APPENDIX 4-2

PEAT AND SPOIL MANAGEMENT PLAN

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

PEAT & SPOIL MANAGEMENT PLAN

GANNOW RENEWABLE ENERGY DEVELOPMENT

Prepared for:
MKO Ltd

Date: **September 2025**

Core House, Pouladuff Road, Cork, T12 D773, Ireland
T: +353 21 496 4133 **| E: info@ftco.ie**
CORK | DUBLIN | CARLOW
www.fehilytimoney.ie

PEAT AND SPOIL MANAGEMENT PLAN
GANNOW RENEWABLE ENERGY DEVELOPMENT

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT
User is responsible for Checking the Revision Status of This Document

Rev. No.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Draft for Comment	EA/KB	IH	BDH	15/05/2025
1	Final following Client comment	EA/KB/AM	IH	TC	18/09/2025
2	Final following volume updates	EA/KB/AM	IH	TC	29/09/2025

Client: MKO

Keywords: Peat, Spoil, Management, Excavation,

Abstract: Fehily Timoney and Company (FT) were engaged by McCarthy Keville O'Sullivan (MKO) to compile a Peat and Spoil Management Plan (PSMP) for the proposed Gannow Renewable Energy Development. The purpose of this report is to provide a Peat and Spoil Management Plan for the construction phase of the wind farm and associated grid connection. 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 Site and proposed peat and spoil management areas which will be developed at the Site.

TABLE OF CONTENTS

DRAWINGS

P24-138-0600-0005: Road Construction Types Plan
P24-138-0600-0006: Type A - Upgrade of Existing Excavated Access Road
P24-138-0600-0007: Type B - New Excavate and Replace Access Track
P24-138-0600-0008: Type C - New Floated Access Track
P24-138-0600-0009: Peat Management Area between T03 and T04
P24-138-0600-0010: Peat Management Area T02
P24-138-0600-0011: Peat Management Area T03
P24-138-0600-0012: Peat and Spoil Management Areas – T04
P24-138-0600-0013: Peat and Spoil Management Areas – T05

LIST OF TABLES

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 Emily Archer (FT Senior Project Geotechnical Engineer, MSc Applied Environmental Geoscience) and Ian Higgins (FT Principal Geotechnical Engineer, MSc in Geotechnical Engineering). Emily is a Senior Project Engineer with Fehily Timoney and has 6 years' experience in geotechnical engineering. Ian is a Technical Director with Fehily Timoney and has 25 years' experience in geotechnical engineering.

1.2 Project Description

Fehily Timoney and Company (FT) was engaged in March 2024 by MKO, on behalf of Gannow Ltd (the Applicant), to compile a Peat and Spoil Management Plan for the Proposed Project. As detailed in Section 1.1.1 in Chapter 1, for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Wind Farm site', 'Proposed Grid Connection' and the 'Site'.

The Proposed Wind Farm site is located approximately 9.7km east of Athenry Co. Galway and 13km north of Loughrea Co. Galway. The Proposed Wind Farm site consists of 8 no turbines with a blade tip height range of between 178 and 185 metres, and associated foundations and hard-standing areas, 1 no. meteorological mast, access roads, 2 no. temporary construction compounds, underground cabling, peat and spoil management, site drainage, and all ancillary works and apparatus. The Proposed Grid Connection includes for 38kV underground cabling from the proposed onsite 38kV substation, in the townland of Attimonmore South, Co. Galway to the existing Cashla 220kV substation in the townland of Barrettspark, Co. Galway. The full description of the Proposed Project is detailed in Chapter 4 of the EIAR.

The Proposed Wind Farm site comprises predominantly agricultural land underlain by cut over raised peat and till derived from limestones with a mainly man-made drainage network. Current land-use along the Proposed Grid Connection comprises of public road corridor, public open space, native woodland, private track, and private land principally used by agriculture.

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. 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 Site.

As for all construction projects, a detailed engineering construction design will be carried out by the appointed construction stage designer prior to any construction work commencing on site. This will take account of the

consented project details and any conditions imposed by that consent. This will 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 on site the contents of the peat and spoil management plan and peat stability monitoring programme will be implemented in full and updated (if required to comply with any planning conditions or requirements of the planning authority) 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 on site. 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 will reasonably minimise the potential for all such peat movements. However, it is noted that due to the soft ground nature of the peat terrain identified at the Proposed Wind Farm site it is not possible to completely avoid localised peat movement.

1.5 Site Investigation

As part of the design process for the Proposed Project, numerous intrusive site investigations were undertaken across the Proposed Wind Farm site, to provide detail and clarity on the nature and extent of sublayers and bedrock as a means of characterising the Proposed Wind Farm site. This assisted in providing additional information on the most suitable location for turbines and associated infrastructure.

Geotechnical ground investigations (i.e. trial pitting) were undertaken from the 7th to the 10th of October 2024, under the supervision of Fehily Timoney & Company (FT) and the MKO Ecology team. The combined geological and hydrological dataset collected from the geotechnical ground investigations and from ground truthing site walkovers completed by FT, Hydro-Environmental Services (HES) and MKO have been used in the preparation of the EIAR Chapters.

The objectives of the intrusive site investigations included mapping the subsoil lithology for all proposed turbines and other identified locations and assessing the underlying bedrock. This data was used to inform the final layout of the Site.

In summary, a total of 12 no. trial pits, supervised by FT, were carried out at proposed turbine locations and at other identified locations to investigate the underlying mineral soil lithology and subsoil/bedrock interface.

The complete geotechnical ground investigations were carried out in accordance with IS EN 1997-2 and BS5930:2015+A1:2020 Code of Practice for Ground Investigations with precedence given to IS EN 1997-2 where applicable.

As part of the assessment of potential peat failure at the Site, FT carried out a site reconnaissance in conjunction with a desk study review. This comprised walkover inspections of the Proposed Project, inclusive of the Proposed Wind Farm and Proposed Grid Connection, with recording of salient geomorphological features which included peat depth assessments across the Site and a preliminary assessment of peat strength at the Proposed Wind Farm site.

The site reconnaissance comprised a walkover inspection of the Proposed Project by engineers from FT in September 2024 and March 2025. Weather conditions for the site visits were wet and overcast in September and dry and overcast in March.

1.6 Relevant Guidance

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

- Good Practice during Windfarm Construction (Scottish Renewables, SNH, SEPA & Forestry Commission Scotland, 5th Edition 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 Tracks 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) Upgrade of existing access tracks (excavate and replace) including temporary widening of local road to facilitate deliver of turbine components

(2) Construction of new excavated roads through peat

(3) Construction of floating roads over peat (will not generate peat and spoil but the methodology for construction is included for completeness)

(4) Excavation and placement of arisings

(5) Excavations in peat for turbine bases, hardstands and other infrastructure foundations

(6) Excavations in peat for underground cables

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, and to facilitate the Proposed Grid Connection existing tracks will need to be upgraded and new access roads will need to be constructed. The road construction design has taken the following key factors into account:

(1) Buildability considerations

(2) Maximising use of existing infrastructure

(3) Minimising excavation arisings

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

(5) Requirement to minimise disruption to peat hydrology

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

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

It should be noted that this report does not include a detailed design for the access roads associated with the Proposed Wind Farm and Proposed Grid Connection underground cabling route. 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 the Site. These measures are based on available guidance, including 'Constructed Tracks 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	Site Conditions			Approximate Length of Road (km)	Comment
	Construction Type	Peat Depth (m)	Slope Inclination (degs)		
Upgrade of existing access roads	Type A	-	Varies	2.4	Upgrade existing excavated access roads to the required width and finished with a layer of selected granular fill – Drawing P24-138-0600-0005
Construction of new excavated roads	Type B	Proposed where less than 1.5m	Varies	4.8	New access road construction technique envisaged for various locations on site – Drawing P24-138-0600-0005
Construction of new floating roads over peat	Type C	>1.5	<3	1.8	New access road construction technique envisaged for various locations on site – Drawing P24-138-0600-0005

Further details on access road construction types A to C are given in Sections 3, 4 and 5 of this report.

3. UPGRADE OF EXISTING ACCESS ROADS – TYPE A

There are 2.4km of access roads requiring upgrade are present across the Site and these have been in operation for a significant number of years. The existing access roads were constructed using both floating and excavate and replace construction techniques. Based on the site walkover carried out by FT the existing access roads were noted as being in relatively good condition. Upgrade works will involve both widening and resurfacing of the existing access road. The proposed locations for upgrade of the existing access roads on site are shown in Drawing P24-138-0600-0005 and details are shown in Drawing P24-138-0600-0006.

3.1 Upgrading Existing Access Tracks Construction Methodology

This methodology includes procedures that will be included in the construction methodology 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 Chapter 4 and 9 of the EIAR.

(1) Access road construction will be to the line and level requirements as per design.

(2) For upgrading of existing excavated access roads (Type A) the following guidelines will be implemented in full:

  (a) Excavation of the widened section of access road will take place to a competent stratum beneath the peat (as agreed with the designer) and backfilled with suitable granular fill.

  (b) Benching of the excavation may be required between the existing section of access road and the widened section of access road where the depth of excavation required exceeds 500mm.

  (c) The surface of the existing access road will be overlaid with up to 500mm of selected granular fill.

  (d) Access roads will be finished with a layer of capping across the full width of the track.

  (e) A layer of geogrid/geotextile may be required at the surface of the existing access road and at the base of the widened section of access road (to be confirmed by the designer).

  (f) For excavations in peat, side slopes will be not greater than 1 (v): 3 (h). This slope inclination will be reviewed during construction. Where areas of weaker peat are encountered then slacker slopes will be required to ensure stability.

(3) The finished road width will have a running width of 5m, with wider sections on bends and corners.

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

(5) At transitions between new floating and existing excavated roads a length of about 10 to 20m will have all peat excavated and replaced with suitable fill. The surface of this fill will be graded to accommodate wind turbine construction and delivery traffic.

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 base of peat for new access roads will be carried out at various locations within the Proposed Wind Farm site and within a private land along the Proposed Grid Connection underground electrical cabling route. The proposed locations for new excavated access roads within the Proposed Wind Farm site and along the Proposed Grid Connection are shown in drawing P24-138-0600-0005 and details are shown in drawing P24-138-0600-0007.

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

4.1 Excavated 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.

(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 2.0m.

(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 up to 20m lengths i.e., no more than 20m of access road will be excavated without replacement with stone fill.

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

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

  (b) Where possible, 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 (peat below about 0.3 to 0.4m depth) will be transported immediately on excavation, where possible, to the designated peat and spoil management areas.

(6) Once excavated, non-catotelm peat will be temporarily stored in localised areas adjacent to excavations for roads and hardstands before being placed into the permanent Peat and Spoil Management areas. All temporary peat and spoil management areas will be upslope of founded roads/hardstands and will be inspected by the Project Geotechnical Engineer before material is stored in the area.

(7) Excavation side slopes in peat will be not greater than 1 (v): 3 (h). This slope inclination will be reviewed during construction. 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.

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

(9) The excavated access road will be constructed with an average depth of 750mm of selected granular fill. Granular fill will be placed and compacted in layers in accordance with designer specifications

(10) Access roads will be finished with a layer of capping across the full width of the road.

(11) A layer of geogrid/geotextile may be required at the surface of the competent stratum where cohesive material is present to prevent mixing of the underlying material with the granular fill.

(12) 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.

(13) Where slopes of greater than 5 degrees are encountered along with relatively deep peat (i.e., greater than 2m) 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.

(14) 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

The use of new floated access tracks will be limited on site to areas of flatter terrain, i.e., less than a 3 degree slope. The proposed locations for floating roads across the Site are shown in drawing P24-138-0600-0005 and details shown in drawing P24-138-0600-0008. Floating roads are not proposed on areas of sidelong ground.

A confirmatory stability analysis will 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 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 (see Section 6), although this is not anticipated at the location of the proposed 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 2m and will be placed at 10m intervals along these sections.

(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 road will be in accordance with appropriate design from the designer.

(4) The make-up of the new floated access road is up to 1,000mm of selected granular fill with 2 no. layers of geogrid with possibly the inclusion of a geotextile separator (drawing P24-138-0600-0008).

(5) Granular fill will be placed and compacted in layers in accordance with designer specifications.

(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 be 5m, with wider sections on bends and corners.

(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 suitable machinery 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.

6. GENERAL CONSTRUCTION GUIDELINES FOR ACCESS ROADS

The following general construction guidelines will be implemented for the access roads on 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. 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. The presence of excavations can destabilise the road. Temporary excavations will 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 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 will 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 2m). These survey points will be surveyed on a weekly basis, and more frequently when construction activities are ongoing in the area.

(8) The construction and upgrading of access roads in areas of deep peat (greater than 2m) will be 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 will be required to ensure the stability of the road. This will 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 will be necessary to re-level the road at convenient 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

7.1 Excavation and Storage of Arisings 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 of the EIAR.

(1) Excavated peat and spoil will be transported immediately to one of the designated peat and spoil management areas, unless it is the acrotelm as this will be temporarily stockpiled and re-used for landscaping purposes.

(2) Further details on the placement of excavated material to designated peat and spoil management areas close to turbines are given in Section 7.4.

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

7.2 Summary of Peat and Spoil Volumes on the Proposed Wind Farm site

A summary of the excavated peat and spoil volumes calculated for the Proposed Wind Farm site is given in Table 7-1.

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

Infrastructure Element (1)	Peat Volume (m^3) (2)	Spoil (non-peat) Volume (m^3) (2)	Comment
8 no. Turbines and Hardstands	82,500	26,730	Hardstanding area and foundation footprint
Access Roads	5,280	3,370	
Substation	1,840	660	Hardstanding areas
Met Mast	130	190	
Grid Connection	-	6,750	Volume of spoil to be stored on site(3).
Total =	**89,750m^3**	**37,700m^3**	**Total = 127,450m^3 (peat and spoil volume)**

Note (1) The location of the infrastructure elements on site are shown on Drawing P24-138-0600-0005.

Note (2) A factor of 15% (bulking factor of 15%) has been applied to the excavated peat volumes and a factor of 10% applied to the spoil volumes to allow for expected increase in volume upon excavation and to allow for a variation in ground conditions across the Site.

Note (3) The total spoil generation volumes for the Proposed Grid Connection underground cabling route is quantified as 16,200m^3. Of this total, 2,700m^3 is comprised of road make up material which will be sent to an appropriately licensed facility. The remaining spoil volume of 13,500m^3 will either be managed in the identified peat and spoil management areas within the Proposed Wind Farm or sent to an appropriately licensed facility. Given the length of the Proposed Grid Connection underground cabling route, it is assumed that approximately 50% (6,750m^3) of the spoil generated during the construction of the Proposed Grid Connection will be managed in the Proposed Wind Farm, which is identified in Table 7-1 above, and the remaining volume will be sent to an appropriately licensed facility. This is dependent on the road makeup at locations along the underground electrical cabling route and the distance from the underground electrical cabling route to the Proposed Wind Farm, the main contractor will determine the appropriate location for management of arisings from the Grid Connection underground electrical cabling route.

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

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

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

Location (1)	Peat and Spoil Volume (m^3)	Comment
Peat placement within proposed peat and spoil management areas	100,500	Up to 1.5m in height across specific areas shown in Drawing P24-138-0600-0005. See Section 7.5 of the report and Drawing P24-138-0600-0011 for further details.
Landscaping (2)	10,000	1,500m^3 assessed at 5 no. turbine locations, c.800m^3 at T6, T7 and T8, including ballast backfill.
Sidecasting	20,000	Sidecasting peat 10m in width and 1m in height on either side of sections of floating road
Total =	**130,500m^3**	

Note (1) The location of the proposed peat/spoil storage areas at the Proposed Wind Farm site are shown on Drawing P24-138-0600-0005.

Note (2) Some of the acrotelm (upper layer of the peat) excavated during construction will be used for landscaping purposes.

7.4 Summary of Management and Reuse of Excavated Peat and Spoil

The Proposed Project will be developed in phases, to allow for the development and backfill of the peat and spoil storage areas. An outline of the proposed Phasing is provided below:

(1) Peat excavated from T01, T02, T03 and T08 (72,490m^3) will be transported to the adjacent peat storage areas, used to create pressure berms on both sides of the floating roads or used for landscaping around the hardstands.

(2) Peat and spoil excavated from T04 to T08 (43,900m^3) will be transported to the peat/spoil storage areas at T04 and T05 or used as landscaping around the hardstands where no peat is present (T04 to T07). Shallow Peat/Topsoil removed from T04 to T08 will be temporarily stockpiled locally and used to cover the peat/spoil storage areas at T04 and T05, as well as any landscaping areas.

(3) Spoil excavated from the substation platform (2,500m^3) will either be landscaped around the platform or transported to the spoil storage areas at T04 and T05.

(4) A small volume (c. 350m^3 per base) of spoil will be reused at each turbine base as ballast backfill.

7.5 Designated Peat and Spoil Management Areas

The following commitments for the placement of peat within peat and spoil management areas will be implemented during construction. These areas have been selected based on a combination of the depth of peat, the recorded peat strength in the area and the slope angle.

(1) Excavated peat will be placed/spread across the 5 no. areas within the Proposed Wind Farm site. These locations are shown in Drawing P24-138-0600-0005.

(2) The peat placed within the peat and spoil management areas shown on Drawing P24-138-0600-0005 will be restricted to a maximum height of 1.5m. Weak/liquified peat will be stored in the centre of the peat management areas with firmer/drier peat placed around the outside.

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

(4) It will be ensured that the surface of the placed peat will be shaped to allow efficient run-off of surface water. Shaping of the surface of the peat will be carried out as placement of peat within the peat and spoil management area progresses. This will reduce the likelihood of debris run-off and reduce the risk of instability of the placed peat.

(5) Finished/shaped side slopes in the placed peat will be not greater than 1 (v): 4 (h). This slope inclination will be reviewed during construction, as appropriate.

(6) Where available, 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 and spoil within the peat and spoil management areas.

(7) Movement monitoring instrumentation will be placed around the areas where peat has been placed. The locations where monitoring is required will be identified by the Project Geotechnical Engineer on site.

(8) Supervision by the Project Geotechnical Engineer will be carried out for the works.

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

(10) All of the above mentioned general guidelines and requirements will be undertaken by the Contractor during construction.

7.6 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
8 no. Turbines and Hardstands	27m diameter excavation footprint for turbine foundation (25m wide base with 1m of working space around the perimeter of the base) with 55 x 35m finished hardstand surface.	81,000	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.
Access Roads (including cabling)	Assumed 5m running surface with 6m wide development footprint. Typical stone depth of 1.0m.	35,400	Allowance includes for widening on bends, at junctions, laybys, and tie-ins to hardstands.
Substation	Hardstanding area of 60 x 30m	2,200	
Meteorological Mast	10 x 10m foundation footprint and 30 x 30m hardstanding area.	120	-
Temporary Construction Compounds	Hardstanding areas of 60 x 40m and 45m x 35m.	4,400	
Grid Connection	Trench 1.2m deep and 0.6m width.	11,000	
	Total =	**134,120m^3**	

Notes

Note (1) A contingency factor of 10% has been applied to the volumes to allow for expected bulking upon excavation and to allow for a variation 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.

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

The turbine bases will be founded on competent founding strata which will require excavation through peat and soft overburden. Some turbine foundations may require a piled solution following confirmatory ground investigations by the Contractor.

Similarly, crane hardstandings, construction compound, substation platforms and met mast foundations are to be founded on competent mineral soil and/or rock which will require excavation through peat and spoil.

8.1 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 Chapters 4 and 9 of the EIAR.

(1) With respect to placement of arisings from excavations the commitments given in Section 7 will be followed.

(2) All excavations within peat will 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 provided.

(3) Excavations will be kept reasonably free from water at all times. Water will be prevented from being impounded within excavations by either using drainage channels cut into the excavation face or by pumping.

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

8.2 Methodology for Excavation at T03

As the hardstand for T03 is located in an area where peat depths of up to 5m are present, a specific methodology has been prepared to limit the volume of peat to be excavated from the hardstand and turbine excavation and to maintain the stability of the excavation. This will involve the construction of a rock cofferdam around the perimeter of the hardstand and turbine location to support the in-situ peat during the excavation of the hardstand.

All works at T03 will be undertaken under the supervision of the Project Geotechnical Engineer and the Ecological Clerk of Works.

The Project Geotechnical Engineer will provide technical input into stability of the peat prior to excavation, during the excavation process and advise of any mitigation measures necessary. Before excavation commences, suitable dewatering measures will be implemented following consultation with the Ecological Clerk of Works.

The peat will initially be excavated in a series of trenches around the perimeter of the hardstand and backfilled with rock before the next section is excavated. Excavations will be limited to a maximum of 5m in length prior to backfilling. Excavation to a solid formation is required around the cofferdam. Where this cannot be achieved

due to peat flowing into the trench, rock will be pushed through the remaining peat in the bottom of the trench to create a solid base.

The rock cofferdam will be constructed around the edge of the hardstand and turbine excavation. The depth and condition of the peat encountered will determine the width of the cofferdam – where the peat is 4m deep, a 4m wide (at base) cofferdam will be required, at 5m deep a 5m wide cofferdam will be required, etc. This width is measured from the outside edge of the earthworks outline at the hardstand.

A sump pump will be used to control the water level within the excavation. Water from the excavation will be pumped to a settlement pond for treatment.

The stability of the peat and the rock cofferdam will be monitored by the Project Geotechnical Engineer. Suitable edge protection measures will be implemented by the Contractor to ensure the safety of operations working in the vicinity of the excavation. Once the perimeter cofferdam is complete then the peat below the hardstand footprint can be excavated.

Excavated non-acrotelm peat will be stored in the adjacent peat storage area or landscaped around the adjacent access roads, with the acrotelm used on the surface of any placed peat to promote vegetation regrowth.

9. EXCAVATIONS FOR UNDERGROUND CABLES

It is proposed to connect the onsite 38kV substation to the existing 220kV Cashla substation in the townland of Barrettspark, Co Galway via 38kV underground electrical cabling. The underground electrical cabling route is approximately 21.8km in length and located primarily within the public road corridor, with three subsections (approximately 0.2km, 0.6km and 1.5km respectively) located in private land/existing track.

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

It is proposed to excavate the trenches for the underground cable at a uniform level within the footprint of the access roads. The Proposed Grid Connection will encounter localised areas of shallow peat (<0.5m) and till derived from limestones, as per GSI mapping (gsi.ie) and walkover surveys, and will be constructed on solid ground to EirGrid specifications.

9.1 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 Chapters 4 and 9 of the EIAR.

(1) With respect to placement of arisings from excavations the guidelines given in Section 7 will be followed.

(2) All excavations within peat will be adequately supported or peat slopes will 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) 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.

(4) Excavations will be kept reasonably free from water at all times.

(5) Any overburden excavated from the cable trench will be transported to the peat/spoil storage areas for storage or sent for disposal to an appropriately licensed facility. Any pavement materials containing tar will be transported to an appropriately licensed facility.

10. GENERAL MEASURES FOR GOOD CONSTRUCTION PRACTICE

To minimise the risk of construction activity causing potential peat instability the Construction Method Statements (CMS) for the Proposed Project will also implement (as a minimum), the general measures below together with the specific measures above.

(1) Uncontrolled concentrated water discharge onto peat slopes identified as being unsuitable for such discharge will be avoided. All water discharged from 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 supported to prevent collapse and development of tension cracks.

(3) Avoidance of placing fill and 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 during construction in areas of possible poor ground, such as deeper peat deposits (see Section 11).

(5) Site reporting procedures will be implemented to ensure that working practices are suitable for the encountered ground conditions. Ground conditions will be assessed by a 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 and Proposed Grid Connection 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 at staggered intervals at locations where the peat depth is greater than 2m. Additional monitoring locations will be provided at infrastructure locations with deeper peat deposits and at peat and spoil management areas. Details of sighting posts are given below.

(1) A line of sighting posts will comprise:

(a) A line of wooden stakes (proposed to be 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 5m intervals in areas of deep peat (say greater than 2.0m). 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 useful by 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 were 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/Engineer/Designer).

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 will 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 will be notified if a peat slide event occurs on 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 engineering staff 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 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.

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 1000mm.

The rock fill for the check barrage 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 at least 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 will be removed as soon as any measures to prevent further peat sliding is agreed with all parties (Contractor/Engineer/Designer).

13. REFERENCES

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 Tracks in the Scottish Uplands. Scottish Natural Heritage.

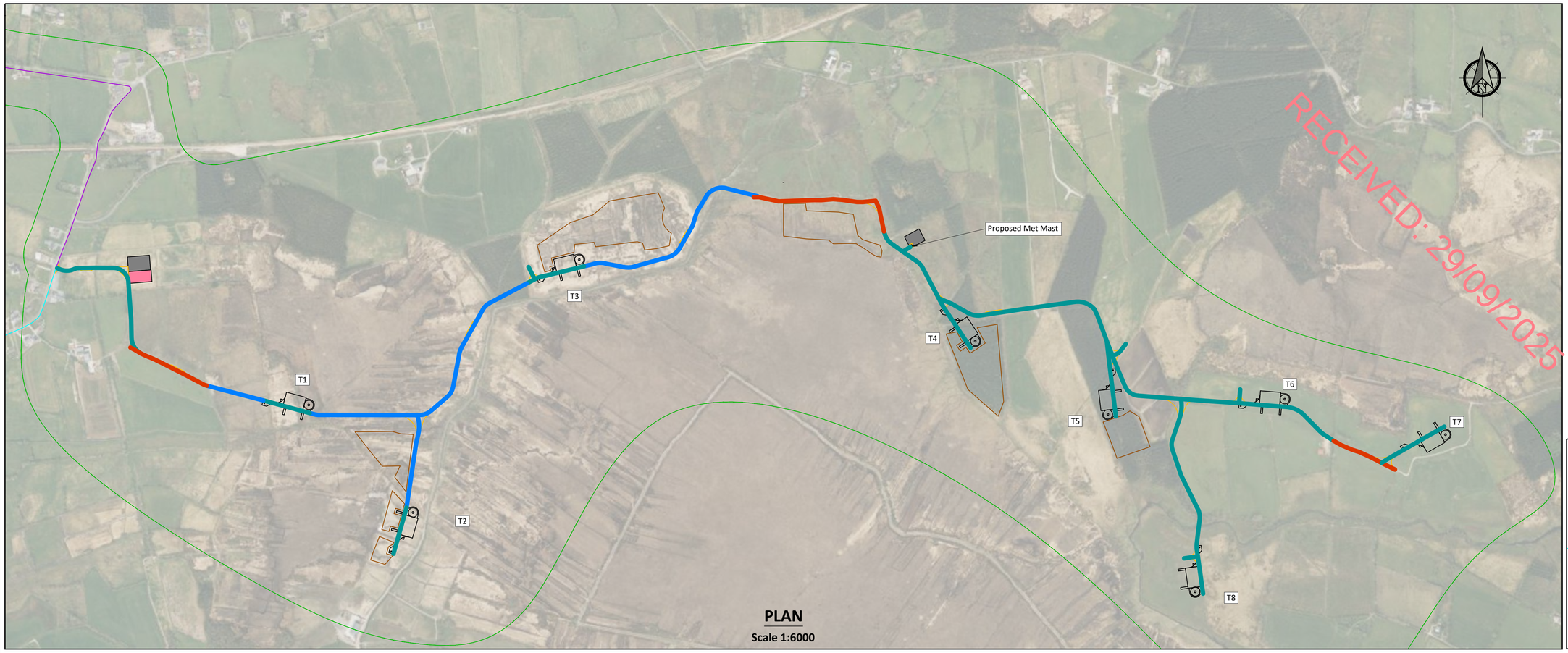
Good Practice during Windfarm Construction (Scottish Renewables, SNH, SEPA & Forestry Commission Scotland, 5th Edition 20249).

Guidance on Developments on Peatland: Site Surveys (Scottish Government, Scottish Natural Heritage and SEPA, 2017.

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

DRAWINGS



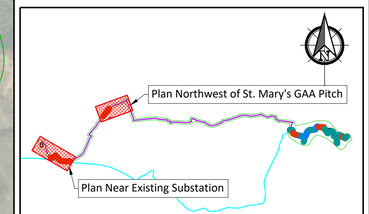
PLAN
Scale 1:6000

Legend:

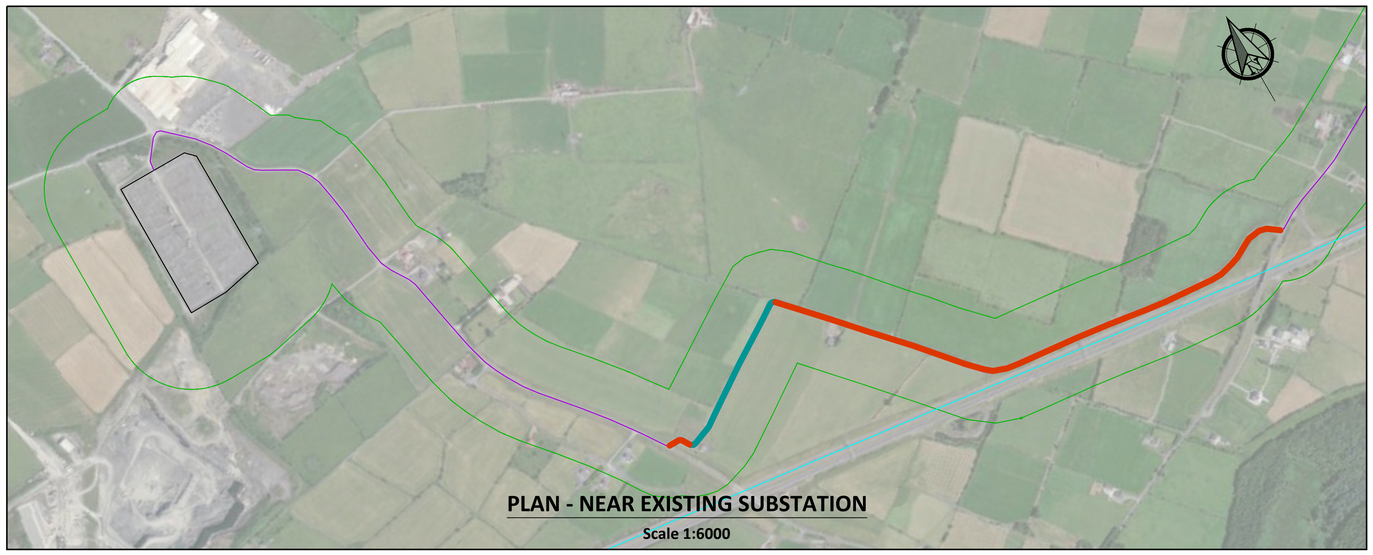
- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area

Road Type Legend:

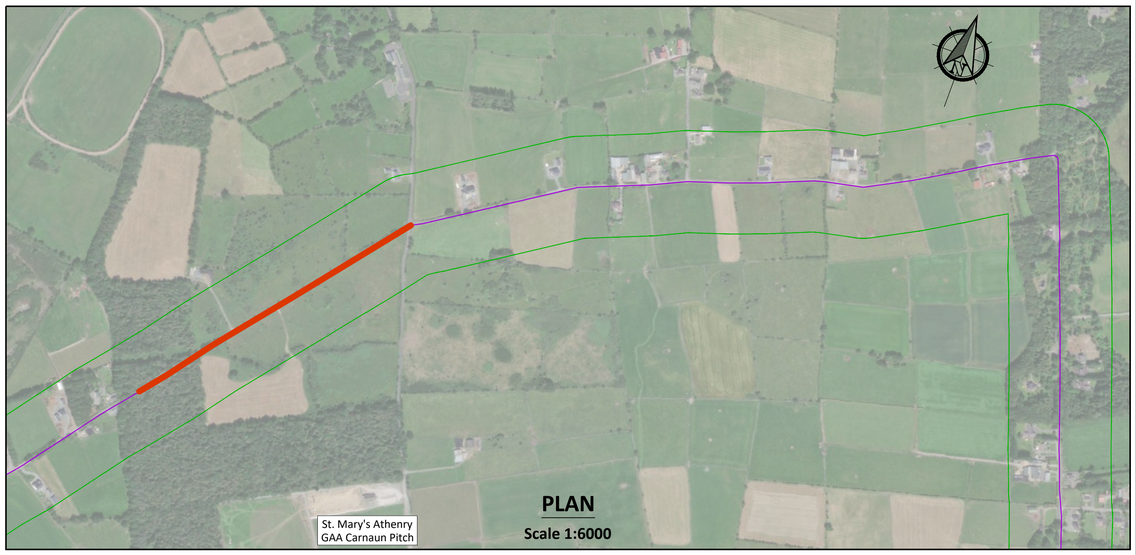
- Type A - Proposed Upgrades to Existing Roads
- Type B - Proposed New Roads
- Type C - Proposed Floated New Roads



KEYPLAN
Scale 1:200000



PLAN - NEAR EXISTING SUBSTATION
Scale 1:6000



PLAN
Scale 1:6000

FEHILY TIMONEY
Cork | Dublin | Carlow
www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	26.05.25
D	FOR INFORMATION	BDH	01.09.25
E	FOR INFORMATION	BDH	17.09.25

PROJECT
GANNOW RENEWABLE ENERGY DEVELOPMENT

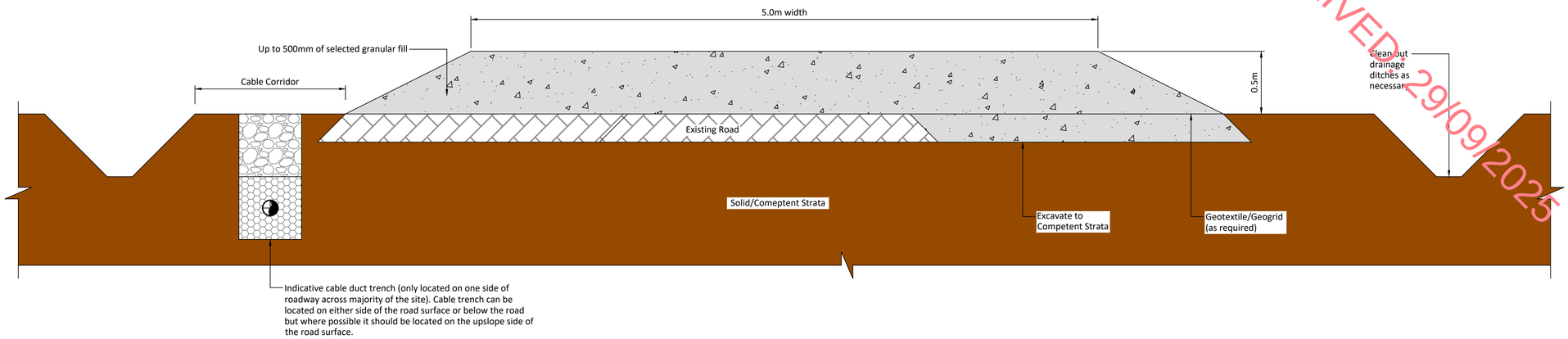
CLIENT
MKO

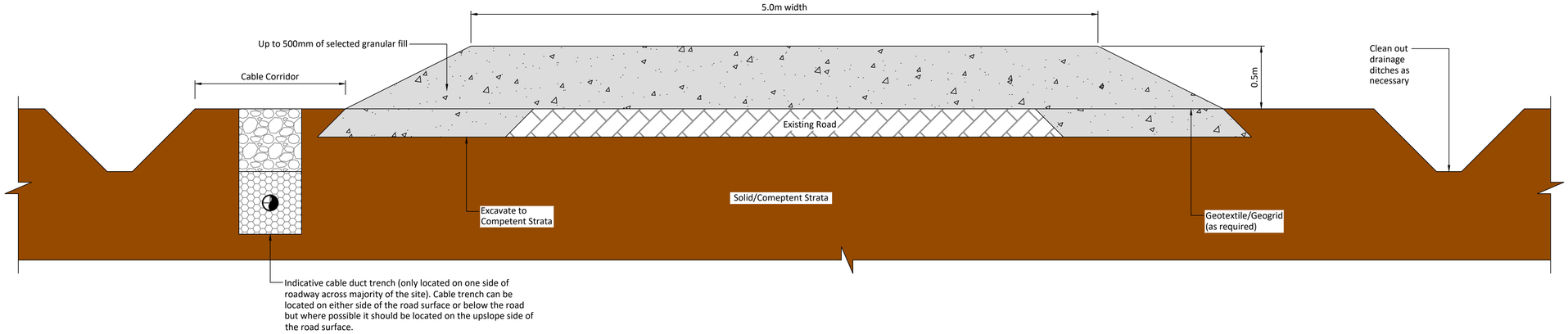
SHEET
PEAT AND SPOIL MANAGEMENT AREAS - ROAD CONSTRUCTION TYPES PLAN

Date 17.09.25
Drawn by POR
Checked by EA
Project number P24-138
Scale (@ A1) As Shown
Drawing Number **P24-138-0600-0005** *(Sheet set subset 0600)*
Rev **E**

O:\ACAD\2024\P24-138\P24-138-0600-0005

16 September 2025





Scale 1:20

FEHILY TIMONEY
Cork | Dublin | Carlow
www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.05.25
C	FOR INFORMATION	BDH	17.09.25

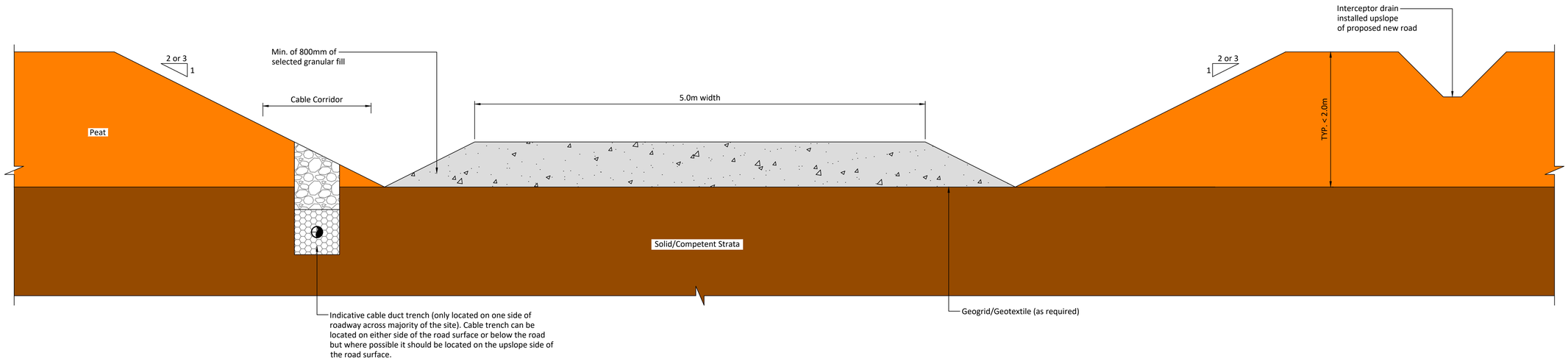
PROJECT	GANNOW RENEWABLE ENERGY DEVELOPMENT
CLIENT	MKO
SHEET	PEAT AND SPOIL MANAGEMENT AREAS - TYPE A - UPGRADE OF EXISTING EXCAVATED ROAD

Date 17.09.25	Project number P24-138	Scale (@ A1) 1:20	
Drawn by POR	Drawing Number P24-138-0600-0006 (Sheet set subset 0600)		Rev C
Checked by EA			

O:\ACAD\2024\P24-138\P24-138-0600-0006

16 September 2025

.



Scale 1:25

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

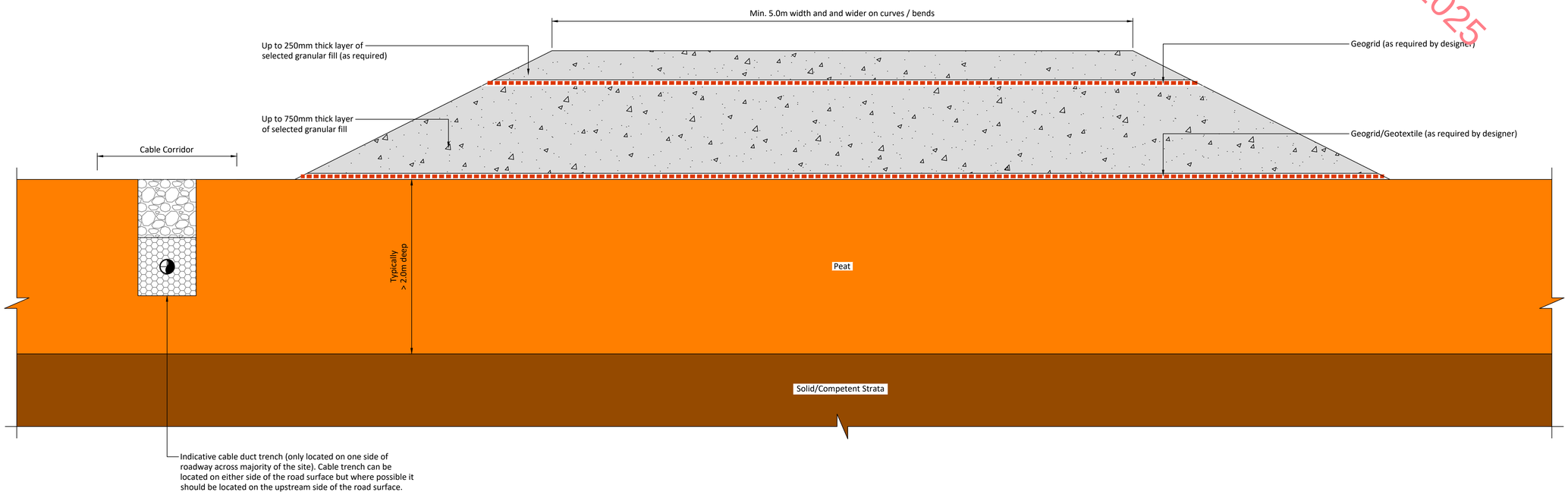
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.05.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT	GANNOW RENEWABLE ENERGY DEVELOPMENT
CLIENT	MKO
SHEET	PEAT AND SPOIL MANAGEMENT AREAS - TYPE B - NEW EXCAVATE AND REPLACE ROAD
Date	17.09.25
Project number	P24-138
Scale (@ A1)	1:25
Drawn by	POR
Checked by	EA
Drawing Number	P24-138-0600-0007 (Sheet set subset 0600)
Rev	C

O:\ACAD\2024\P24-138\P24-138-0600-0007

16 September 2025

.



Scale 1:20

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.05.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT: GANNOW RENEWABLE ENERGY DEVELOPMENT

CLIENT: MKO

SHEET: PEAT AND SPOIL MANAGEMENT AREAS - TYPE C - NEW FLOATED ROAD

Date: 17.09.25

Drawn by: POR

Checked by: EA

Project number: P24-138

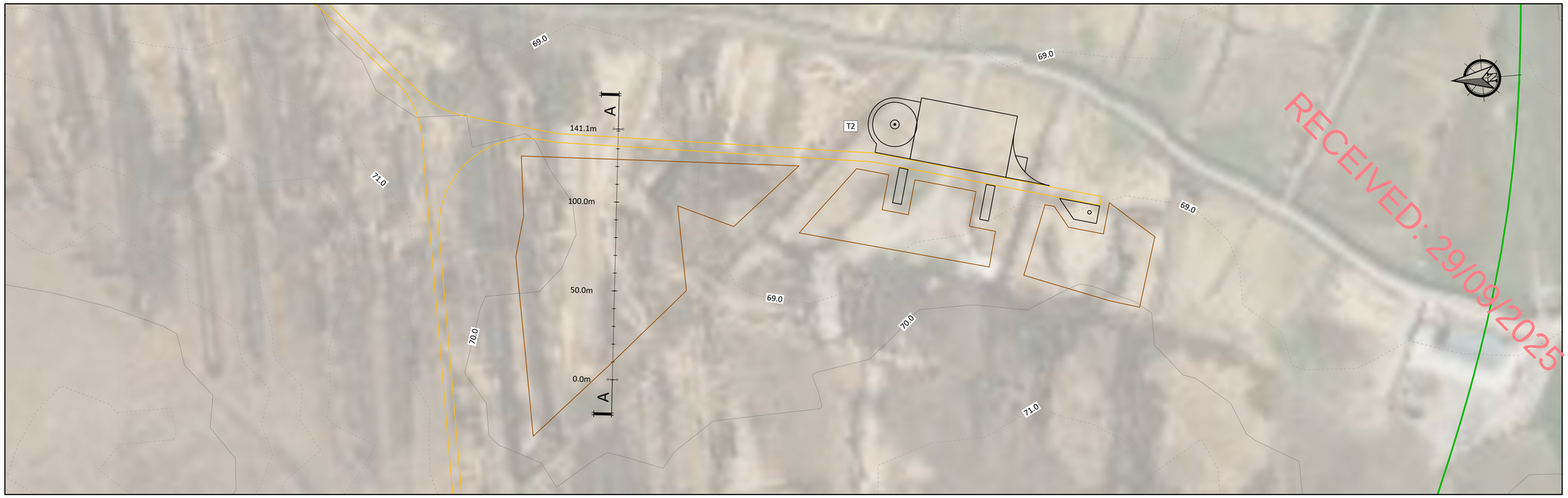
Scale (@ A1): 1:20

Drawing Number: P24-138-0600-0008 (Sheet set subset 0600)

Rev: C

O:\ACAD\2024\P24-138\P24-138-0600-0008

16 September 2025



PLAN

Scale 1:1250

Legend:

- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area
- 50.0 Existing Ground Level - Major Contour
- 50.0 Existing Ground Level - Minor Contour

Construction Notes Peat Deposition Areas:

(1) An interceptor drain will also be installed upslope of the peat deposition areas.

(2) A settlement pond will be required at the lower side of the peat deposition areas.

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

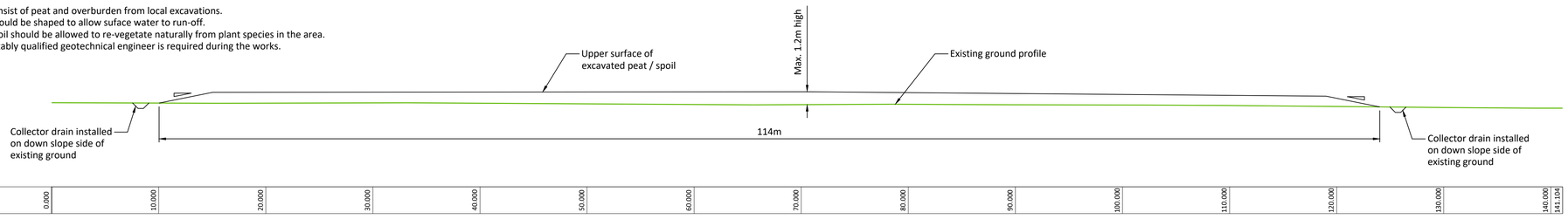
(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the peat deposition area.

(5) All the above-mentioned general guidelines and requirements will be implemented during construction.

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

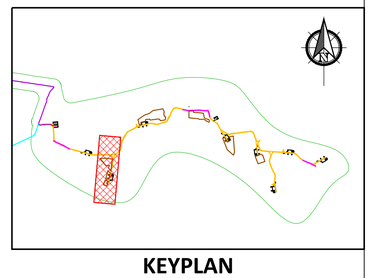
Construction Notes:

1) Spoil heap may consist of peat and overburden from local excavations.
2) Stored material should be shaped to allow suface water to run-off.
3) Placed / spread spoil should be allowed to re-vegetate naturally from plant species in the area.
4) Supervision by suitably qualified geotechnical engineer is required during the works.



SECTION A - A

Scale 1:250



KEYPLAN

Scale 1:40000

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	22.08.25
D	FOR INFORMATION	BDH	17.09.25

PROJECT: GANNOW RENEWABLE ENERGY DEVELOPMENT

CLIENT: MKO

SHEET: PEAT AND SPOIL MANAGEMENT AREAS DETAILS (NORTH OF T02)

Date: 17.09.25

Drawn by: POR

Checked by: EA

Project number: P24-138

Scale (@ A1): As Shown

Drawing Number: P24-138-0600-0009 (Sheet set subset 0600)

Rev: D

O:\ACAD\2024\P24-138\P24-138-0600-0009

16 September 2025

PLAN

Scale 1:1250

Legend:

- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area
- 50.0 Existing Ground Level - Major Contour
- 50.0 Existing Ground Level - Minor Contour

Construction Notes Peat Deposition Areas:

(1) An interceptor drain will also be installed upslope of the peat deposition areas.

(2) A settlement pond will be required at the lower side of the peat deposition areas.

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

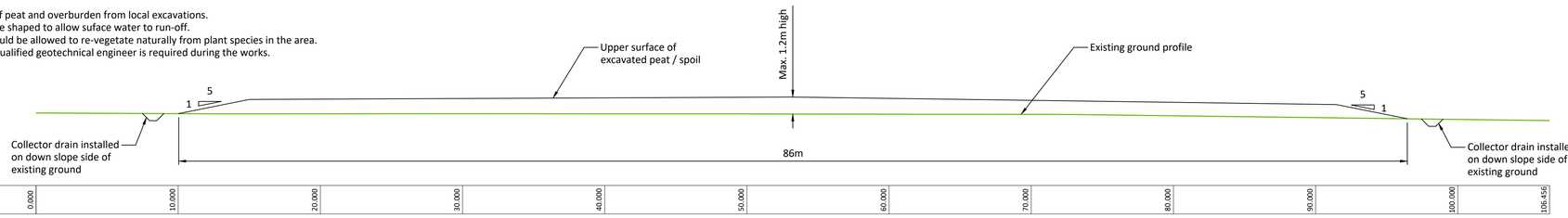
(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the peat deposition area.

(5) All the above-mentioned general guidelines and requirements will be implemented during construction.

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

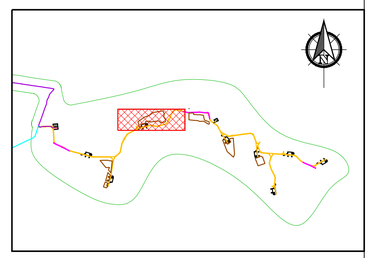
Construction Notes:

1) Spoil heap may consist of peat and overburden from local excavations.
2) Stored material should be shaped to allow suface water to run-off.
3) Placed / spread spoil should be allowed to re-vegetate naturally from plant species in the area.
4) Supervision by suitably qualified geotechnical engineer is required during the works.



SECTION B - B

Scale 1:200



KEYPLAN

Scale 1:40000

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT: GANNOW RENEWABLE ENERGY DEVELOPMENT

CLIENT: MKO

SHEET: PEAT AND SPOIL MANAGEMENT AREAS DETAILS (NORTH OF T3)

Date: 17.09.25

Project number: P24-138

Scale (@ A1): As Shown

Drawn by: POR

Checked by: EA

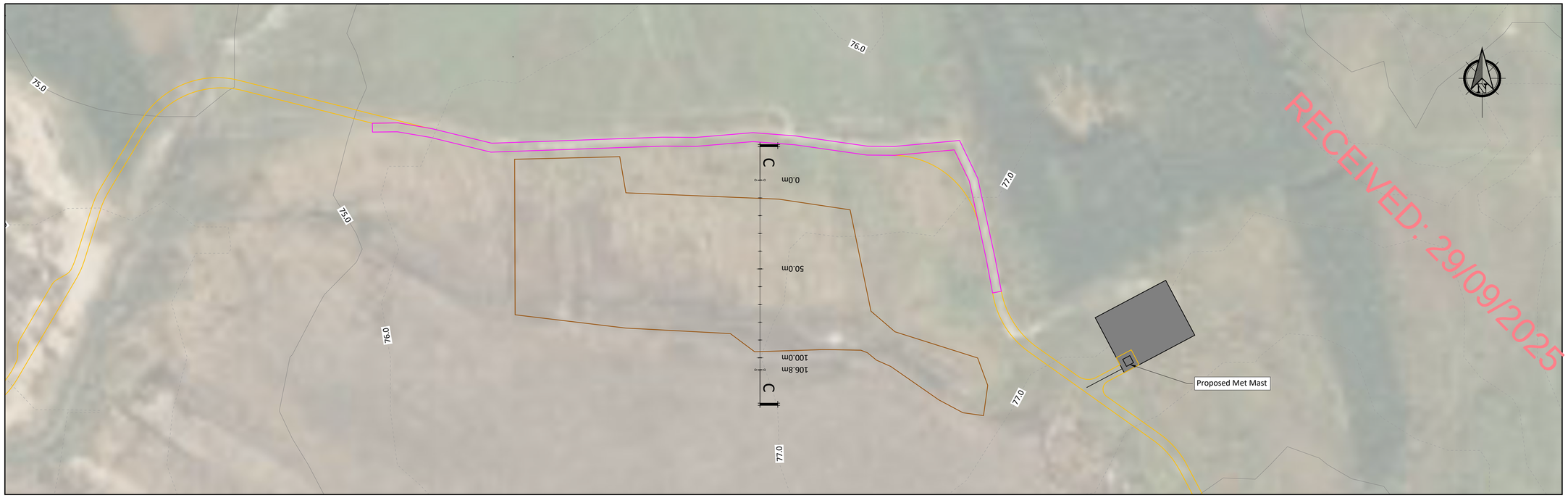
Drawing Number: P24-138-0600-0010

(Sheet set subset 0600)

Rev: C

O:\ACAD\2024\P24-138\P24-138-0600-0010

16 September 2025



PLAN

Scale 1:1250

Legend:

- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area
- 50.0 Existing Ground Level - Major Contour
- 50.0 Existing Ground Level - Minor Contour

Construction Notes Peat Deposition Areas:

(1) An interceptor drain will also be installed upslope of the peat deposition areas.

(2) A settlement pond will be required at the lower side of the peat deposition areas.

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

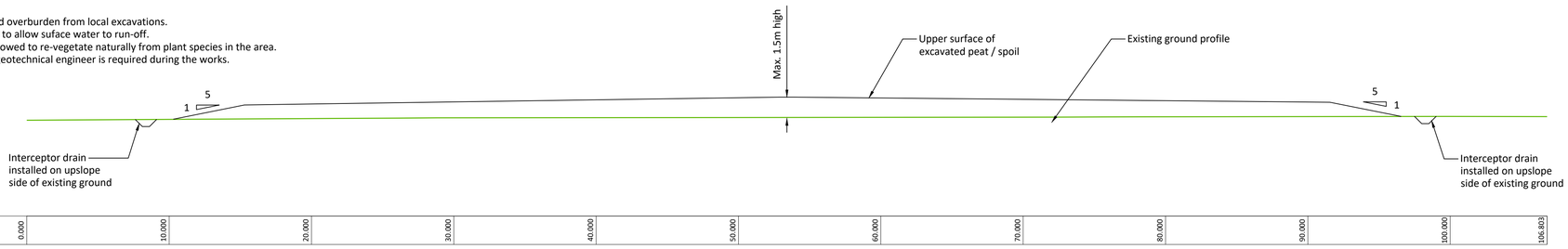
(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the peat deposition area.

(5) All the above-mentioned general guidelines and requirements will be implemented during construction.

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

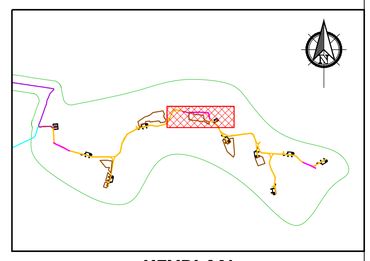
Construction Notes:

1) Spoil heap may consist of peat and overburden from local excavations.
2) Stored material should be shaped to allow suface water to run-off.
3) Placed / spread spoil should be allowed to re-vegetate naturally from plant species in the area.
4) Supervision by suitably qualified geotechnical engineer is required during the works.



SECTION C - C

Scale 1:200



KEYPLAN

Scale 1:40000

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT: GANNOW RENEWABLE ENERGY DEVELOPMENT

CLIENT: MKO

SHEET: PEAT AND SPOIL MANAGEMENT AREAS DETAILS (MIDWAY BETWEEN T03 & T04)

Date: 17.09.25

Drawn by: POR

Checked by: EA

Project number: P24-138

Scale (@ A1): As Shown

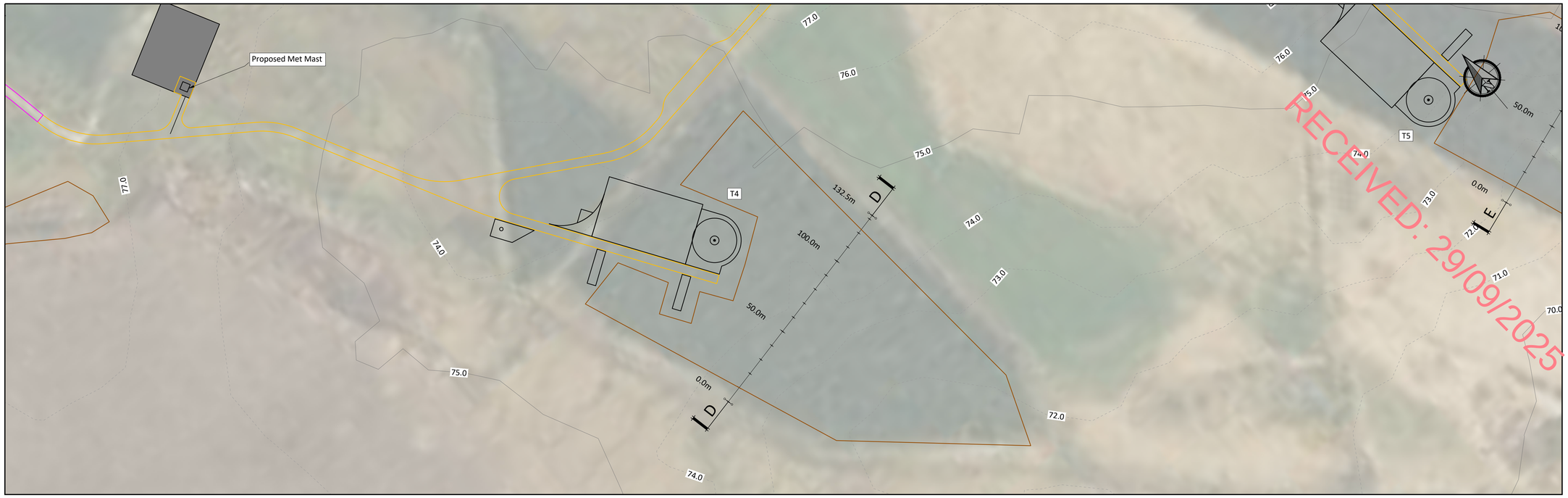
Drawing Number: P24-138-0600-0011

(Sheet set subset 0600)

Rev: C

O:\ACAD\2024\P24-138\P24-138-0600-0011

16 September 2025



PLAN

Scale 1:1250

Legend:

- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area
- 50.0 Existing Ground Level - Major Contour
- 50.0 Existing Ground Level - Minor Contour

Construction Notes Peat Deposition Areas:

(1) An interceptor drain will also be installed upslope of the peat deposition areas.

(2) A settlement pond will be required at the lower side of the peat deposition areas.

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

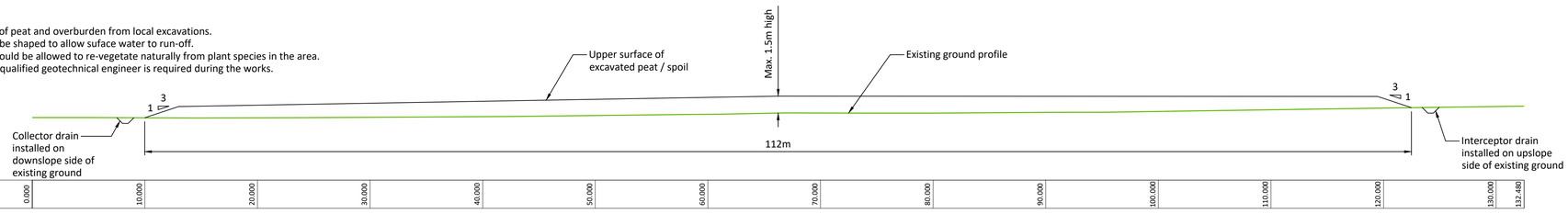
(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the peat deposition area.

(5) All the above-mentioned general guidelines and requirements will be implemented during construction.

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

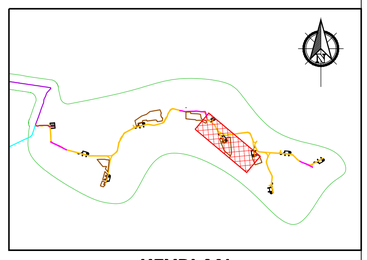
Construction Notes:

1) Spoil heap may consist of peat and overburden from local excavations.
2) Stored material should be shaped to allow suface water to run-off.
3) Placed / spread spoil should be allowed to re-vegetate naturally from plant species in the area.
4) Supervision by suitably qualified geotechnical engineer is required during the works.



SECTION D - D

Scale 1:250



KEYPLAN

Scale 1:40000

FEHILY TIMONEY

Cork | Dublin | Carlow

www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT: GANNOW RENEWABLE ENERGY DEVELOPMENT

CLIENT: MKO

SHEET: PEAT AND SPOIL MANAGEMENT AREAS DETAILS (SOUTH OF T4)

Date: 17.09.25

Project number: P24-138

Scale (@ A1): As Shown

Drawn by: POR

Checked by: EA

Drawing Number: P24-138-0600-0012

(Sheet set subset 0600)

Rev: C

O:\ACAD\2024\P24-138\P24-138-0600-0012

16 September 2025

PLAN

Scale 1:1250

Legend:

- EIAR Site Boundary
- Proposed Turbine Location
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Temporary Construction Compounds
- Proposed Onsite 38kV Substation
- Proposed Grid Connection
- Proposed Turbine Delivery Route
- Peat & Spoil Management Area
- 50.0 Existing Ground Level - Major Contour
- 50.0 Existing Ground Level - Minor Contour

Construction Notes Peat Deposition Areas:

(1) An interceptor drain will also be installed upslope of the peat deposition areas.

(2) A settlement pond will be required at the lower side of the peat deposition areas.

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

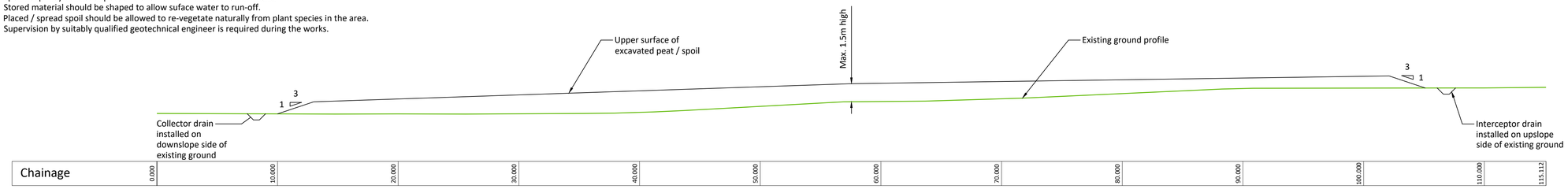
(4) Supervision by a geotechnical engineer or appropriately competent person is recommended for the construction of the peat deposition area.

(5) All the above-mentioned general guidelines and requirements will be implemented during construction.

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

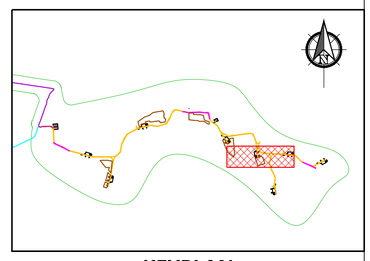
Construction Notes:

1) Spoil heap may consist of peat and overburden from local excavations.
2) Stored material should be shaped to allow suface water to run-off.
3) Placed / spread spoil should be allowed to re-vegetate naturally from plant species in the area.
4) Supervision by suitably qualified geotechnical engineer is required during the works.



SECTION D - D

Scale 1:200



KEYPLAN

Scale 1:40000

FEHILY TIMONEY
Cork | Dublin | Carlow
www.fehilytimoney.ie

Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	17.04.25
B	FOR INFORMATION	BDH	25.06.25
C	FOR INFORMATION	BDH	17.09.25

PROJECT: **GANNOW RENEWABLE ENERGY DEVELOPMENT**

CLIENT: **MKO**

SHEET: **PEAT AND SPOIL MANAGEMENT AREAS DETAILS (SOUTH OF T5)**

Date: 17.09.25
Drawn by: POR
Checked by: EA
Project number: P24-138
Scale (@ A1): As Shown
Drawing Number: P24-138-0600-0013 *(Sheet set subset 0600)*
Rev: C

O:\ACAD\2024\P24-138\P24-138-0600-0013

16 September 2025

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

www.fehilytimoney.ie