APPENDIX 4-3

PEAT AND SPOIL MANAGEMENT PLAN

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

PEAT & SPOIL MANAGEMENT PLAN

BALLYDERMOT WIND FARM, CO. OFFALY & CO. KILDARE

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Abstract: Fehily Timoney and Company (FT) were engaged by MKO to compile a Peat and Spoil Management Plan (PSMP) for the Proposed Ballydermot Wind Farm. The purpose of this report is to provide a Peat and Spoil Management Plan for the construction phase of the Proposed Project. The report describes how peat and spoil which will be excavated from infrastructure locations such as turbine bases and roads and will be handled and placed/reinstated onsite. The report also provides construction details for the types of roads which will be put in place at the Project Site and proposed peat and spoil areas which will be developed at the Proposed Wind Farm site.

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1. INTRODUCTION

1.1 Fehily Timoney and Company

Fehily Timoney and Company (FT) is an Irish engineering, environmental science and planning consultancy with offices in Cork, Dublin and Carlow. The practice was established in 1990 and currently has c.100 members of staff, including engineers, scientists, planners and technical support staff. We deliver projects in Ireland and internationally in our core competency areas of Waste Management, Environment and Energy, Civils Infrastructure, Planning and GIS and Data Management.

This Report was written by Ian Higgins (FT Technical Director, MSc in Geotechnical Engineering). Ian is a Technical Director with Fehily Timoney and has over 25 years' experience in geotechnical engineering.

1.2 Project Description

Fehily Timoney and Company (FT) was engaged in February 2020 by MKO Ltd. on behalf of Bord na Mona (BnM) (The Applicant) to compile a Peat and Spoil Management Plan for the Proposed Ballydermot Wind Farm (the 'Proposed Project'). As detailed in Section 1.1.1 in Chapter 1 of the EIAR, for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Enhancement Areas', 'Proposed Haul Routes', 'Proposed Project site', 'Site', 'Proposed Wind Farm', 'Proposed Turbines', 'Proposed Grid Connection', 'Proposed Onsite Substation', and 'Proposed Offsite Substation'.

The Proposed Project is located approximately 2.2km south south-east of Edenderry, on the border between Co. Offaly and Co. Kildare.

The Proposed Project will comprise 46 no. wind turbines, (19 no. turbines will have a blade tip height of 200 metres (m) above the top of the foundation and 27 no. turbines will have a blade tip height of 220 metres (m) above the top of the foundation), the Proposed Onsite Substation, and Proposed Offsite Substation, and associated works, including a total of 13.1km of The Proposed Grid Connection underground 220kV electrical cabling and 0.12km of OHL(comprising 0.06km of OHL loop-in from the Proposed Offsite Substation to the existing Maynooth-Dunstown 220kV OHL) to connect to the national grid, internal access roads and hardstand areas, temporary construction compounds, ecological and ornithological enhancement, amenity track and all ancillary works and apparatus.
The full description of the Proposed Project is detailed in Chapter 4 of the EIAR.

The Proposed Wind Farm site represents the area encompassing the Proposed Wind Farm and the Proposed Onsite Substation; this area spans a large suite of bogs, comprising of a total of 14 no. individual bog basins, which form part of the Allen Bog Group. The Proposed Wind Farm site is located between the towns of Rathangan and Allenwood, Co. Kildare and Edenderry, Co. Offaly. The Proposed Wind Farm and the Proposed Onsite Substation are located on BnM cutover peat bogs, which, have been extensively modified and drained as a result of historical industrial peat extraction.

The Proposed Wind Farm site is relatively flat-lying with drainage channels running east-west. The Proposed Wind Farm site is split into two areas, to the east and west of the L3001 local road. Current land use within the Proposed Wind Farm site comprises natural recolonisation of cutaway and degraded bog, public road corridor, and existing wind energy infrastructure. Current land use on and along the Proposed Grid Connection comprises degraded raised bog, land principally used for agriculture, and public road corridor. Approximately 38km of BnM permanent fixed-gauge rail lines can be found running through the Proposed Project Site.

BnM has considerable experience in the handling of peat in these circumstances, both during peat production operations and during wind farm construction projects. This experience has shown that the most environmentally sensitive and stable way of handling and moving of peat is its placement across the Site and at locations as close as possible to the excavation areas.

The peat depth data was recorded by FT during the site walkovers between February and June 2022 and by MKO during a site walkover in 2025 and has been used in the assessment of peat stability for the Proposed Wind Farm site.

1.3 Purpose

The purpose of this report is to provide a peat and spoil management plan with particular reference to peat stability for the construction phase of the Proposed Project. The report describes how peat and spoil which will be excavated from proposed infrastructure locations such as turbine bases, substations and roads will be handled and placed/reinstated onsite. The report also provides construction details for the types of roads which will be put in place at the Project Site and proposed peat and spoil areas which will be developed at the Site. Such peat and spoil management measures have been successfully implemented on numerous wind farms over the past 15 years.

This peat and spoil management plan also includes a monitoring programme which will be implemented during the construction phase of the Proposed Project and a contingency plan should peat instability/failure occur at the Project Site.

As for all construction projects, a detailed engineering construction design must be carried out by the appointed construction stage designer prior to any construction work commencing on Project Site. This must take account of the consented project details and any conditions imposed by that consent. This must include a detailed peat stability assessment to account for any changes in the environment which may have occurred in the time leading up to the commencement of construction and a peat and spoil management plan to allow for the most appropriate geotechnical and environmental led solutions to be developed for the management of peat and spoil.

As work is carried out the contents of the peat and spoil management plan and peat stability monitoring programme will be implemented in full and updated (if required) in the Construction & Environmental Management Plan (CEMP) for the construction phase.

This peat and spoil management plan contains some drainage guidelines for construction works and for management of peat. It should be noted that the control of water quality and drainage measures for the Proposed Wind Farm site is outlined in detail in Chapter 4: Description of the Proposed Project and Chapter 9: Water of the Environmental Impact Assessment Report (EIAR).

1.4 Peat Instability Definition

Peat instability in this report is defined as a mass movement of a body of peat that would have a significant adverse impact on the surrounding environment. Peat instability excludes localised movement of peat that would occur below a floating access road, creep movement or localised erosion type events.

Adherence to the peat and spoil management plan should reasonably minimise the potential for all such peat movements. However, it is noted that due to the soft ground nature of the peat terrain it is not possible to completely avoid localised peat movement.

1.5 Ground Conditions

Ground conditions across the Proposed Wind Farm site are described in the Geotechnical & Peat Stability Assessment Report (FT, 2026). A total of 1,026 no. peat depth probes were carried out on site by FT, MKO and HES. Peat depths recorded from peat probing across the Proposed Wind Farm site ranged from 0.0 to 6.0m with an average depth of 1.6m.

There were 5 no. rounds of intrusive SI carried out on the Project Site, as follows:

- ∀ The first round of SI consisting of 9 no. trial pits, was undertaken on the 25th of May 2021 by Fehily Timoney & Company Ltd. (FT) and Tobar Archaeological Services Ltd. (Tobar).
- ∀ The second round of SI, consisting of 53 no. trial pits and 1 no. rotary core borehole, commenced on the 8th of November 2021 and was completed on 7th of December 2021. Works were carried out by IDL under the supervision of FT and Tobar.
- ∀ The third round of SI, consisting of 2 no. rotary-core boreholes, commenced on 21st of June 2022 and was completed on 23rd of June 2022. Works were carried out by IDL under the supervision of FT.
- ∀ The fourth round of SI, consisting of 6 no. rotary-core boreholes, was completed by IDL over the time period 9th of September 2022 to 16th of September 2022 under the supervision FT.
- ∀ The fifth and final round of SI was carried out between 30th November 2022 and 1st December 2022 and comprised 3 no. rotary-core boreholes. Works were carried out by IDL under the supervision of FT. Please see Section 1.8.2 of Chapter 1 for detailed biographies of all involved persons in the SI.

The ground conditions can be typically categorised into the following deposits:

Peat – Typically described as light brown to dark brown amorphous to fibrous peat. Peat thicknesses ranged from 0.2m to 4m from trial pits.

Lacustrine Clay – Light grey to brown, soft to stiff slightly gravelly Silt/Clay with some cobbles and boulders. The thickness of the layer is variable across the Project Site.

Fluvioglacial Sand and Gravel – Typically described as grey silty sandy Gravel with fine to coarse Sand with cobbles and some boulders. The thickness of the layer is variable across the Project Site.

Limestone Bedrock – Strong massive dark blackish grey fine grained calp limestone. The upper 2m of the bedrock is described as weathered.

Groundwater was recorded in twenty - three of the trial pits and varied between 0.6 and 4m bgl.

1.6 Relevant Guidance

The relevant guidance used and referred to throughout this report includes;

- Good Practice during Windfarm Construction (NatureScot, 2024);
- Guidance on Developments on Peatland: Site Surveys (Scottish Government, Scottish Natural Heritage and SEPA, 2017;
- Munro, R, 2004. Dealing with bearing capacity problems on low volume roads constructed on peat. Roadex II Northern Periphery;
- Scottish Natural Heritage/Forestry Commission Scotland, 2010. Floating Roads on Peat;
- Scottish Natural Heritage, 2015. Constructed Roads in the Scottish Uplands. Scottish Natural Heritage.

2. CONSTRUCTION ACTIVITIES COVERED BY PEAT AND SPOIL MANAGEMENT PLAN

2.1 Construction Activities

For the construction phase of the Proposed Project the activities that will generate peat and spoil are as follows:

(1) Construction of new internal access roads (floating and founded) and upgrade of existing tracks - floated road through peat

(2) Excavation and placement of arisings

(3) Excavations in peat for turbine bases, hardstands, substation platforms and all other infrastructure foundations including works along the turbine delivery route (TDR)

(4) Excavations in peat for underground cables

(5) Excavations for turbine accommodation works

Peat and spoil management of the above construction activities are covered individually in this report.

2.2 Road Construction Types

To provide access within the Proposed Wind Farm site and to connect the Proposed Turbines and associated infrastructure existing tracks - floated road will need to be upgraded and new access roads will need to be constructed. The road construction preliminary design has taken into account the following key factors:

(1) Buildability considerations

(2) Maximising use of existing infrastructure

(3) Minimising excavation arisings

(4) Peat stability

(5) Serviceability requirements for construction, wind turbine delivery and maintenance vehicles

(6) Requirement to minimise disruption to peat hydrology

Whilst the above key factors are used to determine the road design the actual construction technique employed for a particular length of internal access road will be determined by the prevailing ground conditions encountered along that length of internal access road.

The general road construction techniques to be considered are given in Table 2-1.

This report describes the most suitable type of road construction for each section of internal access road based on the ground/site conditions recorded during the site walkovers. It should be noted that this report does not include a detailed design for the internal access roads on the Project Site. This report includes the most suitable type of road construction envisaged for each section of access road based on the ground/site conditions recorded during the site walkovers and intrusive site investigation works. Where floating roads are proposed in this report, a proposed methodology is presented, however a detailed design will be carried out prior to construction commencing on Site. These measures are based on available guidance, including '*Constructed Roads in the Scottish Uplands* (Scottish Natural Heritage, 2nd Edition ,2015), Floating Roads on Peat (Scottish Natural

Heritage/Forestry Commission Scotland, 2010) and '*Dealing with Bearing Capacity Problems on Low Volume Roads Constructed on Peat* (ROADEX II, 2004).

Table 2.1: General Road Construction Techniques

Construction Method		Typical Site Conditions			Comment
	Construction Type	Typical Peat Depth (m)	Typical Slope Inclination (degs)	Total Road length (km)	
Upgrade of existing track - floated road'	A	>1.0	<5	2.8	Upgrade to existing track - floated road. Drawing P2319-0600-0025
Construction of new excavated roads through peat	Type B	<1.0	Varies	1.5	New access road construction technique envisaged for various locations on site – Drawin P2319-0600-0021
Construction of new floating roads over peat	Type C	>1.0	<5	58.5	New access road construction technique envisaged for variou locations on site – Drawin P2319-0600-0022

Further details on access road construction types are given in Sections 3 to 5 of the report.

3. UPGRADE OF EXISTING ACCESS ROADS THROUGH PEAT – TYPE A

Up to 2.8km of existing track - floated road requiring upgrade are present across the Proposed Wind Farm site and have been in operation for a significant number of years. The existing track appear to have been constructed using a floating construction technique. Upgrade works will involve the widening of the existing track. The proposed locations for upgrade of the existing track -floated road on the Proposed Wind Farm site are shown in Drawing P2319-0600-00017 to 0020 and details are shown in Drawing P2319-0600-0025.

3.1 Upgrading Existing Access Track – Floated Road Construction Methodology

This methodology includes procedures that will be included in the construction to minimise any impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations, which are discussed separately in Chapter 4 and 9 of the EIAR.

(1) For upgrading of existing track - floated road constructed using a floated construction technique (Type A –Drawing P2319-0600-0025) the following will apply:

(a) Prior to commencing floating road upgrades movement monitoring posts will be installed in areas where the peat depth is greater than 2m and will be placed as described in Section 11.

(b) Construction of upgraded existing track - floated road will be in accordance with appropriate design from the designer.

(c) The surface of the existing track - floated road will be graded/tidied up prior to the placement any geogrid/geotextile (to prevent damaging the geogrid/geotextile).

(d) Where granular fill has been used in the existing track - floated road make-up, a layer of geogrid will be placed on top of the existing track - floated road.

(e) The basal geogrid on the widened section will be overlaid with an average of 800mm of selected granular fill.

(f) Additional geogrid and granular fill may be required in certain sections of the works, such as where excessive rutting is noted in the existing track - floated road (to be confirmed by the designer).

(g) Stone delivered to the upgrades of existing track - floated road will be end-tipped onto the constructed floating road. Direct tipping of stone onto the peat will not be carried out.

(h) To avoid excessive impact loading on the peat due to concentrated end-tipping all stone delivered to the floating road will be tipped over at least a 10m length of constructed floating road.

(i) Following the detailed design of the floated access roads it may be deemed necessary to include pressure berms either side of the access road in some of the deeper peat areas. The inclusion of a 5m wide pressure berm (1.0m in height) either side of the access road will reduce the likelihood of potential bearing failures beneath the access road.

(j) Following end-tipping suitable machinery will be employed to spread and place the tipped stone over the base geogrid along the line of the road.

(2) The finished road width will have a running width of 5.5m, with wider sections on bends and corners where required.

(3) On side long sloping ground any road widening works required will be done on the upslope side of the existing access road.

(4) A final surface layer shall be placed over the existing track - floated road, as per design requirements, to provide a road profile and graded to accommodate wind turbine construction and delivery traffic.

(5) The upgrade of existing track – floated road in areas of deep peat (greater than 2m) will be inspected on a routine basis (by the Site Manager/Ecological Clerk of Works/Project Geotechnical Engineer) during the works, particularly before/following trafficking by heavy vehicular loads.

4. CONSTRUCTION OF NEW EXCAVATED ROADS THROUGH PEAT – TYPE B

The excavation of peat and spoil and founding of access roads on competent stratum (below the peat) for new access roads will be carried out at various locations within the Project Site. The proposed locations for new excavated access roads are shown in P2319-0600-0017 to 0020 and details are shown in P2319-0600-0021.

Excavate and replace type access roads are the conventional method for construction of access roads on peatland sites and they are the preferred construction technique in shallow peat provided there is sufficient placement/reinstatement capacity is available within the Proposed Wind Farm site for the excavated peat.

4.1 Excavated Road Construction Methodology

This methodology includes procedures that are to be included in the construction to minimise any adverse impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations, which are described and assessed in Chapters 4, 8 and 9 of the EIAR.

(1) Prior to commencing the construction of the excavated roads, movement monitoring posts will be installed in areas where the peat depth is greater than 2.5m, and in areas identified within the peat stability risk assessment (see Geotechnical & Peat Stability Assessment, FT, 2026) (Appendix 8-1) as requiring monitoring.

(2) Interceptor drains will be installed upslope of the access road alignment to divert any surface water away from the construction area.

(3) Excavation of roads will be to the line and level given in the design requirements. Excavation will take place to a competent stratum beneath the peat.

(4) Road construction will be carried out in sections of approximately 20m lengths i.e. no more than 20m of access road should be excavated without re-placement with stone fill.

(5) Once excavated, peat will be side-cast locally to the excavation or within the designated peat and spoil areas.

(6) Excavation of materials with respect to control of peat stability:

  (a) Acrotelm (upper, vegetated layer within the peat to about 0.3 to 0.4m of peat) is generally required for landscaping and will be stripped and temporarily stockpiled for re-use as required. Acrotelm stripping will be undertaken prior to main excavations.

  (b) The acrotelm will be placed with the vegetation part of the sod facing the right way up to encourage growth of plants and vegetation.

  (c) All catotelm peat (more decomposed peat below about 0.3 to 0.4m depth) will be transported immediately on excavation to the designated peat and spoil areas.

(7) Once excavated, non-catotelm peat will be temporarily stored in localised areas adjacent to excavations for roads and hardstands before being placed into the peat and spoil areas or reused for landscaping purposes. All peat and spoil areas will be inspected by the Project Geotechnical Engineer before material is stored in the area.

(8) Excavation side slopes in peat will be not greater than 1 (v): 3 (h). This slope inclination will be reviewed during construction, as appropriate. Where areas of weaker peat are encountered then slacker slopes will be required. Battering of the side slopes of the excavations will be carried out as the excavation progresses.

(9) The excavated internal access road will be constructed with an average of 800mm of selected granular fill. Granular fill to be placed and compacted in layers in accordance with the TII Specification for Road Works, Series 600.

(10) The finished road width will have a running width of 5.5m, with wider sections on bends and corners where required.

(11) Internal access roads will be finished with a layer of Cl804/UGM (unbound granular material) across the full width of the road.

(12) A layer of geogrid/geotextile may be required at the surface of the competent stratum, where this stratum is cohesive in nature.

(13) At transitions between floating and excavated roads a length of road of about 10m will have all peat excavated and replaced with suitable fill. The surface of this fill will be graded so that the road surface transitions smoothly from floating to excavated road (P2319-0600-0024).

(14) Where slopes of greater than 5 degrees are encountered along with relatively deep peat (i.e. greater than 1.5m) and where it is proposed to construct the access road perpendicular to the slope contours it is best practice to start construction at the bottom of the slope and work towards the top, where possible. This method avoids any unnecessary loading to the adjacent peat and greatly reduces any risk of peat instability.

(15) A final surface layer will be placed over the excavated road and graded to accommodate wind turbine construction and delivery traffic.

(16) The construction and upgrading of access roads in areas of deep peat (greater than 2m) will be inspected on a routine basis (by the Site Manager/Ecological Clerk of Works/Project Geotechnical Engineer) during the works, particularly before/following trafficking by heavy vehicular loads.

5. CONSTRUCTION OF NEW FLOATED ROADS OVER PEAT – TYPE C

Floating roads will be the predominant road construction type across the Proposed Project and will be used in areas where the peat depth is in excess of 1m. The use of new floated access roads will be limited to areas of flatter terrain, i.e., less than a 5-degree slope. The proposed locations for floating roads are shown in Drawing P2319-0600-0017 to 0020 and details shown in P2319-0600-0022.

A confirmatory stability analysis should be carried out by the designer where it is proposed to install floating access roads over the peat prior to any construction work commencing on the Proposed Wind Farm site.

Floating roads minimise impact on the peat, particularly peat hydrology. As there is no excavation required no peat arisings are generated. However, where the underlying peat has insufficient bearing capacity or due to topographic restrictions an excavate and replace type access road may be more suitable, although this is not anticipated at the location of the floated roads.

5.1 Floating Road Construction Methodology

This methodology includes procedures that will be included in the construction to minimise any adverse impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations, which are assessed in Chapter 4 and 9 of the EIAR.

Note: Details of geogrid arrangement will be provided by the specialist geogrid provider/designer.

(1) Prior to commencing floating road construction movement monitoring posts will be installed in areas where the peat depth is greater than 2.5m and will be placed as described in Section 11, at location agreed between the Project Geotechnical Engineer and the Contractor.

(2) Base geogrid will be laid directly onto the existing peat surface along the line of the road in accordance with geogrid provider's requirements.

(3) Construction of the road will be in accordance with an appropriate design from the designer.

(4) The typical make-up of the new floated access road is 800mm of selected granular fill with 2 no. layers of geogrid with possibly the inclusion of a geotextile separator (drawing P2319-0600-0023).

(5) Granular fill to be placed and compacted in layers in accordance with the TII Specification for Road Works, Series 600 (2024).

(6) Following the detailed design of the floated access roads it may be deemed necessary to include pressure berms either side of the access road in some of the deeper peat areas. The inclusion of a 2 to 5m wide pressure berm (typically 0.5m in height) either side of the access road will reduce the likelihood of potential bearing failures beneath the access road.

(7) The finished road width will have a 5.5m running width, with wider sections on bends and corners, where required.

(8) Stone delivered to the floating road construction will be end-tipped onto the constructed floating road. Direct tipping of stone onto the peat will be avoided.

(9) To avoid excessive impact loading on the peat due to concentrated end-tipping all stone delivered to the floating road will be tipped over at least a 10m length of constructed floating road.

(10) Where it is not possible to end-tip over a 10m length of constructed floating road then dumpers delivering stone to the floating road will carry a reduced stone load (not greater than half full) until such time as end-tipping can be carried out over a 10m length of constructed floating road.

(11) Following end-tipping a suitable bulldozer will be employed to spread and place the tipped stone over the base geogrid along the line of the road.

(12) A final surface layer will be placed over the full width of the floating road, as per design requirements, to provide a road profile and graded to accommodate wind turbine construction and delivery traffic.

(13) The construction and upgrading of access roads in areas of deep peat (greater than 2m) will be inspected on a routine basis (by the Site Manager/Ecological Clerk of Works/Project Geotechnical Engineer) during the works, particularly before/following trafficking by heavy vehicular loads.

6. GENERAL CONSTRUCTION GUIDELINES FOR ACCESS ROADS

The following general construction guidelines are given for the access roads on the Project Site.

(1) Where an open ditch is present alongside an existing/proposed floating access track, the ditch will need to be filled prior to upgrading/constructing the access track. It should be noted that the stability of a floating access road is notably reduced by the presence of adjacent ditches/excavations. The ditch will be filled with suitable drainage stone. As applicable, a perforated pipe will be laid into a ditch prior to filling so as to maintain water flow within the ditch.

(2) Where existing drainage crosses the road then it will be necessary to ensure that this drainage is not affected by settlement of the upgraded access road. Cross drains comprising flexible perforated pipes within a permeable stone fill surround will be used to maintain the existing drainage.

(3) No excavations (e.g. drainage, peat cuttings) will be carried out within 5m distance of a completed floated access road edge, or at a distance determined following site inspection by the works designer. The presence of excavations can destabilise the road. Temporary excavations should be excavated in short lengths and backfilled as soon as practicable.

(4) Floating roads will not be constructed on areas of sidelong ground.

(5) No stockpiling of construction materials will take place on or adjacent to floated access roads so as to avoid bearing failure of the underlying peat.

(6) End-tipping of stone onto the road during the construction/upgrading of the access road should be carefully monitored to ensure that excessive impact loading, which may adversely affect the underlying peat, is limited.

(7) Due to the nature of floating road construction, it will be necessary to monitor the settlement/movement of the road. Survey points will be located along the road at 10m intervals in areas of deep peat (greater than 2.5m). These survey points will be surveyed on a weekly basis, possibly more frequently when construction activities are ongoing in the area.

(8) It is recommended that the construction and upgrading of access tracks -floated roads in areas of deep peat (greater than 2.5m) is inspected on a routine basis during the works, particularly before/following trafficking by heavy vehicular loads.

(9) In the event of excessive vertical displacement of the road during/following construction then mitigation measures may be required to ensure the stability of the road. This may include:

(a) Introduction of pressure berms either side of the road (that are 2 to 5m wide by 0.5m deep stone layer).

(b) Where peat is relatively shallow then excavate peat and replace with suitable fill.

(c) Slowing the rate of construction.

(10) Settlement of a floated access road is expected and will likely be in the order of several 100mm in the deeper peat areas; as such it may be necessary to re-level the road at intervals during the works. The magnitude and extent of settlement is likely to be greater in areas of deeper peat with the rate of settlement reducing over time. Prior to completion of the works, the road will be re-levelled using crushed stone.

7. EXCAVATION AND STORAGE OF PEAT AND SPOIL

The 14 no. bogs that form part of the Allen Bog Group that the Proposed Wind Farm site is located on have undergone commercial peat extraction by BnM using mechanical cutting resulting in well drained and extensively trafficked peat. BnM has considerable experience in the handling of peat in these circumstances, both during peat production operations and during the rehabilitation processes associated with its cutaway bogs. This experience has shown that when the handling and moving of such peat is appropriately managed, stability or environmental issues are not expected to arise.

7.1 Excavation and Storage of Arisings Methodology

This methodology includes procedures that are to be included during construction to minimise any adverse impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations, which are described in Chapter 4 and 9 of the EIAR.

All excavated peat and overburden will be placed/spread alongside the excavations for the infrastructure elements. As an example, Drawing P2319-0600-0024 shows a typical cross section with placed/spread excavated spoil around a typical hardstand area. Further details are given in Section 6.4 of this report.

(1) All excavated peat and spoil will be transported immediately on excavation to designated peat and spoil areas alongside the hardstands and access roads.

(2) Further details on the placement of excavated peat to designated peat and spoil areas alongside the hardstands and access roads are given in Section 7.5.

(3) Some of the peat, in particular the acrotelm (upper layer of the peat), excavated during construction will be used for landscaping purposes.

(4) All works shall be supervised by a competent Geotechnical Engineer. The Contractor will consult the Project Geotechnical Engineer and review and take into account the findings of the Peat Stability Risk Assessment (FT, 2026) to avoid the risk of peat instability in peat excavations, peat stockpiling and all material stockpiling in areas underlain by peat.

7.2 Summary of Peat and Spoil Volumes on the Site

A summary of the excavated peat and spoil volumes calculated for the Proposed Project are given in Table 7-1.

Table 7.1: Summary of Excavated Peat and Spoil Volumes on Site

Infrastructure Element [1]	Typical Dimensions	Peat Volume (m^3) [2]	Spoil (non-peat) Volume (m^3) [2] and [3]	Comment
46 no. Turbines and Hardstands	30m diameter excavation footprint for turbine foundation with 51 x 108m hardstand area.	636,200	112,200	
Access Roads (inc. turning heads and passing bays)	Assumed 5.5m running width with 6-8m wide development footprint.	25,300	-	The majority of access roads are floating where no excavation of peat will take place (see Drawing P2319-0600-0022)
2 no. Meteorological Masts and 1 no. Relay Masts	10 x 10m foundation footprint and 40 x 20m hardstanding area (per mast).	1,900	600	
10 no. Temporary Construction Compounds/ 10 no. Security Huts	Hardstanding areas vary (see Table 4-2 in Chapter 4)	-	-	All compounds are floated
Onsite Substation (and associated infrastructure)	Hardstand area of 210 x 120m	67,900	12,000	
Offsite Substation (and associated infrastructure)	Hardstand area of 113.5 x 82m	1,500	13,300	
	Total =	**732,800m^3**	**138,100m^3**	**Total = 870,900m^3 (peat and spoil volume)**

Note (1) The location of the infrastructure elements on site are shown on Drawing P2319-0600-0017 to 0020.

Note (2) A factor of 20% (bulking factor of 15% and contingency factor of 5%) has been applied to the excavated peat and spoil volumes to allow for expected increase in volume upon excavation and to allow for a variation in ground conditions across the Project Site.

Note (3) Peat and spoil volumes quoted are based on gravity foundations at turbine locations. The use of piled foundations for some or all of the turbine foundations will reduce this volume.

7.3 Summary of Peat and Spoil Areas on the Proposed Wind Farm Site

A summary of the proposed peat and spoil areas at the Proposed Wind Farm site are given in Table 7-2.

Table 7.2: Summary of Peat and Spoil Areas on the Proposed Wind Farm site

Location	Peat and Spoil Volume (m^3)	Comment
Peat placement adjacent to hardstand areas	864,000m	Up to 1.5m in height and up to 50m wide corridor around all hardstands on the Proposed Wind Farm site. See drawings P2319-0600-0017 to 0020 for locations and extents.
Peat placement alongside designated access roads	135,500m	Up to 1.5m in height and 20m wide corridor on both sides of proposed infrastructure elements on site.
Landscaping (1)	46,000	It is estimated that approximately 1,000m^3 of peat will be required for landscaping purposes at each of the 46 no. turbine locations.
Total =	**1,045,500m^3**	

Note (1) Some of the acrotelm (upper layer of the peat) excavated during construction will be used for landscaping purposes.

7.4 Summary of Stone Volume Requirements

Table 7.3 below summarises the stone volume requirement for the Proposed Project, excluding the final blinding layer, all of which will come from an external source.

Table 7.3: Summary of Stone Volume Requirements

Infrastructure Element (1)	Typical Dimensions	Stone Volume (m3) (2)	Comment
46 no. Turbines and Hardstands	30m diameter excavation footprint for turbine foundation with 51 x 108m finished hardstand surface.	637,200	Hardstanding area and foundation footprint. Allowance included for mini-crane pads and blade finger hardstands associated with the main hardstand, plus allowance for side slopes in areas of fill.
Internal Access Roads (including cabling)	Assumed 5.5m running surface with 6-8m wide development footprint. Typical stone depth of 0.8m.	454,000	Allowance includes for widening on bends, at junctions, laybys, and tie-ins to hardstands.

Infrastructure Element [1]	Typical Dimensions	Stone Volume (m3) [2]	Comment
Proposed Onsite Substation	Hardstanding area of 210 x 120m	163,900	
Proposed Offsite Substation	Hardstanding area of 113.5 x 82m	55,250	
2 no. Meteorological Masts and 1 no. relay mast	10 x 10m foundation footprint and 40 x 20m hardstanding area.	2,000	-
Temporary Construction Compounds	10 no. Hardstanding areas with a total area of 78,410m^2 (see Table 4-2 in Chapter 4)	49,900	Assumed 0.75m thickness of stone required for floating compounds.
Car parks		5,000	Floated car parks
	Total =	**1,367,250m^3**	

Notes
Note (1) A contingency factor of 10% has been applied to the volumes to allow for variations in ground conditions across the Site.
Note (2) It should be noted that the volumes given in Table 7-3 are subject to confirmatory design.

7.5 Designated Peat and Spoil Areas alongside Infrastructure Elements

The following commitments for the placement of peat and spoil alongside the proposed infrastructure elements (hardstands and internal access roads) will be implemented during construction.

(1) All excavated peat/spoil will be placed/spread alongside the proposed infrastructure elements (i.e. Proposed Wind Farm internal access roads and Proposed Turbine hardstands). A typical example is given in Drawing P2319-0600-0024 which shows a cross section with placed peat adjacent to a hardstand area.

(2) The peat/spoil placed adjacent to the proposed infrastructure elements should be restricted to a maximum height of 1.5m over a 20m wide corridor on both sides of the proposed access roads, or up to a 50m wide area around hardstands. It should be noted that the designer should define/confirm the maximum restricted height for the placed peat/spoil.

(3) The placement of excavated peat and spoil is to be avoided without first establishing the adequacy of the ground to support the load. The placement of peat/spoil within the peat and spoil areas will require the use of long reach excavators, low ground pressure machinery and possibly bog mats in particular for drainage works.

(4) Where there is any doubt as to the stability of the peat surface then no material will be placed on to the peat surface. The risk of peat instability is reduced by not placing any loading onto the peat surface.

(5) The surface of the placed peat/spoil will be shaped to allow efficient run-off of surface water. Shaping of the surface of the peat and spoil areas will be carried out as placement of peat/spoil within the peat and spoil area progresses. This will reduce the likelihood of debris run-off and ensure stability of the placed peat/spoil.

(6) Finished/shaped side slopes in the placed peat/spoil will be not greater than 1 (v): 4 (h). This slope inclination will be reviewed during construction, as appropriate. Where areas of weaker peat and spoil are encountered then slacker slopes will be required.

(7) Where present, the acrotelm will be placed on the finished surface with the vegetation part of the sod facing the right way up to encourage growth of plants and vegetation at the surface of the placed peat/spoil within the placement areas.

(8) Movement monitoring instrumentation may be required adjacent to the access road where peat/spoil has been placed. The locations where monitoring is required will be identified by the Project Geotechnical Engineer on Site.

(9) An interceptor drain will be installed upslope of the designated peat and spoil areas to divert any surface water away from these areas. This will help ensure stability of the placed peat/spoil and reduce the likelihood of debris run-off.

(10) All the above-mentioned commitments will be undertaken by the Contractor during construction.

8. EXCAVATIONS IN PEAT FOR TURBINE BASES, HARDSTANDINGS AND INFRASTRUCTURE FOUNDATIONS

From the available ground investigation data, it is estimated that all 46 no. turbine bases are likely to require piled foundations. Following the installation and trimming of the piles for the foundations excavation works will be required to remove peat to the underside of turbine base level. Following confirmatory ground investigation gravity foundations may be deemed suitable at certain locations across the Proposed Wind Farm site. Should gravity foundations be employed the volume of peat and spoil to be excavated will be that quoted in Table 7-1. This will be confirmed at detailed design stage following confirmatory ground investigation.

Similarly, crane hardstands, substation platforms and met mast foundations are to be founded on competent overburden which will also require the excavation of peat and spoil.

8.1 Methodology

This methodology includes procedures that are to be included in the construction to minimise any adverse impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations, which are covered in Chapter 4 and 9 of the EIAR.

(1) With respect to placement of arisings from excavations the guidelines given in Section 6 are to be followed.

(2) All excavations within peat are to be adequately supported or peat slopes are to be battered to a safe slope inclination typically of 1 (v): 3 (h). This slope inclination will be reviewed during construction, as appropriate. Where areas of weaker peat are encountered then slacker slopes will be required.

(3) Water levels within excavations will be controlled using drainage channels cut into the excavation face and/or by pumping, as required.

(4) Where water is channelled or pumped from an excavation then this water will be fed into an established watercourse or drainage ditch following suitable treatment, as described in Chapter 9 of the EIAR.

9. EXCAVATIONS FOR UNDERGROUND CABLES

A connection between the Proposed Wind Farm and the national electricity grid will be necessary to export electricity. The Proposed Grid Connection will facilitate the connection of the Proposed Wind Farm to the national grid. The Proposed Grid Connection is comprised of the Proposed Onsite Substation, Proposed Offsite Substation, the 13.1km 220kV underground cabling connection from the Proposed Onsite Substation to the Proposed Offsite Substation, and overhead line (OHL) connecting to the existing Maynooth-Dunstown 220kV OHL, and all ancillary works and apparatus. The Proposed Grid Connection underground cabling from the Proposed Onsite Substation to the Proposed Offsite Substation will follow the public road corridor and proposed new internal access roads.

The Proposed Grid Connection construction methodology, including proposals for water crossings on the underground cabling route is described in Section 4.9.2.3 of Chapter 4 the EIAR.

It is proposed to install the underground 220kV cabling at a uniform level within the footprint of the new proposed internal access roads and the public road corridor (ie, the R414 and L6002). It is proposed to excavate the trenches for the underground cable at a uniform level in peat or other overburden material. The trenches will be 900mm wide and 1200mm deep.

The Proposed Grid Connection underground cabling route is envisaged to encounter peat and glacial till.

The Proposed Turbines will be connected to the Proposed Onsite Substation via underground 33kV electricity cabling. Fibre-optic cables will also connect each Proposed Turbine, the proposed met masts, and the proposed relay mast to the Proposed Onsite Substation. The electricity and fibre-optic cabling connecting to the Proposed Onsite Substation compound will be run in cable ducts adjacent to the proposed roads or direct buried alongside the internal tracks approximately 1000mm beneath ground level to the top of the cable and 900mm wide. The route of the cable will follow the internal access roads to each Proposed Turbine location; the exact number and configuration of cable may vary within the cabling trench. The cabling may be placed on either side of the road, on both sides of the road or within the road. The exact configuration of the underground cabling will be set by the requirements of the electrical designers at detailed design stage. The construction methodology for the underground cables connecting the Proposed Turbines, proposed met mast, and proposed relay masts to the Proposed Onsite Substation, including proposals for water crossings, is described in Section 4.9.1.3 of Chapter 4 of EIAR.

9.1 Methodology

This methodology includes procedures that are to be included in the construction to minimise any adverse impact on peat stability. The methodology is not intended to cover all aspects of construction such as drainage and environmental considerations.

(1) With respect to placement of arisings from excavations the guidelines given in Section 7.5 are to be followed.

(2) It is proposed to excavate the trenches for the underground cable at a uniform depth in peat or other overburden material.

(3) All excavations within peat are to be adequately supported or peat slopes are to be battered to a safe slope inclination typically of 1 (v): 3 (h). This slope inclination will be reviewed during construction, as appropriate. Where areas of weaker peat are encountered then slacker slopes will be required.

(4) Similarly, all excavations within non-peat overburden for the cable trench are to be adequately supported or battered to a safe slope inclination typically of 1 (v): 1.5 or 2 (h). This slope inclination will be reviewed during construction, as appropriate.

(5) Water levels within excavations will be controlled using drainage channels cut into the excavation face and/or by pumping, as required.

(6) Any material excavated from the cable trench which is deemed suitable for reinstatement of the trench will be used for this purpose i.e. stockpiled locally to the works and reused for backfilling.

(7) Any pavement materials containing tar will be transported to an authorised waste facility.

10. GENERAL RECOMMENDATIONS FOR GOOD CONSTRUCTION PRACTICE

To minimise the risk of construction activity causing potential peat instability it is recommended that the Construction Method Statements (CMS) for the Proposed Project will also implement, but not be limited, the general recommendations below together with the specific recommendations from the previous sections.

(1) Avoidance of uncontrolled concentrated water discharge onto peat slopes identified as being unsuitable for such discharge. All water discharged form excavations during work will be piped over areas specifically assessed as being unsuitable and hence directly into suitable drainage lines.

(2) All excavations will be suitably designed and/or supported to prevent collapse and development of tension cracks.

(3) Avoidance of placing fill or undertaking excavations in the vicinity of steeper peat slopes, that is at the crest or toe of the slope.

(4) Installation and regular monitoring of geotechnical instrumentation, as appropriate, during construction in areas of possible poor ground, such as deeper peat deposits (see Section 11).

(5) Site reporting procedures to ensure that working practices are suitable for the encountered ground conditions. Ground conditions to be assessed by suitably experienced geotechnical engineer.

(6) Regular briefing of all site staff (e.g. toolbox talks) to provide feedback on construction and ground performance and to promote reporting of any observed change in ground conditions.

(7) Routine inspection of the Proposed Wind Farm site by the Contractor and Project Geotechnical Engineer will be undertaken and will include an assessment of ground stability conditions (e.g. cracking, excessive floating road settlement, disrupted surface, closed-up drains) and drainage conditions (e.g. blocked drains, absence of water in previously flowing drains, springs, etc).

11. INSTRUMENTATION

11.1 Movement Monitoring Posts

To monitor possible peat movements, it is proposed to install sighting posts upslope and downslope of the access roads and turbine hardstands at staggered intervals at locations where the peat depth is greater than 2.5m. Additional monitoring locations will be required at infrastructure locations with deeper peat deposits, as determined by the Designer or Project Geotechnical Engineer. Details of sighting posts are given below.

(1) A line of sighting posts will comprise:

(a) A line of wooden stakes (typically 1 to 1.5m long) placed vertically into the peat to form a straight line.

(b) The sighting line will comprise 6 no. posts at 5m centres that is a line some 25m long.

(c) A string line will be attached to the first and last posts and all intervening posts will be adjusted so they are just touching the string line.

(2) Lines of sighting posts will be placed across the existing slope about 5m away from the area to be worked. It is recommended that the posts are located along the road at 10m intervals in areas of deep peat (greater than 2.5m). Where there are relatively steeper slopes or softer ground a sighting line will be placed down the slope, or at any location where monitoring is deemed necessary by the Designer or the Project Geotechnical Engineer.

(3) Each line of sighting posts will be uniquely referenced with each post in the line given a reference. The post reference will be marked on each post (e.g. reference 1-1, 1-2, 1-3, 1-4, 1-5, 1-6 for posts in line 1).

(4) The sighting lines will be monitored at the beginning of each working day, and during the day where considered appropriate (e.g. when working activity is concentrated at a specific location).

(5) Monitoring of the posts will comprise sighting along the line and recording any relative movement of posts from the string line.

(6) Where increased movements are recorded the frequency of monitoring will be increased.

(7) A monitoring record will be kept of the date, time and relative movement of each post, if any. This record will be updated and stored as a spreadsheet.

12. CONTINGENCY MEASURES

12.1 Excessive Movement

Where there is excessive movement or continuing peat movement recorded at a monitoring location or identified at any location within the Proposed Wind Farm site but no apparent signs of distress to the peat (e.g. cracking, surface rippling) then the following will be carried out.

(1) All activities (if any) will cease within the affected area.

(2) Increased monitoring at the location will be carried out. The area will be monitored, as appropriate, until such time as movements have ceased.

(3) Re-commencement of activities will only start following a cessation of movement and agreement with all parties (Contractor/Designer/Engineer).

12.2 Onset of Peat Slide

In the unlikely event where there is the onset or actual detachment of peat (e.g. cracking, surface rippling) then the following will be carried out.

(1) On alert of a peat slide incident, all activities (if any) in the area should cease and all available resources will be diverted to assist in the required mitigation procedures.

(2) Action will be taken to prevent a peat slide reaching any watercourse. This will take the form of the construction of check barrages on land. Due to the terrain and the inability to predict locations it may not be possible to implement any on-land prevention measures, in this case a watercourse check barrage will be implemented.

(3) All relevant authorities should be notified if a peat slide event occurs on the Proposed Wind Farm site.

(4) For localised peat slides that do not represent a risk to a watercourse and have essentially come to rest the area will be stabilised initially by rock infill, if required. The failed area and surrounding area will then be assessed by the Project Geotechnical Engineer and stabilisation procedures implemented. The area will be monitored, as appropriate, until such time as movements have ceased.

12.3 Check Barrages

Whilst it is not anticipated from the analysis undertaken that a peat slide will occur on the Proposed Wind Farm site, as a contingency a check barrage procedure is included below.

The check barrage procedure deals with preventing a peat slide from moving downstream within a watercourse.

In the event of a peat slide the most effective method of preventing excessive peat slide debris from travelling downstream in a watercourse is the use of a check barrage. A check barrage comprises the placement of rock fill across a watercourse. The check barrage is a highly permeable construction that will allow the passage of water but will prevent peat debris from passing through. Rock fill will comprise well-graded coarse rock pieces from about 300mm up to typically 1000mm. The rock fill will be sourced from local quarries.

The size of the barrage will vary depending on the scale of the peat debris to be contained and the geometry of the watercourse at the barrage location. In general, due to the low speed of a peat slide there is generally little impact force and most of the lateral load is due to fluid pressure on the upslope face of the barrage.

The check barrage will fill the entire channel width of the watercourse up to a height of 3 to 4m with a crest width of typically 2m and side slopes of about 45 degrees depending on the geometry of the barrage location.

The check barrage procedure is as follows:

(1) Access to the check barrage location will be along the existing access roads on the Proposed Wind Farm site and/or along public roads, where possible. When it is necessary to form the barrage then rock fill will be placed across the watercourse to effectively block the passage of peat debris.

(2) Operatives employed to carry out the construction of the check barrage will be inducted by means of a briefing by on-site supervisors as to the proposed location of the check barrage.

(3) The check barrage provides containment for peat debris in the highly unlikely event of a major peat slide. Further remedial measures, should they be required, will be assessed by the Contractor and the Project Geotechnical Engineer and carried out as soon as physically possible when the location and extent of the failure is established.

(4) Where a barrage was constructed as a precaution and no peat debris reached the watercourse then the barrage should be removed as soon as any measures to prevent further peat sliding is agreed with all parties (Contractor/Engineer/Designer).

13. REFERENCES

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DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

DRAWINGS

Peat Enhancement Area Block A

Peat Enhancement Area Block B

Edenderry Entrance

Peat Enhancement Area Block C

T32

T31

T27

T23

Relay Mast

T24

T26

T25

T42

T41

0m 106m 211m 317m 422m 528m 634m 739m 845m 950m 1056m

Scale 1:21120

PLAN

Scale 1:21120

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Legend:

- Project Site
- TXX — Proposed Turbine Location
- Proposed Internal Access Road
- Existing Site Road to be Upgraded
- Proposed Passing Bay
- Proposed Met Mast
- Temporary Construction Compound
- Proposed Car Park
- Proposed Peat and Spoil Area
- Proposed Peat Enhancement Area
- Proposed Amenity Track
- Proposed Equestrian Amenity Track
- Proposed Amenity Board Walk
- Existing Drain

- Type A - Upgrade of Existing Access Track- Floated Road
- Type B - New Excavate & Replace Access Track
- Type C - New Floated Access Track

Offsite Substation

KEYPLAN

Scale 1:450000

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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26
B	FOR INFORMATION	BDH	09.10.26

PROJECT: BALLYDERMOT WIND FARM

CLIENT: MKO

SHEET: ROAD CONSTRUCTION TYPES PLAN SHEET 1 OF 4

Date: 09.10.26

Project number: P2319

Scale (@ A3): As Shown

Drawn by: POR

Checked by: IH

Drawing Number: P2319-0600-0017

Rev: B

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9 October 2026

Peat Enhancement Area Block A

T30

T29

T28

T46

T45

T44

T42

T43

T40

JOINT BAY 2

JOINT BAY 1

0m 106m 211m 317m 422m 528m 634m 739m 845m 950m 1056m

Scale 1:21120

Grid Cable Route

PLAN

Scale 1:21120

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Legend:

- Project Site
- TXX — Proposed Turbine Location
- Proposed Internal Access Road
- Existing Site Road to be Upgraded
- Proposed Passing Bay
- Proposed Met Mast
- Temporary Construction Compound
- Proposed Car Park
- Proposed Peat and Spoil Area
- Proposed Peat Enhancement Area
- Proposed Amenity Track
- Proposed Equestrian Amenity Track
- Proposed Amenity Board Walk
- Existing Drain

Road Type Legend:

- Type A - Upgrade of Existing Access Track- Floated Road
- Type B - New Excavate & Replace Access Track
- Type C - New Floated Access Track

Offsite Substation

KEYPLAN

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B	FOR INFORMATION	BDH	09.10.26

PROJECT: BALLYDERMOT WIND FARM

CLIENT: MKO

SHEET: ROAD CONSTRUCTION TYPES PLAN SHEET 2 OF 4

Date: 09.10.26

Project number: P2319

Scale (@ A3): As Shown

Drawn by: POR

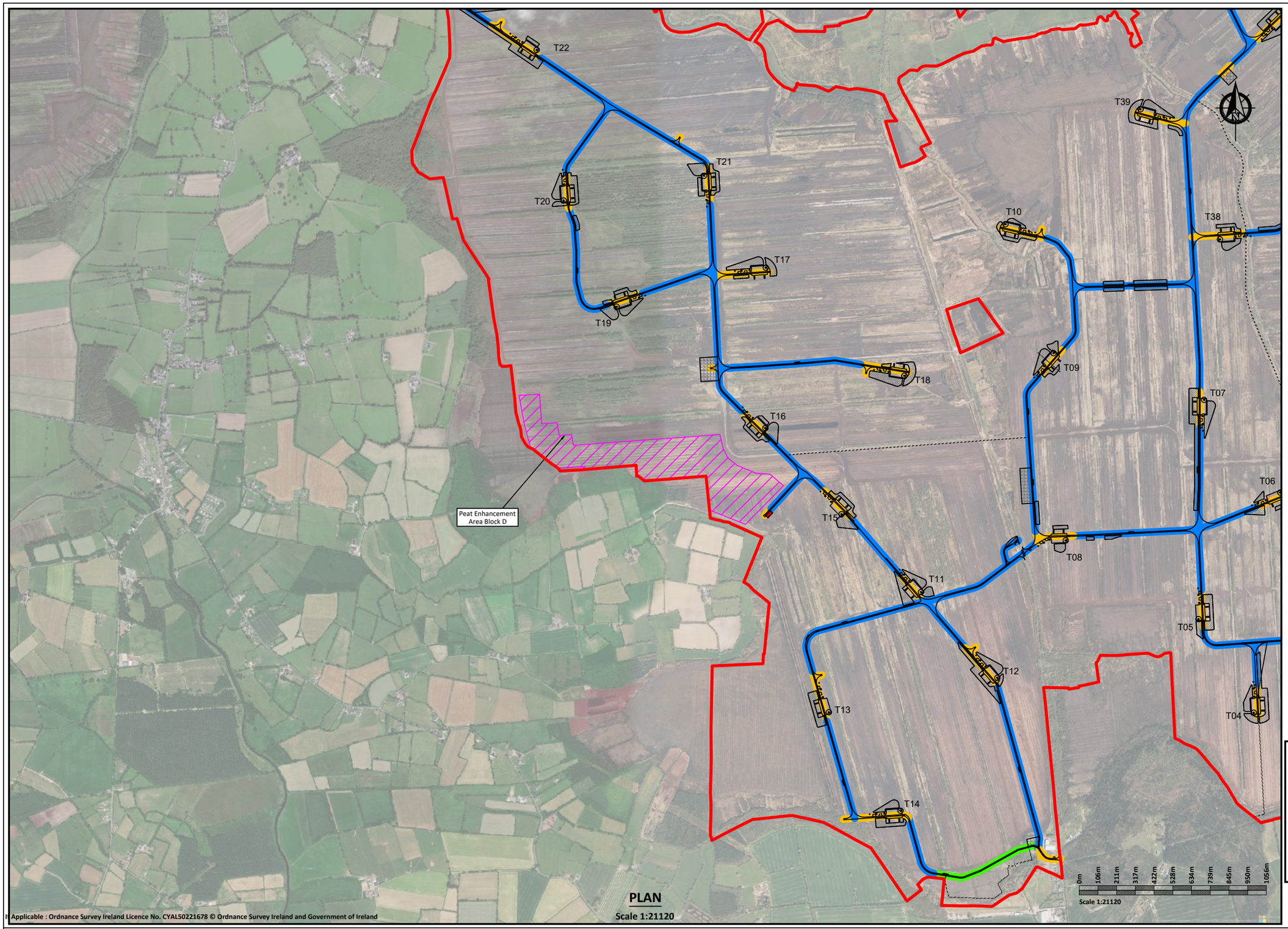
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Drawing Number: P2319-0600-0018

Rev: B

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9 October 2026



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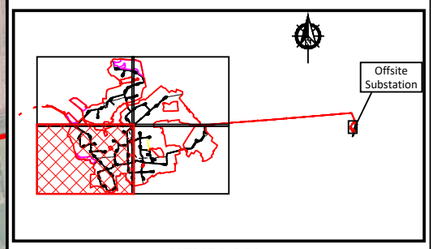
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Legend:

- Project Site
- TXX — Proposed Turbine Location
- Proposed Internal Access Road
- Existing Site Road to be Upgraded
- Proposed Passing Bay
- Proposed Met Mast
- Temporary Construction Compound
- Proposed Car Park
- Proposed Peat and Spoil Area
- Proposed Peat Enhancement Area
- Proposed Amenity Track
- Proposed Equestrian Amenity Track
- Proposed Amenity Board Walk
- Existing Drain

Road Type Legend:

- Type A - Upgrade of Existing Access Track- Floated Road
- Type B - New Excavate & Replace Access Track
- Type C - New Floated Access Track



KEYPLAN
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PROJECT: BALLYDERMOT WIND FARM

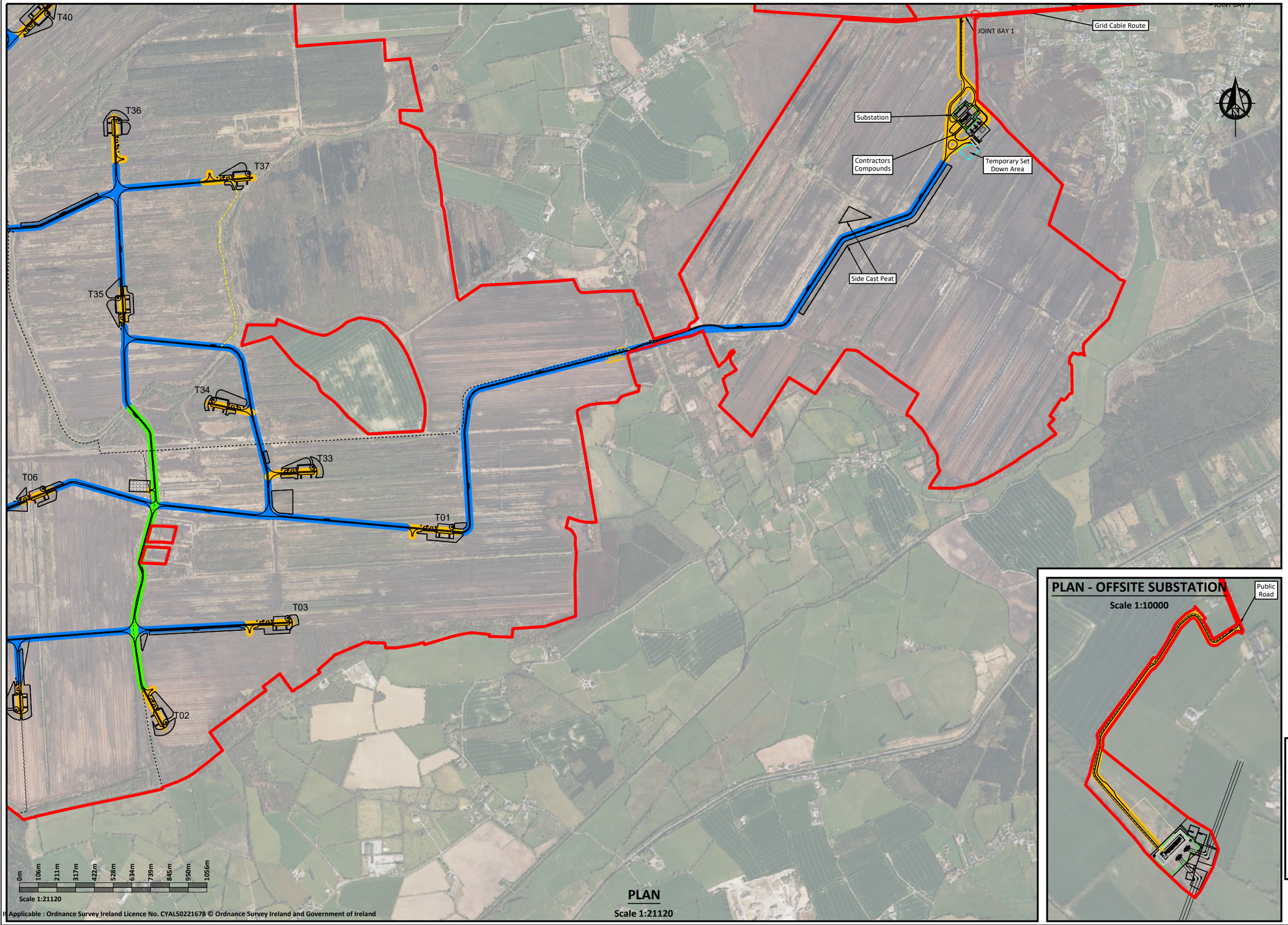
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SHEET: ROAD CONSTRUCTION TYPES PLAN SHEET 3 OF 4

Date: 09.10.26
Project number: P2319
Scale (@ A3): As Shown
Drawn by: POR
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9 October 2026



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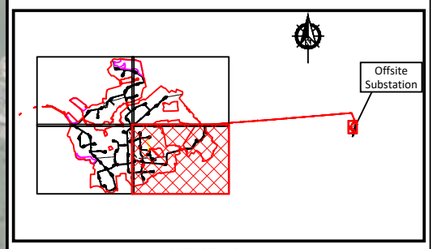
PLAN
Scale 1:21120

Legend:

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- TXX — Proposed Turbine Location
- Proposed Internal Access Road
- Existing Site Road to be Upgraded
- Proposed Passing Bay
- Proposed Met Mast
- Temporary Construction Compound
- Proposed Car Park
- Proposed Peat and Spoil Area
- Proposed Peat Enhancement Area
- Proposed Amenity Track
- Proposed Equestrian Amenity Track
- Proposed Amenity Board Walk
- Existing Drain

Road Type Legend:

- Type A - Upgrade of Existing Access Track- Floated Road
- Type B - New Excavate & Replace Access Track
- Type C - New Floated Access Track



KEYPLAN
Scale 1:450000

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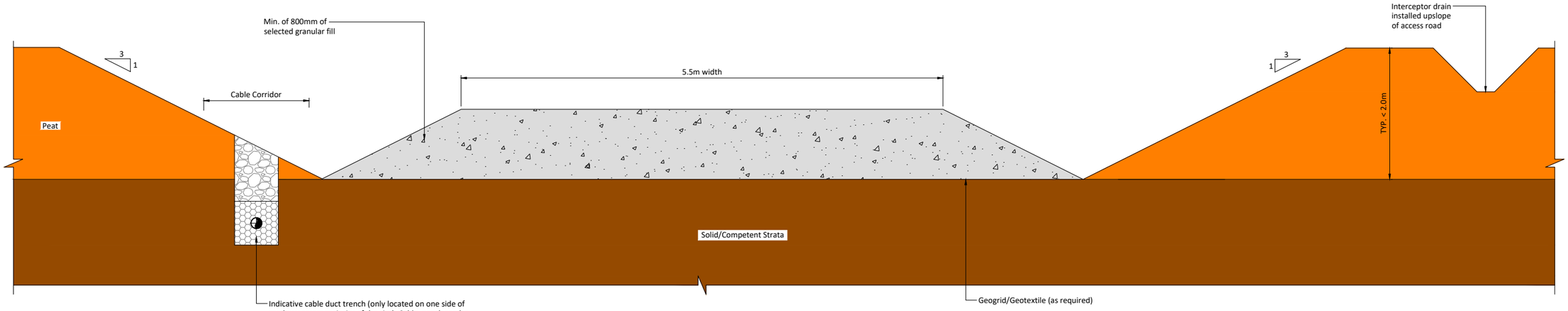
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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26
B	FOR INFORMATION	BDH	09.10.26

PROJECT	BALLYDERMOT WIND FARM
CLIENT	MKO
SHEET	ROAD CONSTRUCTION TYPES PLAN SHEET 4 OF 4
Date	09.10.26
Project number	P2319
Scale (@ A3)	As Shown
Drawn by	POR
Checked by	IH
Drawing Number	P2319-0600-0020
Rev	B

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9 October 2026



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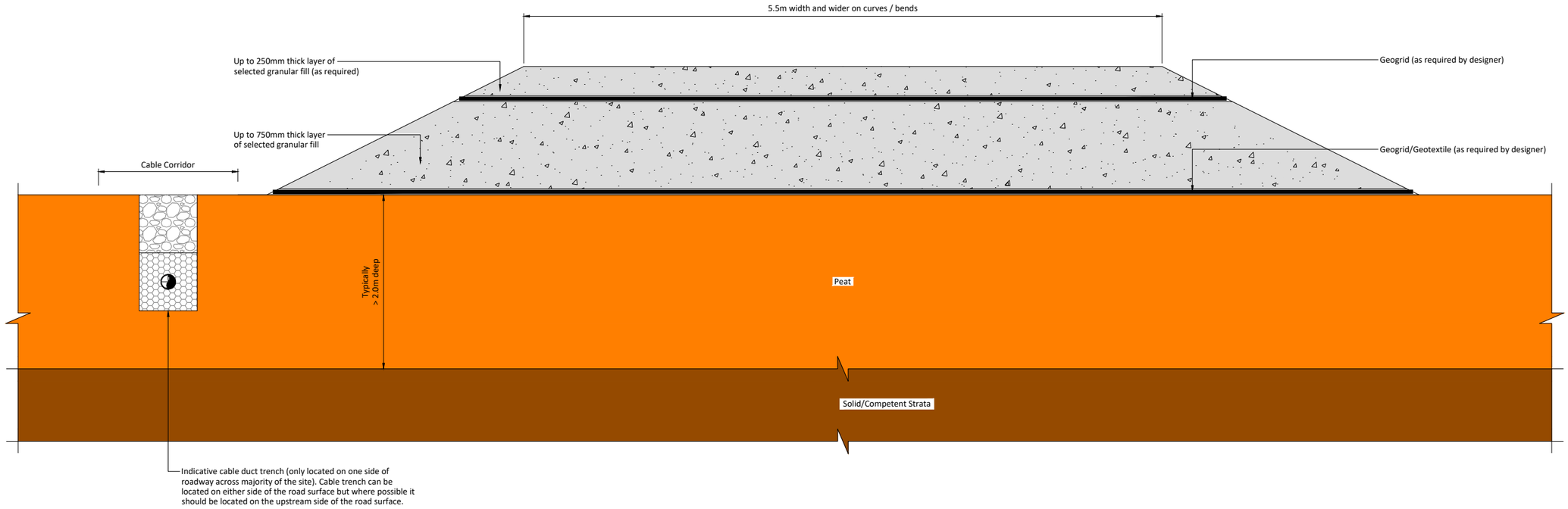
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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26
B	FOR INFORMATION	BDH	22.10.26

PROJECT: BALLYDERMOT WIND FARM		CLIENT: MKO	
SHEET: TYPE B - NEW EXCAVATE AND REPLACE ACCESS ROAD	Date: 22.10.26	Project number: P2319	Scale (@ A1): 1:25
	Drawn by: POR	Drawing Number: P2319-0600-0021	Rev: B
	Checked by: IH		

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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26
B	FOR INFORMATION	BDH	22.10.26

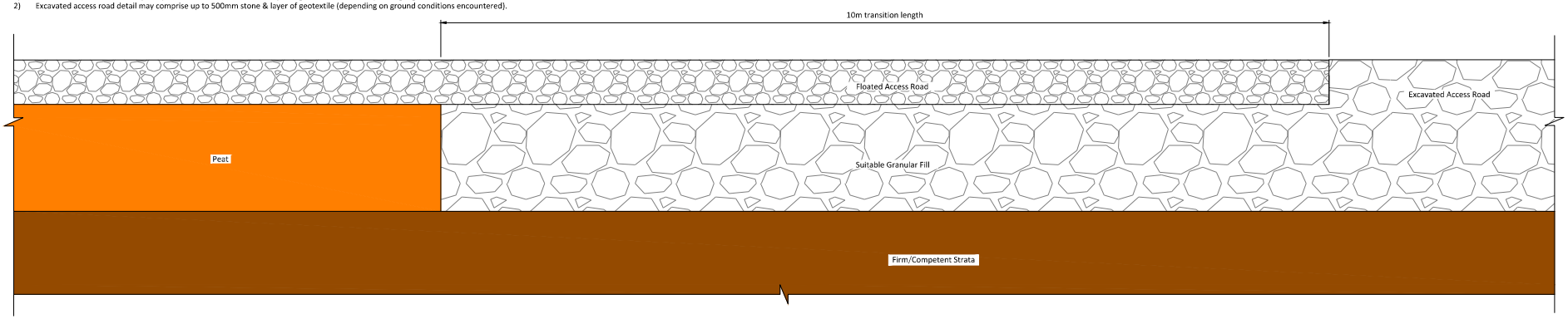
PROJECT	BALLYDERMOT WIND FARM
CLIENT	MKO
SHEET	TYPE C - NEW FLOATED ACCESS ROAD
Date	22.10.26
Project number	P2319
Scale (@ A1)	1:20
Drawn by	POR
Drawing Number	P2319-0600-0022
Rev	B
Checked by	IH

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Notes:

1) Floated access road detail may comprise 500 to 750mm stone fill, layer of geotextile & 1 to 2 layers of geogrid.
2) Excavated access road detail may comprise up to 500mm stone & layer of geotextile (depending on ground conditions encountered).



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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26

PROJECT: BALLYDERMOT WIND FARM

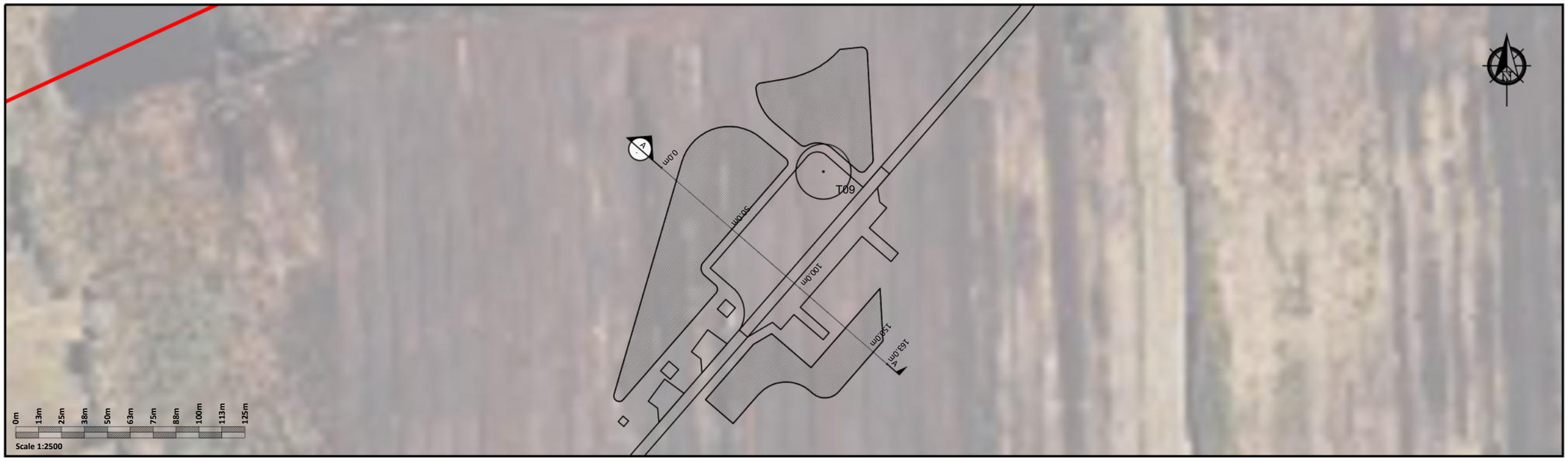
CLIENT: MKO

SHEET: TRANSITION BETWEEN FOUNDED AND FLOATING ROADS

Date: 11.02.26
Drawn by: POR
Checked by: IH
Project number: P2319
Scale (@ A1): 1:25
Drawing Number: P2319-0600-0023
Rev: A

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2 October 2026



PLAN

Scale 1:2500

Legend:

- Project Site
- TXX — Proposed Turbine Location
- Proposed Internal Access Road
- Existing Site Road to be Upgraded
- Proposed Passing Bay
- Proposed Met Mast
- Temporary Construction Compound
- Proposed Car Park
- Proposed Peat and Spoil Area
- Proposed Peat Enhancement Area
- Proposed Amenity Track
- Proposed Equestrian Amenity Track
- Proposed Amenity Board Walk
- Existing Drain

Construction Notes Peat Deposition Areas:

(1) An interceptor drain should also be installed upslope of the repository areas.

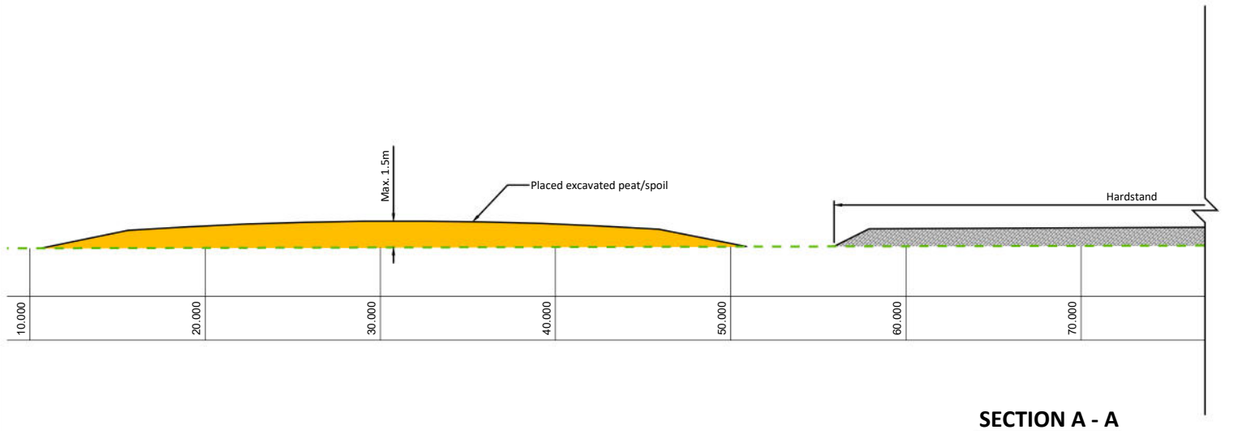
(2) A silting pond will be required at the lower side of the repository areas.

(3) It is important that the surface of the stored spoil be shaped to allow efficient run-off of water from the stored spoil.

(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the repository area.

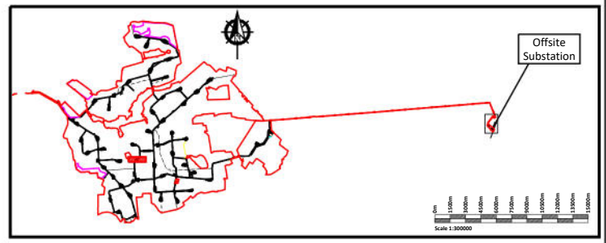
(5) All the above-mentioned general guidelines and requirements should be confirmed by the designer prior to construction.

(6) Further guidelines on the construction of the repository area are included within Section 5.4 of the Peat & Spoil Management Plan.



SECTION A - A

Scale 1:350



KEYPLAN

Scale 1:300000

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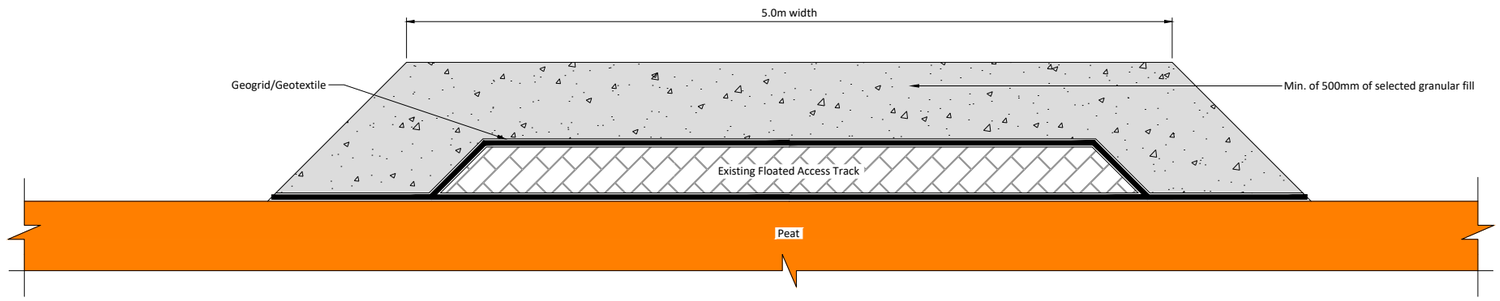
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	11.02.26
B	FOR INFORMATION	BDH	09.10.26

PROJECT	BALLYDERMOT WIND FARM
CLIENT	MKO
SHEET	TYPICAL CROSS SECTION THROUGH PEAT AND SPOIL AREA
Date	09.10.26
Project number	P2319
Scale (@ A3)	As Shown
Drawn by	POR
Drawing Number	P2319-0600-0024
Rev	B
Checked by	IH

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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	02.10.26
B	FOR INFORMATION	BDH	22.10.26

PROJECT: BALLYDERMOT WIND FARM		CLIENT: MKO	
SHEET: TYPE A - UPGRADE OF EXISTING FLOATING ACCESS TRACK	Date: 22.10.26	Project number: P2319	Scale (@ A1): 1:20
	Drawn by: POR	Drawing Number: P2319-0600-0025	Rev: B
	Checked by: IH		

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