

**Comhairle Contae  
Fhine Gall**  
Fingal County  
Council



# Rathmore Park Recreational Sports Hub

DRAFT CEMP



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# 1 INTRODUCTION

This outline Construction and Environmental Management Plan (CEMP) for the proposed Recreational Sports Hub, Rathmore Rd. Lusk, County Dublin in respect of the Part XAB Section 177AE planning application for the proposed development by Fingal County Council.

This outline CEMP has been developed specifically for this project and outlines construction practices, environmental management and mitigation measures which will be implemented during the construction phase to ensure that the project is constructed in accordance with best practice, with the minimum impact on the surrounding environment.

Prior to construction, the appointed Main Contractor will prepare a detailed CEMP taking into account methods/requirements outlined in this report. This outline CEMP will form the basis of the construction management approach on site, while the works are being completed. Ensuring environmental management measures are in place, which will be implemented during the construction phase, to ensure that the project 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 Construction Environmental Management Plan is to outline how the appointed Contractor will 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 principal objective of this outline CEMP is to avoid, minimise and control adverse environmental impacts associated with all aspects of the construction of the proposed development. In essence, this Outline CEMP is intended to provide the appointed Contractor with a practical guide to ensure compliance by all parties with any Planning and Environmental requirements.

The principal objective of this Outline CEMP is to avoid, minimise and control adverse environmental impacts associated with the development, namely the Rogerstown Estuary SAC and SPA.

The Outline CEMP achieves this by providing the environmental management framework to be adhered to during the construction phase of the proposal. It outlines the work practices, construction management procedures, management responsibilities, mitigation measures and monitoring proposals that are required to be adhered to, to complete the proposed development, in an appropriate environmental manner.

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

There is a requirement on the appointed Contractor that details of this outline CEMP are updated with progress, including the roles and responsibilities of those appointed on the site for the construction of the project, if their respective roles change during the project.

While this version of the outline CEMP provides a benchmark for good practice, where avoidance or further minimisation of risks to the environment can be demonstrated through use of alternative methods or improvements to current practices, the Contractor will implement these wherever possible.

## 2 PROJECT OVERVIEW

The proposed Rathmore Recreational Sports Hub development includes the following:

- A new all-weather GAA training area measuring 74m x 28m with a ball-wall measuring 20 x 5m at the northern end, enclosed with a 4m high weld mesh fencing and 2no. ball stop nets 20m x 6m at the south and north of the training area.
- A new All-Weather soccer pitch measuring 100m x 64m with flood lighting and All Weather 8 lane athletics running track with flood lighting, enclosed with a 1.2m high weld mesh fence finished black in colour at 1.2m from the edge of the running track and located on a permeable tarmac footpath surrounding the track 2.7m width from the edge of the track and finished with a pin-kerb at both edges of the tarmac.
- Proposed extension to the existing car park of 21no. additional spaces including disabled & EV ready parking bays. Car park to consist of asphalt road and permeable surface (grass & concrete paving or similar) to parking bays.
- A new storage container for sports equipment measuring approximately 12m x 2.4m x 2.5m.
- Landscaping works including soil grading, mounding, tree planting and boundary treatments.
- Covered Bicycle parking – 30no. bicycle parking spaces to include adapted bicycles.
- A teenage space to include a half size basketball court, and hang-out zone with teen appropriate play features.
- All other ancillary Site Works including re-location of existing play equipment and new signage, footpaths, drinking fountain and electrical & drainage connections.

### 3 PROJECT LOCATION

The proposed development is located at Lough Common, Lusk, north County Dublin. The proposed site is 3.8 ha in area and is currently utilised as a sports / recreational hub for the local area, with a similar site use to the proposed development’s operational phase. The proposed site is mostly composed of amenity grassland, with small areas of hard standing artificial surfaces that mainly consist of a small playground area and a car park. The site is immediately bordered by Lusk Community College to the east and by the R127 to the south (Figure 2.1).

In the wider context, the village of Lusk, which consists of a large number of residential developments, is located to the south and north of the proposed development. The Rathmooney (known locally as the Bride) stream flows easterly, adjacent to the south of the proposed site, into Rogerstown Estuary SAC (00208) and SPA (004015) approximately 3 km from the proposed development, and thus into the Irish Sea (Figure 2.2). There is also indirect hydrological connectivity with the Rathmooney stream, via infiltration of rainwater through the soft surface amenity grassland within the site itself, and urban, underground surface water drainage that is ubiquitous in urban/suburban landscapes.

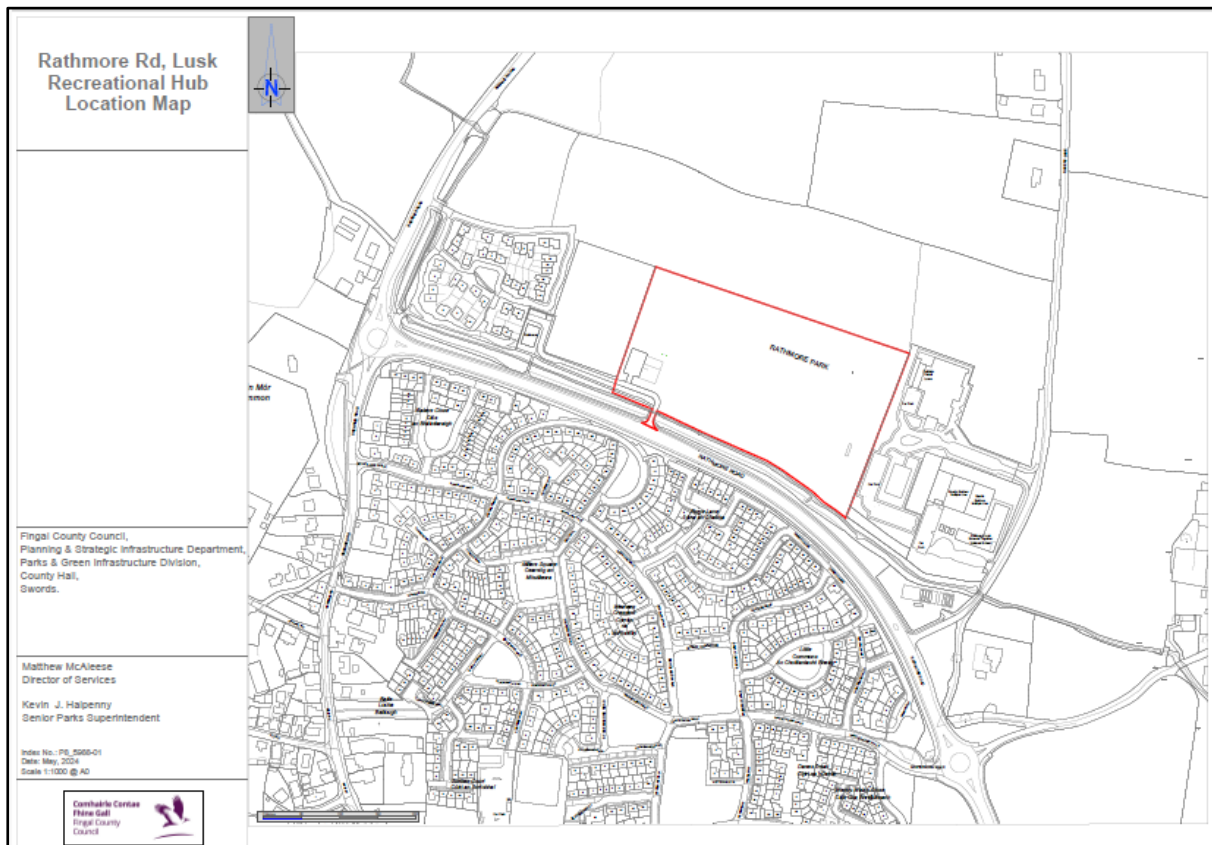


Figure 1 Site Location

# 4 CONSTRUCTION WORKS

## 4.1 OVERVIEW OF CONSTRUCTION WORKS

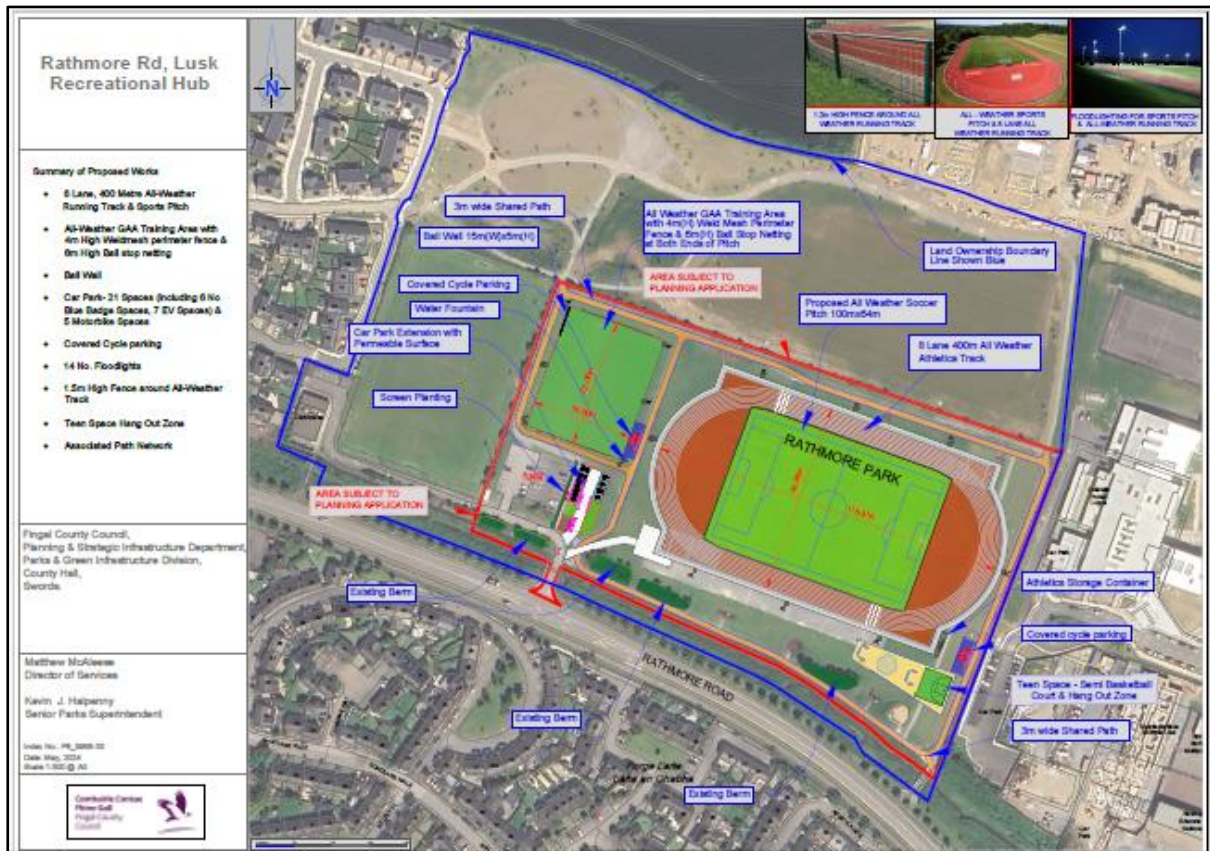


Figure 2 Works Proposals





#### 4.1.1 Athletics Track, Soccer Pitch GAA training area works including:

- Strip topsoil and formation of berms with arisings.
- Construction of formation layer.
- Installation of drainage, ducting, flow control & geotextile.
- Installation of kerbs.
- Installation of stone sub-base including blinding layer.
- Installation of tarmacadam.
- Supply & install synthetic athletics running track.
- Supply & install of shock pad & 3G synthetic carpet including infill to soccer pitch and GAA training area.
- Supply & install of spectator fencing, gates & handrails.
- Pitch and track performance testing.
- Installation of litter bins, boot scrapers & signage.
- Supply & install floodlighting.
- Supply & install water supply to drinking water fountain.

#### 4.1.2 Ancillary Works – Teen Space, Path Network,

- Strip topsoil and formation of berms, less than 1.5m high, with arisings.
- Construction of formation layer.
- Installation of seating & play equipment.
- Extension to path network.

### 4.2 EQUIPMENT AND RESOURCES REQUIRED

- Stone build-up material (Imported material will be clean and will be sourced from a licensed establishment).
- Tarmacadam base for 3G pitches and athletics track.
- Geo-textile membrane.
- Synthetic 3G playing surface and shock pad.
- Bound rubber surface material for the athletics track with binder.
- Sundry equipment including flood lighting, Ball Stop netting and goal post systems.
- Excavator and bulldozer for grading and excavation of project area.
- Tipper trucks for transport of stone subbase materials/geo-synthetic materials.
- Total number of excavators range from 1 to 3 depending on work tasks being undertaken.
- Welfare facilities, potable water, power source.
- A hoarded site compound will be required for the successful contractor to undertake the works. This will be situated on the site of the proposed car park extension and, temporarily on the site of the existing car park during the completion of the extension.

### 4.3 SCHEDULE OF CONSTRUCTION WORKS

The project duration would be of the order of 6-9 months. The Main Contractor will provide a detailed Programme of Works prior to commencement of the works.

### 4.4 WORKING HOURS

Construction hours: -

8.00am – 6.00pm\* (Monday – Friday inclusive)

\*No work on public holidays.

## 4.5 CONSTRUCTION METHODOLOGY

### 4.5.1 Method statements/Environmental Management Plans

Method statements/EMPs have been prepared for various stages of construction and are provided in Appendix 1. They are prepared for activities identified in the works description and are to be issued to all personnel responsible for and involved with the activity concerned. They define the proposed method of working for an element or section of work considering the requirements of the project including site conditions, safety hazards, the contract drawings, specification or code of practice. They outline the proposed use of plant, labour and materials, any hold points or permits and may be supplemented by construction drawings, sketches and produce data as necessary.

### 4.5.2 Site Preparation and Pre-construction Activities

Before construction commences, a number of preparatory activities will be carried out. A construction phase management plan will be prepared and implemented. The following key works will be undertaken as part of the site preparation and pre-construction activities:

#### 4.5.2.1 Pre-Construction Surveys

Any detailed ground investigations required to support the construction process will be carried out and finalised.

#### 4.5.2.2 Enabling Works

Prior to construction commencing, on site demarcation of the construction site boundary will be undertaken to prevent equipment tracking outside the planning boundary.

### 4.5.5 Temporary Construction Compound

The following measures will be undertaken to avoid or minimise negative environmental effects as a result of the erection of the temporary compound:

- The site compound will be contained within a solid hoarding of not less than 2m high.
- Drainage within the temporary site compound will be directed to a temporary soakaway area to prevent surface water runoff exiting the compound.
- Temporary portable toilet facilities will be provided for the duration of the project. The effluent will be removed at regular intervals by an appropriate permitted/licensed and approved contractor.
- A bunded containment area with a capacity of 110% of the stored fuels, lubricants, oils etc, will be provided within the compound.
- The site compound will be in place for the duration of the construction phase and will be removed once the project is complete.

### 4.5.6 Excavation Works and sediment control

All measures regarding the management of excavation works and sediment control are detailed in EMP 1 in Appendix 1.

### 4.5.7 Storage and Stockpiles of Excavated Material

All measures regarding the management of excavation works and sediment control are detailed in EMP 1 in Appendix 1.

### 4.5.8 Storage of Other Materials

All measures regarding the management of excavation works and sediment control are detailed in EMP 2 and EMP 5 in Appendix 1.

#### 4.5.9 Timing of Works

- The timing of the construction phase including soil stripping and excavation works will take account of predicted weather, particularly rainfall.
- Excavations and soil stripping activities will be suspended during periods of prolonged rainfall events.

#### 4.5.10 Hydrocarbon Control

All measures regarding the management of excavation works and sediment control are detailed in EMP 2 in Appendix 1.

#### 4.5.11 Waste Management

All measures regarding the management of excavation works and sediment control are detailed in EMP 5 in Appendix 1.

#### 4.5.12 Emergency Response Plan

All measures regarding the management of excavation works and sediment control are detailed in EMP 9 in Appendix 1.

#### 4.5.13 Construction Noise

There will be an increase in noise and dust levels during the construction phase, but these will be negligible in terms of potential significant effects due to the small-scale and temporary duration of the construction phase, and the distance from European sites (the closest being 2.27 km away).

All measures regarding the management of excavation works and sediment control are detailed in EMP 6 in Appendix 1.

#### 4.5.14 Invasive Species Control

No Invasive species have been identified on the proposed site during a site visit conducted on 3<sup>rd</sup> of May 2023. Given that invasive species could have spread in the intervening time, an invasive species survey will be carried out by a suitably qualified ecologist prior to beginning of construction, as per EMP 8, and should species subject to restrictions (i.e., Third Schedule species<sup>1</sup> of Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011) be recorded on site, the procedure outline in EMP 8 will be followed.

#### 4.5.15 Method Statements

The appointed Contractor will provide method statements to carry out the works and risk assessments based on the outline method of works, procedures and the environmental requirements set out in this outline CEMP.

The following will be considered during the detailed planning of the works phase:

- Good practice guidelines on the control of water pollution from construction sites developed by the Construction Industry Research and Information Association (CIRIA) in particular.
- Method statement for management of surface water to prevent run-off of silt or any other pollutant from the site to watercourses.
- Control of water pollution from construction sites: guidance for consultants and contractors (Masters-Williams et al, 2001).
- Control of water pollution from construction sites – guide to good practice (Murnane et al, 2002).

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<sup>1</sup> List of Third Schedule invasive species available [here](#)

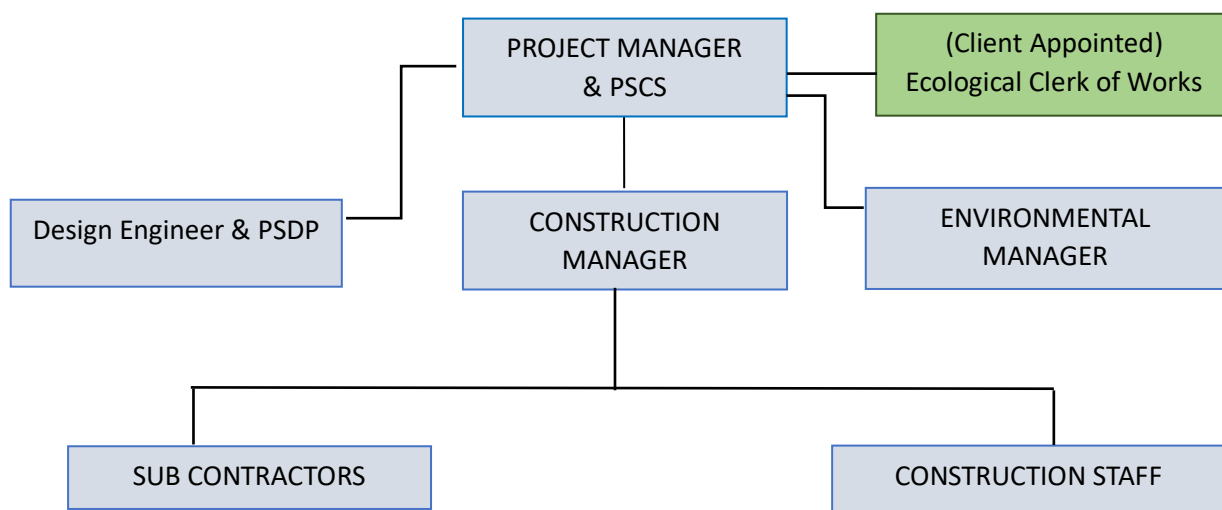
- Proper storage and bunding to 110% capacity of any oils/ hydrocarbons.

## 5 ORGANISATIONAL STRUCTURE, DUTIES AND RESPONSIBILITIES

While the Project Supervisor Construction Stage (PSCS) / Contractor will manage the obligations of the project during construction, Fingal County Council (client) and the Project Supervisor Design Process (PSDP) will ensure same is undertaken correctly.

### 5.1 ON SITE ORGANISATIONAL STRUCTURE AND RESPONSIBILITY

The Organisational Structure for the appointed Contractor's Project Team and the Client appointed Ecological Clerk of works is included below. This structure will be defined by the Contractor/Client and will include the names of the assigned personnel with the appropriate responsibility and reporting structure reflected.



### 5.2 DUTIES AND RESPONSIBILITIES

The general role of key people on site implementing the CEMP will be.

- The Project Manager - liaises with the Project Team in assigning duties and responsibilities in relation to the CEMP to individual members of the main contractor's project team.
- The Construction Manager - liaises with the Environmental Manager when preparing site works Method Statements, monitoring potential environmental impacts and manages the construction personnel and general works.
- The Design Engineer - undertakes and certifies the design and supervises the standard of works, including surface water discharge flow control mitigation measures.
- The Environmental Manager - ensures that the CEMP is developed, implemented and maintained. The Environmental Manager's tasks at the construction site are described below at Section 5.2.4.1.
- The Ecological Clerk of Works - to advise on all aspects of site management, work planning, and to monitor any impacts on ecological features & wildlife during the construction phase. The Ecological Clerk of Works shall be engaged by and report to FCC and shall liaise directly with the design engineer, contractor representatives including Environmental Manager & site personnel, attend regular site meetings and make recommendations on implementing ecological protection measures as may be necessary.

Other roles are outlined as follows.

- Health and Safety (PSDP and PSCS).

The roles and responsibilities outlined below are indicative and will be updated on the appointment of the main contractor (Contractor). Details of the personnel and their responsibilities must be added to the finalised CEMP. An outline of potential roles is provided below.

### 5.2.1 Ecological Clerk of Works

The Ecological Clerk of Works (ECoW) shall be appointed by Fingal County Council and shall attend the site fortnightly at a minimum and daily during ecologically sensitive phases of the works.

The ECoW responsible for:

- Reporting to FCC on a fortnightly basis.
- Liaising with the Construction Manager and Environmental Manager to review all site-specific method statements prepared by the Construction Manager and Environmental Manager and oversee their implementation.
- Inspection of the site on a fortnightly basis to ensure all Environmental Management Plans (EMP's), listed in Appendix A, are in place, updated and functioning as intended and review the Environmental Manager's daily inspection records of all measures.
- Checking all construction members receive weekly 'toolbox talks' making them aware of the method statements and the sensitivities of the site before they are allowed to access the site.
- Check that relevant staff are familiar with emergency response procedures and trained in the use of spill kits.
- Have the authority to suspend works if works are not being carried out in line with the agreed method statement or daily monitoring indicates that the proposed measures are not functioning adequately to minimise the potential impact to local ecology.

### 5.2.2 Project Manager

(To be updated upon appointment of Contractor/finalisation of CEMP)

Name: \_\_\_\_\_

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

- Implementing of the Construction and Environmental Management Plan (CEMP).
- Implementing the Health and Safety Plan.
- Management of the construction project.
- Liaison with the client/developer.
- Liaison with the Project Team.
- Assigning duties and responsibilities in relation to the CEMP.
- Production of construction schedule.
- Materials procurement.
- Maintaining a site project diary.

### 5.2.3 Construction Manager

(To be updated upon appointment of Contractor/finalisation of CEMP)

Name: \_\_\_\_\_

The Construction Manager manages all the works to construct the Recreational Sports Hub, on behalf of the main contractor. The Construction Manager reports to the Project Manager. In relation to the CEMP, the Construction Manager is responsible for:

#### *5.2.2.1 Site-Specific Method Statements*

- Liaising with the Environmental Manager and ECoW 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 and ECoW in reviewing and updating site-specific Method Statements for all Works activities where Environmental Control Measure and Environmental Control Sheets have been altered.
- Liaising with the Environmental Manager and ECoW where third-party agreement is required in relation to site-specific Method Statements, Environmental Control Measures and/or Environmental Control Measure Sheets.

#### *5.2.2.2 General*

- Being aware of all project Environmental Commitments and Requirements.
- Ensuring that all relevant information on project programming, timing, construction methodology, etc., is communicated from the Project Manager to the Environmental Manager in a timely and efficient manner in order to allow pre-emptive actions relating to the environment to be taken where required.
- Programming and planning of excavation works and communicating this schedule at weekly site meetings including to the Environmental Manager and ECoW.
- Ensuring that adequate resources are provided to install any environmental interventions.
- Liaising with the Design Engineer and providing 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 main contractor's project staff.
- Ensuring that the Environmental Manager performs regular and frequent environmental site inspections.
- Facilitating the role of the ECoW.

### **5.2.4 Design Engineer**

(To be updated upon appointment of Contractor/finalisation of CEMP)

Name: \_\_\_\_\_

The Design Engineer is appointed by the main Contractor.

The Design Engineer reports to the Project Manager and is responsible for:

- Design of the Works.
- Review and approval of relevant elements of the method statements – assist the Client with the overall review.

### **5.2.5 Environmental Manager**

(To be updated upon appointment of Contractor/finalisation of CEMP)

Name: \_\_\_\_\_

The Environmental Manager is responsible for:

#### *5.2.5.1 General*

- Being familiar with the project environmental commitments and requirements.
- Oversight of the Implementation of 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 ECoW & FCC in relation to environmental issues.
- Auditing the construction works from an environmental viewpoint.

#### *5.2.5.2 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 should 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.
- Liaising with the ECoW where to agree site-specific Method Statements, Environmental Control Measures and/or Environmental Control Measure Sheets.

#### *5.2.5.3 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.
- 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 relevant stakeholders 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, the Environmental Manager must liaise with the Construction Manager in updating relevant site-specific Method Statements.

#### *5.2.5.4 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.
- 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.

#### *5.2.5.5 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.
- Gathering and holding documentation with the respect to waste disposal.



#### *5.2.5.6 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.
- Reviewing and amending the CEMP in light of these changes and bringing the changes to the attention of the main contractor's senior management and subcontractors.
- Liaison with the ECoW.

#### *5.2.5.7 Environmental Induction Training and Environmental Toolbox Talks*

- Ensuring that Environmental Induction Training is carried out for all the main contractor's site personnel. The induction training may be carried out in conjunction with Safety Induction Training.
- Check that relevant staff are familiar with emergency response procedures and trained in the use of spill kits. Toolbox talks will be undertaken by the Environmental Manager on a weekly basis and for any new worker prior to commencement of work on site. The topics will be determined by the nature of the work being undertaken at the time.
- Providing toolbox talks on Environmental Control Measures associated with Site-specific Method Statements to those who will undertake the work.

#### *5.2.5.8 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 should be made available to the relevant authority, the Design Engineer, ECoW, FCC and the Construction Manager.

#### *5.2.5.9 Site Environmental Inspections*

- Carrying out daily 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 a daily inspection of the bunded areas and surface water run off control measures.
- Appending copies of the inspection reports to the CEMP.
- Liaising with the Construction Manager to organise any repairs or maintenance required following the daily inspection of the site.

### **5.2.6 Other Roles**

#### *5.2.6.1 Health and Safety Personnel*

(To be updated upon appointment of Contractor/finalisation of CEMP)

The Health and Safety personnel for the construction project are appointed by the Contractor in line with the Construction Regulations:

- Carrying out duty of Project Supervisor Construction Stage.
- Responsible for safety induction of all staff and personnel on site.
- Implementing the Health and Safety Plan.
- Auditing and updating the Health & Safety Plan.
- All other required legal duties.

### 5.2.6.2 All site personnel

The site personnel appointed by the Contractor are responsible for:

- Adhering to the relevant Environmental Control Measures and relevant site-specific Method Statements.
- Adhering to the Health and Safety Plan.
- 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.
  - An unauthorised discharge to ground, water or air, damage to a protected habitat, etc.

## 5.3 CONTACTS

### 5.3.1 Main Safety Contacts

Position Title:	Name:	Phone:	Email:
The Client,	Fingal County Council	01 962 5000	planning@fingal.ie
Project Supervisor Design Stage (PSDP)			
Project Supervisor Construction Stage (PSCS)			

### 5.3.2 Main Contractor Contacts

Position Title:	Name:	Phone:	Email:
Project Manager			
Construction Manager*			
Environmental Manager*			
Safety (PSCS)*			
Safety Officers*			
Site Emergency Number*			
Overall Project PSDP			
Project Liaison Officer			

### 5.3.3 Third Party Contacts

Organisation: Email	Position:	Name:	Phone:	Address:
Emergency Services		Fire/Ambulance/ Garda	112 999	
Environmental Protection Agency		EPA Dublin - Regional inspectorate	(01) 268 0100	EPA Dublin McCumiskey House Richview Clonskeagh Road Dublin 14 D14 YR62
Local Authority <a href="mailto:planning@fingal.ie">planning@fingal.ie</a>		Fingal County Council		Parks & Green Infrastructure

				Division, County Hall, Main St, Swords, Co. Dublin
<a href="mailto:dublin@fisheriesireland.ie">dublin@fisheriesireland.ie</a>		Inland Fisheries Ireland	(0) 1 8842693	Inland Fisheries Ireland 3044 Lake Drive Citywest Business Campus Dublin
Health and Safety Authority <a href="mailto:contactus@hsa.ie">contactus@hsa.ie</a>		HSA Dublin, Headquarters	0818 289 389	HSA Contact Centre Health and Safety Authority Metropolitan Building James Joyce Street Dublin 1
Ecological Clerk of Works				
Other, as appropriate				

## 6 ENVIRONMENTAL CONSIDERATIONS AND POTENTIAL EFFECTS

The key potential environmental impacts associated with the proposed development preparation and construction works are set out in the following table. Relevant potential sensitive receptors to the works are identified. These potential sensitive receptors, the environmental considerations and potential impacts are to be considered as the basis for a future detailed CEMP.

Environmental issue Potential Receptor Potential Impacts Protected Sites Hydrological connectivity to Rogerstown Estuary SAC (00208) and SPA (004015)

Environmental Issue	Potential Receptor	Potential Adverse Impacts
Protected Sites	Hydrological connectivity to three Natura 2000 sites.  - Rogerstown Estuary SAC - Rogerstown Estuary SPA - North-West Irish Sea cSPA	Pollution via water quality and siltation
Habitats	- <b>Rogerstown Estuary SAC</b> - Atlantic salt meadows - Mudflats and sandflats not covered by seawater at low tide. - Mediterranean salt meadows. - Shifting dunes along the shoreline with colonising mud and sand - Estuaries	Pollution via water quality and potential alteration of habitat by siltation
Protected Species	-Gluco-Puccinellietalia maritimaie, -Juncetalia maritimi, -Ammophila arenaria - white dunes, -Salicornia and other annuals	Potential alteration of habitat by siltation
Birds	- <b>Rogerstown Estuary SPA</b> Greylag Goose (Anser anser) [A043], Redshank (Tringa totanus) [A162], Dunlin (Calidris alpina) [A149], Ringed Plover (Charadrius hiaticula) [A137], Shelduck (Tadorna tadorna) [A048], Oystercatcher (Haematopus ostralegus) [A130], Light bellied Brent Goose (Branta bernicla hrota) [A674], Grey Plover (Pluvialis squatarola) [A141], Knot (Calidris canutus) [A143], Wetland and Waterbirds [A999], Shoveler (Anas clypeata) [A056], Black tailed Godwit (Limosa limosa) [A156] - <b>North-West Irish Sea cSPA</b> Common Tern (Sterna hirundo) [A193], Common Scoter (Melanitta nigra) [A065], Razorbill (Alca torda) [A200], Arctic Tern (Sterna paradisaea) [A194],	Pollution of supporting habitat via water quality and siltation

	<p>Great Northern Diver (<i>Gavia immer</i>) [A003],  Puffin (<i>Fratercula arctica</i>) [A204],  Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179],  Red throated Diver (<i>Gavia stellata</i>) [A001],  Little Tern (<i>Sterna albifrons</i>) [A195],  Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183],  Herring Gull (<i>Larus argentatus</i>) [A184],  Great Black-backed Gull (<i>Larus marinus</i>) [A187],  Guillemot (<i>Uria aalge</i>) [A199], Roseate Tern (<i>Sterna dougallii</i>) [A192],  Kittiwake (<i>Rissa tridactyla</i>) [A188],  Fulmar (<i>Fulmarus glacialis</i>) [A009],  Shag (<i>Phalacrocorax aristotelis</i>) [A018],  Common Gull (<i>Larus canus</i>) [A182],  Little Gull (<i>Larus minutus</i>) [A177],  Manx Shearwater (<i>Puffinus puffinus</i>) [A013],  Cormorant (<i>Phalacrocorax carbo</i>) [A017]</p>	
Water	<p>Impairment of water quality within the Rogerstown Estuary SAC, Rogerstown Estuary SPA or the North-West Irish Sea cSPA</p>	<p>Erosion and run-off of sediment from excavations, temporary spoil storage areas and/or from accidental spillage or leakage of fuel/oil from machinery/plant which will be in-use during the works or fuel storage/refuelling areas.</p>

Note: This section must be read in conjunction with the AA Screening Report and NIS as prepared by CAAS ecological consultants.

## 7 ENVIRONMENTAL COMMITMENTS

### 7.1 SCHEDULE OF ENVIRONMENTAL REQUIREMENTS (MITIGATION MEASURES)

All construction activities in site will be conducted in line with best practices buildings standards and guidelines. A number of Environmental Commitments specific to the protection of European sites, in the form of mitigation measures, were identified in the NIS. The commitments relevant for the potential adverse effects to European sites with regard to the Habitats Directive, are provided in Mitigation Section 8 of the NIS. All other construction methods for the correct management and regulation of construction activities on site are detailed here.

The appointed Project Manager will be required to update any of the below detailed Environmental Management Plans, NIS mitigation or best practice construction measures for the construction phase should any additional requirements arise, in consultation with the Ecological Clerk of Works (ECoW), the Environmental Manager, and, as relevant, Fingal County Council.

### 7.2 ENVIRONMENTAL MANAGEMENT PLANS (EMPs)

A number of environmental management plans (EMPs) have been prepared for managing the impacts of Construction Activities associated with the development. See Table 1 below and refer to Appendix 1. These plans are to be implemented by the Project Manager and/or Project Contractor as relevant.

Table 1: Plans for Managing Impacts of Construction Activities

Ref:	Procedure:
EMP-1	Management of Excavations / sediment control
EMP-2	Fuels and Oils Management
EMP-3	Protection of Habitats and Fauna (Ecological Management)
EMP-4	Wheel Wash Management
EMP-5	Waste Management
EMP-6	Construction Noise
EMP-7	Dust Management
EMP-8	Invasive Species Management
EMP-9	Emergency Response Plan
EMP-10	Site Environmental Training and Awareness
EMP-11	Monitoring and Auditing
EMP-12	Environmental Accidents, Incidents and Corrective Actions
EMP-13	Environmental Complaints

## 8 AUDITING, MONITORING AND RESPONSE

### 8.1 ENVIRONMENTAL MONITORING SCHEDULE

The Environmental Monitoring Schedule will take cognisance of all mitigation measures outlined in Section 8 of the NIS and relevant planning conditions outlined in the grant of planning permission. The monitoring Schedule for construction will also provide for the checking of equipment, materials storage and transfer areas and specific environmental controls.

A Preliminary Monitoring Schedule is provided below (Table 2) and will be finalised with the appointment of the Contractor. The Contractor's developed daily Site Checklists must have the following information included at a minimum:

Table 2: Preliminary Monitoring Schedule

Aspect	Monitoring Required	Frequency	Note	Responsibility
Water	Sediment & Erosion Controls i.e., silt fences	At least daily during the construction phase as well as during and after significant rainfall events	Refer to Table 3 and EMP 1 below	Construction Manager, Environmental Manager & ECoW
Water	Water Fuel & Oil Storage	Daily	Refer to Table 3 below	Construction Manager
Earthworks	Material and Waste Storage	Daily	Refer to Table 3 below	Construction Manager
Water	Water quality monitoring	Fortnightly	Minimum parameters: pH, Suspended Solids, metals, nitrates, phosphates	Environmental Manager

The Contractor will assign a designated Environmental Manager to monitor the construction activities on a minimum fortnightly basis. The duties will include completing the required checklists (sample checklist included below) and coordinating with the relevant personnel (e.g., Construction Manager, ECoW and the Design Engineer as required) ensuring all environmental monitoring is carried out.

The Contractor-developed daily Site Checklists will have the following information included as a baseline, with any additional checks recommended by the Environmental Manager and ECoW:

Table 3: Site Checklist

Area of Inspection	Description
Silt Fences	Damage to or lagging in fences
Heras boundary fence	Signs of movement (i.e. not in a straight line) Damaged or fallen sections of fence
The land adjacent to the development	Presence of airborne waste eg dust & litter. Presence of invasive species identified during the preconstruction survey.

Site roads	Unacceptable level of sediment/silt on the road surface. Presence of waste.
Site compound – storage area	Damage Untidiness
Site compound – waste collection	Damage Untidiness Full skips
Site compound – oil storage area	Damage to containers or ancillary equipment Leakages Unlocked Storage Area
Site Compound - Dry wheel wash	Build-up of sediment
Wastewater facilities	Holding tank requiring emptying
Site Entrance	Unacceptable level of sediment/silt on the road surface

## 8.2 ENVIRONMENTAL PERFORMANCE INDICATORS

The appointed Project Contractor will outline the key performance indicators to be agreed with the Environmental Manager and ECoW for the site in gauging successful site management in the prevention of pollution and the protection of the environment.

Environmental performance indicators will at a minimum include:

- Number of environmental accidents logged.
- Breach of procedure and corrective actions.
- Number of environmental complaints received.
- Results of site audits.

The performance indicators will be finalised by the Appointed Contractor and communicated to all relevant personnel and sub-contractors. The review periods for analysing site performance indicators must also be specified.

## 8.3 RESPONSE PROCEDURE

In the event of an environmental incident, or breach of procedure, or where a complaint is received, the contributing factors are to be investigated and remedial action taken as necessary. The Contractor will ensure that the following respond actions will take place:

- 1) the Project Manager, PSDP and FCC must be informed of any incident, breach of procedure and/or complaint received, and details must be recorded in the incident/complaint register.
- 2) the Project Manager is to conduct/co-ordinate an investigation to determine the potential influence that could have led to the non-compliance.
- 3) the Project Manager is to notify and liaise with the appropriate site personnel where required, e.g., Construction Manager, Environmental Manager & ECoW.
- 4) If necessary, the Project Manager will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident.
- 5) The details of the incident will 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 will also include any recommendations made to avoid reoccurrence of the incident.

6) The Project Manager will be responsible for any corrective actions required as a result of the incident e.g., an investigative report, formulation of alternative construction methods, pausing of works or environmental sampling.

7) The Project Manager is to ensure that the relevant environmental management plans/procedures are revised and updated as necessary.

#### **8.4 CORRECTIVE AND PREVENTATIVE ACTION**

Corrective Action Requests will be issued to ensure that prompt action is agreed and committed to, with a view to the effective resolution of any deviations from the CEMP requirements or any environmental issues.

### **9 SUMMARY**

This outline CEMP provides the information which will be contained in the final Contractor- developed Plan at the construction stage of the project. The requirement on the Contractor to update these details has been explained, and there is a particular requirement for an update to the roles and responsibilities of those appointed on the site for the construction of the project. The CEMP is a live document and will be improved upon as the project progresses as appropriate.

# Appendix

## APPENDIX 1:

### EMP 1: MANAGEMENT OF EXCAVATIONS / SEDIMENT CONTROL

#### Purpose

To describe measures for the management of all excavations on the site and sediment control

#### Procedure

The appointed Ecological Clerk of Works (ECoW) shall agree a construction methodology for excavations with the Construction Manager and Environmental Manager. This shall include the timing of specific work phases taking note of site & weather conditions, strict site protocols including material handling procedures & machinery selection and stockpiling of material. All such measures & procedures shall be monitored on-site by the appointed ECoW and altered only with their agreement.

- Before any excavation takes place, a location for the storage of excavated soil materials will be chosen. This location will be outside the 15m ecological buffer zone, on a solid stable surface to minimise erosion, and in line with best practice construction methods and agreement of the Environmental Manager and ECoW.
- Storage of excavated material: when an appropriate location for the stockpiled material is chosen, the appropriate silt fencing will be put in place before any materials are excavated to surround the stockpiled material and inserted in accordance with best practice building standards, and a mesh type chosen that is suitable for the material type (or types, if segregated) excavated on site i.e., terrastop silt fencing or equivalent. This will be reviewed and approved by the Environmental Manager and ECoW.
- Double line of silt fencing will also be installed before any on site works or soil excavation takes place and remain in place for the duration of the construction works (see drawing 5988-04) which will be composed of two mesh sizes in accordance with best practice buildings standards i.e., terrastop silt fencing or equivalent:
  - the first silt fence (i.e., closest to the playing pitch construction area) will consist of a wider mesh that is in accordance with best practice buildings standards i.e., terrastop or equivalent, to the south of the site between existing berms; and,
  - the second silt fence will consist of a smaller mesh size and located between the first silt fence and the Rathmooney stream, just south of the existing path.
- All silt fencing on site will be regularly inspected and maintained in accordance with maintenance and response plan detailed in section 8 of this CEMP.
- All silt fencing will be installed in accordance with best practice buildings standards, i.e., terrastop or equivalent, and inspected by the Environmental Manager and ECoW.
- The time between excavation of soil and beginning of construction will be planned in order to reduce the time soil is exposed as much as possible to reduce soil exposure, risk of erosion and run-off.
- Excavation of materials will not take place within a 15m of the ecological buffer zone (measured from the top of the northern bank of the stream), as per drawing 5988-04 - except to install the proposed outfall from the development to the stream as per drawings M02127-09\_DWG\_101\_1 and M02127-09\_DWG\_101\_2 and to install a maintenance vehicle set down area as per drawing 5988-04. These exceptions will only take place when all silt fencing is in place as described above, and both will be monitored by the ECoW.

- Vehicular movements will be restricted to the footprint of the permitted development.
- Machinery will not operate outside of demarcated areas.
- The appointed contractor and Environmental Manager will ensure that reuse of any on site material for the proposed development will be conducted under best practice construction methods (e.g., appropriate handling, processing, storage and segregation of the material).
- Excavations will be monitored by the Environmental Manager and ECoW to ensure that any contamination encountered are identified, segregated and stored in an area where there is no possibility of runoff generation or infiltration to ground or surface water drainage, and no cross-contamination with clean soils elsewhere throughout the site.
- All material/soil excavated during construction will be reused on site for localised landscaping and reprofiling.
- Plant and materials will be stored in approved locations only (such as the proposed site compound) and will not be positioned or trafficked in a manner that would surcharge existing or newly formed slopes.
- The potential for an exceedance of the retention capacity of the silt fencing through increased surface water flow during periods of prolonged and/or heavy storm rainfall will be mitigated by monitoring weather forecasts during the construction phase. The 24 hour advance meteorological forecasting service from Met Éireann will be consulted and this will inform a trigger response system. The trigger-response system will include the cessation of earthworks and traffic until the storm event / heavy rainfall event has passed, postponement of specific tasks, and monitoring the status of all mitigation measures (i.e., inspection of silt fences for damage or lagging or reduced retention capacity) after the storm event, and response measures put in place if needed in agreement with the ECoW and Environmental Manager.

### **Responsibility**

- The ECoW will liaise with the Project Manager, Environmental Manager and the Construction Manager and monitor adherence to the agreed method statements and NIS mitigation measures on a daily basis.
- The Environmental Manager will monitor the site and the excavation areas and associated drainage.
- The Construction Manager will monitor vehicle movements throughout the construction phase.
- The Project Manager will oversee the phasing of the excavation and machinery movement across the site.
- Construction personnel will be informed of the measures to prevent pollution of water courses, including the 15m ecological buffer zone, set down areas, silt fencing areas and maintenance regimes.
- The Design Engineer will have responsibilities to ensure the engineering designs meet the ECoW's requirements and NIS mitigation measures.
- All responsibilities will be agreed with FCC, ECoW and the Appointed Contractor.

## **EMP 2: FUEL AND OILS MANAGEMENT**

### **Purpose**

To describe measures for the management of all fuel and oils on site for the protection of habitats from any spills.

## Procedure

### Construction Machinery and Vehicles

- The potential for hydrocarbons getting into the local watercourses will be mitigated by only refuelling construction machinery and vehicles in designated refuelling areas using a prescribed re-fuelling procedure agreed in advance with the Environmental Manager.
- Refuelling will be carried out using 110% capacity double banded mobile bowser. The refuelling bowser will be operated by trained personnel. The bowser will have spill containment equipment which the operators will be fully trained in using.
- To reduce the potential for oil leaks, only vehicles and machinery will be allowed onto the site that are mechanically sound. An up-to-date service record will be required from the main contractor.
- Potential leaks from delivery vehicles will be reduced by visually inspecting all delivery vehicles for major leaks. Contractors supplying concrete and crushed stone to the site will be contractually required to supply their products using roadworthy vehicles.
- Should there be an oil leak or spill, the leak or spill will be contained immediately using oil spill kits.
- The Environmental Manager will be immediately informed of the oil leak/spill, and will assess the cause and the management of the clean-up of the leak or spill. They will inspect nearby drains for the presence of oil and initiate the clean-up if necessary.
- Immediate action will be facilitated by easy access to oil spill kits. An oil spill kit that includes absorbing pads and socks will be kept at the site compound and also in site vehicles and machinery.
- Correct action in the event of a leak or spill will be facilitated by training all vehicle/machinery operators in the use of the spill kits and the correct containment and cleaning up of oil spills or leaks. This training will be the responsibility of the Environmental Manager at site induction.
- In the event of a major oil spill, a company who provide a rapid response emergency service for major fuel spills will be immediately called for assistance, their contact details will be kept in the site office and in the spill kits kept in site vehicles and machinery.

### Responsibilities

- The Construction Manager and Environmental Manager are responsible for ensuring Fuel and Oils are managed in line with this procedure. The Appointed Contractor, in updating the CEMP, must designate personnel to the tasks relating to Fuels and Oil, as outlined.
- Details and Responsibilities for fuel and oils management to be finalised by Construction Manager, in consultation with the Environmental Manager.

**Reference:** Best Practice Guidelines BPGCS005 – Oil Storage Guidelines (Enterprise Ireland).

## EMP 3: PROTECTION OF HABITATS AND FAUNA (ECOLOGICAL MANAGEMENT PLAN)

### Purpose

To describe measures for the management and protection of habitats and fauna on the site.

### Procedure

- A suitably qualified and experienced Ecological Clerk of Works (ECoW) will be appointed by the Client during the construction phase of the project. Duties will include the review of all

method statements and monitoring of construction phase activities and measures to ensure all environmental controls and NIS mitigation measures are implemented in full. The ECoW shall also advise and monitor progress of site landscaping and planting.

- No removal of vegetation suitable for nesting birds (such as scrub on site) will occur during the breeding bird nesting season (1st March to 31st August inclusive). Should removal of potential nesting habitat such as scrub be required the ECoW will supervise the removal and advise on the next steps should a nest site be identified.
- The ECoW will have a senior level of authority and will be allowed to stop construction activity if there is potential for adverse environmental effects until prescribed measures to prevent such a risk have been implemented.
- Spraying of vegetation using pesticides (herbicides) will not be permitted at any stage of development unless agreed with the ECoW.

## **Ecological Protection Measures**

### **General Habitats**

- Habitat degradation will be limited by restricting the movement of construction vehicles and machinery to assigned areas. Construction vehicles and machinery will not encroach onto land beyond the proposed development footprint. To emphasise this requirement, the boundaries of the footprint of the works will be fenced off with Heras fencing.
- Bare areas will be re-vegetated with appropriate seed mix where artificial sports surfacing is not installed.
- The 15m ecological buffer zone will be observed by all construction personnel and construction machinery as detailed in drawing 5988-04. An exception to this is to install the proposed outfall from the development to the stream as per drawings M02127-09\_DWG\_101\_1 and M02127-09\_DWG\_101\_2 and to install a maintenance vehicle set down area as per drawing 5988-04. These exceptions will only take place when all silt fencing is in place as described above, and both will be monitored by the ECoW.

### **Protection of Fauna**

The ECoW will note any movements or records of commuting mammals and nesting birds on site. Should any signs of usage of the site by birds or mammals be recorded during construction, the ECoW shall be notified. The ECoW will establish whether there is any risk to the noted species due to construction activities and if required the construction methodology & scheduling will be amended to minimise any potential impacts to noted species. Where a protected species is identified, the ECoW shall contact the NPWS for further steps.

- Habitat disturbance to fauna will be limited by ensuring construction vehicles will not encroach onto habitats beyond the proposed development footprint.
- Duration of construction activities will be restricted to 8.00am – 6.00pm (Monday – Friday inclusive).
- Construction work will not take place at night.

### **Responsibility**

- Environmental Manager
- Construction Manager
- ECoW

## References

The Wildlife Acts 1976 to 2023 – available [here](#).

## EMP 4: WHEEL WASH MANAGEMENT PROCEDURE

### Purpose

To describe Measures for the protection of Watercourses and the Public Roads from dirty water from vehicles.

### Procedure

The appointed Contractor must ensure the potential for the roads being dirtied by heavy vehicle traffic is minimised, by including the following:

- A bunded dry Wheel Wash facility, through which all traffic entering and leaving the site will travel, will be provided adjacent to the Site Compound.
- Wheel washes will be cleaned to prevent build-up of material in excess of the capacity of the bund.

### Responsibility

- Construction Manager
- Environmental Manager
- Oversight by ECoW

## EMP 5: CONSTRUCTION WASTE MANAGEMENT

### Purpose

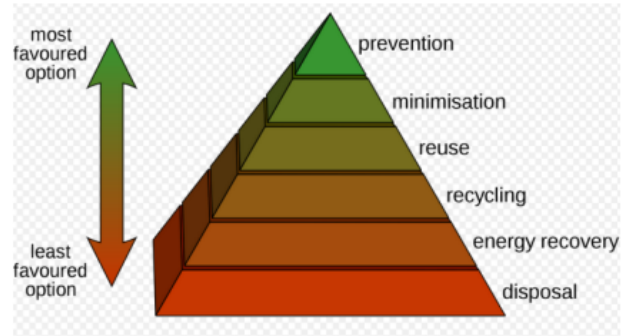
To describe measures for the management of all wastes associated with the construction of the Recreational Sports Hub.

### Procedure

Waste Management Plan

A Waste Management Plan shall be prepared by the appointed Contractor for the construction phase. This Plan will form part of the CEMP:

- Regard should be had to the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects (DoEHLG, July 2006) in preparing and maintaining this plan.
- The Waste Management Hierarchy (illustrated below) should be assessed and applied in the preparation and maintenance of the Construction Phase Waste Management Plan.
- The Construction Phase Waste Management Plan should address the following aspects of the Project:
- Analysis of the waste arising/material surpluses.
  - Specific waste management objectives for the project.
  - Methods proposed for prevention, reuse and recycling of wastes.
  - Material handling procedures.



The Waste Management Plan should contain individual headings describing the following:

- Description of the Project.
- Wastes arising including proposals for minimisation/reuse/recycling.
- Proposed facilities for waste handling.
- Record keeping procedures.

As part of the record keeping procedures, the Construction Manager should keep records provided by waste contractors of all waste being removed from site. The Environmental Manager should record waste removed from site on a quarterly basis. This information should be recorded in a standard format.

A construction phase waste management plan should be developed to control all site generated construction waste and the storage and disposal of same. Any introduced semi-natural (sports surface build-up materials) or artificial materials must be taken off site at the end of the construction phase. Any accidental spillage of solid state introduced materials must be removed from the site by the appropriate means.

#### **General Waste**

- Access to materials will be controlled. A dedicated storage area will be provided in the site compound for building materials such as Terram, geotextile matting, tools and equipment, fencing etc.
- Access to stored materials will be restricted. the site compound will be securely hoarded from the outset and will be locked when there are no site personnel present.
- To contain and manage construction phase waste, multiple skips will be provided at the storage compound. one for recyclable waste and others for various construction waste. These skips will be emptied when required by a licensed waste management company. Waste oil and waste oil drums will be collected and stored in containers and on a bunded tray within the storage container.
- The works will be carried out in phases. At the end of each phase, the completed works areas will be tidied of any unused material or waste. this material will be brought to the site compound for storage and reuse or placed in the appropriate skip for disposal.

#### **Waste Water**

- Any waste water will be removed from site to a licensed facility.

#### **Responsibility**

- The Environmental Manager will be responsible for creating and updating the Waste Management Plan.
- The Environmental Manager will be responsible for identifying a waste contractor to remove waste that can be recycled or reused. He/she will obtain records for all waste leaving the site for this purpose.
- It is the Construction Manager's responsibility to organise the removal of skips from the site when they are full.
- Details and Responsibilities for waste management to be finalised by Construction Manager, in consultation with the Environmental Manager

### **Reference**

Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects (DoEHLG, July 2006).

Details of Site Waste Management to be finalised by Appointed Contractor.

## **EMP 6: CONSTRUCTION NOISE MANAGEMENT**

### **Purpose**

To describe measures for the management of impacts from construction noise

### **Procedure**

Control of Noise at Source

- Plant will be properly and regularly maintained.
- Compressors, if needed, will be 'sound related' models fitted with properly lined and sealed acoustic covers which will be kept closed whenever machines are in use.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers.
- Best practice in the form of BS5228 –1&2:2009 + A1 2014, Code of Practice for the Control of Noise and Vibration on Construction and Open Sites will be adopted during the construction phase in order to minimise the noise generated by construction activities and nuisance to neighbours.
- All plant and equipment for use will comply with the Construction Plant and Equipment Permissible Noise Levels Regulations 1996 (SI 359/1996) and other relevant legislation.

### **Responsibility**

- The Construction Manager will be familiar with the noise sensitive receptors and alert the Environmental Manager in good time prior to work commencing in the areas closest to any noise sensitive receptors.
- The Environmental Manager will review any relevant planning conditions in updating this plan.
- Details and Responsibilities for construction noise management to be finalised by Construction Manager, in consultation with the Environmental Manager and reviewed by the ECoW.

### **References**

BS5228 –1&2:2009, Code of Practice for the Control of Noise and Vibration on Construction and Open Sites



Details of management of noise on the site to be finalised by Appointed Contractor

## **EMP 7: CONSTRUCTION DUST MANAGEMENT**

### **Purpose**

To describe the measures for the management of nuisance impacts on air quality from construction generated dust.

### **Procedure**

A dust minimisation plan will be formulated for the construction phase of the project, by the Construction Manager and the Environmental Manager for review by the ECoW. The potential for dust to be emitted depends on the type of construction activity being carried out in conjunction with environmental factors including levels of rainfall, wind speeds and wind direction. The potential for impact from dust depends on the distance to potentially sensitive locations and whether the wind can carry the dust to these locations. The majority of any dust produced will be deposited close to the potential source and any impacts from dust deposition will typically be within several hundred metres of the construction area.

Construction phase generated dust can be minimised by the following measures:

- The use of water as a dust suppressant, e.g., a water bowser to spray access tracks during any extended dry periods when fugitive dust emissions could potentially arise.
- Public roads will be inspected regularly for cleanliness and cleaned as necessary.
- All loads entering and leaving the site will be covered during dry periods if dust becomes a nuisance on site.
- Control of vehicle speeds transversing the site.
- Wheel wash facilities adjacent to the site compound will facilitate removal of any material collected by vehicles entering or leaving the site and preventing its deposition on public roads.
- Where necessary, site stockpiling of materials will be designed and laid out to minimise exposure to wind.
- Regular site inspections should take place to examine dust measures and their effectiveness.

### **Construction Traffic Emissions**

Construction traffic emissions can be reduced using the following measures:

- Ensure regular maintenance of plant and equipment. Carry out periodic technical inspection of vehicles to ensure they perform most efficiently.
- Implementation of the Traffic Management Plan to minimise congestion. and
- All site vehicles and machinery to be switched off when not in use - no idling.

In order to ensure that no dust nuisance occurs, a series of measures will be implemented:

- The site access road will be regularly cleaned and maintained as appropriate.
- Public roads in the vicinity of the site will be regularly inspected for cleanliness and cleaned as necessary.

- A temporary vehicle dry wheel wash facility, through which all site traffic will pass on entering and leaving the site, will be installed in a bunded area with 110% capacity, adjacent to the site compound area.

The dust minimisation plan will be reviewed at regular intervals during the construction phase to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practice and procedures.

### **Responsibility**

The Environmental Manager is responsible for developing and reviewing the site Dust Minimisation Plan.

The Construction Manager is responsible for organising dust suppression through use of bowsers and cleaners.

Details and Responsibilities for construction dust management to be finalised by Construction Manager, in consultation with the Environmental Manager and reviewed by the ECoW.

### **References**

‘Control of Dust from Construction and Demolition Activities’, UK British Research Establishment (BRE).

‘Environmental Good Practice on Site’, Construction Industry Research and Information Association (CIRA).

‘Environmental Management Plans’, Institute of Environmental Management and Assessment (IEMA).

‘Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan’ National Roads Authority of Ireland (NRA).

## **EMP 8: MANAGEMENT OF INVASIVE SPECIES**

### **Purpose**

To describe measures for the management of invasive species on site.

### **Procedure**

An invasive species survey, with particular focus on Third Schedule species<sup>2</sup> of Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011, shall be undertaken by a suitably qualified ecologist prior to commencement of construction. Should areas with Third Schedule invasive species be identified, these will be demarcated prior to commencement of construction.

The following measures shall be put in place should any Third Schedule invasive species be identified on site prior to construction:

- Should a Third Schedule invasive species be identified within the site, an Invasive Species Management Plan (ISMP) will be developed by a qualified and experienced invasive species

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<sup>2</sup> List of Third Schedule invasive species available [here](#)

expert, in consultation with the ECoW. This ISMP will then be incorporated into the final CEMP for use on site by the Construction Manager and Environmental Manager.

Amongst any other recommendations made by the invasive species expert and the ECoW, the ISMP will include the following:

- Good construction site hygiene will be employed to prevent the introduction and spread of any problematic invasive alien plant species identified (e.g., Himalayan Balsam, Japanese Knotweed etc.) by thoroughly washing vehicles prior to leaving any site.
- All plant and equipment employed on the construction site (e.g., excavator, footwear, etc.) will be thoroughly cleaned down using a power washer unit prior to arrival on site to prevent the spread of invasive plant species.
- All washing must be undertaken in areas with no potential to result in the spread of invasive species. This process will be detailed in the contractor's method statement.
- All planting and landscaping associated with the proposed development shall avoid the use of invasive shrubs.
- A distribution map of the invasive alien plant species on the site, and the above recommendations, will be incorporated into the final CEMP.
- To reduce the likelihood of invasive species spreading, the construction personnel involved in works will be trained in basic relevant invasive species prevention and management (toolbox talk).
- To reduce the likelihood of invasive species being introduced to the site from quarries, the aggregate will be crushed stone which will be biologically inert and would not be expected to have a seed bank.
- The measures followed to avoid the spread of invasive alien species will follow guidelines issued by the National Roads Authority – The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads (NRA 2010) and relevant species guidance from Invasive Species Ireland, Inland Fisheries Ireland, and the engaged invasive species expert.
- Prior to being brought onto the site, all plant and equipment must be clean and free of soil/mud/debris or any attached plant or animal material. Prior to entering the site, all plant/equipment will be visually inspected to ensure all adherent material and debris has been removed.

### **Methodologies**

If required, a Third Schedule Invasive Species Management Plan (ISMP) will be developed and implemented alongside the engaged invasive species expert and ECoW in accordance with relevant guidelines from the National Roads Authority, Inland Fisheries Ireland, and the relevant species guidelines produced by Invasive Species Ireland.

### **Responsibility**

- Construction Manager
- Environmental Manager
- Oversight by ECoW

### **References**

Third Schedule species<sup>3</sup> of Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011

Management Guideline document produced by Invasive Species Ireland available [here](#).

## **EMP 9: EMERGENCY RESPONSE PLAN**

### **Purpose**

To describe measures for the prevention of an environmental accident or incident and the response required to minimise the impact of such an event.

### **Procedure**

In the event of an environmental emergency, all personnel will react quickly and adhere to this procedure.

All site personnel will be inducted in the provisions of the Emergency Response Plan. The following outlines some of the information, on the types of emergency, which must be communicated to site staff:

- Release of hazardous substance - Fuel or oil spill
- Concrete spill or release of concrete
- Flood event – extreme rainfall event
- Environmental buffers and exclusion zones breach
- Housekeeping of materials and waste storage areas breach
- Stop works order due to environmental issue or concern (threat to ecological feature)
- Fire on site (cross-reference site Safety Emergency Plan as appropriate)

If any of the above situations occur, the Emergency Response Plan is activated. The Environmental Manager will be responsible for overseeing the Emergency Response Plan (to be confirmed upon appointment of Contractor) and will be prepared and ready to implement the plan at all times. The Environmental Manager will be immediately informed and report to the scene. He/she must be aware of the:

- Nature of the situation – brief description of what has happened.
- Location of the incident.
- Whether any spill has been released.
- Whether the situation is under control.
- The Emergency Response Plan must be completed by the appointed Contractor and approved by the ECoW.

### **Oil Spillages**

The following list outlines issues likely to be appropriate for inclusion in such a plan:

- Site staff will report the spillage immediately to the Environmental Manager or Construction Manager.
- The Environmental Manager will report the spillage to Inland Fisheries Ireland and Fingal County Council/ ECoW.

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<sup>3</sup> List of Third Schedule invasive species available [here](#)

- Where possible, the source of pollution will be identified.
- Switch off all sources of ignition.
- Stop the spillage spreading.
- Use absorbent materials from the spill kit to mop up the spill (sand or absorbent materials should be used rather than detergents).
- Place boom across watercourse as a precaution.
- Do not wash spillage into drainage system.
- If the spill has already reached Surface water drainage, install absorbent materials in affected drainage pipes and excavate affected materials to skips.
- Shovel contaminated sand/earth/absorbent granules into sacks or skips.
- A specialist oil removal company should remove pooled oil.

### **Contacts**

As an Environmental Control Measure, the Environmental Manager will append the relevant contact details to the Emergency Response Plan document. Examples of such contact details include:

- Environmental Manager.
- Specialist oil removal Company.
- Fingal County Council.
- Inland Fisheries Ireland.
- National Parks and Wildlife Service.

### **Location of Emergency Spill Kits**

- A map indicating the location of all emergency spill kits will be attached to the Emergency Response Plan document.
- Emergency oil spill kits will also be carried in all site vehicles and machinery and in the site office.

### **Responsibility**

- The Construction Manager & Environmental Manager will prepare an Emergency Response Plan to be ready to respond to any incident for review by the ECoW.
- All site personnel will report any spillages of oil or chemicals to the Environmental Manager and Construction Manager immediately.
- As appropriate, the Environmental Manager will report the spillage to the Regional Fisheries Board, local authority and any other relevant authority.

Details of Emergency Response Plans to be finalised by the Construction Manager and review by the ECoW.

## **EMP 10: SITE ENVIRONMENTAL TRAINING AND AWARENESS**

### **Purpose**

To describe measures for the training of all site personnel in the protection of the environment and the relevant controls.

### **Scope**

All site personnel and construction teams which may influence environmental impacts.

## Procedure

An initial site environmental induction and ongoing training will be provided to communicate the main provisions of the CEMP to all site personnel. Two-way communication will be encouraged to promote a culture of environmental protection. The following outlines some of the information which will be communicated to site staff:

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

### Housekeeping and Storage of hazardous materials

- Hazardous materials marked with the following symbols will only be stored in the secure bunded storage container in the site compound.



- Subcontractors will provide a copy of the Material Safety Data Sheets for all hazardous substances brought on site.

All finalised CEMP policies will be adhered to, in the management of fuels and oils, concrete, and installation of sediment and erosion controls and drainage features. All finalised details will be communicated with site personnel. Environmental Training including spill kit training, installation of silt fence training is to be provided by the Environmental Manager with oversight by the ECoW. Environmental training records will be retained in the site office and reported to the ECoW.

## Responsibility

- Environmental Manager
- Construction Manager
- All site personnel

Details of environmental training and awareness procedures to be finalised by the Construction Manager/Environmental Manager and approved by the ECoW.

## EMP 11: MONITORING AND AUDITING PROCEDURE

### Purpose

To describe measures for environmental monitoring during the construction works and audit of control measures to ensure environmental protection.

### Procedure

All mitigation measures, any planning conditions and relevant construction methods will be monitored on site. The Appointed Contractor will nominate an Environmental Manager for the works. The

Environmental Manager will provide Audit Checklists to ensure regular checks of the site's control measures for the ongoing protection of the environment.

At a minimum monitoring will be carried to ensure adherence with the following.

Ref:	Procedure:
EMP-1	Management of Excavations / Sediment Control
EMP-2	Fuels and Oils Management
EMP-3	Protection of Habitats and Fauna (Ecological Management)
EMP-4	Wheel Wash Management
EMP-5	Waste Management
EMP-6	Construction Noise
EMP-7	Dust Management
EMP-8	Invasive Species Management
EMP-9	Emergency Response Plan
EMP-10	Site Environmental Training and Awareness
EMP-11	Monitoring and Auditing
EMP-12	Environmental Accidents, Incidents and Corrective Actions
EMP-13	Environmental Complaints

Checklists for daily, weekly or monthly site audits will be finalised by the Environmental Manager and the relevant personnel informed of their duties. Checklists will include (but are not limited to) confirmation that fuel is stored appropriately, waste management rules are adhered to, all environmental buffers are maintained, sediment and erosion control measures of the Sediment & Erosion/Storm Water Control Plan are in place and functioning. Checklists will be finalised in the Final Contractor's CEMP.

All environmental records, including completed checklists, will be retained at the site office.

### **Responsibility**

- Project Manager
- Environmental Manager
- Construction Manager

Details of Monitoring Procedure and Checklists to be finalised by Appointed Contractor's Environmental Manager and approved by the ECoW.

## **EMP 12 ENVIRONMENTAL ACCIDENTS, INCIDENTS AND CORRECTIVE ACTIONS**

### **Purpose**

To describe measures for the recording, investigating and close-out of any environmental accidents or incidents on the site

### **Procedure**

- The Environmental Manager and ECoW will be contacted as soon as possible where there is any incident that carries the possibility of negative environmental consequences (e.g., minor oil leakage).

- The Emergency Response Plan and standard emergency procedures will be applied to get the incident under control and prevent injury or loss of life in the first instance.
- Work in the area will be halted and the Environmental Manager will 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 will be recorded, and the cause investigated.
- Any remedial action required will be taken to mitigate any damage and prevent a recurrence.
- Corrective actions will be approved by the ECoW and be communicated to personnel and sub-contractors where relevant – particularly where it results to a change in procedure.

#### Example list of environmental accidents & incidents

- Accidents involving large spill of fuel or concrete from delivery truck (emergency response required).
- Spills of fuel and oil (minor).
- Waste or rubbish left around the site (not in dedicated waste areas).
- Breach of any buffers (ecological, archaeological, watercourse).
- Failure of any control measures (silt fences collapsed in a storm).
- Concrete chute wash out in a non-dedicated area.
- Unplanned vehicle movement off the access tracks.
- Unplanned vehicle movement within a buffer zone.

#### Responsibility

- Site staff will contact the Environmental Manager or Construction Manager as soon as possible where there is any incident that carries the possibility of negative environmental consequences.
- The Environmental Manager is responsible for alerting the relevant authorities.
- Details of Environmental Accidents, Incidents and Corrective Actions Procedure, including a chain of responsibility, to be finalised by the Construction Manager/Environmental Manager for review by the ECoW and communicated to all personnel and subcontractors.

## EMP 13: ENVIRONMENTAL COMPLAINTS

### Purpose

To describe measures for the recording and resolving complaints by third parties, including local residents or members of the public

### Procedure

Any environmental complaints received, whether internal or external, will be recorded and investigated. It is recommended that immediate action is taken to resolve environmental complaints to avoid any nuisance to the local community or any environmental damage.

This procedure includes:

- Recording of any complaints to a Site Log.
- Liaison with the ECoW.
- Follow up by the relevant site representative – Environmental Manager.
- Remedial measures where required.



- Ongoing communication with complainant to confirm resolution.
- Any required training or communication with site personnel and sub-contractors as a result.

**Responsibility**

- Project Manager
- Environmental Manager
- Construction Manager

Details of Environmental Complaints Response Procedure to be finalised by the Construction Manager/Environmental Manager for review by the ECoW