
CARRAIGIN POWER LTD

**CARRIGEEN RENEWABLE ENERGY
DEVELOPMENT, COUNTY ROSCOMMON**

**CONSTRUCTION ENVIRONMENTAL
MANAGEMENT PLAN
(CEMP)**

**MANAGEMENT PLAN 4
SPOIL MANAGEMENT PLAN**

March 2026

Carraigin Power Ltd
c/o Enerco Energy Ltd
Lissarda Industrial Estate,
Lissarda,
Cork,
Ireland



Jennings O'Donovan & Partners Limited,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
email: info@jodireland.com



JENNINGS O'DONOVAN & PARTNERS LIMITED
 Project, Civil and Structural Consulting Engineers,
 FINISKLIN BUSINESS PARK,
 SLIGO,
 IRELAND.

Telephone (071) 9161416
 Fax (071) 9161080
 Email info@jodireland.com
 Web Site www.jodireland.com





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Prepared by

Reviewed /Approved by

Document Final	Name Kathlyn Feeney	Name Ciara Gilligan
Date March 2026	Signature 	Signature 

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1 INTRODUCTION

1.1 General

This plan provides an assessment of the issue of handling surplus excavated material at the proposed Carrigeen Renewable Energy Development. The measures outlined in the plan will be monitored on Site by the appointed Ecological Clerk of Works (ECoW) and will be agreed with the contractor before works commence on Site. This plan should be read in conjunction with the Construction Environmental Management Plan (CEMP) and associated management plans.

1.2 Site Investigations

Whiteford Geoservices Ltd (WGS) personnel visited the site between 25th September 2024 and 6th June 2025., to undertake an assessment of topography, geology, drainage and ground stability conditions at the proposed Carrigeen Wind Farm Site. Details of the investigations can be found in **EIAR Appendix 10.1**.

1.3 General Aims and Principals of the Spoil Management Plan

The purpose of this Spoil Management Plan is:

- To outline the proposals in relation to the management of excavated materials;
- Reduction in bare soil exposure and release of sediment;
- To make sure that the landscape is not adversely impacted as a result of the Project; and
- To promote good site management practices for the construction stage.
- Maintain existing ground levels within the flood zone.

Any reinstatement and reprofiling proposals will consider and mitigate against all identified significant risks to environmental receptors.

Topsoil and surface vegetation excavated during the construction of the wind farm infrastructure will be used to finish reinstated surfaces around Turbine Foundations and Turbine Hardstands. Reinstatement and reprofiling of, and around, infrastructure will be carried out during the construction phase.

Landscaping will allow for sympathetic restoration of the ground surface and ground profile to reduce the visual impact of new infrastructure, facilitate vegetation regrowth and reduce scour and erosion of bare surfaces prior to vegetation establishment. Reinstatement will be undertaken as work progresses. This work will be completed only by experienced personnel

under guidance from the appointed ECoW, and they will conduct regular inspections of the work to ensure it is completed in an appropriate manner.

Following construction, the footprint of the hardstands within the floodplain will be reduced, the material removed, and area reinstated to existing ground level.

All areas subjected to reinstatement will be fenced with stock-proof fencing to prevent livestock disturbance until vegetation has become established.

1.4 Management of Excavated Material

Through the design process, the volume of soil to be excavated has been minimised on Site by avoiding areas of sensitive or soft soils and by avoiding excessive cut and fill during construction. However, soil will be excavated at the site entrance, Site Access Roads, Turbine Hardstand locations, Turbine Foundations, the Onsite Substation and for the Internal Cabling circuits as detailed in **Section 2.9**.

Excavated material will be stored at Permanent Spoil Storage locations as shown on EIAR **Figure 1.2**. It will then be reutilised for infill, berm and landscaping purposes. Once reinstatement is complete the temporary storage sites will be re-vegetated with the “top mat”. This refers to the use of topsoil intended for use in the farmland topsoil spread, to prioritise areas where construction activities were carried out and providing a suitable soil condition for the land owners.

1.5 Reinstatement

Reinstatement works will commence at a late stage of construction. However, part of the reinstatement works, such as the completion of a turbine foundation or hardstand can be carried out following the completion of individual sections of work. Ongoing restorative programming facilitates the immediate reuse of spoil at the turbine base location. Suitable material of sufficient density excavated during the works will be reused in various methods during the construction works. This includes the use of excavated materials in the construction of Site Access Roads and hardstand surround berms and in finishing off the turbine hardstand areas after construction works, and the use of excavated subsoil for landscaping. No excavated soils will be taken offsite.

1.6 Control Measures

At the commencement of works, the required work footprint will be identified, and the area will be marked by a rope fence (using range poles or similar) and with appropriate signage.

No activities will be allowed outside of this agreed work area. The Environmental Manager will inspect the area regularly. Excavated spoil will be removed to the approved Permanent Spoil Storage areas as shown on **EIAR Figure 1.2**.

On commencement of the works, drainage works will include blocking of dry drains downgradient of construction areas, installation of silt traps and check dams, and implementation of a double silt fence system where work occurs within the 50m buffer zone of watercourses.

To prevent sediment transport from spoil storage, Permanent Spoil Storage areas will be covered or stabilised, and weather forecasts will be used to schedule works, with large-scale soil disturbance avoided during heavy rainfall events. The site team will monitor real-time rainfall data using Met Éireann resources and adjust activities accordingly.

Earthworks will be suspended in the event of an orange warning for rainfall. Prior to earthworks being suspended the following further control measures will be completed:

- All open spoil excavations will be secured and sealed.
- Temporary or emergency drainage will be created to prevent back-up of surface runoff.
- Working during heavy rainfall and for up to 24 hours after heavy events will not be allowed to ensure drainage systems are not overloaded.

Temporary stockpiles (not exceeding 2m in height) of separated soil material types will be placed adjacent to the excavation areas prior to reinstatement. These stockpiles will be shaped and sealed to prevent the ingress of water from rainfall.

Excavated spoil will not be deposited on the down slope or up slope edges of the adjacent topsoil. This spoil will instead be deposited on the two flanks either side of the excavation (where gradient is least) and spread in such a way as to limit the surcharge pressure on sensitive topsoils.

Spoil types will be treated separately. Mineral soils and topsoils / organic soils will be separated during excavation and these two types of spoil will be disposed of generally as follows:

- A** *Till soils will be deposited directly on top of other mineral soils. This will require the removal of peat where present to facilitate the process.*

- B** *Topsoils / Organic Soils will be stored separately, protected from the environment to maintain their integrity and used to reinstate the minerals soil surfaces following completion of construction works. No topsoil will be disposed of as part of the Project.*
1. Mineral soil reuse will take place at various locations within the Wind Farm Site where low surface gradients combine with minimal peat depth and sufficient distance from sensitive receptors. These proposed Permanent Spoil Storage areas are detailed in **Chapter 2 Project Description: Figure 1.2** and the **Spoil Management Plan**, contained within the **CEMP**.
 2. It is intended that spoil movements will be minimised by disposing of the material within or immediately adjacent to the construction footprint of the structure from whence it was excavated. No spoil disposal will take place within a floodplain or within 20m of a watercourse.
 3. Preparation of the spoil disposal sites will involve the removal of the topsoil which will be transferred to a specific location to be stockpiled and maintained for re-use during restoration operations.
 4. Spoil will be deposited, in layers of 0.50m and will not exceed a total thickness of 2.00m, unless contained by suitably designed and constrained berms.
 5. Spoil will only be deposited on slopes of < 5 degrees to the horizontal and greater than 10m from the top of a cutting. The exact location of these deposition areas has been determined in consultation with the construction phase geotechnical specialist. Refer to **Figure SD1** for details.
 6. Spoil disposal sites will have a regular weekly assessment, made by the construction manager or other suitably qualified individual, to ensure that stability and good condition is maintained.
 7. Once disposal is complete the deposition areas will be re-vegetated with the existing upper vegetated layer removed at the commencement of disposal operations. Upon commencement of the Decommissioning / restoration phase guidance from a suitably qualified ecologist will be sought to provide a suitable methodology and programme of maintenance for the restored areas.

2 RE-USE OF EXCAVATED MATERIAL

The excavated topsoil is intended to be permanently managed on site. It will be used for surface reinstatement of excavated areas infilled following construction and coverage of trackside berms. Prior to the use of areas for storage, clean water drains will first be excavated upslope, to intercept existing greenfield flow. Dirty water arising from construction phase will be conveyed and transferred into a settlement ponds prior to discharge via a buffered outfall

Inspections of the Permanent Spoil Storage areas will be made by a geotechnical engineer through regular monitoring of the works. The appointed contractor will review work practices at spoil management areas when periods of heavy rainfall are expected so as to prevent excessive dirty water runoff from being generated. The surface of the deposited spoil will be profiled to a gradient not exceeding 1 in 3 and vegetated naturally.

It is currently estimated that the quantity of excavated material, when bulked up, due to site clearance and preparation of Wind Turbine foundations, Site Access Roads and Onsite Substation will be approximately **180,878** m³ of topsoil and **171,436** m³ of subsoil.

All of the topsoil and 58,692m³ of the subsoil will be re-used during construction. The area around and above the Turbine Foundation will be backfilled with compacted stone or crushed rock to a minimum specific density as this acts as additional ballast on top of the finished wind Turbine Foundation. The remaining subsoil spoil will be surplus material and will be stored on-site for the duration of the Project, within Permanent Spoil Storage areas. None of the excavated spoil from within the Wind Farm Site will be disposed of off-site but will instead be reused during the Decommissioning phase to reinstate and landscape the Project at the end of its lifetime.

The spoil storage areas have a capacity of 472,646 m³. The location of the Permanent Spoil Storage areas and the reinstatement / landscaping areas are shown on **Drawing No. 6575-JOD-CGWF-XX-DR-C-0403**.

All construction spoil that cannot be re-used during the construction phase will be stored in six long term deposition areas (the Permanent Spoil Storage areas). Refer to **Chapter 2: Project Description**. Spoil identified as potentially hazardous will be promptly stored on an impermeable surface within properly bunded areas in accordance with good site practice as described in the IWEA and Scottish Best Practice Guidelines.

3 MONITORING

The appointed civil contractor will be responsible for implementing, managing, and monitoring this Plan throughout the construction stage to ensure that it conforms to the requirements herein. The appointed ECoW and geo-technical engineer shall also monitor all works associated with this Plan, and the civil contractor will be obliged to act immediately on any instruction relating to this Plan given by either the ECoW or the geo-technical engineer. The civil contractor shall appoint an on-site Environmental Manager in order to effectively manage and monitor this Plan. A Stability Register will be set up for the Spoil Management Area and regular weekly assessment will be made by the Geotechnical Engineer.

The ECoW shall report on compliance with the relevant mitigation measures as outlined in this Plan. The ECoW shall also be empowered to halt works where he/she considers that continuation of the works are likely to result in a significant pollution or siltation incident.