ABWP Phase I Decommissioning

Outline Onshore Decommissioning Environmental Management Plan

Volume 3, Appendix 3.1



RAMBOLL

Bright ideas.
Sustainable change.

Project name ABWP Phase I Decommissioning

Project no. 1620011606-002

Ramboll
240 Blackfriars Road
London
SE1 8NW
United Kingdom
https://ramboll.com

Document revision history

Version	Reason for issue	Author	Date	Checked	Date	Approved	Date
1	Client First Issue	OS	18.05.2026	SMR	18.05.2026	MR	21.05.2026
2	Client Final Issue	OS	11.06.2026	MR	16.06.2026	MR	16.06.2026
3	Client Final Issue	OS	10.07.2026	MR	10.07.2026	MR	10.07.2026

Contents

1 Introduction 10
1.1 Purpose of the Outline Onshore Decommissioning Environmental Management Plan 10
1.2 Document Structure 10
1.3 Implementation of the Detailed Onshore Decommissioning Environmental Management Plan 11
1.4 Relevant Guidance 11
1.5 Notes on Scope 12
2 Proposed Works Onshore 14
2.1 Overview 14
2.2 Programme 17
3 Roles and Responsibilities 18
4 Communication and Reporting 20
4.1 Internal Communication and Reporting 20
4.2 External Communication and Reporting 20
5 Environmental Training, Monitoring and Auditing 21
5.1 Induction Training 21
5.2 Environmental Monitoring and Auditing 21
6 Environmental Management and Mitigation 22
6.1 Water and Land Quality 23
6.2 Noise and Vibration 24
6.3 Onshore Biodiversity 25
6.4 Traffic and Transport 26
6.5 Onshore Infrastructure and Utility Services 27
6.6 Cultural Heritage and Archaeology 28
6.7 Air Quality and Climate Change 29
6.8 Population and Human Health 30
6.9 Landscape and Visual Amenity 31
6.10 Waste 32
7 References 33
Appendix A Placeholder for Detailed Method Statements / RAMS 34
Appendix B Permits and Permissions 35
Appendix C Placeholder for Environmental Incident Procedure 36
Appendix D Placeholder for Onshore Environmental Action Tracker 37
Appendix E Placeholder for Complaint Protocol 38
Appendix F Placeholder for Detailed Traffic Management Plan (TMP) 39
Appendix G Placeholder for Detailed Onshore Waste Management Plan (WMP) 40

List of Tables

Table 2.1: Indicative programme of Proposed Works Onshore 17
Table 3.1: Roles and responsibilities 18

List of Figures

Figure 1: Onshore Site 16

Statement of Authority

Author	Qualifications	Relevant Experience
Oriol Sot Olivet	BSc Biology, University of Girona (Spain) MSc Environment, Sustainability and Sustainable Development Goals (SDGs) (Spain)	Experience in permitting and environmental impact assessment for a wide range of renewable energy projects.
Sara Méndez Roldán	BSc Environmental Sciences, University of Salamanca (Spain) MSc Coastal and Marine Resources Management, University of Portsmouth (UK)	Over 11 years' international experience in permitting and environmental impact assessment for a wide range of coastal and marine developments, including offshore wind farms and subsea cables across a number of geographies, including Spain, the UK, Ireland, Poland and Denmark, among others.
Matt Royall	BSc (Hons) Natural Environmental Science (Earth Sciences), University of Sheffield (UK) MSc Environmental Pollution Control, University of Leeds (UK) Chartered Environmentalist (CEnv)	Over 25 years experience of environmental impact assessment for a wide range of sectors, including windfarms. Experience is across a number of geographies including Ireland, UK, Poland, Lithuania and Romania.

Glossary

Term	Meaning
Arklow Bank Wind Park (ABWP) Phase I	Arklow Bank Wind Park (ABWP) Phase I comprises: • Offshore infrastructure seaward of High Water Mark (HWM), including: – Seven Wind Turbine Generators (WTG) with a combined capacity of 25.2 MW; – One meteorological (met) mast; – Inter-array cables connecting the WTGs and met mast; and – One offshore export cable connecting WTG T4 with landfall at HWM; • Onshore infrastructure landward of HWM including: – One onshore cable connecting landfall at HWM with the onshore substation; and – One onshore substation compound, where the onshore substation and ancillary infrastructure are located.
ABWP Phase II	ABWP Phase II comprises: • Offshore Infrastructure, including: – 53 or 47 WTGs and two Offshore Substation Platforms (OSPs) located within the "Array Area"; – Inter-array cables connecting WTGs with the OSPs; and – Two offshore export cables; • Onshore grid connection infrastructure, including a 220 kV substation at Shelton Abbey with an associated connection to the existing National Electricity Transmission Network; • Operations and Maintenance Facility (OMF) at South Dock, Arklow Harbour; and • EirGrid Upgrade Works.
Additional mitigation	Actions that will be required to reduce the significance of environmental effects of the Proposed Works, which will be dependent on the significance of effects assessed in the EIAR. Also referred to as secondary mitigation in Institute of Environmental Management and Assessment (IEMA) (2024). IEMA is now the Institute of Sustainability and Environmental Professionals (ISEP).
Arklow Energy	Arklow Energy Limited, the entity seeking planning permission for the Proposed Works, i.e. the applicant.
Backfilling	Placement of excavated material back into the trench or excavation after removal.

Term	Meaning
Competent authority	Are those authorities that are entitled to give authorisation or consent to a plan or project. In the planning system, this means planning authorities and An Coimisiún Pleanála. There are, however, a wide range of other competent authorities in respect of other consent regimes e.g. EPA (environmental licencing), Minister for Agriculture, Food and the Marine (forestry, aquaculture and foreshore management), and various state bodies that have authority to undertake development under Part 9 of the Planning and Development Regulations (e.g. An Garda Síochána, defence forces, the courts service). The competent authority for this planning application is An Coimisiún Pleanála (ACP).
Consent	This shall include any licence, permission, permit, approval or other such authorisation granted by a public authority for any activity, or project where the authority is obliged to have regard to the requirements of the Environmental Impact Assessment (EIA) and/or Habitats Directive(s) (MDB, 2017).
Decommissioning	The final closing down and putting into a state of safety of a development, project or process when it has come to the end of its useful life (EPA, 2022).
Detailed Onshore Decommissioning Management Plan (DEMP)	The contractor-developed version of this Outline Onshore DEMP, to be prepared before Proposed Works Onshore commence and maintained as a live document until completion.
Detailed Onshore Waste Management Plan (WMP)	The contractor-developed version of this Outline Onshore WMP, to be prepared before Proposed Works Onshore commence and maintained as a live document until completion.
Detailed Traffic Management Plan (TMP)	The detailed, contractor-prepared version of this Outline TMP, to be finalised prior to commencement of the Proposed Works Onshore once the contractor, final methodology, routes, programme and authority requirements are confirmed.
Effect	The consequence of an impact on a receptor. For example, in the onshore environment, excavation works (activity) results in increased levels of airborne noise (impact), with the potential to disturb ecological receptors (effect).
Embedded mitigation	Mitigation measures included as part of the Proposed Works. Include modifications arising through the iterative design process; and standard industry practice that would occur even without input from the EIA process, e.g. actions undertaken to meet other existing legislative requirements, or actions that are standard practices used to manage commonly occurring environmental effects. Correspond to primary and tertiary mitigation defined in IEMA (2024).
Environmental factor	Refers to environmental factors used to present the characteristics of the environment (EPA, 2022) that are used to organise the description of the environment in the EIAR.
Environmental Impact Assessment (EIA)	The process of examining the anticipated environmental effects of the Proposed Works – from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIAR), evaluation of the EIAR by a competent authority, and the subsequent decision as to whether the Proposed Works should be permitted to proceed, encompassing public response to that decision (EPA, 2022).
Environmental Impact Assessment Report (EIAR)	A report or statement of the effects, if any, that Proposed Works, if carried out, would have on the environment (EPA, 2022).
Foreshore	The bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek, and bay of the sea or of any such river or estuary. Its outer limit is coterminous with the seaward limit of the territorial sea (Foreshore Act 1933 (as amended)), which is at a distance of 12 nm from the nearest point of the baseline or otherwise prescribed (Maritime Jurisdiction Act 2021 (as amended)).
Hazardous waste	Waste that displays one or more hazardous properties and requires specialist classification, storage, handling, transport and treatment (Waste Management Act 1996 (as amended)).
High Water Mark (HWM)	Level reached by the sea level at high tide.
Impact	A change brought about by the Proposed Works.
Landfall	The point where the offshore export cable transitions from the offshore marine environment to the onshore terrestrial environment.

Term	Meaning
Mitigation measures	Measures to avoid, prevent or reduce impacts (EPA, 2022)), which comprise both embedded and additional mitigation, see separate definitions for these.
Monitoring	The periodic or continuous observation of biodiversity indicators and of other parameters that may affect biodiversity for any changes that may occur over time, so as to confirm predictions made with respect to likely effects and identify adverse changes that may require remedial action (Office of the Planning Regulator, n.d.).
Noise	The terms noise and sound are often used interchangeably. Noise usually refers to unwanted or disturbing sounds that interfere with normal hearing and can be unpleasant or harmful. It is often characterised by irregularities in the sound waves and is considered a form of sound pollution.
Onshore cable	Land-based portion of the power cable that transports the total generated power from an offshore wind farm to the onshore power grid. In ABWP Phase I, the onshore cable connects the landfall point at HWM to the onshore substation building.
Onshore Site	Part of the site where Proposed Works Onshore are proposed to take place. In this application for planning permission, the Onshore Site comprises the onshore substation compound that hosts the onshore substation building and ancillary facilities; the onshore cable 10 m corridor connecting the landfall point from high water mark (HWM) to the onshore substation, and the area that will temporarily be used for temporary storage of plant, vehicles, machinery, excavated soil and materials.
Onshore substation compound	Fenced compound that hosts the onshore substation building and ancillary facilities, including the 38 kV transformer.
Planning permission	Formal, legal approval required from a local planning authority or An Coimisiún Pleanála (ACP) to carry out development. The Proposed Works require planning permission submitted from ACP under Section 291 of the Planning and Development Act 2000, as amended.
Principal Decommissioning Contractor	In this document, meaning the contractor(s) appointed to undertake the Proposed Works Onshore and to prepare, implement and update the Detailed Onshore Environmental Management Plan (DEMP) and associated management plans, keeping them as live documents until completion.
Proposed Works	The Proposed Works include decommissioning of ABWP Phase I offshore infrastructure (Proposed Works Offshore) and decommissioning of ABWP Phase I onshore infrastructure (Proposed Works Onshore).
Receptor	Any element in the environment which is subject to impacts (EPA, 2022).
Recycling	Subjection of waste to any process or treatment to make it re-usable in whole or in part (Waste Management Act 1996 (as amended)).
Reinstatement	The restoration of areas affected by excavation, cable removal, dismantling or other Proposed Works Onshore, including any road, footway, verge or site surface affected by the works.
Road Opening Licence	A licence obtained from the relevant local authority, typically through the MapRoad Roadworks Licensing system, where works involve excavation or disturbance of a public road, footway, verge or other highway area.
Sound	The terms noise and sound are often used interchangeably. Sound is a broad term that refers to any auditory experience created by vibrations that travel through a medium such as air, water, or solids to the ear.
Source	The activity or place from which an effect originates (EPA, 2022)
Surface water	Surface waters include rivers, lakes, transitional and coastal waters.
Traffic Management Co-ordinator	A competent person appointed by the Principal Decommissioning Contractor to coordinate traffic management requirements, including signing, lighting, guarding and temporary traffic management arrangements where required.
Waste	Any substance or object belonging to a category of waste specified in the First Schedule or for the time being included in the European Waste Catalogue which the holder discards or intends or is required to discard, and anything which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste until the contrary is proved (Waste Management Act 1996 (as amended)).

Term	Meaning
Waste coordinator	In this document, the person appointed to oversee implementation, monitoring and review of waste management arrangements for the Proposed Works Onshore.

Acronyms

Acronym	Meaning
ABWP	Arklow Bank Wind Park
BSI	British Standards Institution
CIRIA	Construction Industry Research and Information Association
CLM	Community Liaison Manager
DCEE	Department of Climate, Energy and the Environment
DEMP	Decommissioning Environmental Management Plan
DoHLGH	Department of Housing, Local Government and Heritage
EPA	Environmental Protection Agency
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
HWM	High water mark
IEMA	Institute of Environmental Management and Assessment
INNS	Invasive and Non-Native Species
MPs	Monopiles
NMI	National Museum of Ireland
NMS	National Monuments Service
NPWS	National Parks and Wildlife Service
PLC	programmable logic controller
RAMS	Risk Assessment Method Statements
SC	Site compound
TBTs	Toolbox talks
TMP	Traffic Management Plan
TPs	Transition pieces
UK	United Kingdom
UPS	uninterruptible power supply
WCC	Wicklow County Council
WMP	Waste Management Plan
WTGs	Wind Turbine Generators
WWTP	Wastewater Treatment Plant

Units

Unit	Meaning
km	Kilometre
kV	Kilovolt
L	Litre

Unit	Meaning
m	Meter
m^2	Square meter
nm	Nautical mile
MW	Megawatt

1 INTRODUCTION

1.1 Purpose of the Outline Onshore Decommissioning Environmental Management Plan

1.1.1.1 Arklow Energy Limited (Arklow Energy) is seeking planning permission to decommission Arklow Bank Wind Park (ABWP) Phase I (referred to hereafter as 'the Proposed Works'). The Proposed Works include decommissioning of ABWP Phase I offshore infrastructure ('Proposed Works Offshore') and decommissioning of ABWP Phase I onshore infrastructure ('Proposed Works Onshore').

1.1.1.2 The purpose of this Outline Onshore Decommissioning Environmental Management Plan (DEMP) is to provide a consolidated framework that outlines the minimum requirements with regard to environmental management during Proposed Works Onshore, including embedded mitigation measures (i.e. mitigation measures included as part of the Proposed Works Onshore, such as modifications arising through the iterative methodology development process; and standard industry practice that would occur even without input from the Environmental Impact Assessment (EIA)).

1.1.1.3 Once the Principal Decommissioning Contractor has been appointed, they will commit to the preparation and implementation of a Detailed Onshore DEMP. The Detailed Onshore DEMP will expand upon the principles set out in this Outline Onshore DEMP and will provide site-specific measures, methodologies, and control procedures reflecting the final design, decommissioning methods, and programme of works.

1.1.1.4 The Detailed Onshore DEMP will be implemented in accordance with the requirements of the planning permission issued under Section 291 of the Planning and Development Act 2000, as amended.

1.1.1.5 This Outline Onshore DEMP provides a template whereby the Principal Decommissioning Contractor, once appointed, will be required to update and maintain the Detailed Onshore DEMP, based on the final detailed design and decommissioning methodology, in addition to tracking and complying with any planning conditions relevant to the Proposed Works Onshore. Whilst the Detailed Onshore DEMP will be updated based on final detailed design, the Principal Decommissioning Contractor will be required to meet the minimum requirements outlined in this outline version of the Onshore DEMP. Instructions for the Principal Decommissioning Contractor to prepare and maintain the Detailed Onshore DEMP are written in *[red font]*.

1.2 Document Structure

1.2.1.1 This Outline Onshore DEMP is structured around the following sections:

- **Section 1. Introduction (this section):** presents the purpose of the Outline Onshore DEMP and implementation and maintenance of the Detailed Onshore DEMP by the Principal Decommissioning Contractor. It also makes reference to guidance considered and scope covered;
- **Section 2. Proposed Works Onshore:** provides an overview of Proposed Works Onshore, with a focus on decommissioning methodologies and programme;
- **Section 3. Roles and Responsibilities:** outlines roles and responsibilities in relation to environmental management and mitigation during Proposed Works Onshore;
- **Section 4. Communication and Reporting:** presents minimum communication and reporting requirements related to environmental management of relevance throughout the duration of Proposed Works Onshore;
- **Section 5. Environmental Training, Monitoring, and Auditing:** presents minimum environmental requirements for personnel training, monitoring and auditing of environmental performance; and
- **Section 6. Environmental Management and Mitigation:** provides a consolidated framework for environmental management relevant to Proposed Works Onshore, organised by environmental aspect.

1.2.1.2 This Outline Onshore DEMP is supported by a number of appendices that provide relevant supporting information. In some cases, appendices are used as placeholders for the Principal Decommissioning Contractor to include when preparing the Detailed Onshore DEMP. In other cases, appendices cross-reference standalone documents presented as part of the EIAR for the Principal Decommissioning Contractor to update / finalise as part of the Detailed Onshore DEMP (as applicable).

[Principal Decommissioning Contractor to update document structure where applicable]

1.3 Implementation of the Detailed Onshore Decommissioning Environmental Management Plan

1.3.1.1 The Detailed Onshore DEMP will form part of the contract for Proposed Works Onshore between Arklow Energy and the Principal Decommissioning Contractor.

1.3.1.2 The Principal Decommissioning Contractor will prepare the Detailed Onshore DEMP based on this Outline Onshore DEMP, and take ownership of the document, maintaining it as a live document throughout the duration of Proposed Works Onshore, once appointed. The Detailed Onshore DEMP shall be updated following any significant changes in detailed design, decommissioning methodology or further environmental information becoming available. In addition, the Principal Decommissioning Contractor shall ensure that management and mitigation captured in the Detailed Onshore DEMP is in line with planning conditions and requirements from other relevant permits (where applicable).

1.3.1.3 The appointed Principal Decommissioning Contractor and subcontractors will have relevant experience and be aware of standard procedures and practices to avoid environmental impacts. The Principal Decommissioning Contractor will:

- Provide all relevant information, as detailed in and required by this document, to Arklow Energy and/or the relevant authority, to ensure that the Proposed Works Onshore are conducted in compliance with this document and with any other statutory or regulatory requirements;
- Provide all relevant environmental information, including a copy of the Detailed Onshore DEMP and reporting procedures relevant to work undertaken by subcontractors, to subcontractors;
- Consider the requirements contained within the Detailed Onshore DEMP when developing task-specific Risk Assessment Method Statements (RAMS), requiring the same from subcontractors;
- Require subcontractors to identify how they intend to manage environmental issues for their element of the works; and,
- Take responsibility for the environmental performance of subcontractors.

1.3.1.4 Revisions of the Detailed Onshore DEMP will be agreed with Arklow Energy and the consenting authority, as required, and recorded in the document version control. The Detailed Onshore DEMP will be stored electronically by the Principal Decommissioning Contractor. The Detailed Onshore DEMP will be reissued to any relevant authorities and/or stakeholders upon request.

1.4 Relevant Guidance

1.4.1.1 This Outline Onshore DEMP has been prepared in accordance with the following guidance documents:

- International Institute of Environmental Management and Assessment (IEMA, now known as Institute of Sustainability and Environmental Professionals) Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Construction (IEMA, 2024);
- Construction Industry Research and Information Association (CIRIA) guidance C532 Control of Water Pollution from Construction Sites – Guidance for consultants and contractors (Masters-Williams et al., 2001);
- Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects (Environmental Protection Agency (EPA), 2021);

- Containment systems for the prevention of pollution: Secondary, tertiary and other measures for industrial and commercial premises, CIRIA guidance 736F (CIRIA, 2014);
- Construction and Demolition Waste Management – a handbook for Contractors and Site Managers (CIF, 2002); and
- Risk Assessment of Chemical Hazards (HAS, 2004);

1.5 Notes on Scope

1.5.1.1 This Outline Onshore DEMP only covers the Proposed Works Onshore, landward of the highwater mark (HWM), and does not apply to Proposed Works Offshore, seaward of the HWM. A separate Outline Offshore DEMP has been developed for these components of the Proposed Works (see **Volume 3, Appendix 3.4: Outline Offshore Decommissioning Environmental Management Plan**).

1.5.1.2 With respect to waste generation and management associated with the Proposed Works Onshore, an Outline Onshore Waste Management Plan (WMP) has been developed (see **Volume 3: Appendix 3.3: Outline Onshore WMP**).

1.5.1.3 This document does not detail any requirements for Health and Safety risk assessments and prevention measures. It is assumed that, in accordance with standard good practice and Irish legislation, the implementation of appropriate Health and Safety measures will be detailed in other documentation produced by the Principal Decommissioning Contractor.

1.5.1.4 Wicklow County Council (WCC) proposes to undertake engineering works along the Avoca River in order to facilitate flood risk mitigation. The proposals are known as the 'Arklow Flood Relief Scheme' and the details of the scheme are included in the relevant EIAR (Arup, 2021).

1.5.1.5 The Onshore Site partially overlaps with one site compound / laydown area proposed for the Arklow Flood Relief Scheme, the relevant area is illustrated within the EIAR as site compound (SC) 5, which is described as follows:

"The fifth site compound (SC5) will be located at an open area at the eastern end of North Quay (North Pier). It will be used for the management of surplus dredged material arising from the Work Package 2. This will include stockpiling of materials with slightly elevated chloride levels for archaeological examination and onward off-site transportation"

And:

"Site Compound 5 (SC5): Access will be provided from North Quay. A low bund, comprising precast concrete traffic barriers or similar, will be constructed around the perimeter of the site to retain the dredged material. Suitable dust control and monitoring measures will be installed around dredged material stockpile. SC5 will be reinstated to its existing condition on completion of the permanent works"

1.5.1.6 According to the programme presented in Chapter 5 of the Arklow Flood Relief Scheme EIAR, SC5 is expected to be used for a period of 9 months during 2026. Therefore the use of the SC5 area is temporary, and the material will be subject to different management measures dependent on its characteristcis, as some material may be suitable for reuse on the Arklow Flood Relief Scheme site with remainder requiring transfer off site.

1.5.1.7 The works for the Arklow Flood Relief Scheme, including SC5, will be subject to environmental mitigation which is defined in the Construction Environmental Management Plan (Appendix 5.1 of the EIAR) which includes consideration of air and noise emissions, as well as traffic movements and management of dredged materials.

1.5.1.8 As outlined in the Arklow Flood Relief Scheme EIAR, the presence of the sub-station, which is included as part of the Onshore Site, is acknowledged in the land take details for the Arklow Flood Relief Scheme (Appendix 17.1 of the EIAR). Therefore in undertaking the works associated with the Arklow Flood Relief Scheme the contractors will need to work around the existing Onshore Site substation (if it is still present at the time of the Arklow Flood Relief Scheme works relating to SC5).

1.5.1.9 Whilst considered unlikely, it is possible there could be some degree of overlap between the Proposed Works Onshore and works relating to SC5 for the Arklow Flood Relief Scheme. The Applicant has been in liaison with WCC at the consultation stage (see **Stakeholder Consultation and Engagement Report** prepared in support of the application for planning permission) and therefore WCC are fully aware of the Proposed Works Onshore. The key issue will be appropriate communication between WCC and the Applicant in relation to the detailed programming of works relating to SC5 for the Arklow Flood Relief Scheme and the Proposed Works Onshore. This document details the appropriate communication required between these parties.

2 PROPOSED WORKS ONSHORE

2.1 Overview

2.1.1.1 The Onshore Site includes a small, fenced compound (overall footprint: 220 m^2) that hosts the onshore substation, a small one-floor building (footprint: 34.8 m^2; height: 4.65 m) of concrete construction with a pitched, tiled roof surrounded by hardstanding.

2.1.1.2 Within the fenced compound, a 38 kV transformer (footprint: 35.6 m^2; height: 4.6 m) and a submerged oil interceptor tank (10.24 m^2), the latter surrounded by a concrete foundation bund (covering an area of 34.5 m^2), are located. A windscreen located east of the fenced compound provides some shelter to seaspray.

2.1.1.3 The Proposed Works Onshore will include the following activities:

- Onshore substation decommissioning and reinstatement of the area within the fenced compound; and
- Onshore cable removal and reinstatement of the area affected by removal works.

2.1.1.4 The sequence for decommissioning the onshore substation and ancillary facilities within the fenced compound of the Onshore Site will comprise:

- In collaboration with Electricity Supply Board (ESB) Networks, termination and isolation of 38 kV and 400 V electricity supplies;
- Removal of cooling oil (6,700 litres (L)) from the transformer via oil tanker and transport to a licensed waste facility for decontamination;
- Transportation of the transformer to a licensed waste facility for further decontamination of residue oils and contaminants prior to metallic recycling / processing;
- Removal of grey water from submerged oil interceptor tank, to be subsequently excavated and removed;
- Excavation and removal of concrete bund;
- Dismantling and removal of all equipment within the onshore substation building, including switchgear, servers, programmable logic controller (PLC), uninterruptible power supply (UPS), communication infrastructure, etc) for the onward recycling/transportation to a licensed waste facility for further processing and disposal. All cables are anticipated to be processed through a copper granulation plant for optimal environmental outcomes; and
- Dismantling of onshore substation building structure, followed by clearance and levelling, anticipated to include reinstatement in line with Wicklow County Council requirements.

2.1.1.5 The Onshore Cable includes two main sections, further illustrated in **Figure 1:**

- Onshore cable section 1, connecting the landfall point from HWM to the onshore substation, proposed to be permanently removed; and
- Onshore cable section 2, connecting the onshore substation to the ESB Networks 220/110 kV substation located in Killiniskyduff, Arklow, of which:
  - The portion located within the onshore substation compound will be permanently removed as part of the Proposed Works Onshore;
  - The portion located outside the onshore substation compound will be separately managed by ESB Networks and therefore considered outside the Proposed Works Onshore. ESB Networks are anticipated to bottle-end the onshore cable outside the onshore substation compound, and disconnect this at the ESB Networks 220/110 kV substation. This portion of the onshore cable is anticipated to remain in the ground and be re-used at sometime in the future (when there are load increases or generation connections in the area).

2.1.1.6 Onshore cable removal works will commence once the onshore substation compound is vacant and reinstated so that it can be used to temporarily store machinery, vehicles and excavated soil during onshore cable removal works, which will comprise:

- Set up of exclusion zones and signage along the onshore cable route covered by the Proposed Works Onshore (approximately 30 m long);
- Verify the location and depth of the cable using a cable detector;
- Begin excavation at one end of the cable route, maximum excavation width of 3 m and cut sections of the cable as necessary, extracting the cable from the trench using mechanical

aids, and placing removed cable sections in appropriate containers for transport and disposal; and
- Backfill and compact excavated trench with excavated soil previously stored within the fence compound area for reinstatement.

2.1.1.7 Reasonable endeavours will be undertaken to fully remove the onshore cable, however, a small section may be left in situ if cable pulling becomes unfeasible, which is only relevant for the section of the onshore cable located below the rock revetment (approximately 5 m in length). It is considered reasonable to determine this detailed requirement at decommissioning stage as specific cable conditions can only be known once excavation works commence.

2.1.1.8 The Proposed Works Onshore comprise the decommissioning of onshore infrastructure and will be undertaken within the 'Onshore Site', illustrated in **Figure 1**.

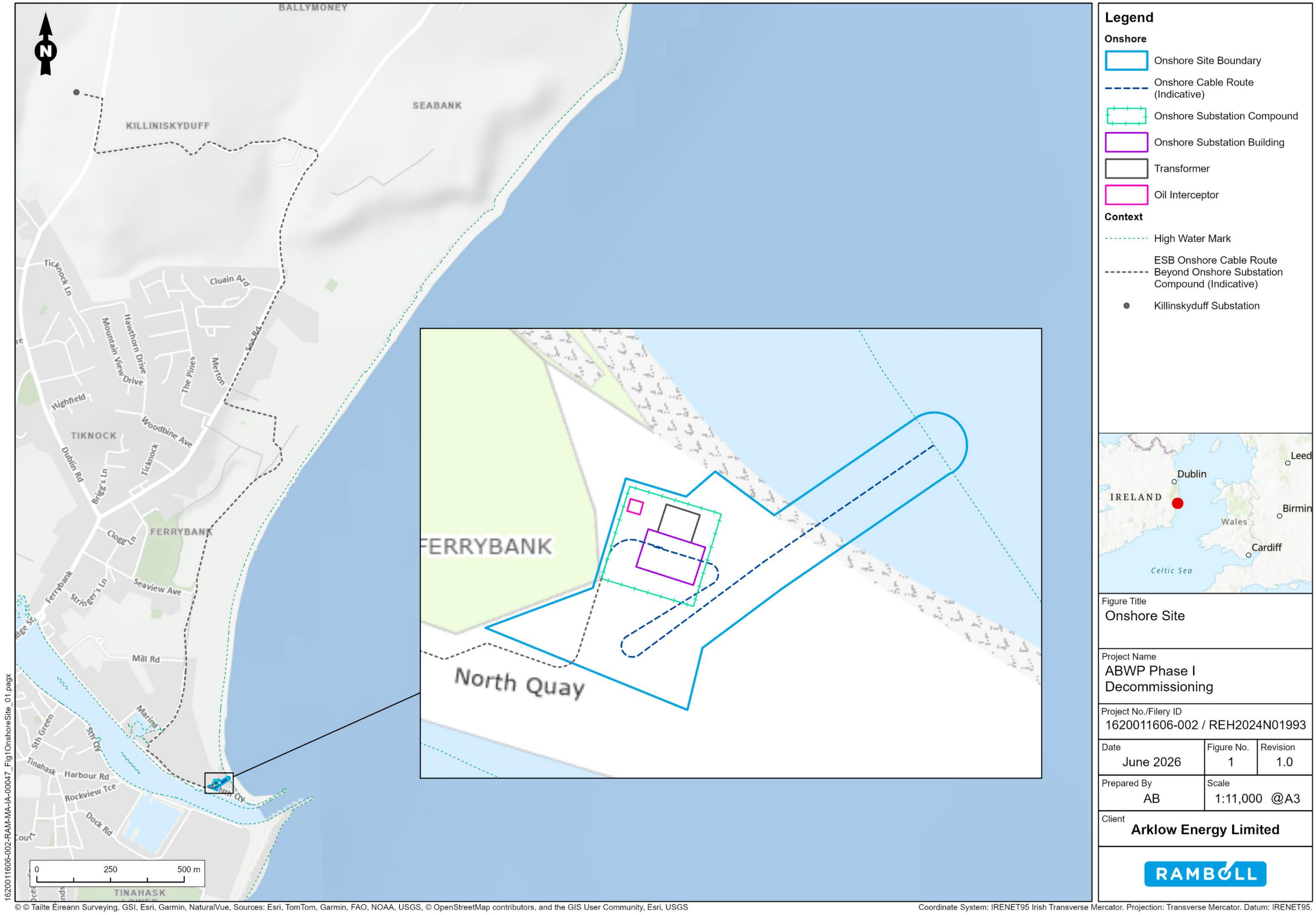


Figure 1: Onshore Site

2.2 Programme

2.2.1.1 The Proposed Works Onshore will be programmed independently from the Proposed Works Offshore, but there is potential for these to be executed in parallel.

2.2.1.2 Given the proximity of the Onshore Site to the sea, Proposed Works Onshore may be programmed during favourable weather and sea state conditions to minimise potential downtime and risks to personnel and be undertaken during day time, anticipated as working from Monday to Saturday (except where otherwise specified in **Appendix A**).

2.2.1.3 **Table 2.1** sets out an indicative programme for the Proposed Works Onshore:

[Principal Decommissioning Contractor to replace with detailed programme. If works are proposed to be undertaken in different stages, individual programmes for each stage should be presented, as these become available.

The Principal Decommissioning Contractor will liaise with WCC in advance of the Proposed Works Onshore to gain an update to the Arklow Flood Relief Scheme and, if applicable, specifically incorporate into the programme any works relating to site compound 5 (for the Arklow Flood Relief Scheme) which may be occurring on or adjacent to the Onshore Site. If there is no overlap in timing between the Proposed Works Onshore and works comprising site compound 5 relating to the Arklow Flood Relief Scheme then no further actions are necessary in terms programming of the respective schemes.]

Table 2.1: Indicative programme of Proposed Works Onshore

Activities	Anticipated Duration	Indicative Programme (weeks)				
		W1	W2	W3	W4	W5
Proposed Works Onshore	30 days					

3 ROLES AND RESPONSIBILITIES

3.1.1.1 **Table 3.1** sets out the roles and responsibilities referenced within the Outline Onshore DEMP that will be fulfilled by the Principal Decommissioning Contractor or subcontractor personnel in relation to environmental management during the Proposed Works Onshore.

[Principal Decommissioning Contractor to develop list of roles and responsibilities, including names and contact details. Some of these roles may be fulfilled by the same person and additional positions may be added as appropriate]

Table 3.1: Roles and responsibilities

Role Title	Name and Contact Details	Responsibility
Arklow Energy Project Manager	*[To be added]*	• Ongoing compliance with the Detailed Onshore DEMP and supporting documents, ensuring sufficient and adequate resources and processes are in place; • Appointment of a Principal Decommissioning Contractor and subcontractors, ensuring contractual obligations of these in relation to the Detailed Onshore DEMP; • Monitor non-compliance and implementation of corrective and preventive actions, ensuring these are addressed efficiently; and • Report to Arklow Energy's senior management.
Arklow Energy Environmental Manager	*[To be added]*	• Review and approval of the Detailed Onshore DEMP prepared and regularly updated by the Principal Decommissioning Contractor, including any associated environmental monitoring; • Conduct environmental audits and/or inspections to ensure compliance of Proposed Works Onshore with the Detailed Onshore DEMP and supporting documentation, e.g. ensuring environmental reports and records are generated and maintained; • Ensure that reporting of compliance with planning conditions (and conditions / requirements in other permits with environmental components) is submitted to the relevant authorities / stakeholders in a timely manner and in accordance with conditions; • Promote a positive environmental culture, increasing environmental awareness throughout the Proposed Works Onshore, including via progress meetings, induction and toolbox talks (TBTs) and training (see **Section 4**); • Approve any corrective / preventive actions proposed by the Principal Decommissioning Contractor in response to any environmental hazard, risk, near miss, incident or query raised by the Principal Decommissioning Contractor or subcontractors; • Liaison with relevant stakeholders on matters relating to the environment, as required, which includes WCC specifically in relation to the Arklow Flood Relief Scheme; and • Report to Arklow Energy Project Manager.
Community Liaison Manager (CLM)	*[To be added]*	• Act as the primary liaison between Arklow Energy, Principal Decommissioning Contractor and local communities, ensuring transparent communication, managing feedback, and coordinating consultation events (if any).
Principal Decommissioning Contractor	*[To be added]*	• Update and maintain the Detailed Onshore DEMP, based on the detailed design and decommissioning methodology, as well as any permits and permissions (**Appendix B**) relevant to the Proposed Works Onshore, preparing and providing RAMS, detailed management plans, and any associated recording and reporting templates in line with the Outline Onshore DEMP, to be provided to Arklow Energy Environmental Manager at least 10 working days in advance of relevant Proposed Works commencing;

Role Title	Name and Contact Details	Responsibility
		*[Principal Decommissioning Contractor to record any relevant permits and permissions in **Appendix B**]* • Appointment of an Environmental Manager with a minimum of five years site experience for acceptance by Arklow Energy Environmental Manager prior to commencement of Proposed Works Onshore; • Appointment of a Traffic Management Coordinator to coordinate traffic management requirements, including signing, lighting, guarding and temporary traffic management arrangements where required, see **Section 6.4** and **Appendix F** (and **Volume 3, Appendix 3.2: Outline Traffic Management Plan (TMP)**; • Appointment of a Waste Coordinator to oversee implementation, monitoring and review of waste management arrangements for the Proposed Works Onshore, see **Section 6.10** and **Appendix G** (and **Volume 3, Appendix 3.3: Outline Onshore Waste Management Plan (WMP)**; • Responsible for the day-to-day management of the Proposed Works Onshore and practical implementation of the Detailed Onshore DEMP, ensuring any required monitoring, reporting and recording is maintained; • Ensure all personnel involved in Proposed Works Onshore receive suitable environmental induction and training prior to undertaking any Proposed Works Onshore; • Accountable for the overall performance of the Detailed Onshore DEMP and associated requirements, including subcontractors' performance, providing any requested records to Arklow Energy Environmental Manager without delay; • Notify the Arklow Energy Environmental Manager of any environmental hazard, risk, near miss, incident or environmental queries without delay; and • Report to Arklow Energy Project Manager and Environmental Manager.
Subcontractors	*[To be added]*	• Adhere to relevant requirements specified in the Detailed Onshore DEMP, including participation in required induction and training; and • Report to Principal Decommissioning Contractor.

3.1.1.2 Prior to commencement of Proposed Works Onshore, a Contacts Sheet will be compiled, which will provide a list of all contact details and be made available to the project team, maintained updated regularly throughout the Proposed Works Onshore.

4 COMMUNICATION AND REPORTING

4.1 Internal Communication and Reporting

4.1.1.1 The Principal Decommissioning Contractor will be required to provide the Detailed Onshore DEMP, RAMS, detailed management plans, and any associated recording and reporting templates to the Arklow Energy Environmental Manager at least 10 working days in advance of Proposed Works Onshore commencing.

4.1.1.2 It is the responsibility of all personnel engaged in the Proposed Works Onshore to report any occurrence of issues, accidents and where an environmental procedure has not been followed.

4.1.1.3 Where environmental issues are identified by any stakeholder or personnel, they will be communicated to the Arklow Energy Environmental Manager for review, who will identify a suitable course of action, and will ensure:

- An appropriate action to address the environmental issue is identified and implemented, where appropriate;
- A suitable owner for the action is identified and they are informed of the fact;
- The action owner is monitored during completion of the action; and
- The results of the action are recorded and communicated to those that raised the issue.

4.1.1.4 The procedure to be followed in the event of an environmental incident will be in **Appendix C: Environmental Incident Procedure.**

[Principal Decommissioning Contractor to include the Environmental Incident Procedure in Appendix C]

4.1.1.5 The Principal Decommissioning Contractor will be required to maintain an Onshore Environmental Action Tracker (**Appendix D**), which will collate all requirements and record environmental issues, accidents or non-compliances, as well as the course of action followed, which will allow for the identification of any additional preventive action to take place and ensure that the event does not occur again.

[Principal Decommissioning Contractor to include the Onshore Environmental Action Tracker in Appendix D]

4.2 External Communication and Reporting

4.2.1.1 The CLM will act as the primary liaison between Arklow Energy, Principal Decommissioning Contractor and local communities, ensuring transparent communication, managing feedback, and coordinating consultation events (if any).

4.2.1.2 The Arklow Energy Environmental Manager will be responsible for liaising with any relevant authorities / stakeholders (which includes WCC specifically in relation to the Arklow Flood Relief Scheme), carrying out any required external communications, notifications and reporting, and responding to any evidence / information requests in line with the Detailed Onshore DEMP.

4.2.1.3 The Principal Decommissioning Contractor and subcontractors must ensure that any complaints are accurately recorded and reported in line with a protocol to be agreed with Arklow Energy, and a log will be maintained to include details of the response and actions taken (**Appendix E**).

[Principal Decommissioning Contractor to include the Complaint Protocol Appendix E]

4.2.1.4 The Principal Decommissioning Contractor will ensure complaints are investigated promptly and responses and/or corrective actions implemented. All observations, queries and complaints will be dealt with in a timely manner.

5 ENVIRONMENTAL TRAINING, MONITORING AND AUDITING

5.1 Induction Training

5.1.1.1 TBTs and induction training of all personnel, including subcontractors and individuals external to the Proposed Works Onshore, will be implemented by the Principal Decommissioning Contractor to ensure that all personnel are aware of the content of the Detailed Onshore DEMP and its applicability to them, environmental sensitivities of the Onshore Site and surrounding area and the measures that should be implemented to minimise potential impacts on the environment.

5.1.1.2 TBTs will be scheduled in advance of relevant Proposed Works Onshore activities (for example, removal of cooling oil), identifying specific control measures and mitigation requirements.

5.1.1.3 In addition, the Principal Decommissioning Contractor will prepare a series of awareness materials and distribute within the project team, which may include training packs, posters, signs and newsletters.

5.1.1.4 A record of environmental training delivered will be maintained by the Principal Decommissioning Contractor.

5.2 Environmental Monitoring and Auditing

5.2.1.1 The primary monitoring tool available for the Proposed Works Onshore will be the Onshore Environmental Action Tracker (**Appendix D**), which will provide a log of all requirements to be adhered to throughout the lifetime of the Proposed Works Onshore, including those identified in the EIAR and described in this Outline Onshore DEMP, as well as those from planning conditions, permits and permissions. The Onshore Environmental Action Tracker will also be used to record environmental issues, accidents or non-compliances, and associated course of action taken.

5.2.1.2 The purpose of the Onshore Environmental Action Tracker is to provide a tool intended for use by both the Arklow Energy Environment Manager and the Principal Decommissioning Contractor to track compliance and environmental performance, providing a record and audit trail across Proposed Works Onshore.

5.2.1.3 The Principal Decommissioning Contractor will be responsible for compiling the Onshore Environmental Action Tracker list of requirements before Proposed Works Onshore commence, issuing this to the Arklow Energy Environment Manager for approval, and maintain this as a live document throughout the Proposed Works Onshore, shared with Arklow Energy Environmental Manager upon request.

5.2.1.4 The Principal Decommissioning Contractor will be responsible for undertaking environmental audits on a weekly basis, providing audit reports to the Arklow Energy Environmental Manager as requested.

5.2.1.5 The Arklow Energy Environmental Manager may also carry out independent environmental audits to ensure compliance, including site visits and conversations with employees.

5.2.1.6 Details and findings of all monitoring and audit activities will be recorded. Any observations or corrective actions arising from audits and inspections will be addressed, with procedures updated in the Detailed Onshore DEMP as required.

6 ENVIRONMENTAL MANAGEMENT AND MITIGATION

6.1.1.1 This section outlines the environmental aspect-specific management and mitigation measures to be implemented during the Proposed Works Onshore. These measures have been developed through the EIA process.

6.1.1.2 **Sections 6.1 - 6.10** capture proposed mitigation and management measures to be implemented during the Proposed Works Onshore by the Principal Decommissioning Contractor based on available information about the Onshore Site and the Proposed Works Onshore at this stage.

*[Principal Decommissioning Contractor to update **Sections 6.1 - 6.10** in line with any relevant planning conditions or requirements identified by separate decommissioning permits.]*

6.1 Water and Land Quality

Environmental Management and Mitigation relevant to Water Quality	
Potential impacts	• Surface runoff contamination of nearby water resources (surface and groundwater); • Impacts associated with flood risk; • Mobilisation of contaminated soils/sediments; • Loss of topsoil, and • Compression of substrata.
Embedded mitigation	• The decommissioning management of the site will take account of the recommendations of the CIRIA C532 guidance to minimise potential impacts to water and land quality, as follows.: – On completion of the removal of below-ground structures the excavations will be backfilled and compacted with acceptable material, usually a free-draining hardcore aggregate back up to original ground levels; – The oil/water interceptor on-site will be left in situ until it's no longer receiving drainage which may potentially include oils or fuels (i.e. the removal of the oil/water interceptor will be appropriated phased during the Proposed Works Onshore); and; – Refuelling of all decommissioning vehicles / plant will be undertaken off-site. • Good management practices will be implemented throughout all the Proposed Works Onshore to protect surface runoff contamination of nearby water resources, and soil quality and prevent land contamination. Measures include (among others) the following: – Manage earth movements and stockpiles to prevent erosion, runoff, and degradation, including appropriate placement, profiling, and timely reinstatement of soils; – In order to reduce the compaction and erosion of topsoil outside the areas that Proposed Works Onshore will physically interact with, haulage routes will be along predetermined routes within and outside the Onshore Site; – During decommissioning, where applicable, surface water runoff would be collected by a temporary drainage system installed by the Principal Decommissioning Contractor. This would minimise the potential for silt run-off to leave the site during the decommissioning works; – The programme for the Proposed Works Onshore will be planned and continuously monitored against weather forecasts, with particular consideration of predicted rainfall events, and works will be adjusted or suspended where necessary to prevent flooding or runoff impacts; – Any storage, handling, or cleaning of liquids, where required, will be undertaken in designated controlled areas incorporating appropriate impermeable surfaces and secondary containment (e.g. bunds, kerbing or equivalent). The specific arrangements will be defined and implemented by the Principal Decommissioning Contractor in accordance with best practice, site-specific conditions, and applicable regulatory requirements, noting that no fuel storage on site is currently anticipated; – Any liquid escape or spillage such as an oil leak will be cleaned up immediately by the designated site personnel acting as a site spillage team; – All standing plant are to have drip trays or plant nappies placed underneath them; – Good housekeeping will be maintained at the site (daily site clean-ups, use of disposal bins, etc.) throughout the Proposed Works Onshore; and – Staff trained in emergency response planning in the event of a fuel leak or spill. • Adherence to the Outline Onshore WMP (**Appendix G**), which includes requirements for the identification, handling, and management of wastes arising from Proposed Works Onshore, ensuring compliance with standard industry practice and relevant waste legislation. *[Principal Decommissioning Contractor to insert Detailed Onshore WMP in **Appendix G**].*
Emergency measures	• Implementation of Environmental Incident Procedure as required **(Appendix C**) *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Water Quality that are not covered by embedded measures listed above]* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions]*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme • Environmental Protection Agency (EPA) *[Others to be identified by Principal Decommissioning Contractor]*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure • **Appendix G** – Detailed Onshore WMP *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Water and Land Quality].*

6.2 Noise and Vibration

Environmental Management and Mitigation relevant to Noise and Vibration	
Potential impacts	Increased noise and vibration emissions
Embedded mitigation	• Noise and vibration will be minimised through the adoption of good industry practice as standard working practices across the Onshore Site to ensure that noise and vibration are reduced whenever practicable, including (among other) the following: – The Principal Decommissioning Contractor will take specific noise abatement measures and comply with the recommendations of the British standards1 and the S.I. No. 559/2025 - European Communities (Noise Emission by Equipment for Use Outdoors) (Amendment) Regulations 2025; – Vehicles and mechanical plant used for the purpose of the Proposed Works Onshore will be fitted with effective exhaust silencers where feasible, maintained in good and efficient working order, and operated in such a manner as to minimise noise emissions; – Machines in intermittent use will be shut down or throttled down to a minimum when not in use; – Wherever possible, equipment powered by mains electricity will be used in preference to equipment powered by internal combustion engine or locally generated electricity; – Noise emitting machinery which is required to run continuously will be housed in a suitable acoustically lined enclosure; – Equipment which breaks concrete, brickwork or masonry by bending, bursting or "nibbling" will be used in preference to percussive tools. Where possible, the use of impact tools will be avoided where the site is close to occupied premises; – Proposed Works Onshore will be planned to ensure all noisy working requirements are identified along with the timescales so such information can be advised to all concerned parties. There will be no site working during any anti-social hours. • Adherence to the Detailed Traffic Management Plan (TMP) (**Appendix F**) and provides the strategic framework for managing traffic and transport associated with the Proposed Works Onshore; and *[Principal Decommissioning Contractor to insert Detailed TMP in **Appendix F**].*
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Noise and Vibration that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme • Environmental Protection Agency (EPA) • Health & Safety Authority (HSA) *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor]*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure • **Appendix F** – Detailed TMP *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Noise and Vibration].*

[1] *British Standards Institution (BSI) (2014) 5228-1 and 2:2009+A1:2014. Code of practice for noise and vibration control on construction and open sites. Noise and Vibration.*

6.3 Onshore Biodiversity

Environmental Management and Mitigation relevant to Onshore Biodiversity	
Potential impacts	• Disturbance of fauna; • Increased risk of invasive and Non-Native Species (INNS) introduction / spread; and • Habitat loss.
Embedded mitigation	• Implementation of water and land quality, and noise and vibration management and mitigation measures are identified in 6.1 and 6.7; • Works at the Onshore Site will, where feasible, take place between September and January. If this is not possible, a nesting bird check will be undertaken by an experienced ecologist prior to commencement of Proposed Works Onshore within the onshore substation compound. If evidence of nesting birds is identified, work will stop and a suitable no-work buffer zone around the nest area will be installed, until such time as chicks have fledged; • No evidence of bat roosts or bat activity was recorded during the building inspection and habitat survey within the Onshore Site. While bats are not expected to be present, should any evidence of bats or potential roosting features be identified during the Proposed Works Onshore, activities will cease in the affected area and a suitably qualified ecologist will be consulted to advise on appropriate measures; • As no invasive non-native species (INNS) were identified during the extended habitat survey within the Onshore Site, only general prevention measures relating to INNS are proposed, as the following: – If any soil and topsoil is required on the site (not expected based on Proposed Works Onshore), this will be sourced from a stock that has been screened for the presence of any invasive species and where it is confirmed that none are present; and – Good construction site hygiene will be employed to prevent introduction of problematic invasive alien plant species by thoroughly washing vehicles prior to entering the site. • Adherence to the Onshore WMP (**Appendix G),** which includes requirements for the identification, handling, and management of wastes arising from Proposed Works Onshore, ensuring compliance with standard industry practice and relevant waste legislation. *[Principal Decommissioning Contractor to insert Onshore WMP* in **Appendix G***].*
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to Onshore biodiversity that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• National Parks and Wildlife Service (NPWS) • Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** - Environmental Incident Procedure • **Appendix G** – Detailed Onshore WMP *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Onshore Biodiversity].*

6.4 Traffic and Transport

Environmental Management and Mitigation relevant to Traffic and transport	
Potential impacts	Increased traffic congestion / disruption
Embedded mitigation	• Adherence to the Detailed Traffic Management Plan (TMP) (**Appendix F**) and provides the strategic framework for managing traffic and transport associated with the Proposed Works Onshore. *[Principal Decommissioning Contractor to insert Detailed TMP in **Appendix F**].*
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	• Road Opening Licence (see **Appendix B**). *[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Traffic and Transport that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme. *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** - Environmental Incident Procedure • **Appendix F** – Detailed TMP *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Traffic and Transport].*

6.5 Onshore Infrastructure and Utility Services

Environmental Management and Mitigation relevant to Onshore infrastructure and utility services	
Potential impacts	• Disturbance/interruption of services (e.g. potential crossing of existing electrical infrastructure (MV/LV cable)).
Embedded mitigation	• Commissioning of utilities maps to have an up to date understanding of infrastructure and utility services that may overlap or be located within the vicinity of the Onshore Site; • Ongoing engagement with Electricity Supply Board (ESB) Networks in relation to any potential crossing of existing electrical infrastructure and in relation to the termination and isolation of electricity supplies. ESB Networks will also decommission the rest of the onshore cable section 2 located outside the Onshore Site boundary; and • The surface water drainage infrastructure within the Onshore Site boundary is understood to be 'self-contained', with no drainage infrastructure originating from off-site coming onto and crossing the Onshore Site. Therefore, removal of drainage infrastructure associated with the Onshore Site should not have 'knock on' effects. The drainage infrastructure associated with the Onshore Site will be removed and 'capped' at points where drainage infrastructure is at the boundary of the Onshore Site, thus ensuring there is no risk of uncontrolled drainage discharges from the Onshore Site. The buildings and hardstanding at the Onshore Site will be removed and replaced with hardcore aggregate which will be free-draining and not require post decommissioning installation of alternative drainage infrastructure.
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to Onshore Infrastructure and Utility Services that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• ESB Networks • Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Onshore Infrastructure and Utility Services].*

6.6 Cultural Heritage and Archaeology

Environmental Management and Mitigation relevant to Cultural Heritage and Archaeology	
Potential impacts	• Direct / indirect impact on unknown archaeological or cultural heritage assets.
Embedded mitigation	• Impacts on known/unknown archaeological or cultural heritage asset are unlikely for the characteristics and extent of the Proposed Works Onshore. In the event of the discovery of archaeological finds or remains, the National Monuments Service (NMS) and the National Museum of Ireland (NMI) will be notified immediately, and the required procedures/report will be developed by the Principal Decommissioning Contractor.
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Cultural Heritage and Archaeology that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• NMS, Department of Housing, Local Government and Heritage (DoHLGH) • National Museum of Ireland (NMI) • Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Cultural Heritage and Archaeology].*

6.7 Air Quality and Climate Change

Environmental Management and Mitigation relevant to Air Quality and Climate Change	
Potential impacts	• Changes to air quality; and • Contribution to climate change.
Embedded mitigation	• Implementation of energy efficiency measures, including: – Regular maintenance of truck, machinery and equipment used during Proposed Works Onshore, ensuring equipment is subject to any legally required technical inspections that ensure efficient performance; – Appropriate maintenance of trucks and machinery engines in line with manufacturers requirements to ensure any emissions are minimised; and – Implementation of fuel efficiency measures throughout Proposed Works Onshore. • Trucks and machinery will possess all relevant classification certificates, complying with statutory requirements under national regulations. • General dust control measures will be also implemented to minimise impacts on air quality, as follows: – Sporadic wetting of loose stone surface to minimise movement of dust particles to the air; and – In periods of extended dry weather, dust suppression may be necessary along road network to ensure dust does not cause a nuisance.
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Air Quality and Climate Change that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme • Environmental Protection Agency (EPA) • Department of Climate, Energy and the Environment (DCEE) *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** - Environmental Incident Procedure *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Air Quality and Climate Change].*

6.8 Population and Human Health

Environmental Management and Mitigation relevant to Population and Human Health	
Potential impacts	• Economic impact (employment and expenditure); and • Impact to the tourism / recreation sector.
Embedded mitigation	• Implementation of noise and vibration and air quality management and mitigation measures as identified in sections 6.2 and 6.7; and • Appointment of a CLM during Proposed Works Onshore in order to act as the primary liaison between Arklow Energy, Principal Decommissioning Contractor and local communities, ensuring transparent communication, managing feedback, and coordinating consultation events (if any), see **Section 3**.
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Population and Human Health that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Population and Human health].*

6.9 Landscape and Visual Amenity

Environmental Management and Mitigation relevant to Landscape and Visual Amenity	
Potential impacts	• Changes to landscape character; and • Visual impacts (Proposed Works Onshore).
Embedded mitigation	• Reinstatement of soil following removal of onshore cable, returned to its condition pre-installation; • The substation site, contractors' compounds and temporary work areas will be managed in an orderly manner with security fencing and hoarding kept in good condition, and vehicular access managed to avoid congestion outside the Onshore Site; • Following completion of the civil works, all excavations will be backfilled using stockpiled materials where feasible; and • Adherence to the Detailed Onshore WMP (**Appendix G**), which includes requirements for the identification, handling, and management of wastes arising from Proposed Works Onshore, ensuring compliance with standard industry practice and relevant waste legislation. *[Principal Decommissioning Contractor to insert Detailed Onshore WMP in **Appendix G**]*
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to onshore Landscape and Visual Amenity that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** – Environmental Incident Procedure *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Landscape and Visual Amenity].*

6.10 Waste

Environmental Management and Mitigation relevant to Waste	
Potential impacts	Waste generation
Embedded mitigation	Adherence to the Detailed Onshore WMP (**Appendix G**), which includes requirements for the identification, handling, and management of wastes arising from Proposed Works Onshore, ensuring compliance with standard industry practice and relevant waste legislation. *[Principal Decommissioning Contractor to insert Detailed Onshore WMP in **Appendix G**].*
Emergency measures	• Implementation of Environmental Incident Procedure as required (**Appendix C**). *[Any other emergency measures considered to be outside the scope of the Environmental Incident Procedure to be identified by Principal Decommissioning Contractor if necessary].*
Planning conditions, permits and permissions	*[Principal Decommissioning Contractor to attach planning permit and planning conditions to Appendix B and summarise here those specifically relevant to Onshore Waste that are not covered by embedded measures listed above].* *[Principal Decommissioning Contractor to identify any other relevant consents, licences and permissions].*
Relevant stakeholders	• Wicklow County Council (WCC), including specific representatives responsible for the Arklow Flood Relief Scheme • Environmental Protection Agency (EPA) *[Any other relevant stakeholders to be identified by Principal Decommissioning Contractor].*
Additional information	• **Appendix A** – Detailed Method Statements and RAMS • **Appendix B** – Permits and Permissions • **Appendix C** - Environmental Incident Procedure • **Appendix G** – Detailed Onshore WMP *[Principal Decommissioning Contractor to identify any other additional information of relevance to the environmental management of Proposed Works Onshore in relation to Onshore Waste].*

7 REFERENCES

Arup, 2021 Arklow Flood Relief Scheme – Environmental Impact Assessment Report. Available at: https://www.pleanala.ie/en-ie/case/310368 (Accessed: June 2026)

Construction Industry Research and Information Association (CIRIA), 2001. Control of water pollution from construction sites. Guidance for consultants and contractors (C532). Available at: https://www.ciria.org (Accessed: May 2026)

CIRIA, 2014. Containment systems for the prevention of pollution: Secondary, tertiary and other measures for industrial and commercial premises. Available at: https://www.epa.ie (Accessed: June 2026)

Environmental Protection Agency (EPA), 2022. Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects. Available at: https://www.epa.ie (Accessed: June 2026)

EPA, 2022. Guidelines on the information to be contained in Environmental Impact Assessment Reports. Available at: https://www.epa.ie (Accessed: February 2026)

FÁS and the Construction Industry Federation (CIF), 2002. Construction and Demolition Waste Management – a handbook for Contractors and Site Managers (2002).

Health and Safety Authority (HSA), 2004. Risk Assessment of Chemical Hazards. Available at: https://www.hsa.ie (Accessed: June 2026)

Institute of Environmental Management and Assessment (IEMA), 2024. Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Construction. Available at: https://www.iema.net (Accessed: February 2026)

MacCabe Durney Barnes (MDB), 2017. Guidance on EIS and NIS preparation for Offshore Renewable Energy Projects. Prepared for the Department of Communications, Climate Action & Environment (DCCAE) and Sustainable Energy Authority of Ireland (SEAI). Available at: https://assets.gov.ie (Accessed: February 2026)

Office of the Planning Regulator, n.d. Planning Library. Environment and Climate Glossary. Available at: https://www.opr.ie (Accessed: June 2026)

APPENDIX A PLACEHOLDER FOR DETAILED METHOD STATEMENTS / RAMS

[Principal Decommissioning Contractor to include detailed method statements / RAMS]

APPENDIX B PERMITS AND PERMISSIONS

[Principal Decommissioning Contractor to update below table, attach associated permits, and keep regularly updated. Specific conditions and requirements shall be logged in Appendix D]

Reference	Relevant Authority	Description	Owner	Status / Validity
Planning permission	An Coimisiún Pleanála (ACP)	Required in advance of the execution of Proposed Works Onshore.	Arklow Energy	To be obtained
Approval of management plans	Wicklow County Council (WCC)	Approval of detailed relevant management plans required in advance of any Proposed Works Onshore commencing	Principal Decommissioning Contractor	To be obtained
Third party consent	Third-party asset owners (cable/pipeline operators)	Crossing Agreement variations / terminations: Formal legal agreements with third-party infrastructure owners (cables, pipelines, telecoms) that were put in place during construction must be formally varied or closed out to reflect removal of utilities assets crossing or proximate to those third-party assets. [Confirmation is required if there are any crossings]	Arklow Energy / Legal team	To be obtained
Road Opening Licence	WCC	Road Opening Licence (MapRoad Roadworks Licensing system): Required from the relevant local authority to excavate public roads for cable removal, reinstatement or other decommissioning works affecting the highway. Minimum insurance and qualification requirements apply.	Principal Decommissioning Contractor	To be obtained
Waste permit	Environmental Protection Agency (EPA) / Relevant Local Authority	Waste Management consent / permit (Waste Management Acts 1996, as amended): Required where demolition and decommissioning activities generate waste material (including spoil, structural materials, cable insulation, equipment). Large-scale operations require EPA waste licence; smaller-scale operations require local authority permit. Article 27 authorisation may be available for by-product status. If required, any relevant waste permit would be secured by the Principal Decommissioning Contractor or AEL (as appropriate)	Arklow Energy / Principal Decommissioning Contractor	To be obtained
Grid connection	EirGrid / ESB Networks	Grid Connection Agreement termination: Formal termination of the Grid Connection Agreement and disconnection from the transmission or distribution system must be agreed with EirGrid and/or ESB Networks prior to decommissioning of the substation and cable infrastructure.	Arklow Energy	To be obtained
Health & Safety Notifications	Health & Safety Authority (HSA)	AF1 and AF2 forms are mandatory notifications to the Irish Health and Safety Authority (HSA) for construction / demolition projects lasting over 30 days or exceeding 500 person-days. Clients submit AF1 before design starts; the Project Supervisor Construction Stage (PSCS) submits AF2 before demolition begins. Online submission is available via the HSA Construction Notification System.	Arklow Energy / Principal Decommissioning Contractor and subcontractor	To be obtained

APPENDIX C PLACEHOLDER FOR ENVIRONMENTAL INCIDENT PROCEDURE

[Principal Decommissioning Contractor to include Environmental Incident Procedure]

APPENDIX D PLACEHOLDER FOR ONSHORE ENVIRONMENTAL ACTION TRACKER

[Principal Decommissioning Contractor to include the Onshore Environmental Action Tracker]

APPENDIX E PLACEHOLDER FOR COMPLAINT PROTOCOL

[Principal Decommissioning Contractor to include Complaint Protocol]

APPENDIX F PLACEHOLDER FOR DETAILED TRAFFIC MANAGEMENT PLAN (TMP)

*[Principal Decommissioning Contractor to include the Detailed TMP for Proposed Works Onshore, to be prepared in line with the Outline TMP presented as part of the planning application for Proposed Works (**Volume 3, Appendix 3.2: Outline TMP** of the EIAR)*

APPENDIX G PLACEHOLDER FOR DETAILED ONSHORE WASTE MANAGEMENT PLAN (WMP)

*[Principal Decommissioning Contractor to include the Detailed Onshore WMP for Proposed Works Onshore, to be prepared in line with the Outline Onshore WMP presented as part of the planning application for the Proposed Works (**Volume 3, Appendix 3.3: Outline Onshore WMP** of the EIAR)*