proposed Development.

- 100% of packaging material, metals, timber, plastic, paper and cardboard waste to be sent for recycling/recovery;
- >90% of overall waste is to be sent for recycling/recovery;
- <10% of waste is to be sent for disposal.

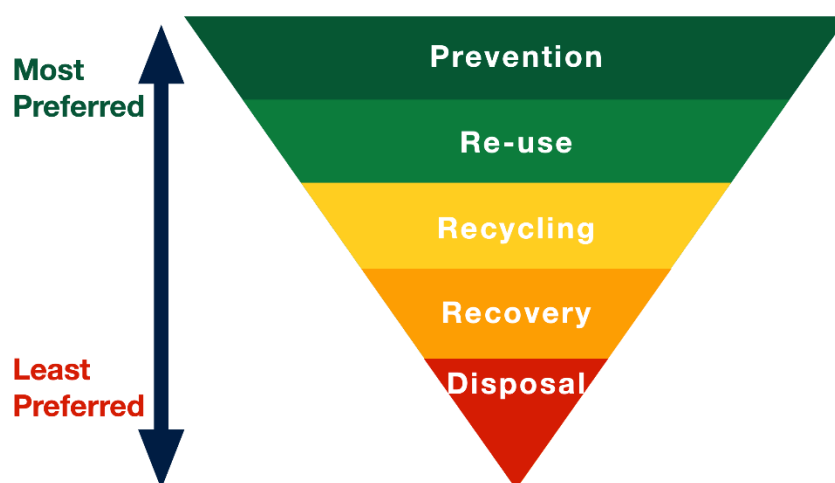


Figure 1-1: Waste Hierarchy
(Source: National Hazardous Waste Management Plan 2021-2027, (EPA, 2021))

2. Proposed Development Overview

The Proposed Development comprises a new 110 kV/MV electrical substation within a 1.73 ha site, including demolition of the existing buildings and boundary wall, construction of a GIS substation building, banded transformers, associated electrical equipment, and all ancillary site infrastructure. The development also includes underground cable connections to the existing electricity network and Diageo's new substation (subject to a different planning application).

The proposed substation site comprises brownfield land owned by Diageo, within the curtilage of a protected structure. It is bounded to the north and northeast by brewery lands, to the west by Steeven's Lane (with the St Patrick's University Hospital opposite), and to the south by mixed-use and residential properties including 132–134 St James's Street and Steevens Gate Apartments.

The majority of the associated underground cable (UGC) infrastructure is located within Diageo's Industrial Emissions Licence (IEL) area.

The overall site location within the greater Dublin area and its interaction with Diageo's IEL is shown in Figure 2-1 and Figure 2-2 respectively.

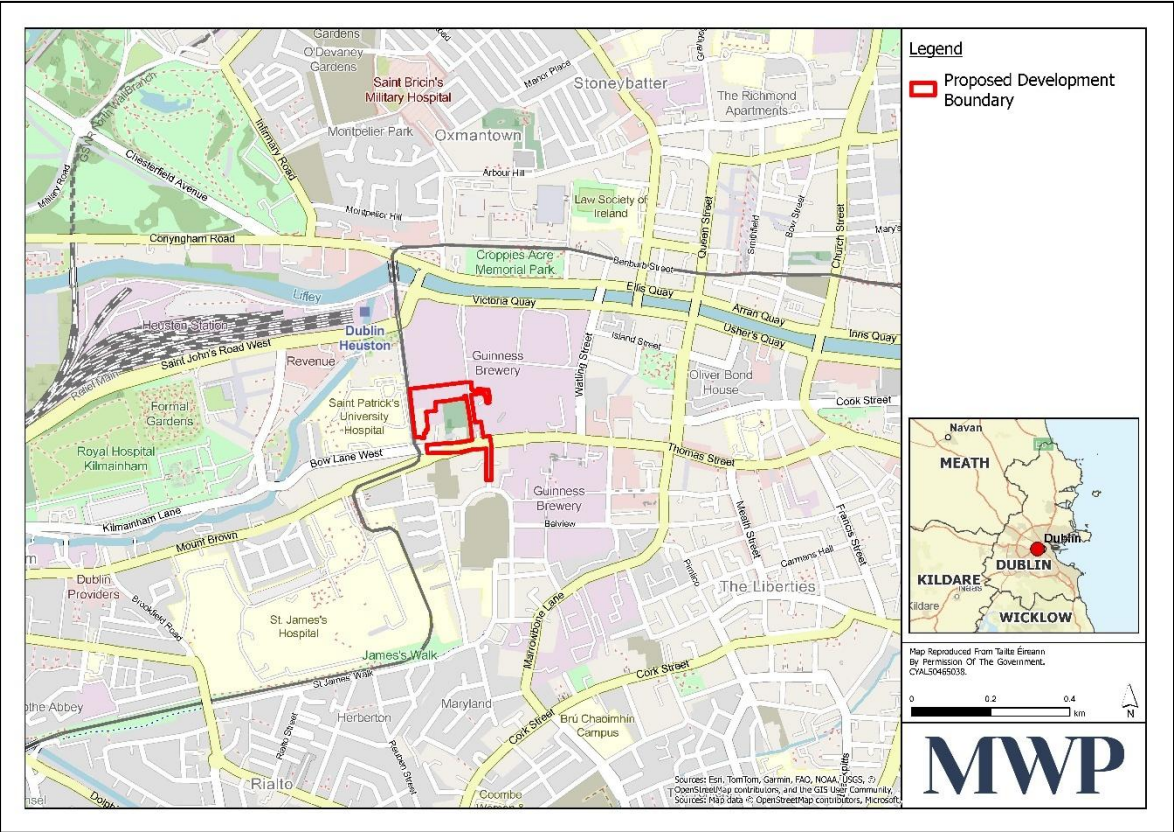


Figure 2-1: Proposed Site Location

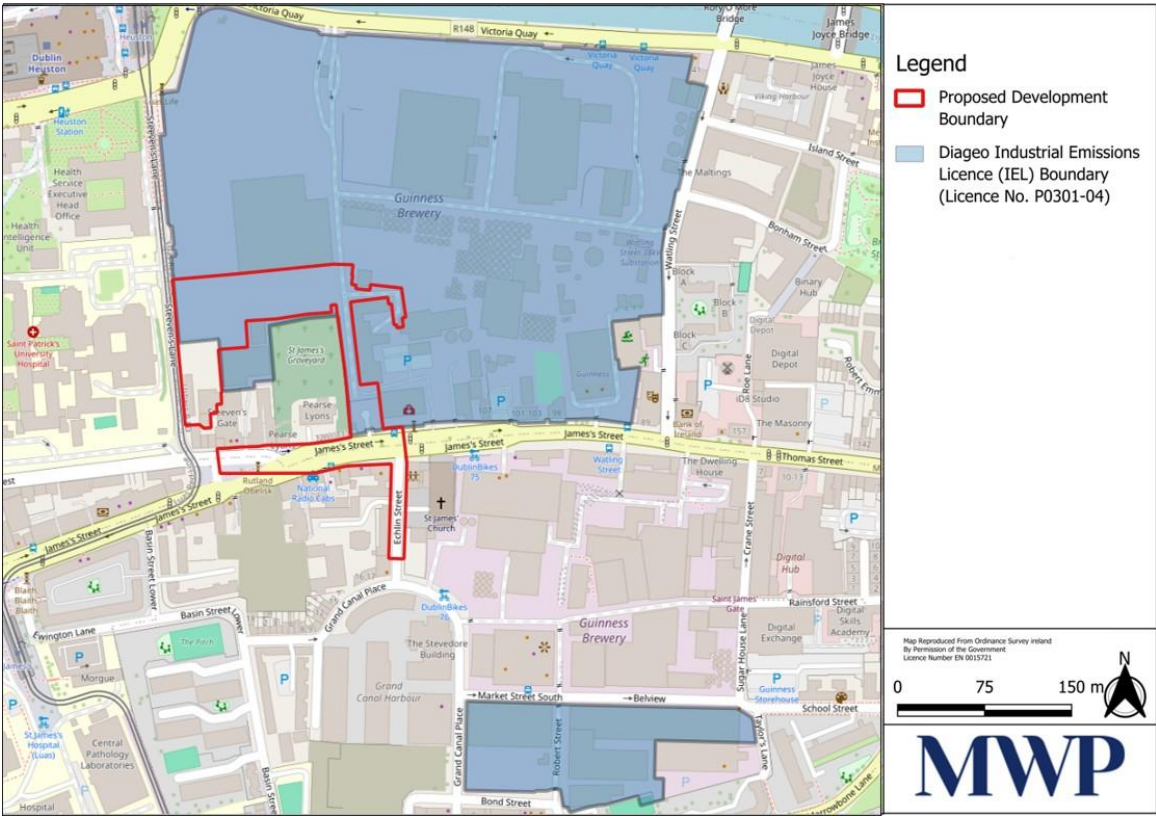


Figure 2-2: Proposed Development Site and Diageo IEL Boundary Interface

The overall construction programme is anticipated to be approximately 3 years in duration.

Further details on the characteristics of the Proposed Development, demolition works, and construction methodology are provided in the Planning Environmental Considerations Report (PECR) and the outline Construction Environmental Management Plan (oCEMP) submitted as part of this planning application.

2.1 Interaction with Diageo's Industrial Emissions Licence Site Boundary

As part of the site is located within the existing Diageo Industrial Emissions Licence (IEL) boundary, the management and reporting of all wastes generated within the IEL site must comply with the conditions of that licence. The licence contains 12 conditions governing the operation of the facility; however, the conditions most relevant to waste management are:

- Condition 7: Resource use and energy efficiency, which includes requirements relating to resource efficiency and waste minimisation; and
- Condition 11: Notification, records and reports, which sets out the requirements for maintaining records and reporting information to the EPA.

The Environmental Protection Agency (EPA) will be notified in advance of the proposed works, and the agreed commencement date for construction activities within the IEL boundary will be confirmed with the EPA. All construction activities will therefore be carried out in a manner that ensures full compliance with the IEL conditions, in addition to applicable national waste management regulations.

As noted in the Annual Environmental Report (AER) (2025) for Licence No. P0301-04, the Diageo IEL contains requirements relating to a range of environmental aspects, including emissions, water, air, groundwater, noise, waste management, and financial provision. Of these, the requirements most relevant to this Waste Management Plan are those relating to waste management.

- Wastewater Management: The IEL requires that wastewater is managed both on-site and off-site in a manner that prevents environmental pollution arising from its discharge.
- Waste Management: Waste is managed in accordance with IEL requirements to ensure it does not cause environmental pollution. All hazardous, non-hazardous, and inert waste streams are appropriately managed, stored, and recorded. Accepted waste may be treated, recovered, disposed of, or stored at the facility, in line with licence conditions.

All emissions are regularly tested for specified pollutants and materials to ensure compliance with established Emission Limit Values (ELVs) and to prevent environmental pollution. Where monitoring identifies an exceedance of an ELV, the EPA must be notified.

3. Waste Generation

3.1 Vegetation Removal

The Proposed Development area is almost entirely comprised of hardstanding and built infrastructure, with negligible vegetated areas. Where present, vegetation is limited to small, localised and unmanaged ruderal growth associated with boundary edges and disturbed ground.

3.2 Surface Stripping and Excavated Materials

The construction of the Proposed Development will require bulk excavation works across the proposed site in order to facilitate the construction of a new 110 kV substation including the provision and associated electrical infrastructure to support the electricity network in the area. The total excavations will amount to approximately 11,745 m³ while the total fill will be approximately 9,930 m³. This estimate is based on the in-situ excavation and does not include a bulking factor. The Proposed Development will comprise electrical plant and equipment including transformers, switchgear and associated control infrastructure, together with associated buildings and ancillary infrastructure.

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

Any excess soils not suitable for reuse will be taken off-site and brought to a suitable licensed waste facility.

3.3 Ground Contamination

The proposed substation site is designated as a brownfield site. Historic 25-inch and 6-inch maps indicate that the proposed site has retained its status as a brownfield site since the earliest records available. The 25-inch map indicating a 'Tobacco and Snuff Manufactory' within the site location.

Environmental Protection Agency (EPA) maps have been consulted, confirming that the overall development site does not fall within any historically designated landfill area. Four soil samples were taken on site in December 2022 at a depth of 0.50m. The soil samples were found to contain hazardous waste (HP7: Carcinogenic, HP11: Mutagenic, HP14: Ecotoxic). As hazardous soil has been identified on site, prior to construction, the contractor will notify the Local Authority and provide a Contaminated Soil Management Plan, to include estimated tonnages, testing requirements, relevant mitigation, authorised waste collector(s) and destination for disposal/treatment.

3.4 Demolition of Boundary Walls and Existing Buildings

The demolition of the existing buildings, boundary and retaining walls can be undertaken within the constraints of the site, provided that demolition is carried out on a phased basis, with one area demolished at a time. This approach would ensure that adequate space is available for the temporary stockpiling of demolition waste. Total Demolition waste from buildings is estimated to be approx. 1,071 m³.

A significant portion of demolition waste is expected to comprise of concrete, blockwork, metals, timber, and glass. Wastes will be segregated where possible for reuse or recycling in accordance with the relevant legislation and guidelines. In addition, some plastics, cabling, and mixed non-hazardous demolition waste will also be generated.

3.5 Fuel, Oil and Chemicals

It is anticipated that fuel (lubricating oil, hydraulic fluid) will be required on site for the vehicles and equipment that will be brought on site during construction. Refuelling will be carried out using 110% capacity double banded mobile browsers.

Chemicals will be brought on site for construction works, some of which could be considered hazardous. Care will be taken with the usage and disposal of any fuels, oils and chemicals on site. Any hazardous waste generated on site will be disposed of to the licenced waste facility.

3.6 Hazardous Substances

It is anticipated that a small quantity of Waste Electrical and Electronic Equipment (WEEE) (containing hazardous components), and batteries (Lead, Ni-Cd or Mercury) may be generated during demolition and construction activities from temporary site offices and machines on site. This waste will be stored in designated areas on site in labelled containers and will be collected by an authorised waste contractor.

3.6.1 Bituminous Material

Excavation of the existing road surface for the cable works will generate bituminous waste, which will be removed off-site by a permitted waste contractor and managed at an authorised facility. Following completion of the cable installation works, the road surface will be reinstated as part of the Proposed Development. Any excess road surface material unsuitable for reuse will be removed from site by a permitted waste contractor and removed to an appropriately authorised waste facility for treatment and disposal.

3.6.2 Asbestos Containing Materials (ACM)

There is asbestos present in buildings to be demolished within the development site. Asbestos or ACMs on-site, will be removed by a suitable competent contractor and disposed of as asbestos waste before works begin. All asbestos removal work or encapsulation work must be carried out in accordance with S.I. No. 632/2025 - Safety, Health and Welfare at Work (Exposure to Asbestos) (Amendment) Regulations 2025.

4. Roles and Responsibilities

While the Appointed Contractor will manage the obligations of the Proposed Development during construction, The client and Client Advisory Team will ensure it is undertaken correctly. Multiple roles outlined in this document may be the responsibility of one person, for example the Environmental Health and Safety (EH&S) Manager in some organisations can have responsibility as the Environmental Manager and the Resource Manager. The general role of key people on site implementing the RWMP is described in Table 4-1.

Table 4-1: Roles and Responsibilities

Person Responsible	Responsibilities	Contact Details
Client	- To prepare Outline Tier 2 RWMP as part of the planning submission; - To commission a licenced competent waste contractor to manage and document waste throughout the demolition and construction phases; - To ensure that RWMP is submitted and agreed on by the Local Authority prior to construction, if conditioned to do so; and - To commission contractor to produce end-of-project RWMP.	TBC
Client Advisory Team	- To maintain, update and ensure implementation of RWMP through the planning and procurement phases of the Proposed Development; - To update record of details and estimated quantities of all projected waste streams; - To work with contractor to reach the target.	TBC

Person Responsible	Responsibilities	Contact Details
Contractor	- To update, implement and review the RWMP throughout the construction phase; - To assign relevant duties and responsibilities to the appropriate person; - To hire a responsible Resource Manager (RM) who will implement the RWMP; - To identify all hauliers engaged to transport each of the resources / wastes off-site; - To identify suitable licensed waste facility site for each type of waste; - To maintain the records of all waste resources for the duration of the Proposed Development; and - To preparing an end-of-life RWMP Review Report.	TBC
Resource Manager/ Environmental Manager	- To conduct waste checks; - To conduct audits annually/biannually as per the requirement of the site; - To adopt construction and demolition methodology to facilitate maximum reuse and/or recycling of waste; - To liaise with client/contractor; - To assign duties in relation to RWMP; and - To maintain and update the waste register.	TBC

5. Design Approach

International best practices have been considered in the design phase to prioritise waste prevention, reuse, recycling and recover material wherever possible. The proposed design approach has been outlined in Table 5-1.

Table 5-1: Design Approach

Design Approach	Description
Designing For Prevention, Reuse and Recycling	The design team has considered the potential reuse of excavated materials on-site wherever feasible, incorporating them for activities such reinstatement of the temporary construction compound. Design Team aims to minimise waste generation. Examples include: - Plans to reuse excavated material on-site - Temporary facilities (portacabins, skips, containers) to be reused by the Appointed Contractor on other site for other construction developments. - Recycling bins and skips strategically placed on-site for effective waste separation and recycling.
Designing for Green Procurement	Supply chain competency will be assessed prior to appointment via a pre-qualification questionnaire which cover key environmental matters. Procurement selection will minimise unnecessary packaging. Options for packaging reduction discussed with subcontractors and suppliers using measures such as 'delivery when required' delivery. Use ordering procedures that avoid waste, i.e., no over-ordering, take-back schemes for both material surplus and offcuts.

Design Approach	Description
	The Appointed Contractor will review 'new' materials to be used as part of the Proposed Development, which contain a recommended percentage of recycled content if they meet the functional, performance and regulatory requirements and are available locally at a reasonable cost.
Designing for Off-Site Construction	The design allows for the use of prefabricated and precast elements which can be manufactured off site to the required specifications. These include: • Cable conduits, • Cable trays, • Precast structural concrete plinths, • Electrical containers, • Cooling units, and • Prefabricated composite panels used for walls and roofing.
Designing for Materials Optimisation	The Proposed Development has been designed in line with standardised design details and avoids overdesigning and unnecessary elements. The elements that are considered includes: • Source materials locally when feasible to reduce delivery distances. • Engage local suppliers for stone, sand, concrete, blocks, and bricks committed to sustainable and recycled materials. • Standardise design details and materials, reducing the number of specified materials for process repeatability and manufacturing efficiency. • Coordinate design to prevent cutting and jointing of materials, minimising offcuts. • Conduct cut and fill analysis for efficient use of excavated ground within the Proposed Development, avoiding waste generation.
Designing for Flexibility and Deconstruction	No unconventional construction materials are required. The vast majority of the construction materials to be used can be recycled and/or recovered and are designed to be easily disassembled.

6. Key Materials, Quantities and Costs

Table 6-1: Waste Streams, Estimated Quantities and Costs

LoW Code	Waste Classification	Description	Waste Type
13 02 08*	Other engine, gear and lubricating oils	Waste hydraulic oil, engine oil and lubricants from construction vehicles and machinery	Hazardous
15 01 01	Paper and cardboard packaging	Construction goods cardboard boxes, paper packaging and cartons	Non-hazardous
15 01 02	Plastic Packaging	Construction goods plastic wrapping, shrink wrap, containers and packaging material	Non-hazardous
17 01 01	Concrete	Waste concrete from demolition and construction works	Non-hazardous
17 01 02	Brick	Waste bricks and masonry material from demolition	Non-hazardous
17 02 01	Wood	Waste wood from demolition, timber pallets and wood off-cuts from construction	Non-hazardous
17 02 02	Glass	Demolition works glass panes and glazing materials	Non-hazardous
17 02 03	Plastic	Construction waste plastics including plastic pipes and fittings	Non-hazardous
17 04 01	Copper, Bronze, Brass	Scrap copper cable, pipework and metal components from demolition	Non-hazardous
17 04 03	Lead	Lead flashing, lead pipework and lead containing materials from demolition	Hazardous
17 04 05	Iron and steel	Scrap steel, metal framework and fabrication off cuts from demolition	Non-hazardous
17 04 11	Cables other than those mentioned in 17 04 10	Electrical and communication cables from demolition and waste material from construction	Non-hazardous
17 05 03	Soil containing hazardous material	Contaminated soil during site excavation work	Hazardous
17 05 04	Soil and stones other than those mentioned 17 05 03	Clean excavated soil, stones and subsoils from cable trenches during construction	Non-hazardous
17 06 04	Insulation materials other than those mentioned in 17 06 01 and 17 06 03	Insulation material from demolition	Non-hazardous

LoW Code	Waste Classification	Description	Waste Type
17 06 05*	Construction materials containing asbestos -18	Asbestos-containing material from demolition works	Hazardous
17 08 02	Gypsum based materials	Demolition works plasterboard and gypsum construction materials	Hazardous
17 09 04	Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	Mixed construction and demolition debris	Non-hazardous
20 03 01	Mixed Municipal Waste	General office and welfare facility waste	Non-hazardous
20 03 04	Septic Tank Sludge	Sludge removed from septic tank or wastewater system	Hazardous

7. Site Management

7.1 Resource Manager

The Appointed Contractor must appoint a designated Resource Manager (RM). The designated Resource Manager of the construction team will be responsible to ensure commitment, operational efficiency and accountability during the construction phase of the Proposed Development.

- The appointed RM will be responsible for managing the waste team, if necessary. The RM will hold the overall responsibility for supervising, recording, and providing regular feedback to the client regarding the site's daily waste management activities.
- The RM will also report to contractor when required. Additionally, they will coordinate with suppliers, service providers, and subcontractors to prioritise waste prevention, recycling and reuse.
- Training will be provided to the RM, covering the maintenance of a record-keeping system, best practices for segregating and storing recyclable materials, conducting audits, and setting targets for on-site waste management.
- RM will be responsible for conducting site induction training. The site staff will be trained to a basic awareness course (environmental induction) to detail the segregation of waste materials at source.
- The RM will be responsible to arrange Regular toolbox talks to ensure all staff are aware of the associated resources and waste management practices to be implemented on site.

7.2 Identifying Suitably Authorised Waste Collection Operations and Waste Destination Sites

The hiring of waste contractors will be undertaken in accordance with the Waste Management Acts 1996 - 2011, Waste Management (Collection Permit) Regulations 2007 as amended, and Waste Management (Facility Permit & Registration) Regulations 2007 as amended.

The following measures are adhered to ensure compliance with these requirements:

1. Ensure that waste collection contractors hold a valid waste collection permit.
2. Check that each waste contractor is permitted to carry the waste concerned. Details of authorised waste types are specified in Appendix A of each waste collection permit.
3. Check that the vehicle registration used to carry waste is listed on waste collection permit. Vehicles details are listed in Appendix C of each waste collection permit.
4. Ensure that waste is being taken to a licenced facility for processing/treatment/disposal. Details of authorised transfer facilities are set out in Appendix B of each waste collection permit.

Waste Collection: all waste shall be collected by a suitably authorised waste collection operator:

A list of currently authorised waste collectors can be accessed here: <https://www.nwcpc.ie/permitsearch.aspx>

Waste Disposal / Recovery: all waste shall be sent to a suitably authorised waste facility:

Waste Facility Permits or Certificate of Registrations can be accessed here: <https://www.nwcpc.ie/permitsearch.aspx>

Waste facilities licensed by the EPA (Industrial Emissions or Waste Licence) is available on the following website: <https://www.epa.ie/our-services/licensing/licencesearch/>

7.3 Requirements for Resource Efficient Supply Chains

The contractor will ensure that supply chain for this Proposed Development adheres to best practices regarding resources and waste management. This will include the following:

- Select procurement routes to minimise unnecessary packaging, for example applying 'Just-in-Time' (JIT) delivery processes to minimise material spoilage.
- Implement ordering procedures and supply chain systems that avoid waste, i.e. no over-ordering, use of take-back schemes for packaging, material surplus and offcuts.
- Select procurement routes that minimise unnecessary packaging.
- Plan the work sequence to reduce the potential for on-site residual resource generation.

7.4 Procedures for Record Keeping and Reporting of all off Site Exports of Resources

The RM will maintain records for all resource material which is used on site and leaves the site, either for reuse, recycling, energy recovery, backfilling or other recovery or disposal on third party sites.

A recording system will be put in place to record residual waste and resources generated on site. A sample recording table is provided in Section 8.3, Table 8-1 of this document. This table will be used as a daily log to

update resource movements off-site and compiled into a database as part of the RWMP files. The type of information to be recorded in the site tracking system is described as follows:

1. For each movement of resource off-site, a signed docket/invoice will be obtained by the RM from the haulier/contractor detailing the following:
 - o A description of the resource stream.
 - o List of Waste (Low) Code for each stream (where applicable).
 - o Validated quantity of material moved off-site by the haulier/contractor (typically reported in tonnes).
2. The name and authorisation of the haulier to transport the material, in the case of a 'waste' this requires a valid Waste Collection Permit (WCP). In the case of by-product or other materials that are not a waste, no WCP is required. In both cases the vehicle registration number should also be recorded for each load of material removed from site.
3. The name and authorisation of the destination site for the resource, again for a 'waste' this requires a valid Cert of Registration, Waste Permit or Waste Licence and in the case of by-product the relevant by-product determination.

It is the obligation of the RM to ensure that all resources taken off-site are in line with the relevant legislation and the key area relates to ensuring that hauliers and recovery/disposal sites have the appropriate authorisations. Some key considerations include:

- Checking the expiry date of the authorisation relative to the duration of the works and whether any review of the permit is required over that period (e.g. WCPs have a maximum life of five years, and review applications need to be lodged before expiry).
- Checking that the waste consent i.e. permit/licence has the authorisation COR holders (Certificate of Registration), Waste Facility Permit holders and Waste Licence holders for the resource stream proposed.
- Checking the authorisation for the resource management operation proposed.
- Check that any waste acceptance limits expressed in the permit/licence for material acceptance are known and that on site sampling has indicated that the residual resource complies with these limits.

7.5 Requirements for Communications with the Local Authority and Other Stakeholders

The RM will communicate through the construction phase with all stakeholders as required. This may include:

- Internal reporting of resource statistics to the Client and the wider construction management team. This may include performance relative to agreed targets and objectives.
- Engaging with Dublin City Council on any site inspection or enforcement audits undertaken at the site. All follow-up actions and corrective actions should be logged and reported to the local authority.
- Engaging with other stakeholders (EPA, public, etc.) as appropriate in relation to the resource management on site.

- Upon completion of construction, the RM will prepare a final report (post-project RWMP) summarising the outcomes of resource management processes adopted, the total reuse and recovery figures and the final destinations of all resources taken off-site.
- Waste records for generated waste within the IEL will be provided to Diageo in time for them to do the Annual Environmental Report (AER) & Pollutant Release and Transfer Register (PRTR).

7.6 Audits and Inspections of Resource Management Practices

- Routine waste audits will be conducted to assess the composition of generated waste. Waste patterns, waste categories, and opportunities for reduction, recycling, or reuse will be analysed.
- Detailed records of waste audits, including methodology, findings, and action plans will be maintained. Documentation of waste categories, quantities, and diversion rates for future reference will be done.
- Checklists for daily, weekly or monthly site audits will be finalised by the RM and the relevant personnel informed of their duties.
- On-site and off-site facility inspections will be conducted to monitor waste management practices. Waste segregation stations, recycling efforts, and storage areas will be inspected.
- Regularly inspection of incoming materials for compliance with eco-friendly packaging and minimal waste generation standards will be conducted.
- Proper training will be provided to site workers about waste management best practices, emphasising the importance of proper segregation, recycling, and responsible disposal.

8. Site Infrastructure

8.1 Minimum Requirements for Site Signage on Resource Management

Labelling and signage will be used on site to inform personnel of key waste storage area requirements and restrictions, with clear signage provided at all Waste Storage Areas (WSAs) as shown in Figure 8-1.

8.2 Minimum Requirements for Resource Storage

- Waste materials are to be stored in appropriate areas that prevent degradation or damage from weathering or moisture.
- Material arising from site clearance and excavation works will be stored separately according to material identification:
 - Stockpile 1 – Excavated sub-soils suitable for reuse on-site.
 - Stockpile 2 – Excavated materials to be removed off-site.
- A dedicated trained banksman will supervise the operation paying particular attention to the condition of materials and making sure that different materials are separated accordingly to their deposition points.

- Surplus topsoil or excavated material unsuitable for reuse in the reinstatement of the temporary construction features will to be transported to an approved licences waste facility capable of accepting the material.
- Designated and secure Waste Storage Areas (WSAs) equipped with bins and skips will be established within the active construction compound of the development site. The designated WSA will have dedicated waste containers, as shown in Figure 8-1, to facilitate the segregation of the following waste stream:
 - Metals
 - Timber
 - Dry Recyclables
 - General waste
 - Electrical waste (WEEE)



Figure 8-1: Good Practice Waste Segregation (Source: EPA RWMP Guidelines)

- Liquid waste (Waste oils, paints, lubricants, adhesives, chemicals) will be stored in appropriate containers in bunded areas until transported offsite. Bunded areas will have the capacity to hold 110 per cent of the liquid waste volume.
- Domestic type waste generated by contractors will be collected on site, stored in an enclosed skip at the construction compounds.
- Waste bins will be placed on site with proper coding and will be collected by the approved waste facility.

8.3 Handling and Export of Resources

- All waste material is only removed from site by suitable persons/organisations, holding all appropriate local regulatory agency issued licenses and permits for the particular waste.
- Any materials suspected of being contaminated (e.g. contaminated soils, demolition materials, chemicals or oils) are isolated from other waste streams pending assessment. Where required, sampling and laboratory testing shall be undertaken to determine the appropriate waste classification and disposal route.
- Materials suspected or confirmed to contain ACM, to be identified through surveys and testing, segregated from other waste streams, stored in sealed labelled containers or packages and removed only by suitably licenced contractors for disposal at authorised facilities.

- Waste material removed from site is only taken for further processing or final disposal at sites approved by the appropriate local regulatory agency holding valid licenses and permits.
- The following measures are adhered to ensure compliance with these requirements:
 - Ensure that waste contractors hold a valid waste collection permit.
 - Check that each waste contractor is permitted to carry the waste concerned. Details of authorised waste types are specified in Appendix A of each waste collection permit.
 - Check that the vehicle registration used to carry waste is listed on waste collection permit. Details from Appendix C of each waste collection permit have been provided to the weighbridge in order to permit the ongoing checking of the status of waste collection vehicles.
 - Ensure that waste is being taken to a licenced facility for processing/treatment/disposal. Details of authorised transfer facilities are set out in Appendix B of each waste collection permit.

Details of all materials leaving the site are to be recorded and maintained as shown in Table 8-1.

Table 8-1: Example of Waste Register Template

Date	Material Description Type	LoW Code	Storage Location	Hazardous (Yes/No)	Quantity (Tonnes)	Waste Treatment Operation	COLLECTION DETAILS				TRANSFER DETAILS		
							Collected by	Permit No	Vehicle Details	Vehicle listed in Appendix C	Transferred to		
											Facility Name	Address	Licence/Permit /COR No

Appendix 2

Outline Construction Traffic Management Plan



Outline Construction Traffic Management Plan

Steeven's Lane ESB Substation

July 2026

SYSTRA

DOCUMENT CONTROL SHEET

IDENTIFICATION TABLE

Client/Project owner	MWP Ltd
Project	Steeven's Lane ESB Substation
Study	Outline Construction Traffic Management Plan
Type of document	Report
Date	22/07/2026
Reference number	IE01T26A53_CTMP
Number of pages	36

APPROVAL

Version	Name		Position	Date	Modifications
R004	Author	D. Harris	Consultant	22/07/2026	Updated following client review
	Checked by	G. Moon	Associate	22/07/2026	
	Approved by	G. Moon	Associate	22/07/2026	

TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 OVERVIEW	5
1.2 PURPOSE OF REPORT	6
2. BASELINE CONDITIONS	7
2.1 ROAD NETWORK	7
2.2 PEDESTRIAN INFRASTRUCTURE	12
2.3 PUBLIC TRANSPORT INFRASTRUCTURE	14
3. PROPOSED DEVELOPMENT	15
3.1 INTRODUCTION	15
3.2 PROPOSED SUBSTATION DEVELOPMENT	15
3.3 PROPOSED CONNECTION TO THE ELECTRICITY GRID	16
3.4 CONSTRUCTION COMPOUND	18
3.5 CONSTRUCTION TRAFFIC	18
3.6 STEEVEN'S LANE FOOTWAY CLOSURE	24
3.7 TRAFFIC MANAGEMENT DURING ELECTRICAL WORKS	26
3.8 SUMMARY OF IMPACTS DURING THE CONSTRUCTION STAGE.	28
4. OTHER MEASURES TO MINIMISE AND MITIGATE IMPACTS	29
4.1 GENERAL	29
4.2 PRIMARY POINT OF CONTACT	29
4.3 SUBCONTRACTORS	29
4.4 DELIVERY CONTROL	29
4.5 TRAFFIC ROUTE DESIGNATION	29
4.6 SIGNAGE AND WAYFINDING	30
4.7 HGV SAFETY MEASURES	30
4.8 CONTRACTOR SPEED LIMIT	31
4.9 GOOD NEIGHBOUR POLICY	31
4.10 DUST AND DIRT CONTROL	32
4.11 PEDESTRIAN SAFETY MEASURES	32
4.12 WORKFORCE TRAVEL AND PARKING ARRANGEMENTS	32
4.13 STAFF INDUCTION & CODE OF CONDUCT	33
4.14 SECURITY AND EMERGENCY PROCEDURES	33
4.1 SUSTAINABILITY	34
5. SUMMARY	35

LIST OF FIGURES

Figure 1.	Site Boundary	5
Figure 2.	Extent of Works	6
Figure 3.	Regional Road Network	8
Figure 4.	Local Road Network	9
Figure 5.	Bollards on Steeven's Lane	10
Figure 6.	LUAS Service on Steeven's Lane	11
Figure 7.	Bow Lane West / Steeven's Lane signalised junction	12
Figure 8.	Footways on Steeven's Lane	13
Figure 9.	Footway widths on Steeven's Lane	13
Figure 10.	Public Transport Facilities	14
Figure 11.	Proposed Development Footprint	15
Figure 12.	Proposed 110 kV and MV UGC Routes	17
Figure 13.	Construction Compound	18
Figure 14.	Diageo Site Entrance on R148 Victoria Quay	19
Figure 15.	Overview of Construction Vehicle Access to Substation Compound	19
Figure 16.	Vehicular Site Access through Diageo Site	20
Figure 17.	Designated HGV Routes	23
Figure 18.	Steeven's Lane Pedestrian arrangements during construction	25
Figure 19.	Enhanced Crossing Location on Steeven's Lane	26
Figure 20.	Likely extent of Traffic Management works	27
Figure 21.	Examples of Signage	30
Figure 22.	HGV Safety Measures	31

LIST OF TABLES

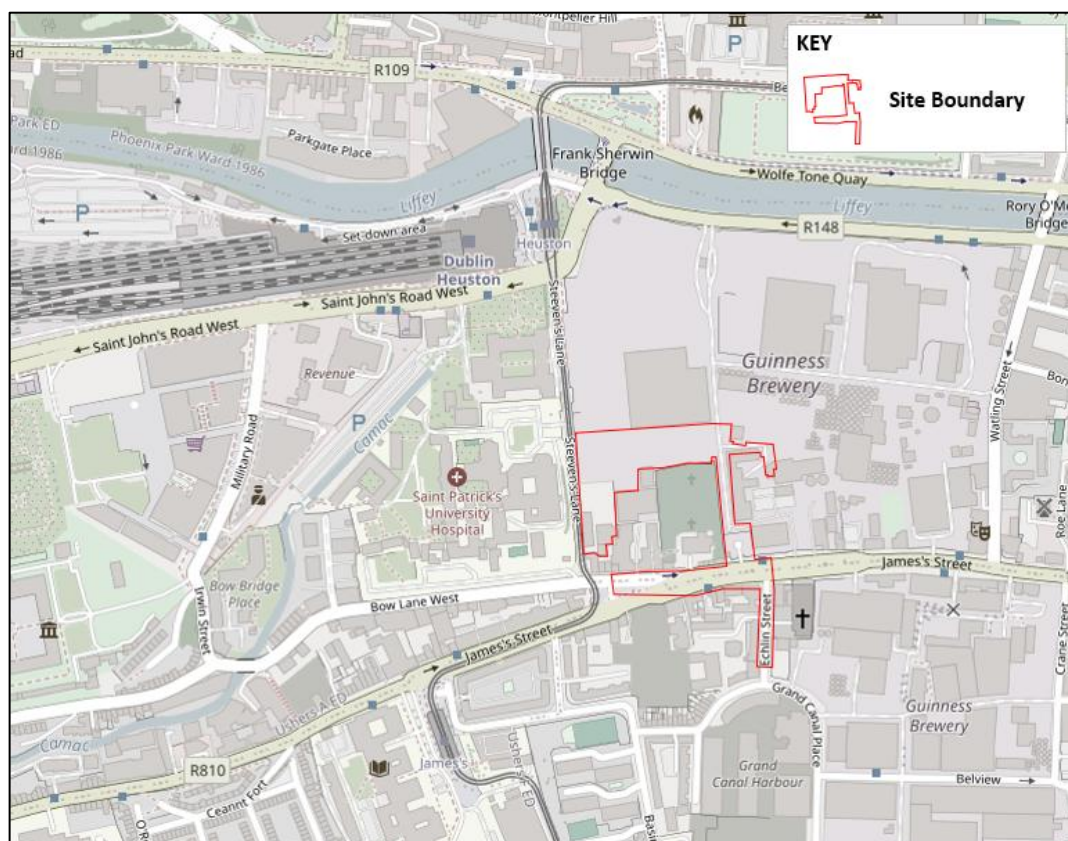
Table 1.	Total and Daily Construction Trips by Phase	21
Table 2.	Traffic impact during peak construction	22
Table 3.	Construction vehicle types by Phase	23

1. INTRODUCTION

1.1 Overview

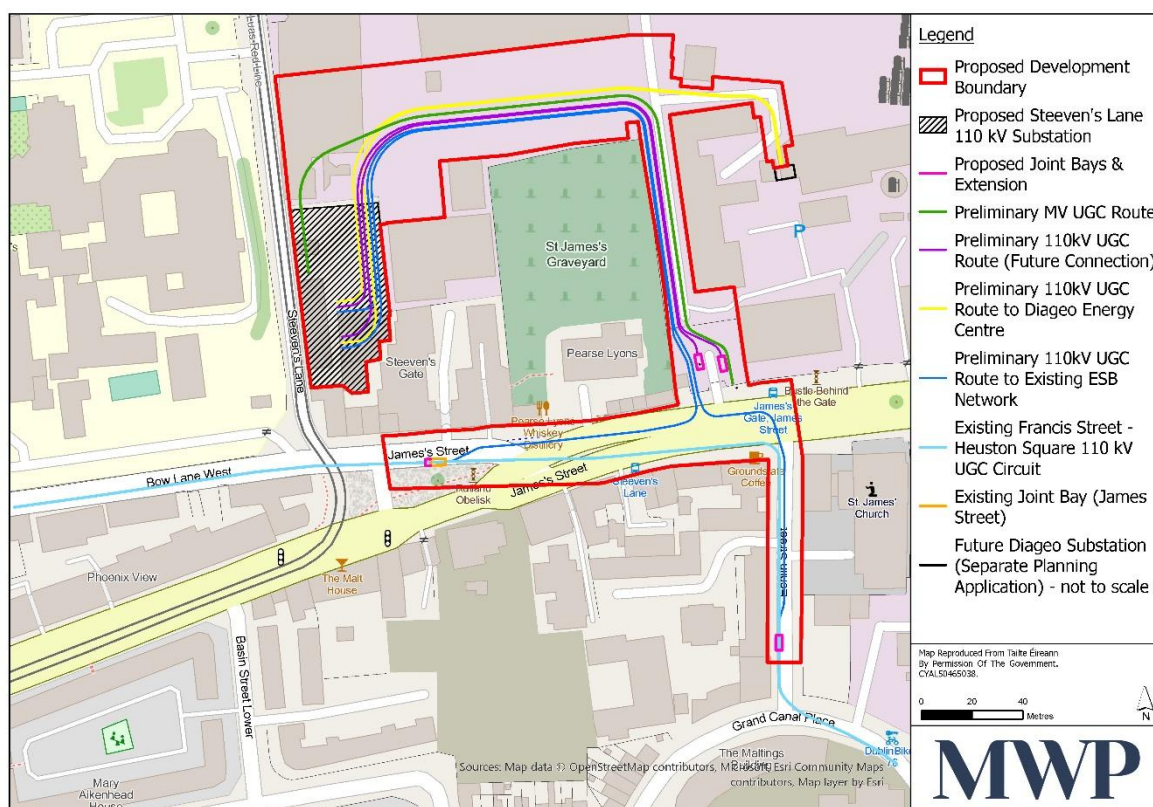
- 1.1.1 SYSTRA Ltd (SYSTRA) has been commissioned by MWP Ltd to produce an Outline Construction Traffic Management Plan (OCTMP) in relation to the proposed development of a 110 kV Distribution substation at Steeven's Lane, located in the southwest of Dublin City Centre. The site location is shown in **Figure 1**.

Figure 1. Site Boundary



- 1.1.2 The works will comprise two main elements:
- Construction works relating to the new ESB substation itself, which will take place within a site within the current Diageo boundary. This construction site will be accessed solely through the Diageo site, via the existing main entrance on R148 Victoria Quay.
 - Construction works relating to the installation of underground cabling on James's Street and Echin Street, and within the Diageo site.
- 1.1.3 The extent of these works is shown by the red line site boundary in **Figure 2**.

Figure 2. Extent of Works



1.2 Purpose of Report

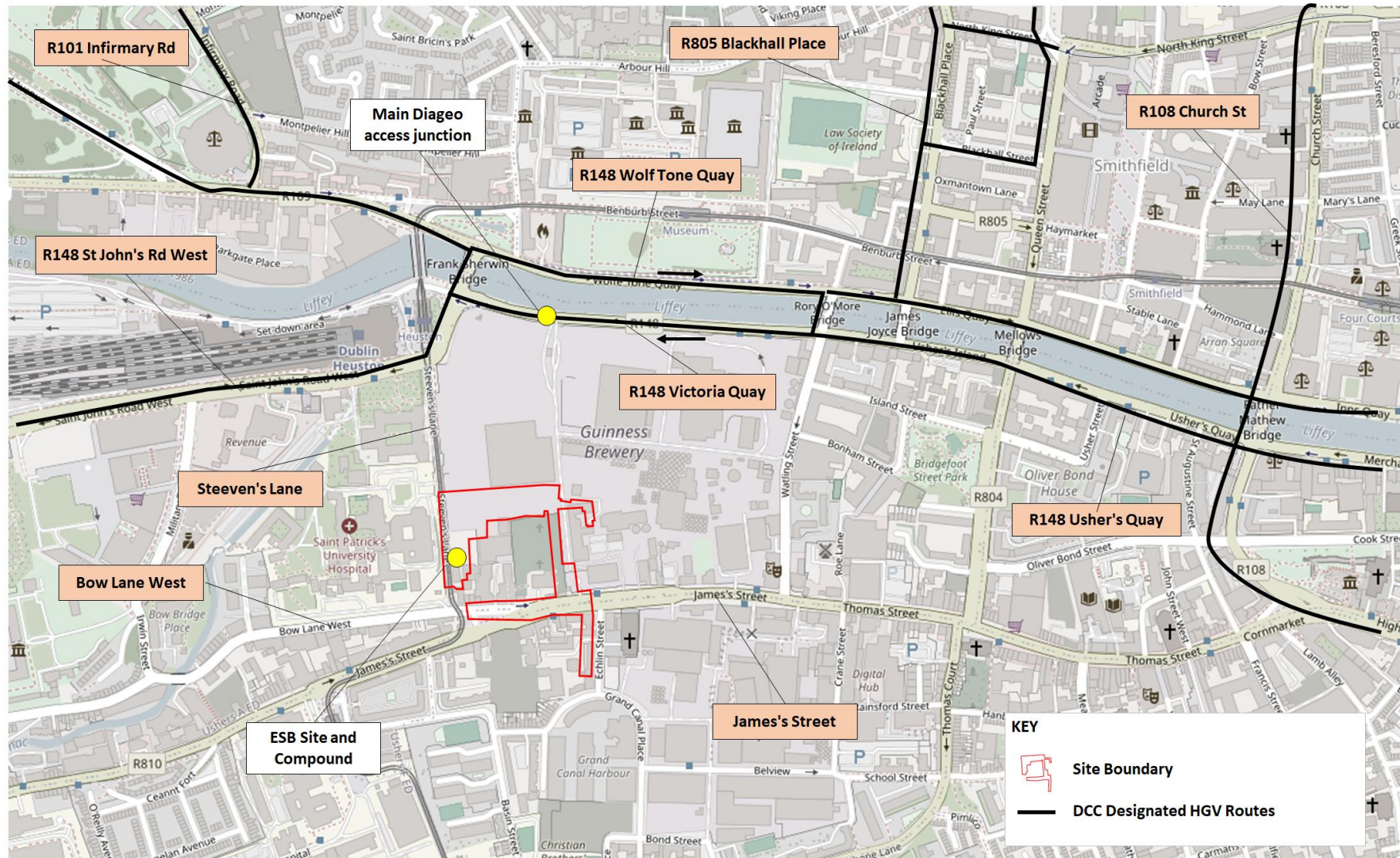
- 1.2.1 This OCTMP outlines a series of measures that could be implemented through the construction stage to help minimise traffic impacts and associated environmental impacts.
- 1.2.2 This OCTMP:
- Demonstrates how access to the construction site will be managed;
 - Identifies suitable routes for construction traffic;
 - Quantifies the levels of traffic generated during the construction phase;
 - Proposes measures to ensure that pedestrian, cycle and road safety is not compromised during construction; and
 - Assesses the impact on the pedestrian route along Steeven's Lane and in the vicinity of Bow Lane West and James's Street.
- 1.2.3 It is expected that the provision of a full CTMP will be made a condition of planning. This OCTMP sets out the principles that should be employed, which will be developed further in the full CTMP.

2. BASELINE CONDITIONS

2.1 Road Network

- 2.1.1 **Figure 3** shows the Regional road network in the area around the site, along with Dublin City Council's Designated HGV Routes, which apply to HGVs with 5 or more axles.

Figure 3. Regional Road Network



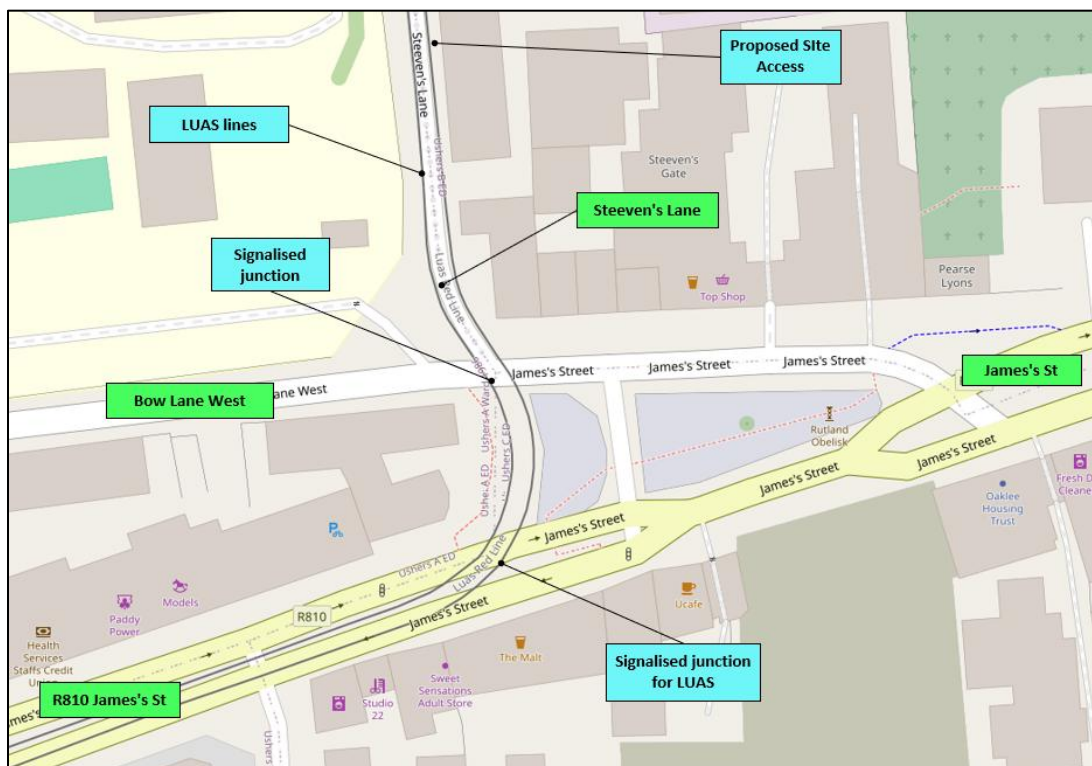
R148

- 2.1.2 The R148 provides access between the N4/M50 interchange to the west of the city, the city centre, and the M50 at the Dublin Tunnel. In the vicinity of the site, it runs along both the north and south banks of the River Liffey.
- 2.1.3 R148 Wolf Tone Quay, on the north side of the river, is one way in an eastbound direction. Between Frank Sherwin Bridge and Rory O'More Bridge it has two lanes for general traffic, with a further lane for buses. A two-way cycle track runs alongside the road. Some inbound construction traffic is likely to travel along R148 Wolf Tone Quay, and use Rory O'More Bridge to join R148 Victoria Quay to access the construction site through the Diageo entrance.

R148 Victoria Quay, to the south of the river, is one-way in a westbound direction. It comprises a single traffic lane, along with a dedicated bus lane. A segregated cycle lane runs between the bus lane and footway. R101

- 2.1.4 The R101 heads north-west from the city centre, providing access onto the R147, which joins the M50 at Blanchardstown. To the east of the site, the R108 runs north, intercepting the North Circular Road and continuing northwards towards the N1 at Ballymun.
- 2.1.5 **Figure 4** shows the road network around the Steeven's Lane / Bow Lane West / St James's Street area in more detail.

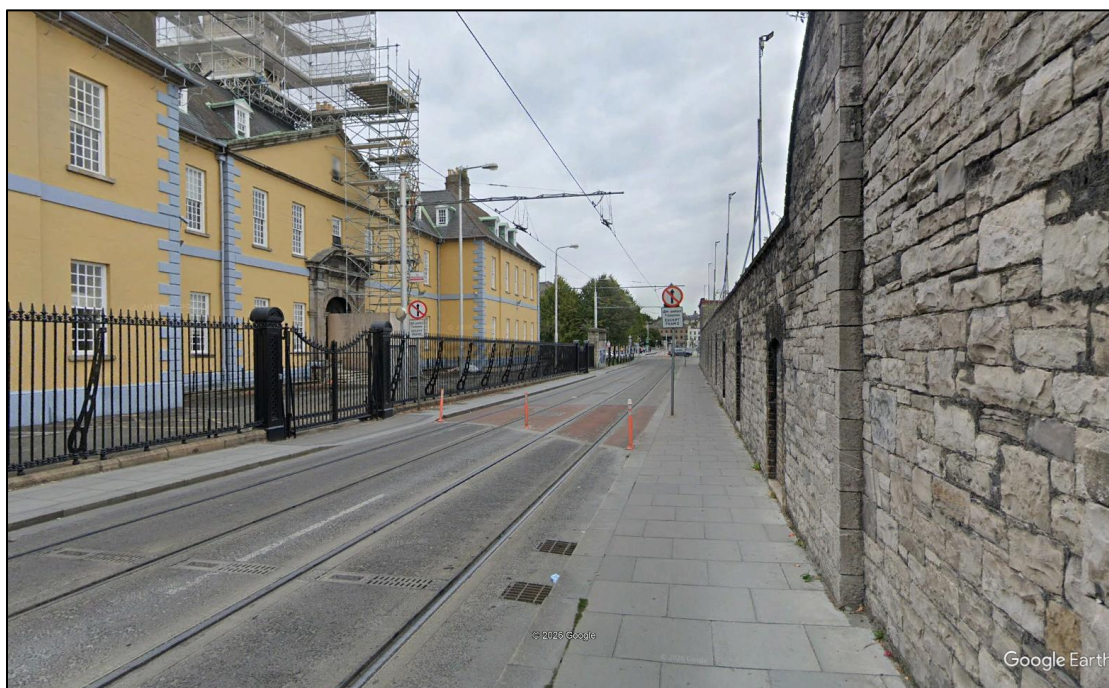
Figure 4. Local Road Network



Steeven's Lane

- 2.1.6 Steeven's Lane is accessed from a signalised junction with Bow Lane West to the south. It is closed to through-traffic, and provides access only to the development site (when in operation) and the adjacent St. Patrick's University Hospital car park. As shown in **Figure 5**, bollards are present ~50m to the north of the St Patrick's University Hospital's vehicle access, which prevent the through-movement of vehicles between St John's Road west and Bow Lane West.

Figure 5. Bollards on Steeven's Lane



- 2.1.7 Steeven's Lane is subject to height restrictions of between 5.5m and 6m due to overhead lines of the LUAS Red Line, which operates in both directions.
- 2.1.8 The Red Line is a high frequency route with more than 14 trams per hour per direction on weekdays. Trams operate with the following frequencies in both directions:
- Weekday AM peak (07:00 – 10:00) – 3-4 minutes;
 - Weekday Off-Peak (10:00 – 16:00) – 3-4 minutes;
 - Weekday PM Peak (16:00 – 19:00) – 3-4 minutes; and
 - Saturday – 6–7 minutes.
- 2.1.9 The LUAS line on Steeven's Lane is indicated by **Figure 6**.

Figure 6. LUAS Service on Steeven's Lane



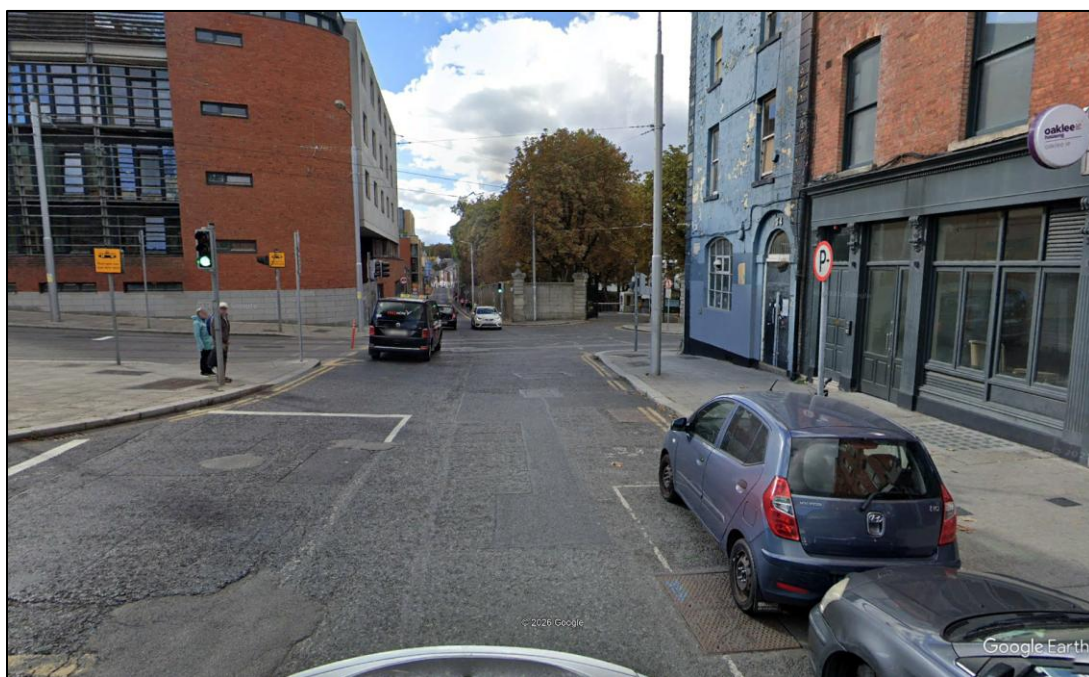
R148

- 2.1.10 The R148 (Chapelizod Bypass) is a dual carriageway that links the M50 to Dublin city centre and is subject to a 60km/h speed limit. The R148 has two lanes in each direction including a 24hr bus lane in each direction accommodating several high frequency bus services. Parking and loading are not permitted on the R148.

Bow Lane West

- 2.1.11 Bow Lane West is a narrow street with a speed limit of 30km/h and provides access to Steeven's Lane via a signalised junction, also used by the LUAS Red Line. Bow Lane West has a weight limit of 3.5 tonnes to the southwest of the site and there is a banned right turn at the priority junction with James Street (R810). There is a loading bay of approximately 10m in length that permits loading between 07:00-19:00 from Monday to Saturday.

Figure 7. Bow Lane West / Steeven's Lane Signalised Junction



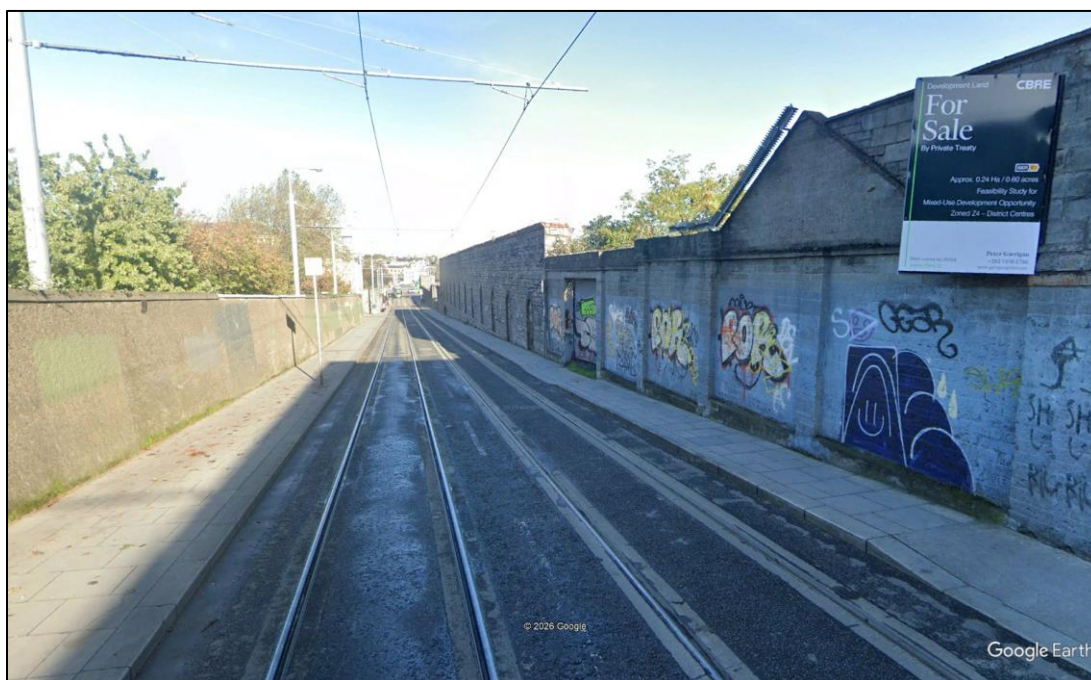
R810 James's Street

- 2.1.12 James Street / Mount Brown is a single carriageway road, linking the Liberties in the City Centre with Kilmainham and is subject to a 50km/h speed limit. The LUAS Red Line operates on a small section of James Street in both directions, sharing a single lane with vehicle traffic in the westbound direction.

2.2 Pedestrian Infrastructure

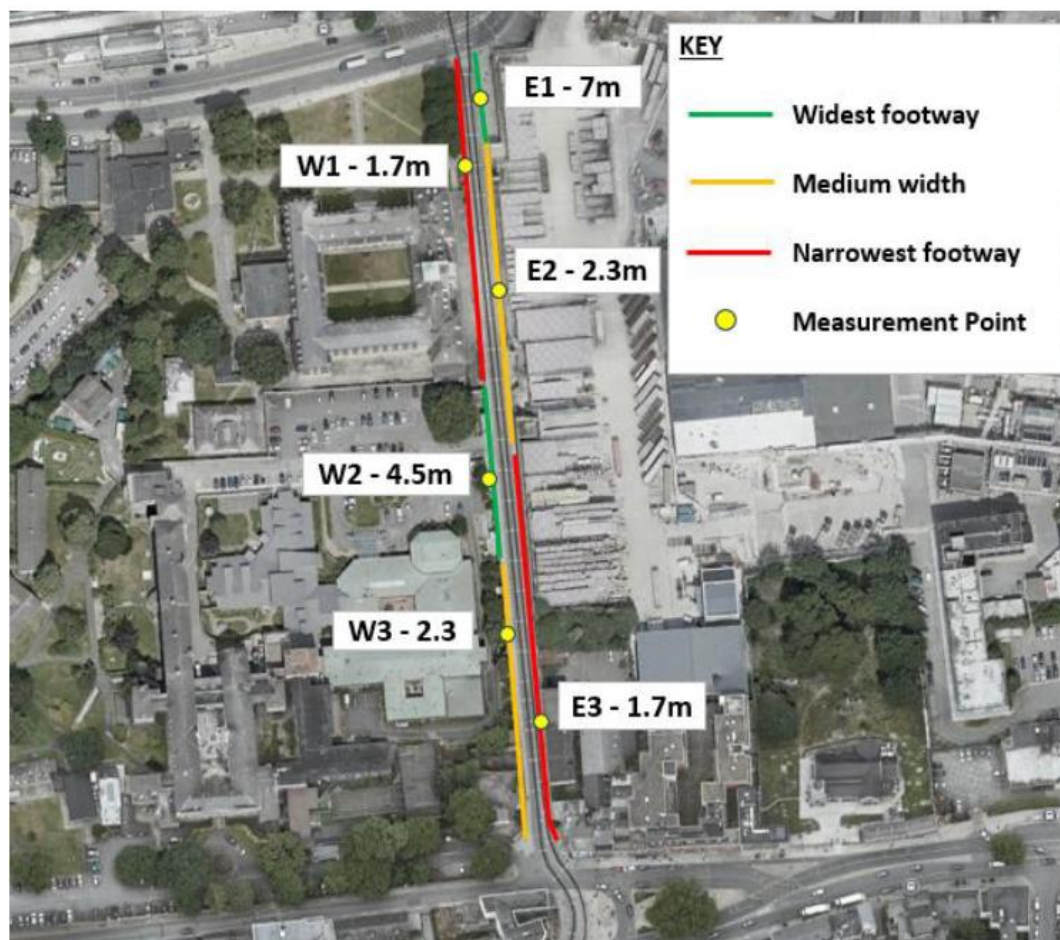
- 2.2.1 The pedestrian footways on either side of Steeven's Lane are shown in **Figure 8**.

Figure 8. Footways on Steeven's Lane



2.2.2 Footway widths on Steeven's Lane vary from ~1.7m to ~4.5m, as shown in Figure 9.

Figure 9. Footway Widths on Steeven's Lane

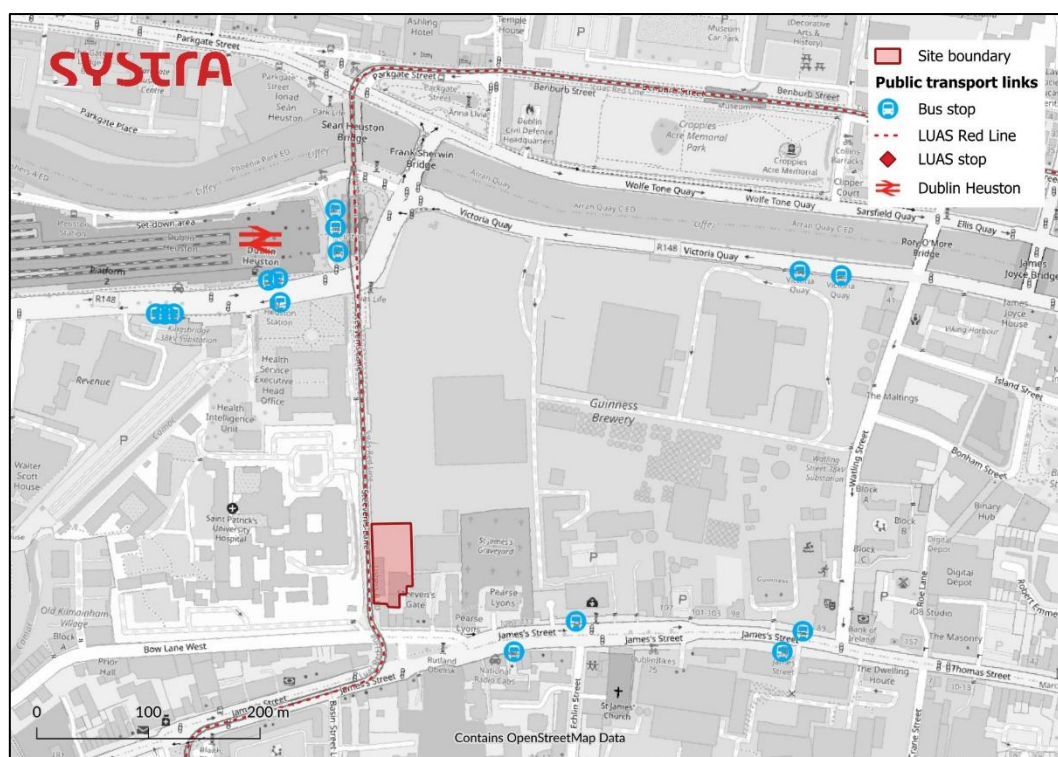


- 2.2.3 During the construction stage, it is intended to suspend access along the footway along the east side of Steeven's Lane, in order to facilitate demolition of the existing boundary wall and construct a new entrance junction into the site. Pedestrians will be diverted to the western footway for the extent of the closure of the eastern footway.

2.3 Public Transport Infrastructure

- 2.3.1 The site is well-served by public transport, which will be a viable travel option for site operatives. It is located close to a number of bus stops, the LUAS Red Line, and Dublin Heuston Railway Station. The locations of these public transport links are indicated by **Figure 10**.

Figure 10. Public Transport Facilities



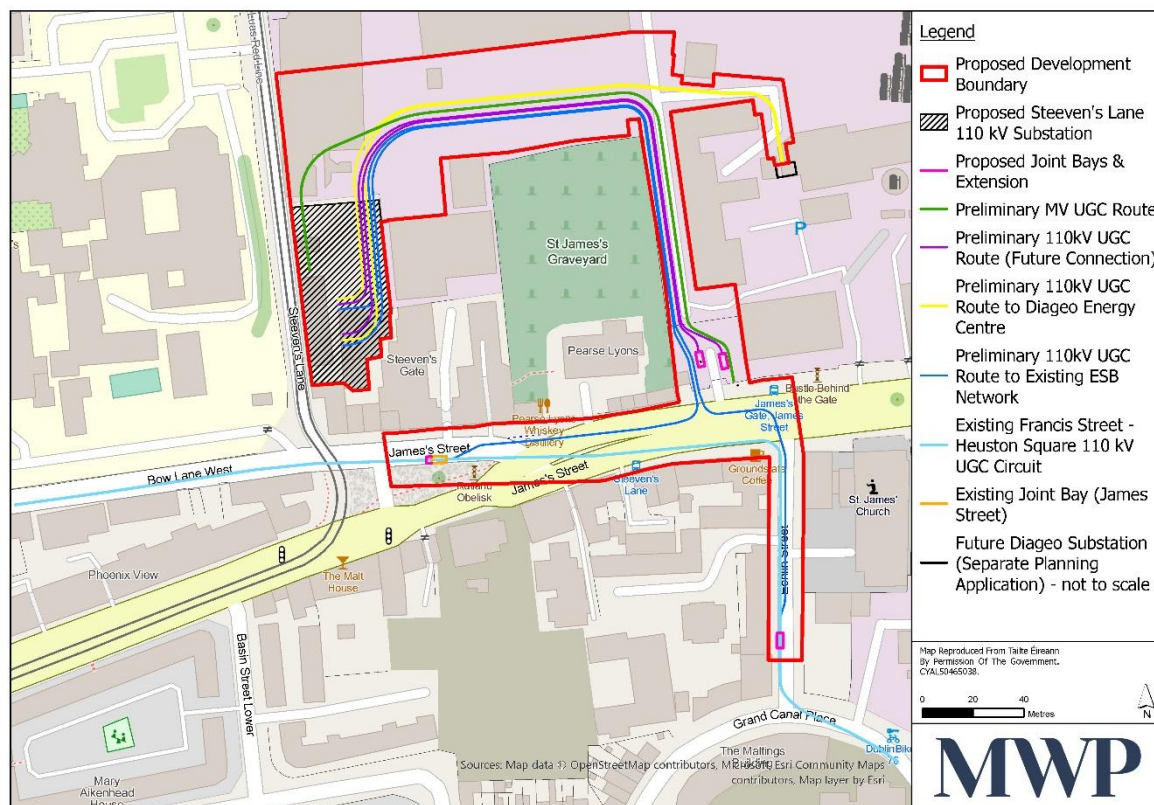
- 2.3.2 The nearest bus stops are located on the R810 James's Street, approximately 300m to the south of the site. These stops are served regularly by numerous bus services providing connections to Dublin City Centre and suburbs.

3. PROPOSED DEVELOPMENT

3.1 Introduction

- 3.1.1 **Figure 11** shows the Proposed Development footprint and illustrates the positions of the Proposed Development components and infrastructure within the development boundary.

Figure 11. Proposed Development Footprint



- 3.1.2 The characteristics of the Proposed Development are fully described in the Planning and Environmental Considerations Report (PECR) accompanying this planning application, and this OCTMP report should be read in conjunction with it. In addition, full details of the proposed design, layout, elevations, sections, and associated site development works are provided within the planning drawings.

- 3.1.3 A summary of the Proposed Development is provided in the section below to set the context and aid clarity.

3.2 Proposed Substation Development

- 3.2.1 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; and
- 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.

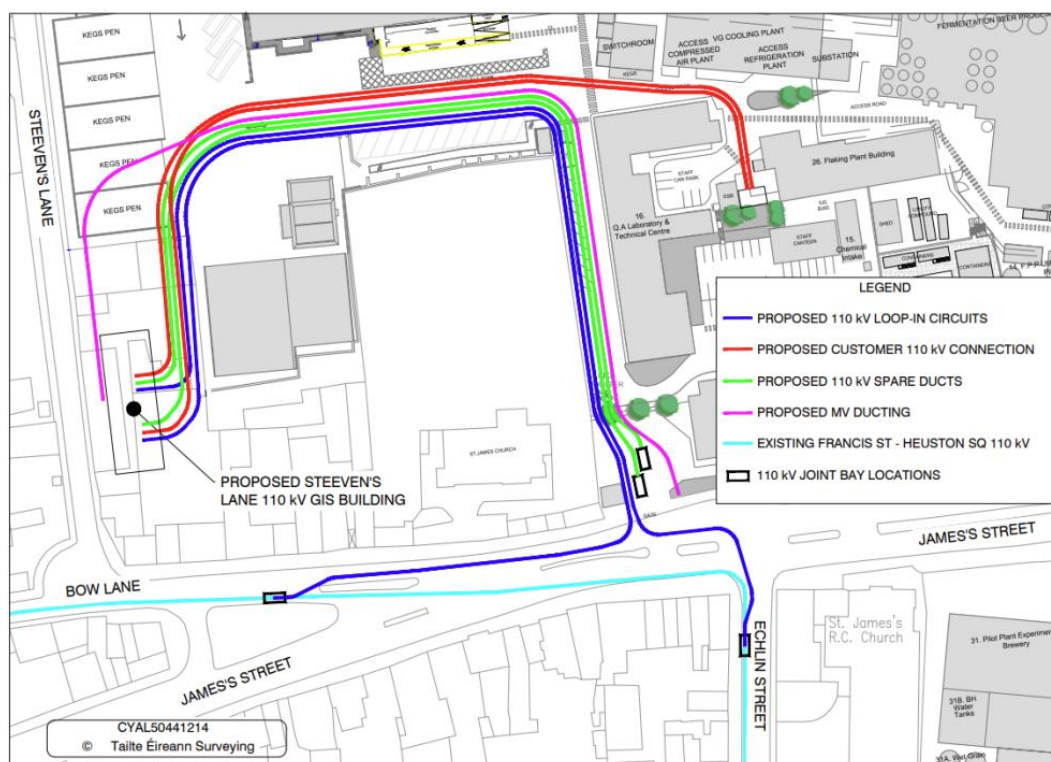
3.3 Proposed Connection to the Electricity Grid

3.3.1 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.
- And 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' Street.

3.3.2 The proposed indicative underground cable (UGC) routes are show by **Figure 12**.

Figure 12. Proposed 110 kV and MV UGC Routes

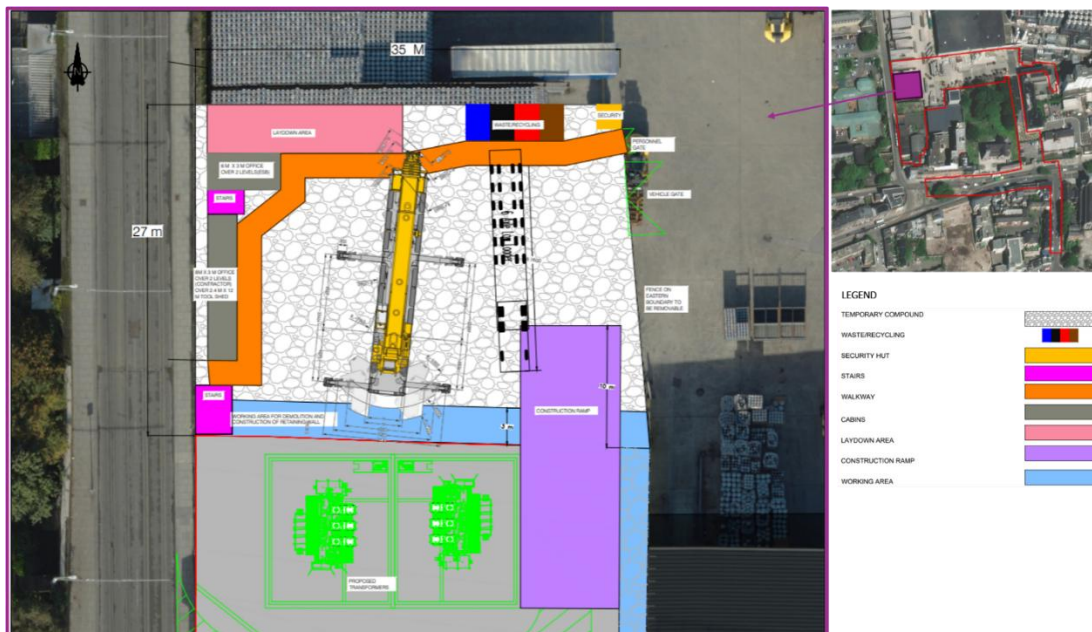


- 3.3.3 Cable installation will predominantly utilise open-cut trenching within public roads. This will involve excavation of the trench, installation of ducting on a prepared bedding layer, placement of suitable surround and backfill materials, and provision of warning tape. Works will typically progress in short sections to minimise disruption, with temporary reinstatement undertaken as works advance.
- 3.3.4 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.
- 3.3.5 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

3.4 Construction Compound

- 3.4.1 A construction compound will be constructed to the north of the ESB construction site, as shown in **Figure 13**.

Figure 13. Construction Compound



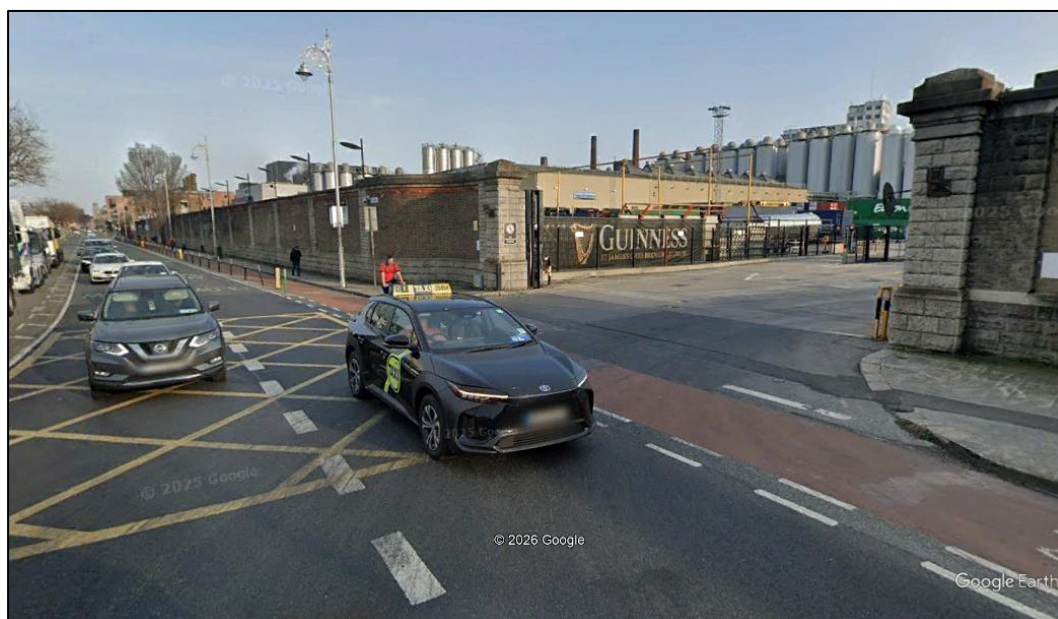
- 3.4.2 The compound will contain a laydown area, site offices and welfare facilities, and an area for the storage of waste and recycling.

3.5 Construction Traffic

Vehicle Access

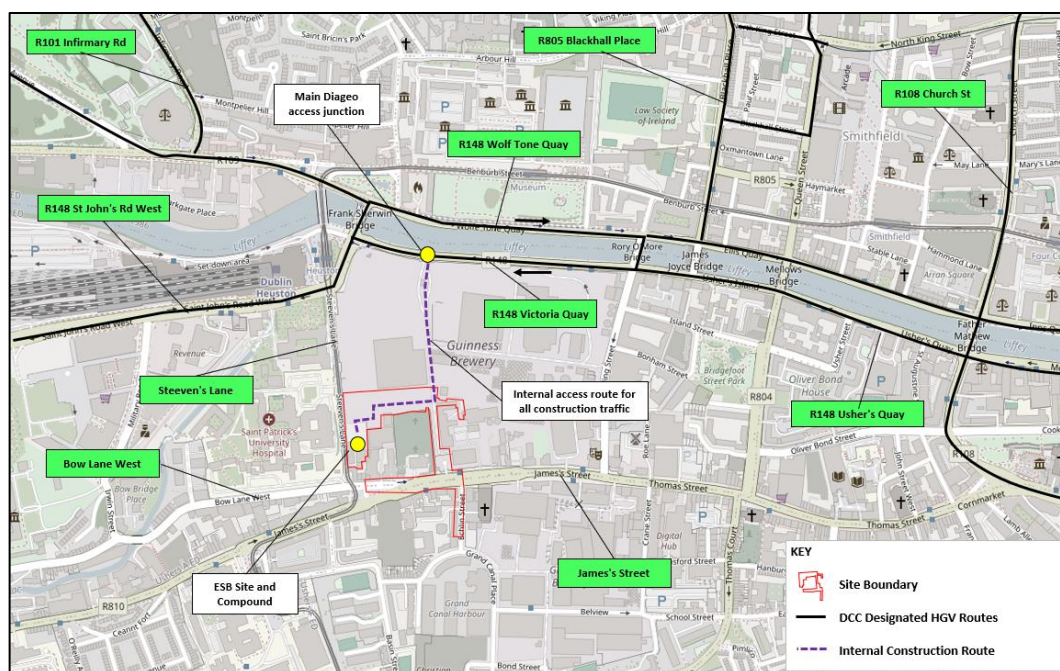
- 3.5.1 During the construction stage, all vehicle access into the site compound, and ESB construction site, will be through the existing Diageo facility via the main entrance on R148 Victoria Quay, which is shown in **Figure 14**.

Figure 14. Diageo Site Entrance on R148 Victoria Quay



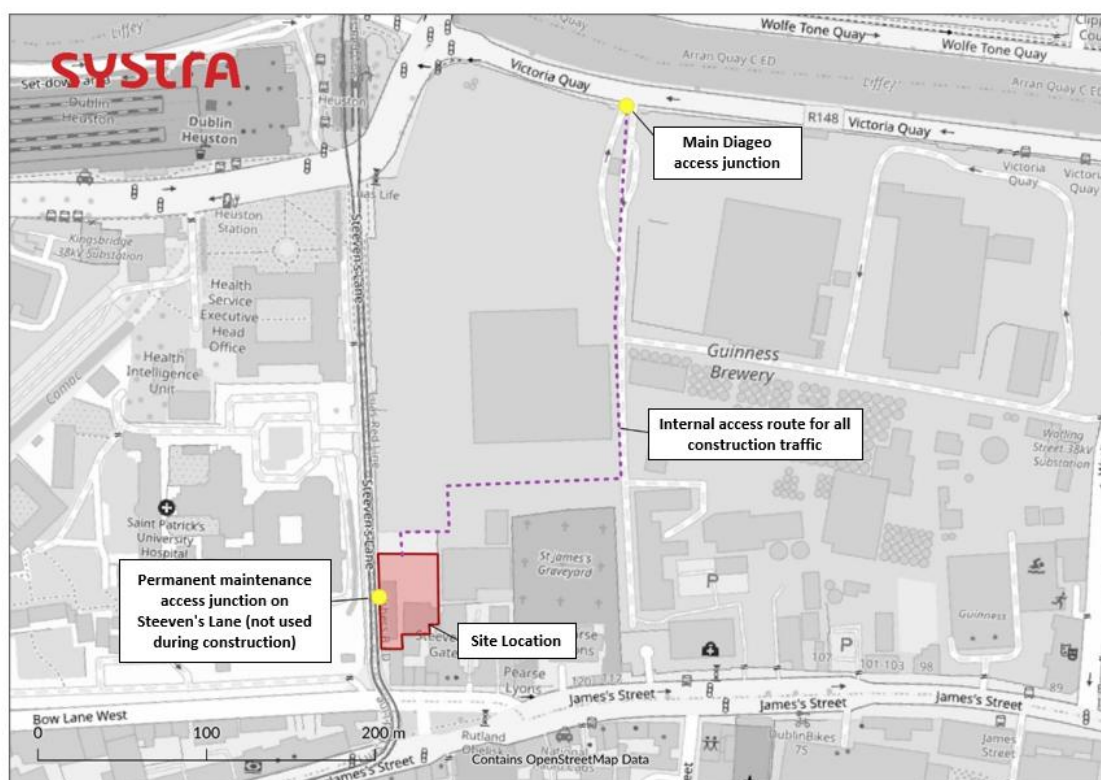
3.5.2 **Figure 15** provides an overview of construction traffic routes to the Diageo access.

Figure 15. Overview of Construction Vehicle Access to Substation Compound



3.5.3 The route through the Diageo site to the site compound is shown in **Figure 16**.

Figure 16. Vehicular Site Access through Diageo Site



- 3.5.4 Vehicle access within the Diageo site is currently subject to on-site management controls, which would apply to ESB construction traffic. This includes a 'vehicle spotter' who is required to be on-site prior to the arrival and departure of all vehicles.
- 3.5.5 Construction traffic movements will need to comply with planning conditions attached to the planning consent for the Diageo site. 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.

Volume of Construction Traffic

- 3.5.6 The overall construction programme is anticipated to last for approximately 26 months. Construction traffic will comprise:
- Cars/Vans - contractor/operative vehicles;
 - Light Goods Vehicles (LGVs) – 7.5t panel vans; and
 - Heavy Goods Vehicles (HGVs) for transporting plant/machinery, construction materials, including concrete, stone, building materials, drainage/ducting materials, structural steel, cabling, site boundary wall material and electrical components.
 - Abnormal loads associated with the delivery of two 110kV / Mv transformers to site, comprising the Transformer Delivery Vehicles (TDV), and heavy-lift cranes which will be used to lift the transformers from the Diageo site into the construction site.
- 3.5.7 The construction phases and the type and number of vehicle trips in each stage is shown in **Table 1**.

Table 1. Total and Daily Construction Trips by Phase

Activity	Phase	Loads	Two-Way Vehicle Movements	Duration (months)	Duration (working days)	Average Two-Way Vehicle Movements Per Day
Building Demolition	Demolition	100	200	3	64	3
Retaining Wall Demolition	Demolition	16	32	1	21	2
Site excavation (cut)	Civils	725	1450	9	191	8
Road material import	Civils	4	8	1	21	0
Building material import	Civils	122	244	3	64	4
Footpath construction	Civils	3	6	1	21	0
Compound formation (FFL)	Civils	480	960	3	64	15
Transformer bund	Civils	75	150	2	43	4
Retaining wall reconstruction	Civils	16	32	2	43	1
Temporary ramp	Civils	15	30	1	21	1
Delivery of Equipment	Electrical Installation works	30	60	3	64	1
Delivery of Ancillary Items	Electrical Installation works	50	100	3	64	2
Abnormal Load (girder-frame trailer)	Electrical Installation works	2	4	3	64	0
Abnormal Load (mobile cranes)	Electrical Installation works	2	4	3	64	0
Excavation works	Cable Routing	100	200	3	64	3
Material Deliveries	Cable Routing	40	80	3	64	1
Reinstatement Works	Cable Routing	345	690	3	64	11
TOTAL		2125	4250			

- 3.5.8 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.
- 3.5.9 Peak HGV movements are estimated to be in the order of 30 trips per day¹, 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.

Worker Vehicle Trips

- 3.5.10 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.
- 3.5.11 No car parking will be provided within the site compound, due to space constraints. Any workers choosing to drive to site must park in publicly available spaces in the local area.

Overall Traffic Impact During Construction

- 3.5.12 **Table 2** summarises the percentage impact of construction traffic, during the peak construction period on R148 Victoria Quay, in the vicinity of the Diageo entrance.

Table 2. Traffic Impact During Peak Construction

Ref	Location	5-day AADT	Peak Construction Traffic			% impact
			HGV	Site Workers	TOTAL	
ATC 4	R148 west of Diageo access	15,718	30	20	50	0.3%
ATC 5	R148 east of Diageo access	17,341	20	20	40	0.2%

- 3.5.13 Table 2 demonstrates that the predicted increase in traffic is 0.2% and 0.3%. This is well below the threshold of 5% set out in TII's Traffic and Transportation Assessment Guidelines, above which a detailed assessment of impact is required. On this basis, no further assessment of traffic impacts is required.

On-site Vehicle Types

- 3.5.14 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.
- 3.5.15 The number and type of vehicles / plant that will be required on site in each Phase is shown in **Table 3**.

¹ Table 5 shows the calculated **average** two-way movements per day. Peak movements per day may be slightly higher than the average.

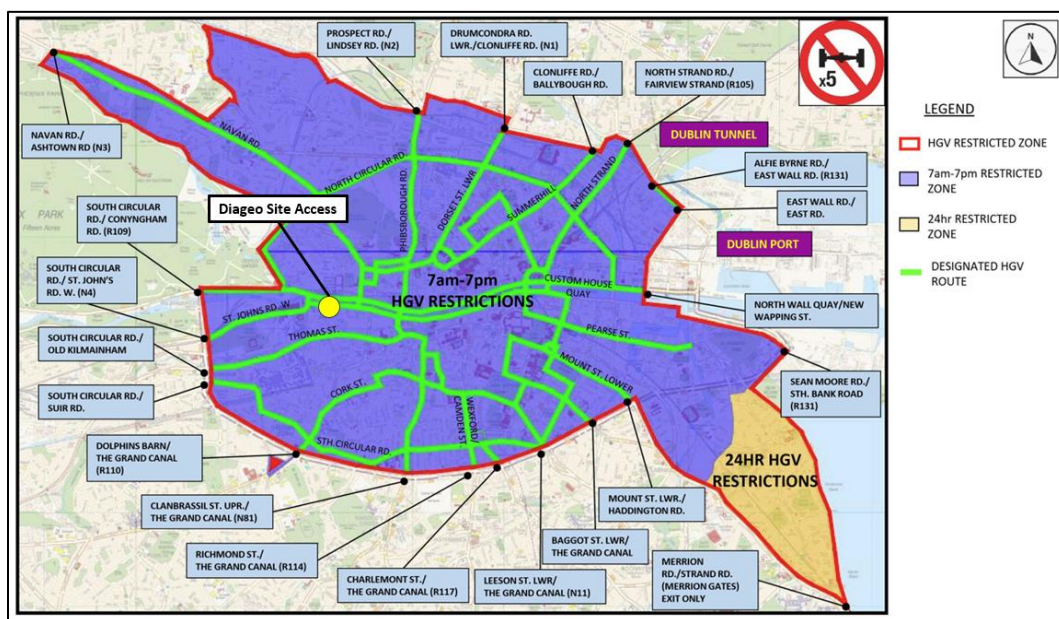
Table 3. Construction Vehicle Types by Phase

Plant and Machinery	Demolition Phase	Civils Construction Stage	Electrical Installation Stage	Total Construction Vehicles	Duration (months)
Long-Reach Excavator demolition excavator	1	0	0	1	3
Standard tracked excavator for piece-meal masonry demolition	1	0	0	1	3
Excavator-mounted hydraulic breaker	1	0	0	1	3
Telescopic Handler	1	0	1	2	5
Mobile Crane	0	1	1	2	5
15-30T Excavator	0	3	2	5	17
12T Roller	0	2	1	3	8
Tractor & Trailer	0	0	1	1	3
3-10T mini digger	0	2	0	2	10
Diesel Generator	0	1	2	3	17
CFA Piling Rig	0	1	0	1	1
Total	4	10	8	20	20

Construction Traffic Routing

3.5.16 Figure 17 shows DCC's 'Designated HGV Route' network within the city centre.

Figure 17. Designated HGV Routes



3.5.17 Restrictions on these routes only apply to HGVs with 5 or more axles, meaning that the majority of HGV traffic associated with the ESB site (with the likely exception of 16.5m max legal HGVs) would not be subject to these restrictions. Nevertheless, **Figure 17** provides a useful overview of the most suitable routes for HGVs in the city centre, which encompasses all of the routes that ESB HGV construction vehicles are likely to use.

3.5.18 This network includes R148 Victoria Quay, from which the Diageo site (and hence the ESB site) takes access.

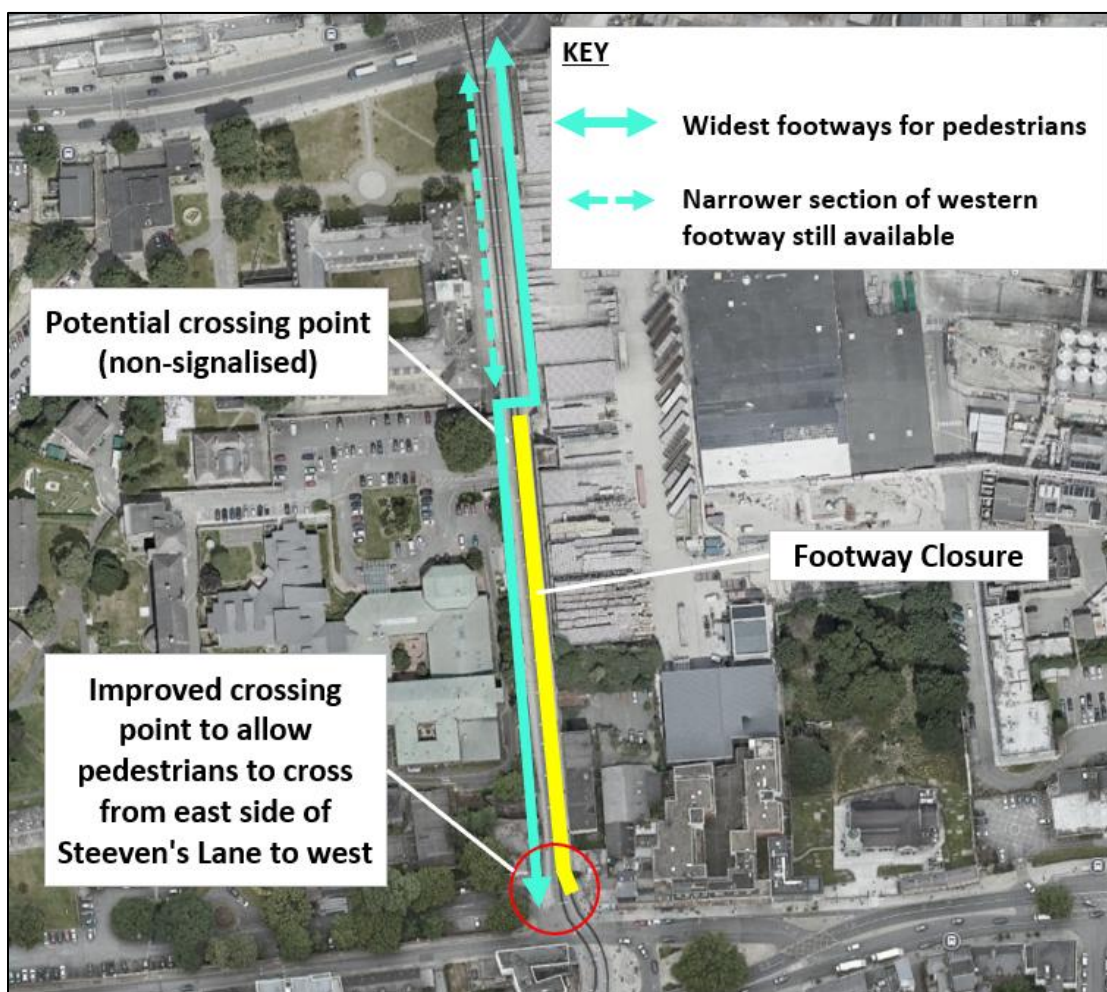
Abnormal Loads

- 3.5.19 As set out in Table 3, two 110 kV/MV transformers will be delivered to site during the electrical installation phase. These units constitute abnormal loads and will be transported by specialist haulage contractors using a specialised girder-frame trailer.
- 3.5.20 Transformer delivery will be required via the Diageo entrance on R148 Victoria Quay, after which the units will be lifted up to the Steeven's Lane site using a heavy-lift mobile crane. A crane of approximately 500 t capacity (or larger) is likely to be required, positioned within the temporary construction compound located in Diageo's Keg Storage Area. These heavy-lift cranes may also constitute abnormal loads.
- 3.5.21 All GIS equipment and associated electrical components will be delivered using standard HGVs and will not be classified as abnormal loads.
- 3.5.22 While the precise load configuration and delivery methodology will be confirmed following the construction tender stage, 110 kV transformers typically weigh between 60–70 tonnes during transport. As such, specific traffic-management measures and localised delivery arrangements will be developed through an Abnormal Load Assessment undertaken by the appointed Contractor. The Contractor will liaise with An Garda Síochána and Dublin City Council to secure the necessary permits, determine whether a Garda escort is required, and agree an appropriate delivery window.
- 3.5.23 Where practical, abnormal loads will be transported, by specialist haulage contractors, overnight, and it is therefore, in conjunction with the low number of movements, probable that associated disruption to road network operation will be negligible.

3.6 Steeven's Lane Footway Closure

- 3.6.1 A temporary footway closure on the eastern side of Steeven's Lane, in front of the site, will be required during the planned demolition and construction works for a period of around six months.
- 3.6.2 SYSTRA's recommended strategy, which has been informed by a Pedestrian Comfort Level Assessment, is shown in **Figure 18**.

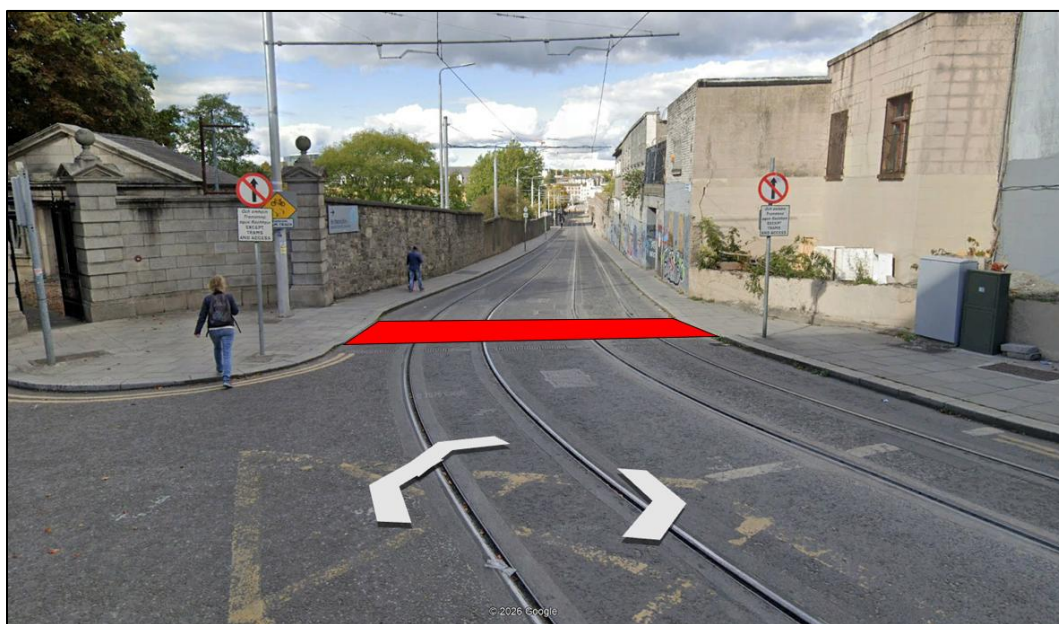
Figure 18. Steeven's Lane Pedestrian Arrangements During Construction



3.6.3 The proposed strategy is that:

- The eastern footway is closed along the extent of the site boundary. All pedestrians will use the western footway on this section.
- A suitably signed crossing point is provided to the north of the site, to enable pedestrians to cross between the two footways. This will allow use of the wider northern section of the eastern footway to be retained and reduce pressure on the narrowest northern section of the western footway.
- Temporary signs and potentially enhanced road markings are provided at the existing dropped kerb crossing across the south end of Steeven's Lane (see **Figure 19**), to allow pedestrians to cross from east to west.

Figure 19. Enhanced Crossing Location on Steeven's Lane

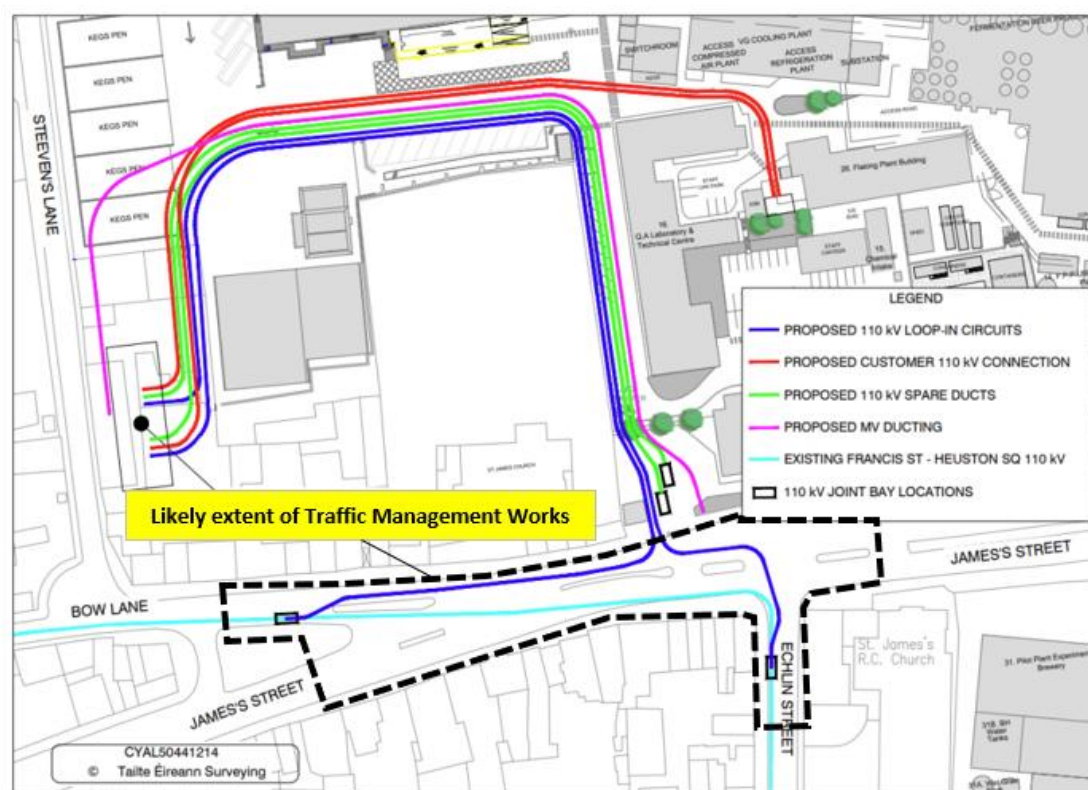


- 3.6.4 The PCA demonstrates that the sections of western footpath on Steeven's Lane to the south of the proposed crossing, and the section of eastern footpath on Steeven's Lane to the north of the proposed crossing, will have sufficient capacity to accommodate pedestrian flows when the footway closure is in place.
- 3.6.5 It is anticipated that exact arrangements will be finalised by the Contractor as part of the detailed design process.

3.7 Traffic Management During Electrical Works

- 3.7.1 A description of the Electrical Works that will be undertaken is provided in **Section 3.3**.
- 3.7.2 Temporary traffic management will be required in the James's Street, Bow Lane West and Echlin Street area, for a period of around 3 months. The likely extent of these works is shown in **Figure 20**.

Figure 20. Likely Extent of Traffic Management Works



- 3.7.3 All road traffic management measures will adhere to the relevant documentation; “Guidance for the Control and Management of Traffic at Road Works” and “Chapter 8 - Temporary Traffic Measures and Signs for Roadworks”.
- 3.7.4 All works along the public road will be subject to a Road Opening License (ROL). The application for the ROL will include a full traffic management plan, the details of which will be agreed with Dublin City Council prior to the submission of the ROL application
- 3.7.5 The traffic management system will most likely involve the use of a stop/go system, or temporary traffic lights, with a single lane of traffic in operation. A full road closure will be not required but lane closures will be required. Works may be required to be carried out at night to limit traffic disruption and this will be agreed with DCC during the road opening licence approval
- 3.7.6 Appropriate signage will be erected for all works. This will include temporary signage indicating site access, general information signage to inform road users of the nature and location of the works. Signage will be checked regularly to ensure it remains in place and is secure.
- 3.7.7 The cable route will be divided into sections and traffic management measures will only be installed along sections of road which works are being carried out on.
- 3.7.8 The impact of these measures on general traffic will be short-lived, and temporary in nature. They are likely to increase slightly increase journey times along R810 James’s Street, and some traffic may re-route around the area.

3.8 Summary of Impacts During the Construction Stage.

3.8.1 The assessment has found that:

- The volume of vehicle trips that will be generated during the construction stage is small, and limited to around 30 two-way HGV movements, and 20 two way car / van movements during the peak construction period. This is predicted to result in very small percentage increases on the public road network, well below the TII threshold of 5% at which further assessment and potentially mitigation is required.
- Construction traffic will access the site compound through the Diageo site, meaning that the LUAS line on Steeven's Lane will be unaffected.
- One of the key effects during this period will result from the closure of a portion of the footway on the eastern side of Steeven's Lane. SYSTRA has undertaken a Pedestrian Comfort Level Assessment on Steeven's Lane, which has been informed by a pedestrian survey. The PCLA has been used to inform the proposed pedestrian strategy on Steeven's Lane whereby pedestrians will use the western footway for the length of the closure of the eastern footway, and then be provided with a crossing point to allow them to use the eastern footway beyond this point (should they wish). The PCLA demonstrates that this provides sufficient capacity to accommodate pedestrian flows when the footway closure is in place.
- Traffic Management measures will be required in James's Street, Bow Lane West and Echlin Street area, for a period of around 3 months, whilst electrical works are completed. The impact of these measures on general traffic will be short-lived, and temporary in nature.

4. OTHER MEASURES TO MINIMISE AND MITIGATE IMPACTS

4.1 General

- 4.1.1 This section of the Construction Management Plan sets out the mitigation measures that could be employed during construction to minimise the impact of construction traffic on the local residents, businesses and the local highway network.

4.2 Primary Point of Contact

- 4.2.1 A designated Primary Point of Contact will be appointed to implement, communicate and monitor the CTMP. This could potentially be the Construction Site Manager, or one of their team.
- 4.2.2 The details of the appointed contact will be provided to DCC prior to activities beginning on-site.

4.3 Subcontractors

- 4.3.1 Individual subcontractors involved in activities such as waste removal should be required to incorporate the relevant requirements from the CTMP into their activities as well as statutory requirements. Any potential sub-contractors will be required to show how they will comply with the OCTMP and how targets will be achieved and impacts minimised.

4.4 Delivery Control

- 4.4.1 The contractor will be required to plan and manage deliveries and collections from the site to minimise the impact on the surrounding road network and local communities.
- 4.4.2 The contractor shall consider the following measures during the construction period:
- Peak hours for a construction site are generally outside regular 'office / employment' hours and where possible deliveries (especially abnormal loads) shall not be within the morning and evening road network peaks;
 - The number of delivery trips shall be minimised through a combination of consolidated ordering, rationalising suppliers and consolidated deliveries;
 - On-site waste shall be minimised through recycling and re-use to minimise the number of collections from site;
 - Deliveries to the site will be staged, with drivers given specific time windows for arrival on-site. The release of vehicles from the site would also be controlled to prevent convoys of vehicles; and
 - Review of delivery times considering aspects such as school holidays, events in the local community, thus minimising the impact of peak construction deliveries on the road network (where feasible).

4.5 Traffic Route Designation

- 4.5.1 Construction traffic will use approved routes to and from the site, which are likely to correspond to DCC's Designated HGV network.
- 4.5.2 Routes to the site will be designated through appropriate signage and via supplier communications (sub-contractor conditions of contract). The designation of the access routes

will ensure that wayfinding is effective and the most suitable routes for HGVs accessing the site is used. The contractor will ensure all vehicles utilise the designated routes.

- 4.5.3 Members of the public, or other interested parties, will be able to report any instances of vehicles not utilising the designated routes to the contractor who would take necessary action to prevent a repeat.

4.6 Signage and Wayfinding

- 4.6.1 Given the existing number of HGVs currently accessing the Diageo site, the small number of additional daily trips associated with the ESB development are unlikely to necessitate any additional warning signs on the public road network.
- 4.6.2 Warning signs should, however, be installed within the Diageo site, to warn employees and other visitors (pedestrians, drivers etc) that construction is taking place. Signs will be required along the route between the Diageo entrance and the construction compound, and in the vicinity of the site itself. The contractor will agree the exact location of the signage with Diageo once appointed. **Figure 21** illustrates examples of the type of signage which could be utilised.

Figure 21. Examples of Signage

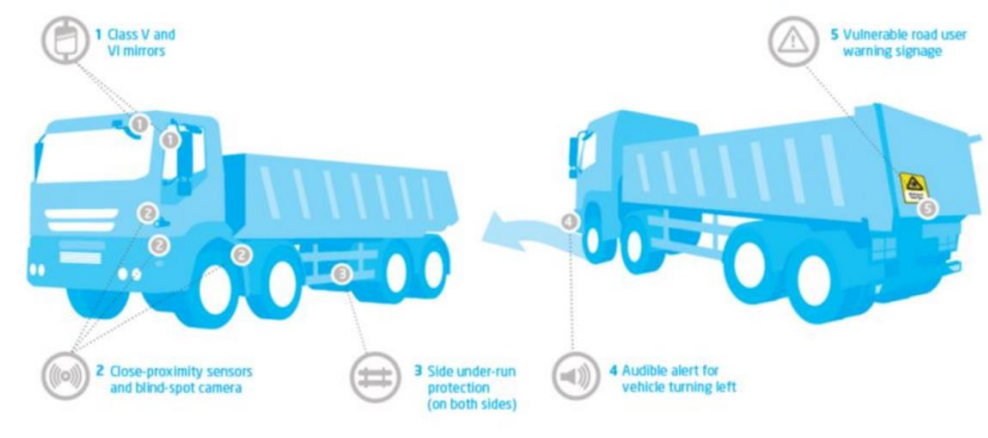


4.7 HGV Safety Measures

- 4.7.1 Heavy Goods Vehicles associated with the construction of the development should:
- Have Side Guards fitted, unless it can be demonstrated to the reasonable satisfaction of the Employer, that the Lorry will not perform the function for which it was built, if Side Guards are fitted;
 - Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides a reliable alternative), a Close Proximity Sensor, an in-cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre;
 - Have a Class VI Mirror; and bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

- 4.7.2 The Site Manager should ensure that all contractors and fleet operators at the site sign with vehicles over 3.5 tonnes will be required to have the vulnerable road user safety kit, outlined in **Figure 22**, fitted.

Figure 22. HGV Safety Measures



- 4.7.3 The Site Manager should undertake checks of vehicles accessing the site. In the event that a vehicle arrives at the site and is not fitted with the above safety kit then the vehicle may be refused entry and a non-conformance report completed.
- 4.7.4 The Site Manager / Contractor should ensure that all contractors and fleet operators accessing the site have received the correct level of training and have had driver license checks.

4.8 Contractor Speed Limit

- 4.8.1 All vehicles shall comply with the site speed limits and traffic management requirements as specified by Diageo's St James's Gate site rules and induction procedures.
- 4.8.2 SYSTRA do not feel it necessary to impose any additional speed limit restriction on the public road network.
- 4.8.3 On-site operatives will be briefed on the speed limit through induction sessions and through regular staff briefings. Other parties responsible for site deliveries will also be instructed on the restrictions.

4.9 Good Neighbour Policy

- 4.9.1 The contractor will strive to be a 'Good Neighbour', with systems employed to ensure local issues are understood. As part of this the contractor could sign up to the Considerate Constructor Scheme (CCS).
- 4.9.2 Consultation and communication with local residents and businesses will begin prior to commencement of construction. It is suggested that this focuses on residents, businesses and other occupiers of premises in the area around Steeven's Lane, Bow Lane West, James's Street and Echlin Street.
- 4.9.3 An induction specific to the development site will be provided to all personnel before construction commences. This will identify any issues and sensitivities in the context of the surrounding community.

4.10 Dust and Dirt Control

- 4.10.1 Mud and debris on the road are regarded as one of the main environmental nuisances and safety problems arising from construction sites. All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway.
- 4.10.2 A road sweeper will be used within the Diageo site, to ensure that excessive dust and dirt does not build up. It is proposed that the road sweeper will operate at a minimum frequency of once per week with additional sweeping taking place as required.
- 4.10.3 Further to this, all skips and storage area for cement, sand and fine aggregates will be sheeted/covered when not in use. All HGVs serving the site will be required to ensure that their wheels have been cleared of mud and debris, with wheel washing facilities provided on site. Similarly, provision will be made for cleaning of the road whenever required.
- 4.10.4 Goods, waste material and wheelbarrows will be secured and covered prior to being transported to and from the site to prevent the escape of debris and dust.
- 4.10.5 The Site Manager will undertake regular inspections of the site and the roads surrounding the site to ensure that dust control measures are complied with. The Site Manager will record and respond to all dust and air quality pollutant emissions complaints and will maintain a log of any complaints and any action taken to resolve the issues.
- 4.10.6 The frequency of site inspections will increase when activities with a high potential to produce dust are being carried out as well as during periods of prolonged dry or windy conditions.

4.11 Pedestrian Safety Measures

- 4.11.1 Pedestrian safety throughout the construction programme will be paramount. This will be particularly important:
 - Within the Diageo site, and the site compound.
 - On Steeven's Lane during the closure of the eastern footway.
 - In the James's Street, Bow Lane West and Echlin Street area, when electrical cabling work is being undertaken, and traffic management is in place.
- 4.11.2 The appointed Contractor should draw up detailed plans showing temporary arrangements for pedestrians during each phase of construction, to include:
 - Footpath closures
 - Diversion routes.
 - Crossing points.
 - Signage.

4.12 Workforce Travel and Parking Arrangements

- 4.12.1 It is anticipated that some workers will use public transport and / or walk to the site. Regarding pedestrian access, all construction personnel are required to undertake a site-specific induction prior to gaining access to the compound. This induction outlines the requirements for pedestrians to stay on the dedicated walkways clearly marked along the site. During the construction works, all personnel will be required to use these walkways while traversing on site by foot. If, at any stages of construction, works are required outside the main hoarding lines, a detailed plan including a risk assessment and method statement (RAMS), as well as appropriate traffic management systems will be developed by the

contractor to be presented for review and approval by Diageo's internal Health and Safety team prior to the execution of such works.

- 4.12.2 No car parking will be provided within the site compound, due to space constraints. Any workers choosing to drive to site must park in publicly available spaces in the local area.

4.13 Staff Induction & Code of Conduct

- 4.13.1 All site staff will be informed about traffic management arrangements and procedures via site induction literature packs.
- 4.13.2 Transportation of materials to and from the site should be conducted by HGV vehicles operated by drivers with an in-date Driver Certificate of Professional Competence (CPC) qualification.
- 4.13.3 In addition to the Driver CPC qualification, regular 'in-house' coaching should be provided to ensure drivers maintain best practice when operating HGVs.
- 4.13.4 Drivers should be fully inducted and enrolled into a code of conduct which outlines how driving duties should be undertaken. The driver's code of conduct should include guidance on the following:
- Required license categories;
 - General vehicle operation and highway code;
 - Drivers working hours / fatigue management;
 - Breakdowns / Road Traffic Collisions / Emergencies;
 - Use of electronic devices;
 - Drug and Alcohol policy; and
 - Behavioural expectations.

4.14 Security and Emergency Procedures

- 4.14.1 The Appointed Contractor shall prepare and maintain an Emergency Response Plan / Contingency Plan (ERP) for the construction phase of the works. The plan shall be proportionate to the nature, scale and environmental risks associated with the proposed construction activities and shall set out the procedures to be followed in the event of an emergency or incident, including spills or releases of potentially polluting materials, extreme weather events, fire, drainage impacts, risks to sensitive environmental receptors, archaeological or ecological features, and interactions with public road or Luas infrastructure.
- 4.14.2 The Emergency Response Plan / Contingency Plan shall be communicated to all relevant site personnel through site induction and environmental training and shall be displayed at suitable locations on site. Appropriate emergency response materials and pollution control equipment, including spill kits, shall be available at suitable locations across the site.
- 4.14.3 In the event of an environmental emergency or incident, the Environmental Manager shall be notified immediately and shall assess the incident, coordinate the required response actions, and ensure that appropriate containment, clean-up, reporting and corrective measures are implemented. All incidents shall be recorded and managed in accordance with the requirements of the Emergency Response Plan / Contingency Plan.

4.1 Sustainability

4.1.1 The contractor will plan and execute construction with a demonstrably high regard to sustainability. In particular the following objectives will be set in place:

- Minimisation of vehicle movements to / from the site;
- Promotion of shared transport arrangements for construction staff, and encouragement to use public transport;
- Thorough pre-planning of operations on-site to optimise the redistribution of earthworks materials together with minimisation of haul distances;
- Apply a 'reduce-reuse-recycle' philosophy to all waste processing activities; and
- Conform to construction / building codes of practice in relation to sustainability objectives and procedures.

5. SUMMARY

- 5.1.1 SYSTRA Ltd (SYSTRA) has been commissioned by MWP Ltd to produce an Outline Construction Traffic Management Plan (OCTMP) in relation to the proposed development of a 110 kV Distribution substation at Steeven's Lane, located in the southwest of Dublin City Centre.
- 5.1.2 This OCTMP outlines a series of measures that could be implemented through the construction stage to help minimise traffic impacts and associated environmental impacts.
- 5.1.3 It is expected that the construction of the development will last for approximately 26 months. During the Construction stage, all vehicular site access will be via the Diageo main access junction on R148 Victoria Quay. No vehicles will access via Steeven's Lane. No more than 30 two-way HGV trips per day (during peak construction periods) are expected during any construction phase.
- 5.1.4 The following primary measures are proposed to manage and mitigate the effects of the construction stage of the ESB Development:
- Effective delivery planning and control.
 - Ensuring that contractors use designated construction routes.
 - Providing adequate signage, both for wayfinding and to warn drivers, pedestrians and other road users of the presence of construction traffic.
 - Ensuring that HGVs have compliant safety measures fitted.
 - Ensuring appropriate vehicle speeds, particularly within the Diageo site.
 - Operating a 'Good Neighbours' policy, to ensure that local businesses, residents and other affected parties are kept informed of ongoing or planned works.
 - Effectively controlling dust and dirt on the site and in the surrounding area.
 - Operating within agreed site working hours, to eliminate undue disturbance at 'quiet' times of the day, or at the weekend.
 - Ensuring that worker car parking is retained within the site, or in designated areas.
 - Encouraging as many workers as possible to walk, or use public transport to travel to work.
- 5.1.5 Pedestrian safety throughout the construction programme will be paramount. This will be particularly important:
- Within the Diageo site, and the site compound.
 - On Steeven's Lane during the closure of the eastern footway.
 - In the James's Street, Bow Lane West and Echlin Street area, when electrical cabling work is being undertaken, and traffic management is in place.
- 5.1.6 The appointed Contractor should draw up detailed plans showing temporary arrangements for pedestrians during each phase of construction, to include:
- Footpath closures
 - Diversion routes.
 - Crossing points.
 - Signage.

ENGINEERING AND ENVIRONMENTAL CONSULTANTS



Cork

Park House,
Bessboro Road,
Blackrock, Cork
T: 021 453 6400
E: info@mwp.ie

Tralee

Reen Point,
Blennerville, Tralee,
Co. Kerry
T: 066 712 3404
E: tralee@mwp.ie

Limerick

The Elm Suite, Loughmore
Centre, Raheen Business
Park, Limerick
T: 061 480 164
E: limerick@mwp.ie

Galway

Unit 27, Top Floor
Briar Hill Business Park,
Galway,
T: 091 399 633
E: info@mwp.ie

London

2 Exchange Tower,
1-2 Harbour Exchange
Square, London
T: 0044 20 7253 0893
E: mail@mwvalsh.co.uk