

# Appendix C4.01

Environmental Operating Plan  
(also known as a Construction Environmental Management Plan)

## Appendix C4.01

# ENVIRONMENTAL OPERATING PLAN

(Also known as a Construction Environmental Management Plan)

### TEN-T Priority Route Improvement Project, Donegal



TT\_MGT0337-RPS-P3-ZZ-RP-E-EN0001

Environmental Operating Plan

March 2026

## Table of Contents

<b>1</b>	<b>INTRODUCTION</b> .....	<b>1</b>
1.1	Purpose and Scope .....	1
<b>2</b>	<b>DESCRIPTION OF PROPOSED DEVELOPMENT</b> .....	<b>3</b>
2.1	Project Overview .....	3
2.2	Project Stages .....	4
2.3	Location of all Work Sites, Offices and Construction Compounds .....	5
2.4	Construction Duration of the Scheme .....	5
2.4.1	Section 1 .....	5
2.4.2	Section 2 .....	6
2.4.3	Section 3 .....	6
<b>3</b>	<b>REFERENCE DOCUMENTS</b> .....	<b>6</b>
3.1	Scheme Specific Documentation .....	6
3.2	General Reference and Guidance Documentation .....	7
<b>4</b>	<b>CONTACT SHEETS</b> .....	<b>8</b>
4.1	Contractor Details .....	8
4.2	Employer Contacts .....	8
4.3	Third Party Contacts .....	8
<b>5</b>	<b>ORGANISATIONAL STRUCTURE/ ROLES AND RESPONSIBILITES</b> .....	<b>10</b>
5.1	Organisational Structure .....	10
5.2	Roles and Responsibilities .....	10
5.2.1	Project Manager .....	10
5.2.2	Site Environmental Manager .....	10
5.2.3	Environmental Clerk of Works (ECoW) .....	12
5.2.4	Contractor's Project Ecologist.....	13
5.2.5	Contractor's Project Archaeologist .....	13
5.2.6	Contractor's Landowner Liaison Officer .....	14
5.2.7	Employer's Environmental Representative.....	14
5.2.8	Employer's Project Ecologist .....	14
5.2.9	Employer's Project Archaeologist.....	15
5.2.10	Employer's Landowner Liaison Officer .....	15
5.2.11	All Site Personnel .....	15
<b>6</b>	<b>SCHEDULE OF ENVIRONMENTAL COMMITMENTS</b> .....	<b>15</b>
<b>7</b>	<b>ENVIRONMENTAL CONTROL MEASURES</b> .....	<b>16</b>
<b>8</b>	<b>SITE-SPECIFIC METHOD STATEMENTS</b> .....	<b>17</b>
<b>9</b>	<b>ENVIRONMENTAL AWARENESS TRAINING</b> .....	<b>17</b>
9.1	Environmental Induction Training .....	17
9.2	Specific Training.....	18
<b>10</b>	<b>COMMUNICATION</b> .....	<b>18</b>
10.1	Internal Communication .....	18
10.2	External Communication .....	18
<b>11</b>	<b>INSPECTIONS, MONITORING AND AUDITING</b> .....	<b>18</b>
11.1	Inspections .....	18
11.2	Monitoring.....	18
11.3	Auditing .....	19
11.3.1	Audit by Environmental Manager.....	19
11.3.2	Audit by the Engineer .....	19

**12 EOP HANDOVER .....19**

## Tables

Table 4-1: Contact Information of Contractor and Relevant Staff .....8  
Table 4-2: Employer Contact Information .....8  
Table 4-3: Contact Information of Third-Party Personnel .....9

## Figures

Figure 1-1: Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA, 2007) .....2  
Figure 2-1: Proposed Development Location .....4  
Figure 7-1: Main Steps for Development and Implementation of Environmental Control Measures .....16

## Appendices

EIAR Chapter 21 Schedule of Environmental Commitments

EIAR Appendix C4.02: Construction Traffic Management Plan

EIAR Appendix C4.03: Biodiversity Management Plan

EIAR Appendix C4.04: Invasive Species Management Plan

EIAR Appendix C16.03: Construction & Demolition Resource and Waste Management Plan

# 1 INTRODUCTION

This document comprises the Environmental Operating Plan (EOP), also referred to as a Construction Environmental Management Plan (CEMP), for the construction phase of the TEN-T Priority Route Improvement Project, Donegal, the TEN-T PRIPD, (hereafter referred to as the 'Proposed Development'). The EOP sets out the processes and procedures for the delivery of environmental mitigation and monitoring measures during construction. This document will be provided to the appointed Contractor to update and finalise prior to construction. The appointed Contractor(s) will be required to ensure the information contained within the finalised EOP is complied with so as to prevent, manage and/or minimise potential significant environmental effects during the construction phase. The information in this EOP is specific to the Proposed Development and contains the mitigation and monitoring measures set out in the Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) for the Proposed Development.

The EOP has been prepared in accordance with the National Roads Authority (NRA) (Operating as Transport Infrastructure Ireland (TII)) Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA, 2007).

Should there be any future update to the guidelines and/ or best practices, then the construction phase EOP shall be updated and finalised in accordance with any such updated guidelines.

Where this document refers to an entity in the singular, e.g. Contractor, it shall also be taken to mean the plural, especially where more than one Contractor may be appointed to the construction stage of the Proposed Development.

## 1.1 Purpose and Scope

The EOP is a document that details the overall environmental management strategy that will be adopted and implemented during the construction of the Proposed Development. Its purpose is to set out a management framework to demonstrate how the proposed construction works can be delivered in a logical, sensible and safe sequence which incorporates specific environmental control/mitigation measures relevant to the construction works. The EOP sets out the mechanisms by which environmental protection is to be achieved during the construction phase of the Proposed Development. Implementation of the EOP (which the Contractor will be obliged to implement) will ensure disruption and nuisance are kept to a minimum and compliance with it will assist in preventing, managing and/or minimising significant environmental impacts during the construction phase.

The EOP is a working document and will be updated and finalised by the appointed Contractor prior to the commencement of the construction works, and will include any additional commitments which may arise as part of the EIA / AA / statutory approval processes and also any mitigation measures / conditions required pursuant to any decision to grant approval by An Coimisiún Pleanála (the Commission).

All of the content provided in this EOP will be implemented in full by the Contractor and any updating and finalisation of the EOP by the Contractor will not affect the robustness and adequacy of the information and the mitigation measures presented in this EOP and the appendices hereto and also as contained in the EIAR and NIS.

The appointed Contractor will be responsible for the maintenance of the EOP and for ensuring that all sub-contractors adhere to and implement the procedures and measures included in the finalised EOP.

The scope is as follows:

- Implement all environmental commitments and requirements.
- Manage all environmental aspects of the construction works in accordance with best practice.
- Provide for environmental awareness training for construction operatives and staff.
- Ensure all relevant mitigation measures are implemented as required, including those set out within the EIAR and NIS; subject to any modifications and/ or additional requirements imposed and or which may

arise as part of the EIA / AA / statutory approval processes e.g. by National Parks and Wildlife Service (NPWS), National Monuments Services (NMS) licences, etc. and also any mitigation measures / conditions required pursuant to any decision to grant approval by the Commission..

- Ensure any monitoring requirements are implemented as required in accordance with the aforementioned consent(s), permits, and/ or licences.
- Follow procedures for communicating with the public.

The following information and management plans form part of this EOP:

- Chapter 21: Schedule of Environmental Commitments, which forms part of the EIAR, provides a summary of the environmental commitments presented in the relevant individual chapters of the EIAR. This EOP refers out to Chapter 21 and does not recreate the commitments within this document.
- Appendix C4.02: Construction Traffic Management Plan.
- Appendix C4.03: Biodiversity Management Plan.
- Appendix C4.04: Invasive Species Management Plan.
- Appendix C16.04: Construction & Demolition Resource and Waste Management Plan.

These documents are provided separately as part of the EIAR for ease of referencing but it is intended that they will be integrated into the EOP to be finalised by the appointed Contractor(s).

NRA (operating as TII) guidance (NRA, 2007) provides an outline of the main steps associated with the creation and implementation of an EOP, as shown in Figure 1-1.

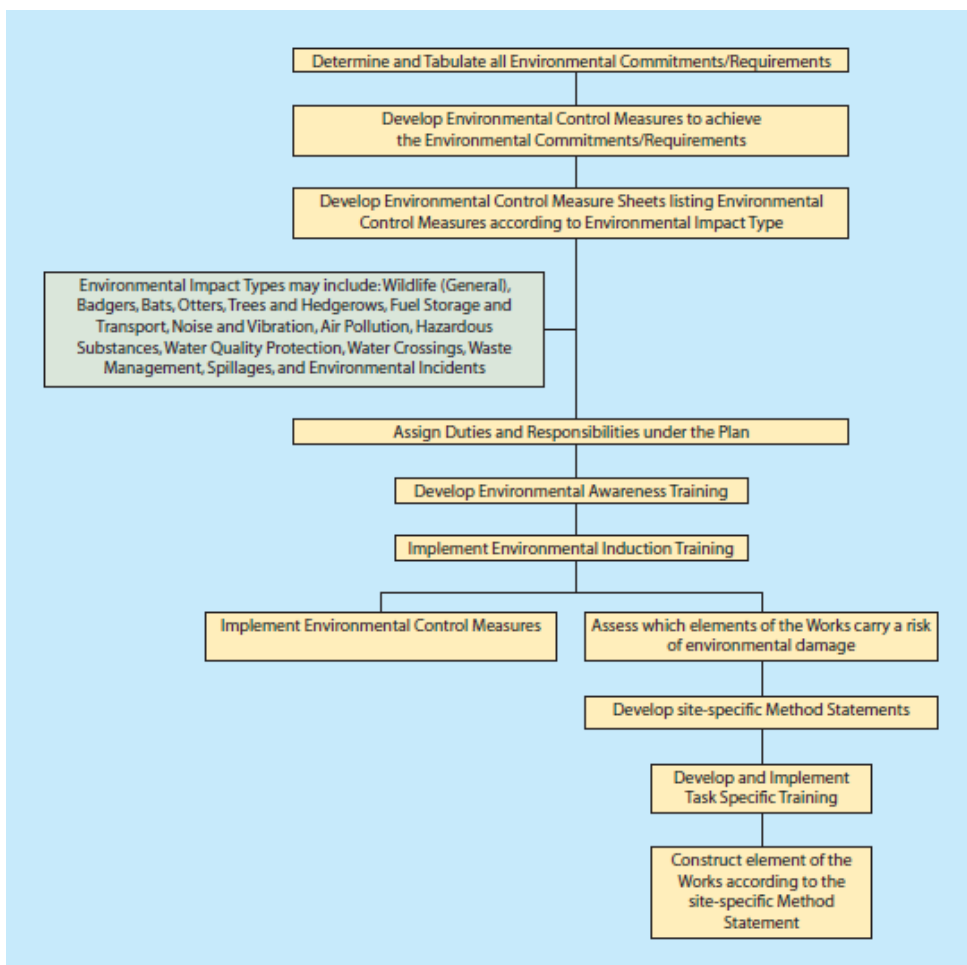


Figure 1-1: Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA, 2007)

It will be the responsibility of the Contractor to ensure the sufficiency and accuracy of the contents within the construction stage EOP. The activities of the Contractor and the subcontractors will be aligned with the EOP.

This EOP shall:

- Include all of the environmental commitments that are set out in the following:
  - The appendices to this EOP.
  - Contract Documents.
  - EIAR.
  - NIS.
  - Any additional commitments which may arise as part of the EIA / AA / statutory approval processes in relation to the Proposed Development and also any mitigation measures / conditions required pursuant to any decision to grant approval by the Commission.
- List of relevant environmental legislative requirements and provide a method of documenting compliance with these requirements.
- Methods by which construction work will be managed to prevent, reduce or compensate for potential adverse impacts on the environment.

The following will be incorporated by the Contractor in the construction phase EOP:

- The Contractor's organisational structure.
- Clearly identified roles and responsibilities of the staff working for the Contractor.
- Procedures for communicating with the public.
- Procedures for communicating with relevant site-personnel.
- Procedures for environmental awareness training for the Contractor's staff.
- Procedures for monitoring and responses to monitoring results, where it is contractually required.
- A system for compliance auditing, checking and corrective action to be implemented during the construction phase.

## 2 DESCRIPTION OF PROPOSED DEVELOPMENT

### 2.1 Project Overview

The Proposed Development involves the targeted and appropriate intervention on three sections of the TEN-T network in Donegal, as illustrated in Figure 2-1.

The intervention includes online improvements and upgrades, the bypassing of urban centres, route realignment and the development of an integrated active travel network. The following three sections form the Proposed Development:

#### **Section 1 – N15/N13 Ballybofey/ Stranorlar Urban Region:**

- *Full active travel, modal hubs, urban bypass (Ballybofey).*

#### **Section 2 – N56/N13 Letterkenny to Manorcunningham:**

- *Full active travel, online/upgrade, route realignment, urban bypass (Letterkenny), modal hub.*

#### **Section 3 – N14 Manorcunningham to Lifford/Strabane/A5 Link:**

- *Full active travel, route realignment, urban bypass (Lifford) and cross border connection (Lifford/Strabane), modal hubs.*

Transport Infrastructure Ireland (TII) is the Approving Authority for the project. The Sponsoring Agency is Donegal County Council with Donegal National Roads Design Office (NRDO) performing the role of Project Manager.



Further details regarding the project design and the proposed construction methodology of each road section are provided in Chapter 4: Project Description and Volume D: Book of Drawings of the EIAR.

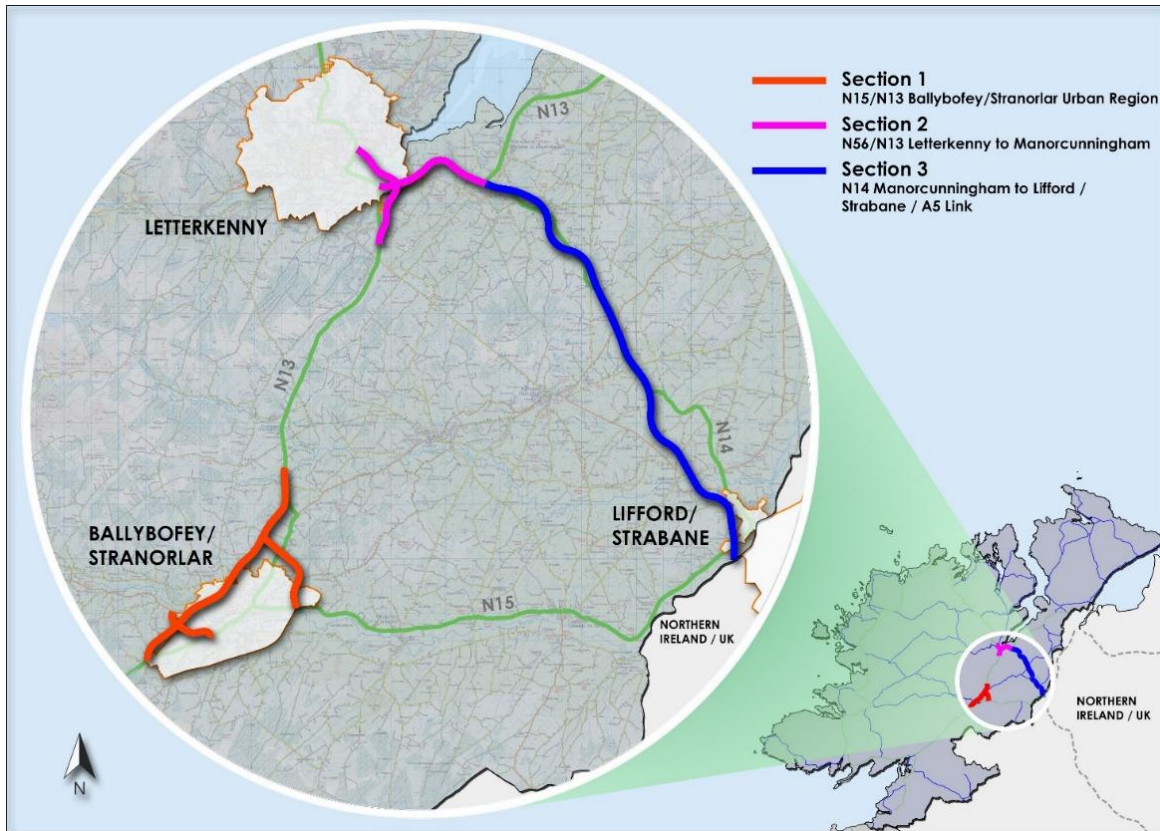


Figure 2-1: Proposed Development Location

## 2.2 Project Stages

It is anticipated that the construction of the Proposed Development will be carried out either as one contract or as two or three smaller contracts. The associated typical construction period will vary between sections, with consideration toward topography and land use varying between sections. It is anticipated that the Proposed Development will be constructed over a 60-month period with each section taking up to 36 months to be constructed.

The construction works can be sub-divided into the following elements. It should be noted that advance/enabling works are not included in the overall construction timeline of 60 months.

### 1. Advance/ Enabling Works Contracts

In advance of the main construction works commencing, a number of advance/ enabling works contracts will be undertaken. These will likely include:

- Ground investigation works including geophysical surveys (e.g. ground penetrating radar), geotechnical investigations (e.g. boreholes, trial pits), sampling, etc.
- Hydrogeology and hydrology surveys including well surveys.
- Archaeological investigations, including excavations, detection device surveys, wade surveys, etc.
- Topographical surveys.
- Structural condition surveys (e.g. buildings, property boundaries, roads).
- Environmental surveys, including ecological surveys.
- Implementation of mitigation measures
- Fencing.
- Utilities identification, mapping and diversions.
- Invasive alien plant species treatment and/or removal.



**2. Mobilise Main Contractor to Site**

Compound set-up. Hardstanding areas, material stores, machinery areas, access roads etc.

**3. Undertake Invasive Alien Species Removal and Site Clearance**

Implement removal and site clearance of invasive alien plant species in accordance with an agreed management plan and legislation (if not already completed as part of an advance works contract).

**4. Water Management**

Drainage works including pre-earthworks drainage and other measures to intercept and divert rainfall and surface waters away from the earthworks and hardstanding areas.

**5. Construction**

All works necessary for the construction of the project.

**6. Roadside Finishing Works**

Protective metal railings, footpath, cycle ways, signage, etc.

**7. Landscaping**

Topsoiling, planting, grass seeding and other landscaping works.

**8. Demobilise Main Contractor from Site**

The Contractor shall demobilise from site, removing all waste and surplus materials.

**2.3 Location of all Work Sites, Offices and Construction Compounds**

The Contractor shall visit the site prior to mobilisation to become familiar with the layout and ground conditions on site. Upon mobilisation to site the Contractor shall firstly demarcate a lay-down area for materials deliveries and a site compound area. This will be agreed with the Contractor's Site Environmental Manager.

Construction compound locations for each road section are detailed in Chapter 4: Project Description of the EIAR and the General Arrangement EIAR Drawings 4.1 (Section 1), 4.2 (Section 2) and 4.3 (Section 3) contained in Volume D: Book of Drawings. The compounds will provide for the following:

- Welfare/ Office facilities for site staff.
- Plant/ machinery parking/ storage area.
- Fuel storage/ refuelling area.
- Segregated waste area.
- Construction staff parking.

Site office and staff welfare facilities will be installed and will be clearly signed. Temporary self-contained toilet facility units shall be utilised. Visitors to the site will report to the site office on arrival and will undergo an induction process.

**2.4 Construction Duration of the Scheme****2.4.1 Section 1**

The construction phase for Section 1 will last approximately 36 months. The construction can be broken down into three distinct parts:

- **Part 1** – Mainline southern tie-in to the River Finn Crossing, including the Ballybofey Link Road.
- **Part 2** – Mainline River Finn Crossing to the northern tie-in, including the proposed grade separated junction at Teevickmoy.
- **Part 3** – N15 Primary Road Connector from the mainline to the tie-in with the N15 at Treanamullin.

## 2.4.2 Section 2

The construction phase for Section 2 will last approximately 36 months. The construction can be broken down into three distinct parts:

- **Part 1** – Mainline southern tie-in to the River Swilly Crossing, including the links in the vicinity of Dry Arch Roundabout / Bonagee.
- **Part 2** – Mainline River Swilly Crossing to the northern tie-in at Ballyrairie.
- **Part 3** – Realignment and improvement of the existing N56 Dual Carriageway between Dry Arch Roundabout and the interface with Section 3 at Pluck Roundabout, including the proposed grade separated junction at Trimragh.

## 2.4.3 Section 3

The construction phase for Section 3 will last approximately 36 months. The construction can be broken down into four distinct parts:

- **Part 1** – Mainline northern tie-in at the interface with Section 2 to Swilly Burn River.
- **Part 2** – Swilly Burn River to River Deelee.
- **Part 3** – River Deelee to Lifford Junction.
- **Part 4** – N14/N15 to A5 Link including the River Finn Crossing to the border with Northern Ireland.

# 3 REFERENCE DOCUMENTS

This section provides a summary on the guidance documents that will be referred to in the finalisation of the EOP in advance of the construction phase.

## 3.1 Scheme Specific Documentation

Scheme specific documentation to be referred to when determining the environmental commitments and requirements for the Proposed Development include:

- The Contract Documents.
- Any Order granting approval for the Proposed Development that may be granted by the Commission with details provided on each of the conditions attached to any such approval.
- EIAR and all commitments set out therein, together with any additional commitments which may arise as part of the EIA / statutory approval processes in relation to the Proposed Development.
- NIS, and all commitments set out therein, together with any additional commitments which may arise as part of the AA / statutory approval processes in relation to the Proposed Development.
- Construction Traffic Management Plan (EIAR Appendix C4.02).
- Biodiversity Management Plan (EIAR Appendix C4.03).
- Invasive Species Management Plan (EIAR Appendix C4.04).
- Construction and Demolition Waste Management Plan (EIAR Appendix C16.03).
- Licences/ permits or other authorisations that may be granted for the Proposed Development, e.g. any further bat derogation licences required arising from for example confirmatory pre-construction surveys, National Monuments Services Licences.
- Third Party Consultation Certificates.
- Contractor's Quality and Environmental Management Plan.
- Contractor's Construction Phase Safety and Health Plan.

### 3.2 General Reference and Guidance Documentation

In addition to updating the EOP, the Contractor will provide an Environmental Management System (EMS) of the construction phase of the Proposed Development, which will be certified to ISO 14001:2015 (Environmental management systems) or any subsequent update thereof. The EMS will identify environmental aspects and risks, ensure legal compliance, and continually improve environmental performance across all operations and life cycle stages.

The best practice measures set out in the EOP shall be informed by the relevant guidelines, including but not limited to the following:

- Environmental good practice on site guide (fifth edition) (C811) (CIRIA, 2023).
- Guidelines for the Treatment of Badgers prior to the Construction of a National Road Schemes (CC-ENV-01103) (TII, 2005).
- Guidelines for the Treatment of Bats during the Construction of National Road Schemes (CC-ENV-01102) (TII, 2005).
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (CC-ENV-01101) (TII, 2005).
- Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes (PE-ARC-02008) (TII, 2005).
- Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, During and Post-Construction of National Road Schemes (GE-ENV-01110) (TII, 2006).
- Air Quality Assessment of Proposed National Roads – Standard (PE-ENV-01107) (TII, 2025).
- The Management of Invasive Alien Plant Species on National Roads – Standard (GE-ENV-01104) (TII, 2020).
- The Management of Invasive Alien Plant Species on National Roads – Technical Guidance (GE-ENV-01105) (TII, 2020).
- Guidelines for the Treatment of Noise and Vibration in National Road Schemes (PE-ENV-01110) (TII, 2004).
- Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (CC-ENV-01104) (TII, 2006).
- Guidelines for the Management of Waste from National Road Construction Projects (GE-ENV-01101) (TII, 2017).
- Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (GE-ENV-01109) (TII, 2007).

This is a non-exhaustive list and relevant guidance current at the time of construction will be followed by the Contractor.

## 4 CONTACT SHEETS

It is crucial that the environmental incidents (if any) are reported properly and in time during the construction phase. For this purpose, it is required that the contact details of the relevant personnel employed at the site are available and updated on a regular basis, or as required. The following subsections provide examples on how important contact information can be recorded.

### 4.1 Contractor Details

Table 4-1 provides an example of a record of contact details for the main Contractor key staff.

**Table 4-1: Contact Information of Contractor and Relevant Staff**

Position Title	Name	Contact Number	Email
Project Manager			
Programme Manager			
Construction Manager*			
Environmental Manager*			
Environmental Clerk of Works*			
Site Agents			
Forepersons			
Safety Officers*			
Site Emergency Number*			

\* 24-hour contact details required.

### 4.2 Employer Contacts

Table 4-2 provides an example record of contact details of the Employer for the Proposed Development.

**Table 4-2: Employer Contact Information**

Organisation	Position Title	Name	Contact Number	Email
Employer's Representative	Employer's Representative			
Project Resident Engineer's Office	Project Resident Engineer			
Regional Design Office	Design Office Project Manager			
Local authority	Liaison Officer			

### 4.3 Third Party Contacts

Table 4-3 provides an example record of contact details of any third party relevant to the development of the Proposed Development.

**Table 4-3: Contact Information of Third-Party Personnel**

Organisation	Position Title	Name	Mobile Phone Number	Email
Donegal County Council				
Inland Fisheries Ireland				
Loughs Agency				
Waterways Ireland				
National Monuments Service				
National Parks and Wildlife Service				
Department of Climate, Energy and the Environment				
Office of Public Works				
Environmental Protection Agency				
Health and Safety Authority				
Letterkenny University Hospital				
Gardai				
Fire Services				
Coast Guard				
Other Emergency Services				
Other, as appropriate.				

## 5 ORGANISATIONAL STRUCTURE/ ROLES AND RESPONSIBILITIES

### 5.1 Organisational Structure

The Contractor is required to develop an organisational chart in the finalised EOP that will set out the roles and responsibilities of the relevant personnel.

### 5.2 Roles and Responsibilities

#### 5.2.1 Project Manager

Name: <To be inserted by the Contractor>

The Project Manager is required to have the following responsibilities during the construction phase:

- Liaising with the project team in assigning duties and responsibilities to individual members of the Contractor's project staff in relation to the EOP.
- Approve key personnel required for employment on the project. The Project Manager will liaise with the Site Environmental Manager.
- Lead the works on site. This person will be responsible for the management and control of the activities and will have overall responsibility for the implementation of the EOP. They will be assisted by the Site Environmental Manager who will act as their deputy.

#### 5.2.2 Site Environmental Manager

Name: <To be inserted by the Contractor>

A Site Environmental Manager will be appointed by a contractor for each section. Responsibilities of a Site Environmental Manager are detailed in the (NRA) *Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan*.

The Site Environmental Manager must possess sufficient training, experience and knowledge appropriate to the nature of the task to be undertaken, and hold a Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland), in Environmental Science or Environmental Management, Engineering or other relevant qualification acceptable to the Employer.

Separate from the on-going and detailed monitoring carried out by the Contractor as part of the EOP, the Site Environmental Manager shall carry out the inspection/ monitoring regime described below, and report to the Contractor. The results will be stored in the Site Environmental Manager's monitoring file and will be available for inspection/ audit by third parties authorised by the Employer, including but not limited to representatives from Donegal County Council, National Parks and Wildlife Service (NPWS), Inland Fisheries Ireland (IFI), Lough's Agency, Environmental Protection Agency. All inspections/ monitoring/ results will be recorded on standard forms.

The responsibilities of the Site Environmental Manager include:

#### Task-Specific Risk Assessment and Method Statements

- Liaising with the Project Manager in preparing task-specific risk assessments and method statements for works activities where there is a risk of environmental damage. These task-specific risk assessments and method statements shall incorporate relevant and documented environmental control measures.



- Liaising with the Project Manager in reviewing and updating task-specific risk assessments and method statements for works activities where environmental control measures and associated documentation have been altered.
- Liaising with the Project Manager where third party agreement is required in relation to task-specific risk assessments and method statements, environmental control measures and associated documentation.

### General

- Being familiar with the contents, environmental commitments and requirements contained within the reference documents.
- Being familiar with baseline data gathered during environmental assessment and contained in the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) and during pre-construction surveys.
- Listing all environmental commitments and requirements in an environmental commitments summary table.
- Assisting the Project Manager in liaising with the Employer, PSDP, Employer's Representative and the provision of information on environmental management to the Employer's Representative during the course of the construction phase, and
- Liaising with the project team in assigning duties and responsibilities in relation to the EOP to individual members of the main contractor's project staff.

### 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 consultation certificates are issued to the Employer's Representative as required.
- Liaising with all prescribed bodies during site visits, inspections and consultations.
- Where additional environmental control measures are agreed as a result of third-party consultation, ensuring that the EOP is amended accordingly.
- Where additional environmental control measures are agreed as a result of third-party consultation, the Site Environmental Manager should liaise with the Project Manager in updating relevant task-specific risk assessments and method statements.
- Where required, liaising with the Project Manager in agreeing site-specific Method Statements with third parties.

### Licensing

- Ensuring that all relevant works have (and are being carried out in accordance with) the required permits, licences, certificates, approvals, etc.
- Liaising with the designated licence holders with respect to licences granted pursuant to the European Communities (Birds and Natural Habitats) Regulations 2011, 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.

### Waste and By-Product 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.
- Where required, obtaining and holding all notifications and approvals to/from the EPA in relation to any Regulation 27 by-product and Regulation 28 end of waste materials in accordance with the requirements

of the European Communities (Waste Directive) Regulations 2011, as amended, and any guidelines and/or requirements published by the EPA.

- Gathering and holding documentation with respect to waste disposal.

### **Legislation**

- Keeping up to date with changes in environmental legislation that may affect environmental management during the construction phase.
- Advising the Project Manager of these changes.
- Reviewing and updating the EOP in light of these changes and bringing the changes to the attention of the main contractor's senior management and subcontractors.

### **Site environmental inspections**

- Carrying out regular documented inspections of the site to ensure that work is being carried out in accordance with the environmental control measures and relevant task-specific risk assessments and method statements, etc.
- Appending copies of the inspection reports to the EOP.

### **Specialist environmental contractors**

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

### **Environmental Induction Training and Environmental Tool Box 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.
- Providing toolbox talks on environmental control measures associated with task-specific risk assessments and method statements to those who will undertake the work.

### **Environmental Incidents/Spillages**

The Site Environmental Manager shall

- Be notified of all incidents where there has been a breach of agreed environmental management procedures: where there has been a spillage of a potentially environmentally harmful substance; where there has been an unauthorised discharge to ground, water or air; where there has been damage to a protected habitat, etc.
- Prepare and be in readiness to implement at all times an Emergency Response Plan.
- Notify the relevant statutory authority/ authorities of environmental incidents.
- Carry out an investigation and producing a report on each environmental incident. The report of the incident and details of remedial actions taken should be made available to the Employer, the Employer's Representative and the Project Manager.

### **5.2.3 Environmental Clerk of Works (ECoW)**

Name: <To be inserted by the Contractor>

The Contractor shall appoint a suitably qualified person(s), to the role of Environmental Clerk of Work(s) (ECoW) for each section. The appointed ECoW must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland), (e.g., in Environmental Science, Ecology, or a related discipline) and demonstrate significant relevant experience, typically a minimum of 2-5 years in an ECoW or similar role. The role of the Contractor's ECoW will be to monitor the construction works, appoint the relevant specialists required and to ensure compliance with relevant legislation, and planning conditions, to ensure the implementation of the mitigation measures in the planning approval as may be granted.

The ECoW decides on elements that require direct supervision and instructs actions as appropriate, including the authority to require the temporary cessation of works where necessary and to ensure the implementation of the mitigation measures in the planning approval as may be granted.

Where the ECoW encounters a non-conformance on-site they shall immediately notify the personnel carrying out/ managing the work, the Contractor's Project Manager and the Employer.

The ECoW shall have the authority to advise the Contractors and all site staff to ensure that all personnel working on site are trained in pollution incident control response. A regular review of weather forecasts of heavy rainfall is required, and the Contractor is required to prepare a contingency plan for before and after such events.

The ECoW is required to have the following responsibilities during the construction phase:

- Be present on the site as required
- Liaise with the Contractor's Project Manager, Site Environmental Manager and Site Supervisor.
- Work closely with the Contractor's personnel to monitor activities and ensure that all relevant environmental legislation is complied with and that the requirements of the EOP are implemented.
- Ensure that the mitigation measures outlined in this document (including any updates to this document following consent) are implemented in full and to supervise works in sensitive locations.
- Have the authority to oversee works and instruct action where there is a risk of environmental pollution or non-conformance with the requirements of the EOP, as appropriate, including the authority to require the temporary cessation of works, where necessary.

#### 5.2.4 Contractor's Project Ecologist

Name: <To be inserted by the Contractor>

The Contractor shall appoint their Project Ecologist(s) before the commencement of works. The Project Ecologist must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland). The Contractor's Project Ecologist will be suitably experienced, and have the required surveying skills for the ecological feature (e.g. bats, badger, otters, birds). The Project Ecologist will have the following responsibilities during pre-construction and construction phases:

- Supervise pre-construction ecological surveys, implementation and overseeing of ecological mitigation measures and ensuring that activities on-site are conducted in accordance with the planning permission as they pertain to ecological matters.
- Have due regard for works required in, adjacent to or connected to any protected site, including Natura 2000 site. This shall extend to consideration of any likely significant effects on the qualifying interests of Special Areas of Conservation (SAC)s and Special Protection Areas (SPA)s.

#### 5.2.5 Contractor's Project Archaeologist

Name: <To be inserted by the Contractor>

The Contractor's Project Archaeologist must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised

qualification from the National Academic Recognition Information Centre (NARIC Ireland) in archaeology and/or a related discipline. Such persons shall have professional knowledge and experience of the monumental and portable heritage and related assessment and regulatory processes. Where archaeological test excavations, monitoring, geophysical surveys, metal detection and/or underwater archaeological assessments are required during construction, the Contractor's Project Archaeologist undertaking such work shall be suitably qualified and experienced and eligible to hold the relevant excavation or survey licence(s). The appropriate licences/consents shall be obtained prior to commencement of such work, and the Contractor's Project Archaeologist shall ensure compliance with all licensing requirements and conditions. The Contractor's Project Archaeologist is required to have the following responsibilities during the construction phase:

- Supervise the necessary archaeological mitigation, testing, and monitoring throughout. This includes overseeing the conduct of any excavations and ensuring they are performed in accordance with any license conditions attached.
- Work closely with contractor's personnel to monitor excavations etc. for archaeological potential, especially during topsoil stripping.

### 5.2.6 Contractor's Landowner Liaison Officer

Name: <To be inserted by the Contractor>

The Landowner Liaison Officer is required to have the following responsibilities during the construction phase:

- Work closely with the Contractor to communicate with landowners potentially affected by
  - the advance works contracts, including archaeology, ground investigations, pre-construction surveys (including condition surveys), etc.
  - the construction works.
  - post-construction works and surveys, including condition surveys.

### 5.2.7 Employer's Environmental Clerk of Works

Name: < To be inserted by Donegal County Council >

Donegal County Council (DCC) shall appoint a suitably qualified person(s), to the role of Environmental Clerk of Works (ECoW) for each section. The appointed ECoW must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland), (e.g., in Environmental Science, Ecology, or a related discipline) and demonstrate significant relevant experience, typically a minimum of 2-5 years in an ECoW or similar role. The role of the Employer's ECoW will be to monitor the construction works on behalf of the Employer and report on environmental compliance with the mitigation and monitoring requirements.

Where the Employer's ECoW encounters a non-conformance on-site they shall immediately notify the personnel carrying out/ managing the work, the Contractor's Project Manager, Contractor's ECoW and the Employer.

### 5.2.8 Employer's Project Ecologist

Name: < To be inserted by Donegal County Council >

DCC shall appoint the Employer's Project Ecologist before the commencement of works. The Employer's Project Ecologist must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland). The Employer's Project Ecologist will be suitably experienced, and have the required surveying skills for the ecological feature (e.g. bats, badger, otters, birds). The Employer's Project Ecologist will act on behalf of DCC and liaise directly with the Contractor's Project Ecologist, review reporting deliverables, and supervise site activities as required.

## 5.2.9 Employer's Project Archaeologist

Name: < To be inserted by Donegal County Council >

DCC shall appoint the Employer's Project Archaeologist before the commencement of works. The Employer's Project Archaeologist must hold a relevant Level 8 qualification on the National Framework of Qualifications (NFQ) as recognised by Quality and Qualifications Ireland (QQI), or other recognised qualification from the National Academic Recognition Information Centre (NARIC Ireland) in archaeology and/or a related discipline. Such persons shall have professional knowledge and experience of the monumental and portable heritage and related assessment and regulatory processes. The Employer's Project Archaeologist shall act on behalf of DCC and liaise directly with the Contactor in relation to cultural heritage mitigation and monitoring measures, and to ensure that any works involving cultural heritage features are carried out in accordance with the relevant licences, permits and permissions.

## 5.2.10 Employer's Landowner Liaison Officer

Name: < To be inserted by Donegal County Council >

DCC shall appoint the Employer's LLO before the commencement of works. During the construction phase, the Employer's LLO will work closely with the Contractor's LLO to communicate with landowners likely to be affected by the proposed works. The LLO will act as the interface between the landowners and the Contractor/Local Authority.

## 5.2.11 All Site Personnel

All personnel working on-site shall attend environmental induction training before commencing work on site.

- Personnel shall adhere to the relevant environmental control measures and relevant task-specific risk assessment and method statements including those set out in the EOP.
- Reporting immediately to the Site Environmental Manager and Project 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, and damage to a protected habitat, etc. Depending on circumstances it may be appropriate for general operatives and machinery operators to report directly to their Foreperson who will then report to the Site Environmental Manager and Project Manager.

# 6 SCHEDULE OF ENVIRONMENTAL COMMITMENTS

The EOP incorporates all environmental commitments set out in contract documents such as the Work Requirements (WR), the EIAR and the NIS, and will also include any additional commitments which may arise as part of the EIA / AA / statutory approval processes in relation to the Proposed Development and also any mitigation measures / conditions required pursuant to any decision to grant approval by the Commission, including the requirements of the planning authority, and/or the requirements of any other licences or permits issued to facilitate the works (e.g. any further bat derogation licences required arising from confirmatory pre-construction surveys).

Details regarding these commitments are provided in Volume B, Chapter 21: Schedule of Environmental Commitments in the EIAR as well as in Section 7 of the Natura Impact Statement (NIS).

NPWS, NMS, IFI, Loughs Agency or other state agencies may stipulate further conditions and/ or modifications to the proposed mitigation and monitoring contained in the EIAR and NIS during the EIA / AA / approval processes. Further, all conditions attached to any grant of approval from the Commission, and or any licences (such as the bat derogation licences as granted), permits, etc. shall be included within the EOP by the Contractor.

Reference shall also be made to the supporting management plans prepared as part of the EIAR, namely:

- Construction Traffic Management Plan (EIAR Appendix C4.02).

- Biodiversity Management Plan (EIAR Appendix C4.03).
- Invasive Species Management Plan (EIAR Appendix C4.04).
- Construction and Demolition Resource and Waste Management Plan (EIAR Appendix C16.03).

## 7 ENVIRONMENTAL CONTROL MEASURES

The environmental control measures aid in achieving the environmental commitments. These will be identified and implemented by the Contractor for the Proposed Development. The procedure displayed in Figure 7-1 shall be followed by the Contractor for the identification of environmental control measures relevant to the Proposed Development.

For an example of an environmental control sheet, see Section 7.3 of the NRA (2007) “Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan”.

Examples of environmental control measures include:

- Construction and demolition waste management.
- Water quality protection.
- Invasive alien species and biosecurity management.

Appendix A of the EOP shall replicate Chapter 21: Schedule of Environmental Commitments of the Environmental Impact Assessment Report (EIAR). This chapter reproduces the mitigation measures set out in each individual chapter of the EIAR. These mitigation measures shall be updated to reflect any amendments resulting from any approval as may be granted by the Commission for the Proposed Development, including any conditions attached to such approval.

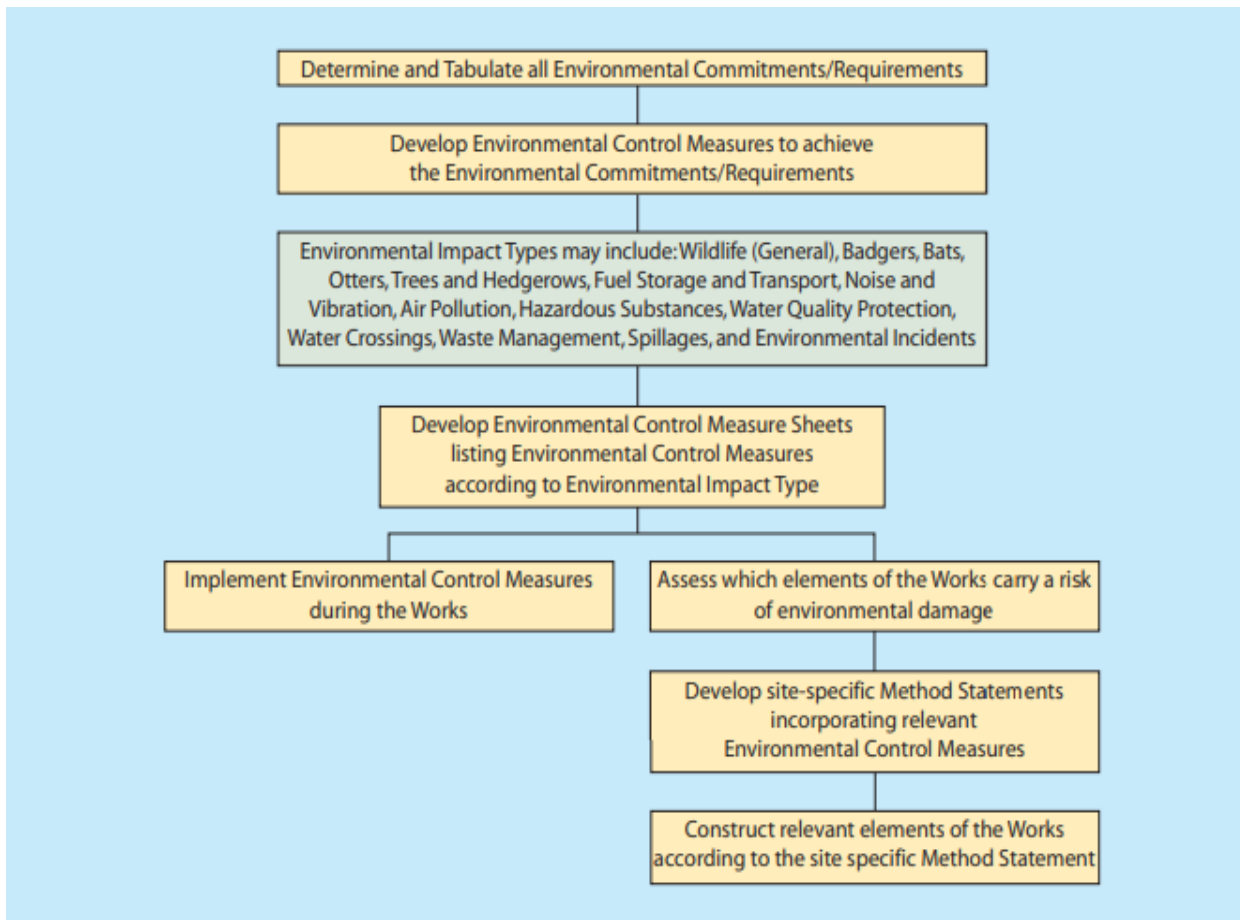


Figure 7-1: Main Steps for Development and Implementation of Environmental Control Measures



## 8 SITE-SPECIFIC METHOD STATEMENTS

A method statement provides details on the construction methods and the resources to be utilised for the construction activities. Site-specific and/or task specific method statements are prepared where there is a risk of environmental damage from specific work activities. In this regard the contract documents may contain the provision: *'Notwithstanding any other requirements of the Contract, site-specific method statements shall be provided for all Works activities where there is a risk of environmental damage'*.

The method statement should entail the following:

- The proposed method of construction and how impacts shall be mitigated.
- Contingency plans and emergency plans to limit damage caused by accidents, spills or other unforeseen events.
- Notification procedures to the relevant authorities, utilities and service providers.

Depending on the contract, third party consultees can provide input into the method statements in the form of reviews or agree the method statement in the form of an approval. Once finalised, the Contractor will provide the details of the method statements to the Employer's Representative for written consent prior to the commencement of the activity / construction works.

An example template of a site-specific method statement is provided in NRA (2007) *"Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan"*.

## 9 ENVIRONMENTAL AWARENESS TRAINING

All site personnel shall have appropriate knowledge and training to ensure the successful implementation of the measures contained in the EOP. All site personnel undergo environmental awareness training as part of their induction to site, before commencing work.

It is essential that the Site Environmental Manager provides a briefing on the EOP and the environmental commitments/ requirements to contractor's senior personnel, namely the Project Manager, Design Engineers, Site Agents, and any other key personnel.

Given the proposed three-year construction period for the works, it is recommended that refresher training on environmental awareness be provided at periods to be specified in the EOP.

### 9.1 Environmental Induction Training

Environmental induction training shall be provided by the Site Environmental Manager to all personnel. This can take place in conjunction with the safety induction.

Training will include:

- Overview of the environmental policy and EOP, goals and objectives.
- Awareness in relation to risk, consequence and methods of avoiding environmental risks as identified within the register of aspects and with the planning conditions.
- Awareness of roles and individual environmental responsibilities and environmental constraints to specific jobs.
- Location of and sensitivity of SAC, SPA, other designated sites, protected monuments, structures etc.
- Location of habitats and species to be protected during construction, how activities may affect them and methods necessary to avoid impacts.
- Location of flood zones.

Toolbox talks based on specific activities being carried out will be given to personnel by the nominated project representative. These will be based on specific activities being carried out and will include

environmental issues particular to the project, including the impact on bird populations and water quality namely:

- Oil/diesel spill prevention and safe refuelling practice.
- Storage of materials including oil/diesels and cement.
- Emergency response processes used to deal with spills.
- Minimising disturbance to wildlife.
- Emergency response to include water pollution hotline to the relevant regulatory body (e.g. EPA, IFI, Loughs Agency) for regulator response. Identification of registered / accredited spill clean-up company for oil etc.
- Consideration of importance of containment of vehicle washing, containments of concrete /cement / grout washout etc, bank protection using hessian to prevent excessive scour and mobilisation of suspended solids, maintenance of vegetation corridors etc.

## 9.2 Specific Training

The Contractor will produce a specific training plan, and appropriate training will be provided by the Contractor to ensure that all site personnel have sufficient understanding of environmental issues and management requirements prior to commencing construction work. A register of completed training is to be kept by the Site Environmental Manager. The Project Manager will ensure that environmental emergency plans are drawn up, and the Site Environmental Manager will conduct the necessary training/inductions.

## 10 COMMUNICATION

A communication strategy for both internal and external communications to promote awareness, education and sharing of information on the progress of the Proposed Development will be prepared by the Contractor.

### 10.1 Internal Communication

It is essential that all the meetings including site management, site safety should address environmental issues on the agenda. These issues should be reported by the Site Environmental Manager in all such meetings.

### 10.2 External Communication

The Contractor will prepare a communications plan for external stakeholders as specified in the EIAR mitigation.

## 11 INSPECTIONS, MONITORING AND AUDITING

### 11.1 Inspections

The appointed Site Environmental Manager will carry out environmental inspections at appropriate intervals. The Site Environmental Manager will be accompanied by a qualified and accredited environmental specialist (ecologists, landscape architects and noise specialists etc.) when appropriate and where required during inspections. The Site Environmental Manager will append the reports from environmental inspections to the EOP.

### 11.2 Monitoring

The Proposed Development may require certain types of monitoring e.g., related to water quality, vibration, noise levels etc. Monitoring requirements are stipulated in the EIAR and NIS.

A schedule of monitoring shall be prepared by the Site Environmental Manager. They will also ensure that all the monitoring is carried out by appropriately qualified and competent personnel. Where the monitoring results fall outside the range contractually required, the Environmental Manager is responsible for initiating

and reporting on corrective action. This may require the alteration of relevant Environmental Control Measures.

An example template of a monitoring schedule is provided in 2007 NRA's "Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan".

## 11.3 Auditing

The 2007 NRA's "Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan" provides a template (Form 6) that can be used as an example to assist in preparation of an audit report. This form can assist the Road Authority and/or TII in ensuring their compliance with the requirements of the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019.

### 11.3.1 Audit by Environmental Manager

For successful implementation of the EOP by the Contractor, the Site Environmental Manager along with the Project Manager shall ensure that an annual audit is undertaken. The reports of these audits shall be annexed to the EOP. The EOP may also be revised between annual audits as deemed appropriate particularly where there are updates to environmental control measures or environmental legislations.

### 11.3.2 Audit by the Employer's Representative

The Employer's Representative shall ensure that an audit of the EOP is carried out at regular intervals as agreed with the Employer to ensure the Contractor is complying with the environmental provisions of the contract. Non-Conformance, Corrective and Prevention Action Plan

Non-conformances are generally issued in a situation where legal or contractual limits associated with activities on the project are exceeded, or there is an internal/external complaint associated with environmental performance.

Correction is the act of developing or improving where non-conformances have been identified. Prevention is the act of ensuring that non-conformance does not (re)occur.

In the event of non-conformance, the following must be investigated:

- Cause of the non-compliance: a Non-Conformance Report (NCR) will be prepared to record any environmental incident and work that has not been carried out in accordance with the EOP or Method Statement(s).
- Develop a plan for correction of the non-compliance: a Corrective Action Report (CAR) will be prepared where a non-conformance is identified as a result of monitoring, inspection, surveillance and valid complaints.
- Determine preventive measures and ensure they are effective: any actions identified shall nominate an owner to follow through the action to be taken, along with a specified timescale for it to be closed out.
- 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. The Contractor and the Employer's site supervisory teams will monitor and investigate non-conformances relating to environmental issues.

## 12 EOP HANDOVER

The EOP prepared for the EIAR shall be updated and finalised by the appointed Contractor as described earlier above. The updated EOP shall be submitted by the Contractor to the Employer's Representative prior to construction works commencing for review/ comment. There may be a number of iterations of the EOP before the Employer's Representative will accept a version that meets the full requirements of the Contract.

Once this EOP has been accepted, it will be reviewed and updated by the Contractor as necessary. The updated EOP will be submitted to the Employer's Representative following each update. The EOP will be maintained by the Contractor until completion of the Defects Notification Period.

Two copies of the final and complete EOP shall be supplied to the Employer's Representative immediately following the end of the Defects Notification Period.

# EIAR CHAPTER 21

## Schedule of Environmental Commitments

# EIAR APPENDIX C4.02

## Construction Traffic Management Plan



# EIAR APPENDIX C4.03

## Biodiversity Management Plan

# EIAR APPENDIX C4.04

## Invasive Species Management Plan

# **EIAR APPENDIX C16.03**

## **Construction & Demolition**

### **Resource and Waste Management Plan**