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Appendix 4.1

Construction Environmental Management Plan (CEMP)

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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR THE DEVELOPMENT OF A HEALTHCARE WASTE MANAGEMENT FACILITY AT BLARNEY BUSINESS PARK

Construction Environmental Management Plan (CEMP)

Prepared for:
SRCL Ireland Ltd (T/A Stericycle)

Date: **November 2025**

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We protect what matters.

Document No:
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1. INTRODUCTION

1.1 General Introduction and Purpose

This document is the Construction and Environmental Management Plan (CEMP) for the development of a Healthcare Waste Management Facility at Block 8003, Blarney Business Park, Shean Upper, Blarney, County Cork, T23 EYH5 and has been prepared for SRCL Ltd. T/A Stericycle (herein referred to as Stericycle) to accompany the planning application for the proposed development.

This document sets out the construction and environmental management measures associated with the proposed development. This plan will be developed further by the developer/appointed contractor to reflect input during the consenting stage and at the post-planning and construction stages. Any adjustments to the CEMP will be carried out on the basis that they do not increase the impacts identified assessed and mitigated against addressed in the Environmental Impact Assessment Report (EIAR).

This document should be read in conjunction with the EIAR prepared for the proposed development, along with other relevant drawings and documentation. In the case of any ambiguity or contradiction between this CEMP and the EIAR, the EIAR shall take precedence.

This CEMP sets out the key environmental management measures associated with the construction of the proposed development, to ensure that during this phase of the development, the environment is protected and impacts on the environment are minimised.

The document is divided into six sections:

Section 1: Introduction: this section provides details on the existing site and the proposed development.

Section 2: Existing Site Environmental Conditions: this section provides details of the existing geological, hydrological, ecological and archaeological conditions at and around the proposed development site. These conditions are to be considered by the Contractor in the construction phase of this proposed development.

Section 3: Overview of Construction Works: this section provides an overview of the construction works proposed.

Section 4: Environmental Management Plan (EMP): this section outlines the main requirements of the EMP, the project obligations, the Environmental Management System (EMS) and outlines the environmental mitigation measures for the protection of the environment including measures relating to ecological protection, noise and dust minimisation, surface water management, and construction waste and traffic management.

Section 5: Safety & Health Management Plan: this section defines the work practices, procedures and management responsibilities relating to the management of safety and health during the design and construction of the proposed development.

Section 6: Emergency Response Plan: this section contains predetermined guidelines and procedures to ensure the health, safety and welfare of everybody involved in the project and to protect the environment during the construction phase of proposed facility.

1.2 The Applicant

Stericycle provides essential healthcare waste management solutions in Ireland and internationally and are a Subsidiary of WM Inc. WM are a publicly traded US-headquartered market leader in waste management. Stericycle have a strong track record supporting the public and private sector in providing sustainable, resilient healthcare waste management services.

Stericycle holds a national contract with the Health Services Executive (HSE) to manage all the healthcare waste generated by HSE providers across the country and has successfully provided these services from two sites in the Dublin area for over twenty years.

Stericycle carries out all its waste management activities under a Quality Management Systems (certified to ISO 9001: 2015), an Environmental Management Systems (certified to ISO 14001: 2015) and Occupational Health and Safety Management Systems (ISO 45011: 2018).

1.3 The Site

The proposed development site is located at Blarney Business Park in the north-west of the Cork City area (ca. 7.2 km north-west of Cork City Centre). It is directly east of the settlement of Blarney.

Blarney Business Park is an established business park characterised by commercial, light-industrial and industrial land use. Construction of the Business Park commenced in the mid-2000's. In 2018, Blarney Business Park was acquired by the developer JCD Group Ireland and it has been developed significantly since then.

The proposed development site is ca. 1.32 hectares and is located at the centre of the business park. A light-industrial/warehouse building and associated site infrastructure has been constructed on-site.

The site and business park can be accessed directly from the N20 Cork to Limerick Road, which runs to the immediate west of the site. The Cork to Limerick railway line runs directly north of the business park.

The Shean Upper Stream is situated ca. 230 m south-west of the site. This drains in a southerly direction into the Clogheenmilcon Fen ca. 690 m to the south the site. Clogheenmilcon Sanctuary Walk travers the area of the fen. The fen drains into the Blarney River at a point ca. 930 m to the south-west of the site.

Dispersed rural one-off housing and agricultural land delineated by hedgerow surrounds the business park in all cardinal directions. Areas of forestry are present in the area surrounding the business park, to the west, south-west and south. Ring Wood is situated 415 m to the west of the site.

Residential estates and associated land use that lie within the settlement of Blarney are situated to the north-west, west and south-west of the site. The nearest sensitive human receptors to the site are residential dwellings situated at Aisling Geal 470 m north-west of the site.

The location and context of the proposed development is illustrated in Figure 1-1 overleaf.

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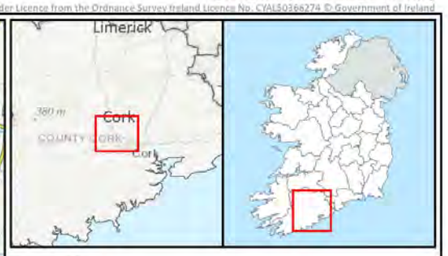

Legend

- Site Boundary
- County Boundary

0 0.5 1 2 Kilometers

TITLE:	Site Location		
PROJECT:	Planning Application and EIAR for Healthcare Waste Management Facility		
FIGURE NO:	1.1		
CLIENT:	Stericycle Ltd.		
SCALE:	1:50,000	**REVISION:**	0
DATE:	18/07/2025	**PAGE SIZE:**	A3

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1.4 Overview of the Proposed Development

The proposed development will comprise the installation and operation of Healthcare Waste Treatment and Transfer Facility at the proposed development site. The facility will accept up to 15,000 tonnes of packaged healthcare waste per annum for management and will provide healthcare waste management capacity for the southern and western regions of Ireland. The proposed development constitutes a change of use of the site.

The following additions/alterations to existing infrastructure on-site will be made to facilitate the proposed development:

1. The installation of plant and facilities inside the existing light-industrial/warehouse building on-site to accommodate healthcare waste management operations and associated commercial activities.
2. The installation of a multi-flue stack (1.5 m x 2.0 m) at the existing roof of the building.
3. Modifications to increase the height of 2 x rear station doors from 3.0 m to 4.0 m.

Waste management activities on-site will be undertaken entirely within the existing building on-site.

A Proposed Site Layout Plan depicting the proposed alterations relating to this proposed development is shown in a drawing which accompanies this planning application (See Drawing Reference 2896-P-003 Proposed Site Layout Plan contained in Volume 4 of the accompanying EIAR).

1.4.1 Proposed Healthcare Waste Treatment and Transfer Facility

A Healthcare Waste Treatment and Transfer Facility will be installed inside the existing building on-site. This facility will accept packaged healthcare waste for on-site treatment and/or transfer off-site for recovery/recycling or disposal, as the case may, at third-party waste management facilities. It will also accept packed hazardous waste for transfer off-site for third party waste management facilities. It will have a 50-year lifespan.

This facility will be comprised of the following components:

- A Healthcare Waste Treatment Plant, consisting of a shredder; a steam injection auger, an overband magnet and associated handling, conveyance and water systems;
- a gas fired steam generation boiler to supply the steam auger;
- a Bin Washing System for re-usable containers;
- an air abatement system to treat waste gases arising at the treatment plant. This system will consist of a high efficiency particulate air (HEPA) filter, a coalescing vessel and a carbon filter bed;
- a stack emission point to air (via the roof of the existing building), which will emit waste gases from the treatment process and the gas fired steam raising plant;
- an emission point to sewer, where effluent arising from treatment process condensate and bin washing will be discharged;
- a Waste Re-packaging Facility for healthcare and hazardous waste being subject to re-packaging and transfer;
- designated waste storage areas/facilities for waste pending treatment; waste pending re-packaging and transfer; treated waste residues for transfer; and re-packaged waste for transfer. These storage areas/facilities will have impermeable surfaces and sealed drainage and all waste is stored in fully enclosed, leak-proof containers; and,
- a Sharps Container Management Facility.

1.4.2 Proposed Ancillary Facilities for Existing Building

The following ancillary facilities will be installed inside the existing building on-site to accommodate waste management operations and ancillary commercial activities.

- A main store;
- a cold store;
- a canteen;
- staff welfare facilities;
- office areas;
- a conference room;
- a laboratory;
- a mezzanine storage area
- a server room;
- a cleaners closet;
- a break out area; and
- a staff lobby.

1.4.3 Alterations to Existing Site Infrastructure

Existing site infrastructure on-site will be utilised by the Applicant to operate the proposed Healthcare Waste Treatment and Transfer Facility.

It is not proposed to increase the size of the existing water, gas, electricity, wastewater or stormwater connections to the site. Existing utility connections at the site are sufficient for accommodating the proposed development.

Some further minor alterations will be made to existing ancillary site infrastructure to accommodate the proposed Healthcare Waste Treatment and Transfer Facility. These are described below.

1.4.4 Multi-Flue Stack

A multi-flue stack (1.5 m x 2.0 m) will be installed at the roof of the existing building. Three flues be housed by this stack – a 600 mm for the proposed treatment process abatement plant, a 300 mm flue from the proposed gas fired steam raising plant, and a 300 mm flue that will serve to ventilate steam from the proposed bin wash process.

1.4.5 Modifications to Existing Station Doors

2 no. existing station doors to the rear of the existing building will be increased in height from 3.0 m to 4.0 m to accommodate unloading and acceptance of packaged healthcare waste from vehicles at these doors.

1.4.6 Proposed Firewater Retention System

A firewater retention system will be constructed/installed within the existing building on-site for the purpose of containing any firewater that may be generated in the event of a fire on-site. This system is depicted in Drawing Reference 2896-P-101 accompanying this planning application and will consist of the following:

- A concrete bund wall surrounding the outer perimeter of the facility building. This wall will 375 mm high.
- Automated Hazardous Material and Firewater Containment Barriers at access point gaps in the bund wall. This barrier will raise to a heigh of 375 mm when activated. It will be automatically triggered in the event of an emergency, spill or fire on-site. The specific systems will be Anhamm Liquid Stop Barriers which are self-closing, stainless steel barriers with chemical and age resistant Polytetrafluoroethylene (PTFE) seals.
- An automatic shut off penstock on a pneumatic valve to the foul drain from the facility.

In the event of a fire, these components will act in combination to ensure the internal area of the building can act as firewater retention structure. The system will provide complete retention of any firewater which could be generated in the event of a fire on-site. It has been designed in accordance with EPA Guidance on Retention Requirements for Firewater Run-off (EPA, 2019), and to retain 'worst-case' firewater volumes that could be generated in a fire at the facility.

The system will be constructed/installed and periodically inspected, tested and maintained in accordance with EPA requirements defined in the Industrial Emissions licence for the operational facility and Best Available Techniques defined for waste management facilities.

2. EXISTING SITE ENVIRONMENTAL CONDITIONS

This section of the CEMP describes the existing sites and environmental conditions. The information contained in this section is an abridged version of the text contained in the EIAR. The EIAR should be consulted for a more extensive description of the existing site.

2.1 Geological Conditions

The subsoils present at the proposed development site were taken from the GSI 1:50,000 Quaternary Geology of Ireland map (GSI, 2025) and comprise of 'Till derived from Devonian sandstones' (TDSs). Other deposits outside of the site but within the study area include 'Bedrock outcrop or subcrop (Rck), 'Gravels derived from Devonian sandstones'(GDSs), 'Alluvium' (A), and 'Fen Peat' (FenPt).

The GSI 1:100,000 scale bedrock geology map (GSI, 2025) shows the site is primarily underlain by the Gyleen Formation. The Gyleen Formation is described as comprising of sandstone with mudstone and siltstone. Other bedrock outside of the site but within the study area include

There are two primary unnamed faults surrounding the site, one 1.0 7km east, and one 0.33 km west of the site. Both fault lines run in a north-west direction. The nearest outcrops to the site are 0.41 km to the north-east, and 0.47 km to the south south-west.

The GSI - Irish Geological Heritage Section (IGH) and NPWS (National Parks and Wildlife Service) have undertaken a programme to identify and select important geological and geomorphological sites throughout the country for designation as NHAs (Natural Heritage Areas) – the Irish Geological Heritage Programme. This is being addressed under 16 different geological themes. For each theme, a larger number of sites (from which to make the NHA selection) are being examined, to identify the most scientifically significant. The criterion of designating the minimum number of sites to exemplify the theme means that many sites of national importance are not selected as the very best examples. However, a second tier of County Geological Sites (CGS) (as per the National Heritage Plan) means that many of these can be included in County Development Plans and receive a measure of recognition and protection through inclusion in the planning system.

The GSI Online Irish Geological Heritage database (GSI, 2025) indicates that the proposed development is not located in an area of specific geological heritage interest, including NHAs and CGS. The nearest site of significant geological heritage feature to the proposed development site is St Joseph's Section (Site Code: CC008). The geological feature is described by the GSI as *'A roadside outcrop showing sub-vertical bedding planes'*. The feature is located approximately 4.26 km south-southeast of proposed development in the Cork townland of Mount Desert.

The GSI Online Minerals Database accessed via the Public Data Viewer (GSI, 2025) shows there are no quarries within the proposed development site. This nearest quarry to the site is an active sand and gravel quarry. It is located approximately 9 km southwest of the site.

The Aggregate Potential Mapping database indicates that the proposed development site is located within an area of high potential for crushed rock aggregate.

The GSI Online Landslides Susceptibility Database accessed via the Public Data Viewer (GSI, 2025) shows landslide susceptibility at the proposed development site is low.The nearest landslide event to the proposed development occurred ca. 13.8 km to the south-southeast, recorded as a boggy depression at the top of a river gulley (Event ID: GSI_LS12-0327).

The proposed development site is located on an existing vacant industrial/warehouse unit. Prior to the construction of the industrial/warehouse unit the site was a green field site comprising agricultural land. The owner of the unit has confirmed no ground or groundwater contamination occurred during the construction of the site.

Further details on the geology conditions of the site are provided in Chapter 9 – Soils, Geology and Hydrogeology of Volume 2 of the accompanying EIAR.

2.2 Hydrogeological Conditions

The groundwater vulnerability is classified by the GSI as '*High*' at the proposed development site.

The underlying subsoil permeability is '*moderate*'. The GSI mapping indicates a total thickness of overburden of 3 to 10 metres (GSI, 2025).

The proposed development is located within the Ballinhassig East Groundwater Body (GWB).

The description of the GWB has been taken from the 'Summary of Initial Characterisation' draft reports for each defined GWB published by the GSI in accordance with the Groundwater Working Group Publication: Guidance Document GW2 (2003). The GWB Characterisation Reports are available from the GSI Public Data Viewer.

According to classification work carried out as part of the Water Framework Directive and published by the EPA, the Ballinhassig East GWB is classified as having 'Good' status in terms of quality and quantity. The GWB is classified as '*Not at Risk*' of meeting of failing to meet its WFD objectives by 2027, under the 3rd cycle of the WFD risk assessment.

The site lies above a section of the Ballinhassig East GWB that comprises a locally important aquifer that consists of bedrock which is moderately productive only in local zones.

According to the GSI datasets (GSI, 2025), there are no karst features recorded within the proposed development site boundary. The nearest karst feature to the proposed development site is a cave (1407SEK001) located approximately 1.77 km southwest of the site.

Further details on the geology conditions of the site are provided in Chapter 9 – Soils, Geology and Hydrogeology of Volume 2 of the accompanying EIAR.

2.3 Hydrological Conditions

The site lies within the Water Framework Directive (WFD) catchment HA 19 known as the Lee, Cork Harbour and Youghal Bay catchment. This catchment includes the area drained by the River Lee and by all streams entering tidal waters Lough Mahon and North Channel Great Island and into Cork Harbour, Co. Cork, draining a total area of 2,182 km².

The site lies within the Manin_SC_010 WFD sub-catchment.

The Manin_SC_010 sub-catchment drains an area that is 90 km^2 in size covering sections from Blarney to Grenagh. This sub-catchment is considered to constitute the study area for the purpose of this assessment. This catchment encompasses the following sub-basins:

- MARTIN_010
- MARTIN_020
- MARTIN_030
- MARTIN_040
- BLARNEY_010

The site lies within the MARTIN_040 sub-basin. This sub-basin is 17 km^2 and contains the River Manin, the River Blarney and their tributary streams and surface water drains, including the Killowen Stream, Knocknasuff Stream and Shean Upper and Lower Streams.

A surface water drainage system serves the site. This drainage system was designed in compliance with Sustainable Drainage System (SuDS) principles. Rainwater falling on roof and external areas on-site is collected by the drainage system and discharged to the drainage network serving the overall Blarney Business Park, via an existing petrol interceptor and an existing, suitably sized stormwater attenuation tank. The stormwater discharge point is situated at the south-eastern corner of the site. Stormwater discharges from the site are controlled by a hydrobrake, which limits the discharge to 8.55 litres per second. This drainage network drains via culvert to the Shean Upper Stream ca. 230 m south-west of the site.

The Shean Upper Stream flows in a southerly direction to the west of the N20 until draining into the Clogheenmilcon Fen (also known as Blarney Bog) located ca. 690 m to the south of the site. The Clogheenmilcon Sanctuary Walk travers the area of the fen. The Fen drains into the Blarney River at a point ca. 930 m to the south-west of the site.

The Blarney River flows west, joining the River Shournagh ca. 3.3 km southwest of the site. The Shournagh continues to flow in a south-westerly direction for 1.5 km before bending towards the southeast and eventually flowing into the River Lee 4.7 km south-southwest of the site. The River Lee drains into the Lee Estuary ca. 5.5 km south-southeast of site, which in turn, flows into Lough Mahon 11 km east-southeast of the site. The Cork Harbour SPA and Great Island Channel SAC, protected Natura 2000 sites, are situated at the River Lee Estuary and in Lough Mahon. Detail regarding these protected sites and potential impact on these sites is contained in Chapter 8 – Biodiversity in Volume 2 of the accompanying EIAR, as well as in the Appropriate Assessment Screening Report accompanying this planning application. The site is therefore hydrologically connected to Natura 2000 sites. This linkage is however indirect and relatively distant in nature.

Further details on the geology conditions of the site are provided in Chapter 10 – Hydrology and Surface Water of Volume 2 of the accompanying EIAR.

2.4 Ecological Conditions

The project site and immediate surrounds are dominated by Buildings and artificial surfaces (BL3), with Ornamental/non-native shrub (WS3) and Scattered trees and parkland (WD5) present at the boundaries of the project site.

The surrounding habitat is predominantly built lands (road, pavement, hard surfaces and buildings) and improved grassland with small areas of woodland associated with the N20. In the wider landscape the National Land Cover mapping indicates that the business part is surrounded by artificial surfaces (urban developments and roads), agricultural grasslands (improved grassland, dry grassland, and cultivated land) and fragmented areas of broadleaved forest and woodland.

There are no habitats within the project site that conform to those listed under Annex I of the EU Habitats Directive. There were no signs during an ecological site walkover and no desktop (W67H and W67I) records of any fauna that conform to those listed under Annex II or IV Habitats Directive.

3. OVERVIEW OF THE CONSTRUCTION WORKS

The construction works for the proposed development are minor, limited and small-scale in nature.

The installation of plant and facilities inside the existing building on-site will constitute the vast majority of the construction works to take place. Only minor construction works will be undertaken externally as part of the proposed development.

The proposed development does not involve any demolition, land-take, the construction of any additional buildings or structures on-site, site clearance or groundworks.

3.1 Proposed Site Layout

A Proposed Site Layout Plan depicting the layout of the proposed development is shown in a drawing which accompanies the planning application (See Drawing Reference 2896-P-002 Proposed Site Layout Plan contained in Volume 4 of the accompanying EIAR).

3.2 Construction Period

It is estimated that the construction phase of the proposed development will be 6 months in duration.

3.3 Construction Hours

Construction work will generally be carried out during daylight hours. Construction work will be confined to the following times (unless otherwise agreed with the Local Authority):

- Between 7:00 AM and 6:00 PM, Monday to Friday, and 8:00 AM to 2:00 PM on Saturdays. No construction work is permitted on Sundays or bank holidays.

3.4 Overview of the Construction Works

The following construction works will be undertaken on-site as part of the proposed development:

- The installation of a temporary, small-scale construction compound inside the building on-site, including a site office, staff welfare facilities, material/product storage areas, waste storage areas and portable toilets.
- The carrying out of minor additions/alterations to existing ancillary site infrastructure located externally on-site; including the installation of a multi-flue stack at the roof of the existing building, and modifications to 2 no. existing station doors to the rear of the existing building.
- Haulage of plant, equipment and furnishings to the site.
- Temporary storage of plant, equipment and materials for building fit out on-site.
- The installation of the waste processing and handling plant and ancillary plant/equipment/facilities at the operational area inside the building. This will include the carrying out of minor concreting works for the footings for plant supports
- The construction/installation of a bin washing area/system and associated drainage system inside the building.

- The delineation/installation of waste storage areas/facilities.
- The installation of the Sharps Container Management Facility and associated ancillary equipment and facilities.
- The installation of firewater retention facilities inside the building. This will include the laying of a concrete pathway perimeter/bund wall and automatic raising barriers at rear entrances to the facility, and the installation of an automatic shut off penstock on a pneumatic valve to the foul drain from the facility.
- The installation/fit out of ancillary building facilities, including staff welfare facilities, office areas etc.
- The haulage of construction waste arising during the works from the site to off-site waste facilities for management.
- Decommissioning of the construction site, clean-up of the site and facility commissioning.

3.4.1 Construction Plant

A combination of the following mobile plant will be used during construction:

- Forklifts
- Mobile Elevated Working Platforms
- Mini-cranes
- Telehandlers

This mobile plant will be operated inside the building on-site for the vast majority of time, as the vast majority of construction works will take place inside the building.

3.4.2 Construction Waste

Only minor levels of construction waste will be generated during the construction works.

The works do not involve any demolition, land-take, the construction of any additional buildings or structures on-site, site clearance or groundworks that may generate significant levels of waste.

There will be no oil/fuel storage or vehicle/plant maintenance activities undertaken on-site during construction.

The type, quantity and source/s of wastes that are likely to be generated during construction, and the resource management route for these wastes, are listed in Table 3-1.

Table 3-1: Wastes likely to be generated during construction

Waste Type	Quantity	Source/s	Destination
Timber	< 33 tonnes	Scaffolding, temporary supports/formwork, product deliveries, timber offcuts	Recovery at regional Materials Recovery Facility and onward recycling
Sanitary effluent	< 25.44 m^3 [1]	Portaloo toilets	Treatment at regional Wastewater Treatment Plant
Plastics and cardboard	< 5.5 tonnes	Plastic and cardboard packaging, plastic offcuts	Recovery at regional Materials Recovery Facility and onward recycling
Metal	< 5.5 tonne	Metal packaging, metal offcuts	Recovery at regional Materials Recovery Facility and onward recycling
Paint, paint containers and associated materials	< 2 tonnes	Painting/refurbishing	Management/treatment at regional Hazardous Waste Management Facility and onward recycling
Cladding	< 2 tonnes	Modifications to building envelope	Recovery at regional Materials Recovery Facility and onward recycling
Minor quantities of incidental construction waste (mixed municipal, organic waste, mixed dry recyclables, concrete, timber, plaster, tile, glass, metal, dust, debris, waste electrical or electronic equipment)	< 55 tonnes	Construction works generally	Recovery at regional Materials Recovery Facility and onward recycling or energy recovery

[1] Assumed 4 no. Portaloos with a capacity of 265 litres each serviced once a week for the duration of the 6-month construction period.

Any wastes generated on-site during the construction of the proposed development will be handled and managed in accordance with the requirements of the Waste Management Act 1996, as amended, and associated Regulations. All wastes generated during the construction phase of the proposed development will be segregated and stored temporarily in waste skip containers at the temporary construction compound inside the building. Wastes will be transferred off-site for recovery/recycling. Only appropriately authorised waste management providers will be used to haul wastes from the site. Wastes will be sent to suitably permitted/licensed waste facilities only. Wastes will be managed in accordance with circular economy principles and as *'high up'* the Waste Hierarchy defined under in the Waste Framework Directive (2008/98/EC) as possible.

3.5 Construction Working Hours

Construction work will generally be carried out during daylight hours. Construction work will be confined to the following times (unless otherwise agreed with the Local Authority):

- Between 7:00 AM and 6:00 PM, Monday to Friday, and 8:00 AM to 2:00 PM on Saturdays. No construction work is permitted on Sundays or bank holidays.

4. ENVIRONMENTAL MANAGEMENT PLAN

4.1 Introduction

This Environmental Management Plan (EMP) defines the project obligations, Environmental Management System (EMS) and environment mitigation measures relating primarily to the construction phase of the proposed development.

This EMP describes how the Contractor for the construction works will implement a site Environmental Management System (EMS) on this project to meet the specified contractual, regulatory and statutory requirements and EIAR mitigation measures. This plan will be further developed and expanded following the grant of planning permission and appointment of the Contractor for the construction works. Please note that some items in this plan can only be finalised with appropriate input from the Contractor who will carry out the construction works and once the planning conditions attached to any grant of planning are known. It is the Contractor's responsibility to implement an effective environmental management system to ensure that the Applicant's environmental requirements for the construction of this project are achieved.

All site personnel will be required to be familiar with the environmental management plan's requirements as related to their role on site. The plan describes the project, sets out the environmental procedures that will be adopted on site and outlines the key performance indicators for the site.

- The EMP is a controlled document and will be reviewed and revised as necessary.
- A copy of the EMP will be located at the Contractors site office.
- All employees, suppliers and Contractors whose work activities cause/could cause impacts on the environment will be made aware of the EMP and its contents.

4.2 Project Obligations

During the construction of the proposed development several environmental management obligations must be implemented and achieved by the applicant and the Contractor. In addition to statutory obligations, there are several specific obligations set out in the EIAR. These obligations are set out below. When planning is granted, there are also likely to be planning conditions, with which the applicant must comply. The CEMP will be reviewed and updated, if required, following any grant of planning. The Contractor and all of its sub-Contractors will be made fully aware of and be contractually required to adhere to all environmental obligations.

4.2.1 EIAR Obligations

The EIAR identified mitigation measures that will be put in place to mitigate the potential environmental impacts arising from construction of the development.

4.2.2 Planning Permission Obligations

Should the proposed development be granted planning permission, the conditions of the planning grant issued will be adhered to.

4.2.3 Other Obligations

The contractor will liaise directly with the applicant, Cork City Council and An Garda Síochána in relation to securing any necessary permits to allow the works to take place including for example (non-exhaustive list):

1. Commencement notice
2. Special Permits in relation to oversized vehicles on public roads, if required

The Applicant will continue to liaise closely with the local residents, especially neighbours and landowners in the surrounding area and all reasonable steps will be taken to minimise the impact of the development.

4.3 Environmental Management System

The Environmental Management System (EMS) which will be adopted during the construction phase of the proposed development is outlined in the sections below.

4.3.1 Environmental Policy

The Contractor is responsible for preparing and maintaining an Environmental Policy for the site. The policy should be appropriate to the project, commit to continuous improvement and compliance with legal requirements and provide a framework for objectives and targets. This will be communicated to all site personnel and will be available on-site notice boards.

4.3.2 Training, Awareness and Competency

All site personnel will receive environmental awareness information as part of their initial site induction and briefing. The detail of the information should be tailored to the scope of their work on site. The Contractor for the construction works may decide to conduct the environmental awareness training at the same time as health and safety training (often referred to as Site Inductions).

This will ensure that personnel are familiar with the environmental aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The CEMP will be retained in the site management office during the project. The environmental performance at the site will be on the agenda of the monthly project management meetings for the project.

Elements of the CEMP will be discussed at these meetings including objectives and targets, the effectiveness of environmental procedures, etc. Two-way communication will be encouraged by inviting all personnel to offer their comments on environmental performance at the site.

4.3.3 Register of Environmental Aspects

The Contractor is responsible for preparing and maintaining a Register of Environmental Aspects pertaining to the site. This register will identify the environmental aspects associated with activities onsite and determine which aspects have or can have a significant impact on the environment.

4.3.4 Register of Legislation

The Contractor is responsible for preparing and maintaining a register of key environmental legislation pertaining to the site. This register will reference all current environmental legislation and will be inspected, reviewed and updated regularly to ensure compliance.

4.3.5 Objectives and Targets

Objectives and targets are required to be set to ensure that the project can be constructed and operated in full accordance with the EIAR, planning conditions and legislative requirements, with minimal impact on the environment.

Environmental objectives are the broad goals that the Contractor must set in order to improve environmental performance. Environmental targets are set performance measurements (key performance indicators or KPI's) that must be met in order to realise a given objective.

The Contractor will set objectives based on each significant environmental impact. Key objectives are likely to include the following:

- To ensure that the surface water quality is not negatively impacted by construction works;
- To ensure that humans are not negatively impacted by dust generated by construction works;
- To ensure that humans are not negatively impacted by noise generated by construction works;
- To ensure that impacts to habitats and wildlife are prevented during works;
- To ensure that the visual impact during the construction work is minimised;
- To ensure that the proposed development is constructed in compliance with the planning application, planning drawings and the EIAR.

Performance in relation to each of these objectives will be reviewed on a regular basis by means of inspections, audits, monitoring programmes, etc.

4.3.6 Non-Conformance, Corrective and Preventative Action

Non-conformance notices will be issued where there is a situation where limits associated with activities on the project are exceeded, or there is an internal/external complaint associated with environmental performance.

Non-conformance is the situation where essential components of the EMS are absent or dysfunctional, or where there is insufficient control of the activities and processes to the extent that the functionality of the EMS in terms of the policy, objectives, and management programmes, is compromised. A non-conformance register should be controlled by the Contractor.

The EMS and all its components must conform to the EMP, objectives and targets and the requirements of the ISO 14001 management standard.

In the event of non-conformance with any of the above, the following must be undertaken:

- Investigate cause of the non-compliance;
- Develop a plan for correction of the non-compliance;
- Determine preventive measures and ensure they are effective;
- Verify the effectiveness of the correction of the non-compliance;
- Ensure that any procedures affected by the corrective action taken are revised accordingly.

Responsibility must be designated for the investigation, correction, mitigation and prevention of non-conformance.

4.3.7 EMS Documentation

The Contractor is required to keep the following documentation in relation to the environmental management of the project (as a minimum):

- Construction Environmental Management Plan for the proposed development;
- Register of Environmental Impacts;
- Register of Planning Conditions;
- Monitoring Records;
- Minutes of Meetings;
- Training Records;
- Audit and Review Records.

All of these documents and records are to be available for inspection in the site office. The documentation shall be up to date and shall be reviewed on a regular basis with revisions controlled in accordance with the site quality plan.

4.3.8 Control of Documents

The Contractor will establish, implement and maintain a procedure to control EMS documents and records so they are clearly identifiable, organised, current, easily located and revised when necessary.

4.4 Environmental Mitigation Measures

Construction phase measures have been defined for certain environmental topics considered under the EIAR for the proposed development. These are presented in the sections below. A Construction Traffic Management Plan is also presented.

4.4.1 Soils, Geology and Hydrogeology; and Hydrology and Surface Water

Details of construction phase mitigation measures relating to Soils, Geology and Hydrogeology and Hydrology and Surface Water; and Ecology are presented below.

4.4.1.1 Avoidance by Design Measures

- The construction/installation works will be designed, overseen and checked by competent engineers, suitably qualified and experienced in construction and the installation of a healthcare waste management facility.
- Refuelling of machinery and plant during construction will only occur off-site to avoid any risk of contamination due to refuelling spills.
- Waste/material generated during construction activities will be managed in accordance with the Resource and Waste Management Plan (RWMP) for the proposed development. All waste material generated during construction will be dispatched to an appropriately authorised waste management facility.

4.4.1.2 Measures for Spills

Specific measures relating to the management of hydrocarbons are as follows:

- An existing oil separator is situated on-site. This will be in operation during the construction/installation works and will serve to prevent the discharge of oil-based material. It will be routinely inspected and maintained.
- Appropriately sized drip trays will be utilized on-site where necessary to prevent the release of any oils that may be released during work activities.
- Spill kits containing oil soakage pads and booms will be made available on-site to ensure prompt and adequate clean-up of any accidental fuel or oil spills.
- Any waste oils will be collected in leak-proof containers and stored in bunds prior to removal from the site.
- An Emergency/Spill Response Procedure will be prepared, and all construction site operatives will be briefed on the response measures required during the site inductions and routine toolbox talks.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All fuelling and major repair and maintenance operations will take place off-site. Vehicles entering the site will be in good working order, free from leakage of fuel or hydraulic fluid.

4.4.1.3 Measures for Preventing the Release of Cement Based Materials

The following measures are proposed to prevent the release of cement-based products to the receiving environment during the construction phase of the proposed development:

- All concrete works will be undertaken inside the building on-site, under dry and contained conditions.
- No batching of wet-cement products will occur on site. Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place.
- Where concrete is delivered on site, only the chute need be cleaned, using the smallest volume of water possible. The water will be captured in washout container, safely contained and collected and then dispatched off-site for appropriate management/treatment. There will be no discharge of cement contaminated waters to the drainage system on-site.

4.4.2 Air Quality

Details of construction phase mitigation measures relating to Air Quality are presented below.

The proposed development has been assessed as having a low risk of dust soiling impacts and a negligible risk of dust related human health impacts during the construction phase as a result of construction and trackout activities. Therefore, the following dust mitigation measures shall be implemented during the construction phase of the Proposed Development. These measures are appropriate for sites with a medium risk of dust impacts and aim to ensure that no significant nuisance occurs at nearby sensitive receptors. The mitigation measures draw on best practice guidance from Ireland (DCC (2018), DLRCC (2022)), the UK (IAQM (2024), BRE (2003), The Scottish Office (1996), UK ODPM (2002)) and the USA (USEPA, 1997). The measures are divided into different categories for different activities.

Table 4-1: Construction Dust Management Measures

Mitigation Type	Location	Description of Mitigation or Monitoring Measures
Communications	Construction Compound/Site Boundary and throughout (as required)	An Environmental Manager (EM) will be assigned by the appointed contractor. The EM will be responsible for co-ordinating the day-to-day management of environmental impacts during the Construction Phase. The EM will be responsible for performing inspections as deemed necessary and manage responses to environmental incidents. The name and contact details of the EM will be responsible for construction dust management and air quality issues will be displayed at the construction compound/site boundary hoarding, as well as head/regional office contact details. A complaints register will be kept by the appointed contractor detailing all telephone calls and letters of complaint received in connection with dust nuisance or air quality concerns, together with details of any remedial actions carried out
Construction Works Area Management	Construction Compound/Site Boundary and throughout (as required)	Storage areas/containers will be covered to prevent wind whipping. Cutting, grinding or sawing equipment will be fitted with or used in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. Equipment will be readily available in the construction works areas site to clean any dry spillages. Spillages will be cleaned up as soon as reasonably practicable after the event using wet cleaning methods.
Operating Vehicles / Machinery	Construction Compound/Site Boundary and throughout (as required)	Engines of all vehicles will be switched off engines when stationary - idling vehicles are not permitted.
Construction Activities	Areas where construction is required	Smaller supplies of fine power materials bags will be sealed after use and stored appropriately to prevent dust escaping.

Mitigation Type	Location	Description of Mitigation or Monitoring Measures
Measures specific to trackout (transport of dust and dirt from the construction works areas onto the public road network)	Construction Compound/Site Boundary and throughout (as required)	Vehicles transporting any loose materials entering and leaving the Proposed Development works area will be covered with tarpaulin to prevent escape of materials during transport. Before entrance onto public roads, trucks will be checked to ensure the tarpaulins are properly in place.
Monitoring	Construction Compound/Site Boundary and throughout (as required)	To determine if any short-term dust impacts will occur, a minimum of daily visual inspections for dust soiling of receptors (including roads, and surfaces such as street furniture, cars and windowsills) adjoining the construction works areas will be undertaken. Inspection results will be recorded in the site inspection log. Cleaning will be provided if necessary, such as in the event of a dust complaint resulting from the Proposed Scheme construction works.

4.4.3 Noise and Vibration

Details of construction phase mitigation measures relating to Noise are presented below.

The predicted noise levels from on-site activity from the general construction works associated with the proposed project are below the noise criteria in BS 5228-1:2009+A1:2014 and are not expected to result in significant negative effects. Nonetheless, several mitigation measures will be employed as good practice, to minimise any potential impacts from the proposed project.

The noise impact for construction works traffic will be mitigated by restricting movements along access routes to the standard working hours, unless specifically agreed otherwise. Consultation with the local community is important in minimising noise impacts, and therefore any out of hours working would be agreed in advance with the planning authority. In addition, residents will be informed of construction activities through the Community Liaison Officer.

The construction works on site will be carried out in accordance with the guidance set out in BS 5228:2009+A1:2014, and the noise control measures set out below:

- Proper maintenance of plant will be employed to minimise the noise produced by any site operations. All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the project, with particular attention paid to the lubrication of bearings
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use.
- Plant known to emit noise strongly in one direction will, when possible, be orientated so that the noise is directed away from noise-sensitive locations.
- A speed limit of 15km/h will be enforced on-site.
- Drop heights for construction equipment/materials will be minimised.

- Training will be provided by the Site Manager to workers and drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation.
- The hours of construction activity will be limited to avoid unsociable hours where possible. Construction operations shall be restricted to between 7:00hrs and 18:00 hrs, Monday to Friday, and 08:00hrs to 14:00 hrs on Saturdays. No construction work is permitted on Sundays or bank holidays. If it is necessary to work outside these hours, any such out of hours working would be agreed in advance with the planning authority and in consultation with the local community.
- Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006).

4.4.4 Construction Traffic Management Plan

4.4.4.1 Overview

The Construction Traffic Management Plan (CTMP) shall be finalised in accordance with this Plan following the appointment of the Contractor for the construction works.

Please note that some items in this plan can only be finalised with appropriate input from the Contractor who will actually carry out and schedule the works. Furthermore, it is appropriate that the Project Supervisor Construction Stage (PSCS), when appointed, should have an active role in the preparation/review of the Construction Traffic Management Plan.

The Contractor is required to prepare a CCMP prior to the construction works commencing.

As with any construction development project, the transport of plant, equipment and materials onto the site will give rise to increased traffic and associated impacts. However, due to the nature of construction these impacts will be temporary.

Construction phase traffic associated with the proposed development will be limited to the following:

- Construction staff driving to and from the work site by car, jeep and van.
- Occasional delivery of construction plant, equipment and tools to and from the site by jeep, van and Heavy Duty Vehicles (HDV).
- Occasional delivery of plant, equipment, products to be installed on-site (e.g., waste facility plant, ancillary, materials to be used during construction, furnishings) by jeep, van and HDV.

Public perception of the construction phase will be influenced primarily from the impact of traffic movements. The degree of traffic disturbance caused by the construction phase depends on the level of construction traffic and the length of the construction period.

Construction traffic will require regular access to the site at varying times throughout the construction phase.

The aim of the CTMP is to put in place procedures to manage traffic effectively on site and in the immediate vicinity of the development, to ensure the continued movement of traffic on public roads and to minimise disturbance during transportation of materials, equipment and tools. The correct implementation of the CTMP will ensure that appropriate procedures are in place to minimise any effects on the safety and movement of the general public.

Prior to the commencement of construction, the CTMP will be reviewed by the Contractor (and any sub-contractors) and will be updated as necessary.

The proposed development site is accessed via an entrance at the south-east of the site boundary. A 7 m wide access roadway is situated at the front of the building and alongside the building to the south. A 4 m wide access/egress roadway is also situated alongside the building to the north.

Construction traffic will enter and exit the site via the existing site entrance; access the rear yard via the access roadway alongside the building to the south; and leave the rear yard via the egress roadway running alongside the building to the north.

Small vehicles (up to 3.5 tonne) may then exit from either the north or south security gate.

Large vehicles (over 3.5 tonne) may only exit via the south security gate as the north side access route is too small for larger vehicles.

All vehicles will exit the site in a southbound direction only, turning right onto the roadway from the site.

No vehicles will approach and enter the site in a northbound direction, or will exit the site in a northbound direction (so as to prevent the swept path of the vehicle straying onto the right hand (opposite) side of the highway.

4.4.4.2 Construction Staging

It is estimated that the construction phase of the proposed development will be 6 months in duration. This is inclusive of set up, construction activities, installation of plant and commissioning of operations. Upon appointment of a contractor for the works, a detailed construction programme will be developed.

4.4.4.3 Construction Plant and Vehicles

A combination of the following mobile plant will be used during construction:

- Forklifts
- Mobile Elevated Working Platforms
- Mini-cranes
- Telehandlers

This mobile plant will be operated inside the building on-site for the vast majority of time, as the vast majority of construction works will take place inside the building.

It should be noted however that final selection of construction plant and vehicles may vary depending on suitability, availability, contractor's choice, etc.

Plant operators will be responsible for the upkeep and maintenance of construction plant and vehicles, ensuring good working order prior to use. Should emergency maintenance need to be carried out on site, this will be carried out at a designated area away from off-site receptors and it will be ensured that a spill kit is nearby.

There will be a provision of sufficient on-site parking to accommodate construction personnel, visitor parking and deliveries and reducing insofar as practicable potential overflow onto the local network. No contractor parking will be permitted outside the proposed development site or any public roads outside the confines of the site.

4.4.4.4 Traffic Management Co-ordinator

The Contractor will appoint a dedicated competent Traffic Management Coordinator for the duration of this project and this person will be the main point of contact for all matters relating to traffic management on the project.

4.4.4.5 Induction

Prior to the works commencing, the Traffic Management Coordinator will carry out an induction for the materials haulage contractor staff to inform them of the traffic requirements in relation to vehicle movements. Traffic consideration shall form part of the induction process for all site staff also.

4.4.4.6 An Garda Síochána

Following the appointment of the successful Contractor for the main construction works for this project, this CTMP shall be finalised. The Traffic Management Coordinator will liaise directly with An Garda Síochána in relation to the plan and any concerns/requirements they have will be incorporated into the plan. The necessary permits (including approved route permits) will be applied for and obtained from An Garda Síochána, if required.

4.4.4.7 Cork City Council

The Contractor will liaise directly with Cork City Council Roads and Traffic Management section in relation to the plan and any necessary permits (including standard permits) will be applied for and obtained from the Roads and Traffic Management section.

4.4.4.8 Traffic Management Measures

Construction phase effects will be short-term due to the nature of construction The construction access shall be managed by signage and flagmen.

Construction traffic will be scheduled to typically arrive at site prior to the traditional commuter peak hour in the morning and after the evening peak hour. It is anticipated that the generation of construction vehicles during the general construction period will be evenly spread throughout the day and as such will not impact significantly during the peak periods. An appropriate routing strategy for construction vehicles will be finalised and agreed and implemented as part of the CTMP. Construction traffic is not considered likely to give rise to reduced operational performance of the local road network.

A detailed CTMP incorporating the measures set out in this CEMP will be formalised and agreed with the Cork City Council prior to the commencement of construction.

Impacts arising from construction traffic will be managed and mitigated through the agreement of suitable travel routes. To reduce insofar as practicable, the impact of construction generated traffic and to reduce the volume of site generated traffic during construction the following measures are proposed:

- Provision of sufficient on-site parking to accommodate construction personnel, visitor parking and deliveries and reducing insofar as practicable potential overflow onto the local network. No contractor parking will be permitted outside the proposed development site or any public roads outside the confines of the application site.
- Encourage/require the Contractor to transport construction personnel and to encourage staff to travel by public transport or to share vehicles to reduce parking demand at the site.
- Inform construction staff of the alternative modes of transport highlighting the availability of non-car modes of transport and the accessibility of the site by bus and bicycle.
- Traffic Management Coordinator - A dedicated competent Traffic Management Coordinator will be appointed for the duration of the project and this person will be the main point of contact for all matters relating to traffic management on the project.
- Haul Routes - The plan will identify those roads that will be used to access this project and where appropriate will indicate roads not to be used by construction traffic.
- Site Induction - All workers and all drivers delivering materials to site will receive a comprehensive site induction which will include, as appropriate, a section on traffic management and clear guidance on the routes to site to be used/not used.
- Traffic Management and Traffic Control - All temporary traffic management will be planned and executed in accordance with best practice and by reference to Chapter 8 of the Traffic Signs Manual.

The transportation of construction materials and commuting of construction staff will not have a significant impact upon the operation or capacity of the receiving public road network. It is the intention of the Applicant to comply with Local Authority policy on maintaining the roads serving the site clean of dirt and debris associated with the development at the site.

5. SAFETY AND HEALTH MANAGEMENT PLAN

5.1 Introduction

This Safety and Health Management Plan (SHMP) defines the work practices, procedures and management responsibilities relating to the management of health and safety during the design, construction and operation of the proposed development and shall be read in conjunction with the Preliminary Safety & Health Plan prepared for the project by the Project Supervisor for the Design Process. The Safety and Health Management Plan shall be finalised in accordance with this plan following the appointment of the contractor for the construction works.

This SHMP describes how the contractor for the construction works will implement a site safety management system (SMS) on this project to meet the specified contractual, regulatory and statutory requirements, environmental impact statement mitigation measures and planning conditions. It is the contractor's responsibility to implement an effective safety management system to ensure that the developer's safety requirements for the construction of this project are met.

All site personnel will be required to be familiar with the requirements of the safety management plan as related to their role on site. The plan describes the project organisation and sets out the health and safety procedures that will be adopted on site:

- The Safety and Health Plan is a controlled document and will be reviewed and revised as necessary;
- A copy of the Safety and Health Plan will be located on/near the site H&S notice board;
- All employees, suppliers and contractors whose work activities cause/could cause impacts on the environment will be made aware of the SHMP and its contents.

5.2 Project Obligations with Respect to Health and Safety

The construction of the proposed development will impose numerous safety management obligations on the developer, designer and contractor. These obligations are set out below. The contractor for the construction works and all of its sub-contractors are to ensure that they are fully aware of and in compliance with these safety obligations.

5.2.1 Statutory Obligations

The Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (Construction) Regulations 2013 place a responsibility on the Developer as the "Client", the Designer, the Project Supervisors and the Contractor.

The Developer/ Employer must:

- Appoint a competent and adequately resourced Project Supervisor for the Design Phase (PSDP);
- Appoint a competent and adequately resourced Supervisor for the Construction Stage (PSCS);
- Be satisfied that each designer and contractor appointed has adequate training, knowledge, experience and resources for the work to be performed;
- Co-operate with the project supervisor and supply necessary information;
- Keep and make available the safety file for the completed structure;
- Provide a copy of the safety and health plan prepared by the PSDP to every person tendering for the project;
- Notify the Authority of the appointment of the PSDP.

Designers must:

- Identify any hazards that their design may present during construction and subsequent maintenance;
- Eliminate the hazards or reduce the risk;
- Communicate necessary control measures, design assumptions or remaining risks to the PSDP so they can be dealt with in the safety and health plan;
- Co-operate with other designers and the PSDP or PSCP;
- Take account of any existing safety and health plan or safety file;
- Comply with directions issued by the PSDP or PSCS.

The PSDP must:

- Identify hazards arising from the design or from the technical, organisational, planning or time related aspects of the project;
- Where possible, eliminate the hazards or reduce the risks;
- Communicate necessary control measure, design assumptions or remaining risks to the PSCS so they can be dealt with in the safety and health plan;
- Ensure that the work of designers is coordinated to ensure safety;
- Organise co-operation between designers;
- Prepare a written safety and health plan for any project and deliver it to the client prior to tender;
- Prepare a safety file for the completed structure and give it to the client.

The PSCS must:

- Co-ordinate the identification of hazards, the elimination of the hazards or the reduction of risks during construction;
- Develop the Safety and Health Plan initially prepared by the PSDP before construction commences;
- Co-ordinate the implementation of the construction regulations by contractors;
- Organise cooperation between contractors and the provision of information;
- Co-ordinate the reporting of accidents to the Authority;
- Notify the Authority before construction commences;
- Provide information to the site safety representative;
- Co-ordinate the checking of stage working procedures;
- Co-ordinate measures to restrict entry on to the site;
- Co-ordinate the provision and maintenance of welfare facilities;
- Co-ordinate arrangements to ensure that craft, general construction workers and security workers have a Safety Awareness card, e.g. Safe Pass and a Construction Skills card where required;
- Co-ordinate the appointment of a site safety representative where there are more than 20 persons on site;
- Appoint a safety adviser where there are more than 100 on site;
- Provide all necessary safety file information to the PSDP;
- Monitor the compliance of contractors and others and take corrective action where necessary;
- Notify the Authority and the client of non-compliance with any written directions issued.

The Contractor must:

- Co-operate with the PSCS;
- Promptly provide the PSCS with information required for the safety file;
- Comply with directions of the project supervisors;
- Report accidents to the Authority and to the PSCS where an employee cannot perform their normal work for more than 3 days;
- Comply with site rules and the safety and health plan and ensure that your employees comply;
- Identify hazards, eliminate the hazards or reduce risks during construction;
- Facilitate the site safety representative;
- Ensure that relevant workers have a safety awareness card and a construction skills card where required;
- Provide workers with site specific induction;
- Appoint a safety officer where there are more than 20 on site or 30 employed;
- Consult workers with site specific induction;
- Monitor compliance and take corrective action.

Consequently, at all stages of the project there are statutory requirements for the management of safety, health and welfare of all involved in or affected by the development. As previously outlined, this CEMP and specifically the Safety and Health Management Plan addresses key construction management issues associated with the proposed development. This plan will be developed further at the construction stage, on the appointment of the Contractor for the main construction works.

5.2.2 The Preliminary Safety and Health Plan

In accordance with the requirements of the Safety, Health & Welfare at Work (Construction) Regulations 2013, a Preliminary Safety & Health Plan will be required as part of the design process.

This plan will be further developed by the PSCS on appointment and maintained as a live document during construction and commissioning of the proposed development.

The Safety and Health Plan is required to include the following information:

- A general description of the project;
- Details of other work activities taking place on site;
- Works involving particular risks;
- The timescale for the project and the basis on which the time frame was established;
- Conclusions drawn by designers and the PSDP having taken into account the General Principles of Prevention and any relevant Safety and Health Plan or Safety File; and
- The location of electricity, water and sewage connections so as to facilitate early establishment of welfare facilities.

In accordance with the PSDP's procedures, the Preliminary Safety & Health Plan for the proposed development should include the following sections and subsections to ensure that the PSCS is aware of the health and safety issues at tender stage and enable them to price accordingly:

Preamble:

1 General Project Information:
- 1.1 Title
- 1.2 Description of Project
- 1.3 Employer
- 1.4 Designers/Other Consultants
- 1.5 Project Supervisor Design Process
- 1.6 Drawings, Specifications and Other Documents
- 1.7 Intended Contract Commencement Date
- 1.8 Intended Contract Completion Date
- 1.9 Basis for Contract Duration
- 1.10 Restrictions on Working Hours
- 1.11 Notification of Project
- 1.12 Termination of the PSCS Appointment

6 Information Required for Safety File:

6.1 Information Required for Safety File from PSCS

5.2.3 The Management of Health and Safety during the Construction Phase

The selection criteria for the Contractor for the works will be based on the ability to construct the works in a manner that will not endanger the safety, health and welfare of any parties and competence to fulfil the role of PSCS.

The contract will be awarded on the basis of assessment of the candidates against relevant health and safety criteria including experience of similar projects, knowledge of the construction processes involved and training of their management and staff who will be involved in carrying out the works.

5.2.4 The Construction Stage Safety and Health Plan

In accordance with the requirements of the Safety, Health & Welfare at Work (Construction) Regulations 2013, the preliminary Safety & Health Plan prepared by the PSDP will be further developed by the PSCS before the commencement of the construction work and updated on a regular basis during the construction phase of the project.

The document will include the following sections and subsections to ensure the management of health and safety during the construction phase of the project:

1. Description of Project:
    - Project description and programme details
    - Details of client, PSDP and PSCS, designers
    - Contractor and other consultants
    - Extent and location of existing records and plans
    - Arrangements for communicating with contractors, PSDP and others as appropriate
2. Communication and Management of the Work:
    - Management structure and responsibilities
    - Safety and health goals for the project and arrangements for monitoring and review of safety and health performance
    - Arrangements for:
        - Regular liaison between parties on site
        - Consultation with the workforce
        - The exchange of design information between the Client, Designers, Project Supervisor for the Design Process, Project Supervisor Construction Stage and Contractors on site
        - Handling design changes during the project
        - The selection and control of contractors
        - The exchange of safety and health information between contractors
        - Security, site induction, and on-site training
        - Welfare facilities and first aid
        - The production and approval of risk assessments and method statements

- The reporting and investigation of accidents and other incidents (including near misses)

- Site rules
- Fire and emergency procedures

3. Arrangements for Controlling Significant Site Risks:

- Safety risks:
  - Services, including temporary electrical installations
  - Preventing falls
  - Work with or near fragile materials
  - Control of lifting operations
  - Dealing with services (water, electricity and gas)
  - The maintenance of plant and equipment
  - Poor ground conditions
  - Traffic routes and segregation of vehicles and pedestrians
  - Storage of hazardous materials
  - Dealing with existing unstable structures
  - Accommodating adjacent land use
  - Other significant safety risks
- Health risks:
  - Dealing with contaminated land
  - Manual handling
  - Use of hazardous substances
  - Reducing noise and vibration
  - Other significant health risks

The construction stage safety and health plan will be maintained on site by the PSCS and will be communicated to all relevant parties on an ongoing basis through inductions, site safety meetings and toolbox talks etc. as required.

6. EMERGENCY RESPONSE PLAN

6.1 Introduction

This chapter of the CEMP presents an Emergency Response Plan for the proposed development. The Emergency Response Plan shall be finalised in accordance with this outline plan following the appointment of the contractor for the construction works and following detailed design development.

This Emergency Response Plan contains predetermined guidelines and procedures to ensure the safety, health and welfare of everybody involved in the project and to protect the environment during the construction phase of the proposed development. This plan outlines the immediate response to an emergency or disaster situation and will be developed by the construction works contractor and PSCS as part of their construction stage Safety and Health Plan.

An emergency is any disruptive or harmful event that endangers people, environment, property or assets. Emergencies can be small, as in a fire contained by employees using firefighting equipment or large, as in a disaster resulting from a storm.

In the context of the proposed development, examples of Emergency Response Plan emergency events are:

- Medical emergency;
- Overheated equipment;
- Chemical and fuel spill;
- Fire;
- Loss of power;
- Vehicle incidents.

Example sources of emergency or disaster events are:

- Unstable/inappropriate stockpiles on site;
- Faulty or incorrect use of equipment;
- Falls from height;
- Smoking;
- Storm/adverse weather;
- Power failure;
- Fuel spill;
- Road failure;
- Serious vehicle collisions or overturning.

6.2 Emergency Response Plan

An emergency response plan deals with the immediate physical effects of a disaster and outlines the initial response.

6.2.1 Emergency Response Liaison

The contractor/PSCS will designate an individual to serve as the Emergency Response Liaison for this project. The emergency response liaison will coordinate the emergency response for the duration of any emergency at or nearby the project site.

Cork City Council, An Garda Síochána and the HSE Ambulance Co-ordinator will be provided with the construction programme and the onsite contact information from the Emergency Response Liaison prior to construction.

The Emergency Response Liaison will be immediately reachable at all times during project construction. The Liaison will coordinate with the above agencies to establish emergency procedures for access to and within the site in the event of an emergency.

6.2.2 Reporting Emergencies

In the event of fire, storm, flood, serious injury or other emergency, contact:

ALL ON SITE EMERGENCIES DIAL 112 or 999

6.2.3 Designated Responder

A map depicting the location with the emergency meeting point will be furnished to Cork City Council Fire Department and HSE ambulance co-ordinators.

Upon arrival on the scene, the senior EMS Officer will set up the incident command structure. The Emergency Response Liaison and all contractor's personnel will cooperate with directions of the incident commander and assist as directed.

The nearest emergency services, ambulance and Accident & Emergency (A&E) facilities are:

Service:	Contact Details:	
Accident & Emergency (A&E)	Cork University Hospital	(021) 492 2000
Ambulance Service	Dial 112 or 999	
Fire Services	Dial 112 or 999	
Garda Station	Blarney Garda Station	(021) 451 6290

Each member of the Contractor's team who are First-Aid and Cardiopulmonary Resuscitation (CPR) trained personnel will be identifiable with a hard hat sticker indicating their training.

6.2.4 Emergency Alarm

The emergency alarm will be raised on-site as soon as an emergency situation is detected, the alarm will be identified (contractor to check those that apply):

Air Horn		**Radio**		**Voice**		**Hand Signals**		**Siren**	

6.2.5 Emergency Reporting

In the event of an emergency the nearest supervisor with radio equipment/mobile phone will be notified. The degree of emergency will be reported to the Emergency Response Liaison who will contact the Emergency Services and request the appropriate emergency service.

6.2.6 Medical Protocol

In the event of a major medical emergency, the emergency centre (999) will be notified, and an ambulance and emergency medical team will respond to the scene. All major medical cases require professional (ambulance) transportation. In the event of a minor medical case, the affected employee can be transported via company vehicle in the escort of a foreman or site engineer (with first aid training).

6.2.7 Emergency Response

Upon notification, the Emergency Response Liaison will respond to the emergency scene and manage emergency operations:

1. Assess hazards and make the area safe – If you cannot enter the area without risking your safety, don't do it, call the Emergency Services immediately and wait for them. If you think you can safely enter the area, look around the emergency scene for anything that can be dangerous or hazardous to you, the casualty, or anyone else at the scene. Bystanders can help with making the area safe. First aid kits will be available on site. Operators that have been first aid/CPR/AED trained will be listed on site and easily identifiable by a hard hat sticker.

2. Take charge of the situation – if you are the first-aid provider on the scene act fast. If someone is already in charge, briefly introduce yourself and see if that person needs any help. If there is any chance the casualty could have a head or spinal injury, tell them not to move.

3. Get Consent – always identify yourself as a first-aid provider and offer to help. Always ask for consent before touching a conscious adult casualty and always ask for consent from a parent or guardian before touching an unconscious or conscious child or infant. With an unconscious adult casualty consent is implied as it is generally accepted that most people want to live. Remember to protect yourself first by wearing gloves and eye protection.

4. Assess Responsiveness – is the casualty conscious or unconscious? Note their response while you are asking them for their consent. If they respond, continue with the primary survey, and if they don't respond, be aware that an unconscious casualty is or has the potential of being a breathing emergency.

5. Call out for help – this will attract bystanders. Help is always useful in an emergency situation. Someone can be called over the phone for medical help. Others can bring blankets if needed, get water, etc. A bystander can help with any of the following:

- Make the area safe;
- Find all the casualties;
- Find the first aid kit, or any useful medical supplies;
- Control the crowd;
- Call for medical help;
- Help give first aid, under your direction;
- Gather and protect the casualty's belongings;
- Take notes, gather information, be a witness;
- Reassure the casualty's relatives;
- Lead the ambulance attendants to the scene of the emergency;
- Notify Emergency Services as soon as you can. Either send a bystander or call yourself.

In the event of a major medical emergency, the Emergency Response Liaison, as the person-in-charge of the emergency scene, will dispatch someone to the site access point nearest the emergency scene to direct and lead arriving outside responders to the emergency scene. The designated meeting point will be agreed prior to the commencement of construction. Emergency personnel will be met at this meeting point which has been communicated by management during the 999 call. The emergency personnel escort will use the hazard lights on their vehicle so they are easily identified.

6.2.8 Escape and Evacuation Procedure

Dependent upon the degree of the emergency and if safe to do so, employees will evacuate to the designated assembly area where the designated wardens shall account for all employees and determine if anyone still remains within the emergency scene.

6.2.9 Prevention of Illness/Injury due to Weather/Elements

1. All employees will have access to shelter and heat in the event of inclement weather.
2. Employees will have access to at least a litre of water at all times.
3. Weather forecast will be discussed every morning with the crews. Weather conditions and forecast will be monitored regularly by management.
4. No Employee will work alone. A buddy system will be used so employees can contact a supervisor in case of an emergency.

6.2.10 Environmental Emergency Procedure

An emergency preparedness and response procedure is required to prevent environmental pollution incidents. Emergency Silt Control and Spillage Response Procedures will be contained in this ERP.

Suitable spill kits and absorbent material for dealing with oil spills will be maintained on site. In the event of pollution or potential risk of pollution, the Local Authority should be informed immediately.

6.2.11 Emergency Response Plan – Haul Routes

Emergency Response Procedure relating to transportation of plant, equipment and materials to the site will be developed by the contractor during the construction phase of the development.

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