TECHNICAL APPENDIX 7.2

Peat Slide Hazard and Risk Assessment

ITPENERGISED
Earth. Smart. Solutions

ScottishPower Renewables

9th Floor Scottish Power Headquarters

320 St Vincent Street

Glasgow

G2 5AD

ITPEnergised

7 Dundas Street

Edinburgh

EH3 6QG

Registration Number: SC450178

Tel: 0131 557 8325

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Appendix 7.2 Peat Slide Hazard Risk Assessment

1 Introduction

1.1.1 The following Peat Slide Hazard and Risk Assessment (PSHRA) report provides an overview of peat slide mechanisms, desk study information, Site survey results to highlight any risk of peat slide within the proposed Development Site.

1.1.2 The peat slide risk assessment was led by Jenny Hazzard, Environmental Planning Director at ITPEnergised. Jenny has a BSc in Geological Engineering and an MSc in Engineering Geology, and she is a Practitioner Member of IEMA. Jenny has 20 years of experience in environmental consultancy including EIA, geo-environmental assessment, ground investigations, and assessment of geology, hydrology and hydrogeology impacts. She has led on hydrology, hydrogeology and peat assessment work for several renewable energy and transmission & distribution projects across Scotland, including peat slide risk assessments and peat management plans for several proposed Scottish windfarm projects.

1.1.3 Technical support was provided by Andrew Ramand, Technical Director at ITPEnergised. Andrew has an MSc in Environmental Technology from Imperial College, is a Practitioner Member of IEMA, is a full member of the Institution of Environmental Sciences, and has over 17 years of experience as an environmental advisor. He has led EIAs and provided technical assessments in hydrology, hydrogeology and geology, peat surveys, peat slide risk assessments and peat management plans for numerous energy sector projects including windfarms and overhead power lines. He authored the Geology and Hydrology assessments for the Beauly-Denny overhead power line, as well as supporting reports regarding construction methods on peat and techniques for water crossings during construction. More recently he was the technical lead for geology, hydrology and peat assessment work, designing and leading on peat surveys and completing peat slide risk assessments for Sandy Knowe Windfarm in Dumfries and Galloway, Creggan Windfarm in Argyll and Bute, Tom nan Clach Windfarm in the Highlands, Barrel Law Windfarm in the Scottish Borders, and Beinn Mheadhonach Windfarm on Skye. Andrew has provided expert witness support on geology, hydrology and peat at public inquiry.

1.1.4 Field surveys were led by Andrew and supported by members of the ITPEnergised Environmental Planning team, including experienced ecologists.

1.2 Peat Failure Characteristics/Mechanisms

1.2.1 The Peat Landslide Hazard and Risk Assessments Best Practice Guide for Proposed Electricity Generation Developments, published by the then Scottish Executive (2006, updated by the Scottish Government April 2017) determines peat landslide(instability) in two categories, 'peat slides' and 'bog bursts'. It is indicated that peat slides have a greater risk of occurrence in areas where peat depth is shallow (up to 2 m) and slope gradients are steep (5 to 15^{o}). Bog bursts, however, are indicated to have a greater risk of occurrence in areas where peat depth is deep and slope gradients are shallow. As recorded in the Best Practice Guide, bog burst events have generally only been reported in Irish and Northern Irish peat bogs. They are uncommon in Scotland and therefore are not considered to attribute significant risk in relation to this assessment. It is noted that peat instability events (including bog bursts), although extremely uncommon, may occur outside the limits mentioned above.

1.2.2 Further to the simple definition above, a number of natural factors are considered to interact and create the potential for peat instability to occur. These natural factors would typically include:

- **Slope Gradient**: as noted in the Best Practice Guide, peat slides have a greater likelihood of occurrence in areas where slope angles range from 5 to 15^{o}. Deposits with shallow slope gradients of less than 5^{o} are less susceptible to failure as the influence of gravity is not as substantial and deposits with steeper slope gradients are less susceptible to failure due to the general lack of peat presence (although peaty debris slide, with shearing within the mineral substrate, may occur).
- **Peat Depth**: the extent and depth of peat is controlled to a degree by rainfall and elevation, giving risk to three common types of peat (as described by Boylan *et al*. 2008):
  - **Upland Blanket Bog:** blanket bogs are typically about 3 m thick, however, they can be up to 5 m thick, generally thinning at greater elevations (note, the proposed Development Site is considered to be an upland blanket bog site).
  - **Lowland Blanket Bog:** much the same as the upland version, however, they form around sea levels in areas of very high rainfall.
  - **Raised Bog:** raised bogs generally tend to be 3-12 m thick, averaging 7 m, with their growth occurring above the water table.

1.2.3 As an instability indicator, peat depth can give an indication of peat strength and the potential scale of a slide where the generalisation can be made that the potential for peat instability increases with peat depth provided gradients exist to allow movement. However, when combined with other instability indicators, any depth of peat can fail.

- **Peat Strength:** the shear strength of peat is an important aspect in assessing the risk of landslip in blanket peat areas, with areas of lower shear strength likely to be the cause of any peat slide. However, due to the influence of fibres within the deposits and of stratification with depth i.e. fibrous through to amorphous (see 'Peat Stratification' below), reliable values of shear strength are difficult to obtain using common place in situ and laboratory soil strength tests. Where data is available, it can be used, with caution, to assist in assessing likely risk.
- **Relief:** the combination of slope gradient and variation in elevation can result in confined and unconfined zones i.e. where undulating or hummocky terrain (confined) exists, the natural relief has the potential to mitigate the occurrence of a peat slide. However, convex sloping hillsides (unconfined) can increase the hazard potential.
- **Evident and/or Potential Areas of Instability:** the presence of any geomorphological characteristics (refer to Paragraph 1.2.7 below) may signify that there is an increased risk of peat instability in the area. However, peat instability events may occur in areas where no geomorphological characteristics are present if the general characteristics match those mentioned above.
- **Vegetation Cover:** the vegetation cover of an area of bog/mire gives an indication as to its hydrological setting and therefore physical characteristics, as noted in the Best Practice Guide and detailed by Hobbs (1986).
- **Peat Stratification:** weak layers within a peat mass can facilitate peat failure, the process in which peat is formed causes peat to show natural anisotropic strength. The interface between the three distinct layers (indicating three hydroseral stages) within a peat mass is defined by hydrology. The three layers are:
  - **Top Mat:** living vegetation of herbaceous plants, grasses and mosses;
  - **Acrotelm:** decomposing peat which is saturated periodically and is of relatively high permeability; and
  - **Catotelm:** permanently saturated dense peat of relatively low permeability.

  Peat stratification is linked to peat depth (Dykes, 2006), with thinner peat deposits having a thinner or no catotelm layer. This lack of, or reduction in, the catotelm layer leads to peat mass having a higher shear strength, as the overlying top mat and acrotelm layers are more fibrous in nature compared to the underlying catotlem layer.

  Raised and blanket bogs are both within the third stage of hydroseral development although their individual morphology is different. Raised bog is commonly made up of several layers of peat representing each stage in development. Raised bog may also include a layer of mud/organic clay at its base representing lake and swamp sediments. Blanket peat is usually made up of bog peat (third stage) alone.
- **Hydrology (Surface and Subsurface):** surface (seeps and springs, wet flushes, watercourses, concentration of drainage networks etc.) and subsurface (pipe systems, underground channels etc.) drainage pathways can provide areas of peat with a water supply which may be absorbed by the peat mass potentially increasing the

mass of the peat, causing pooling/piping within the peat mass, or an increase in water at the base of the peat mass, each of which increases the susceptibility of the peat mass to failure.

1.2.4 The presence of a number of the above natural factors may create the potential for peat instability to occur, however, the actual instability is generally the result of a combination of further causative factors. These factors have been grouped into two categories within the Best Practice Guide described as preparatory and triggering factors.

1.2.5 Preparatory factors, which affect the stability of peat slopes in the medium to long-term (tens to hundreds of years), are:

- increase in mass of the peat through peat formation;
- increase in mass of the peat through increase in water content;
- increase in mass of the peat through afforestation;
- reduction in shear strength from changes in the physical structure of the peat due to creep, weathering or vertical tension cracks of the material;
- loss of surface vegetation and associated tensile strength (e.g. deforestation);
- changes in the subsurface hydrology (water filled pools and/or pipes etc.); and
- afforestation reducing the water held in the peat body, increasing the potential for formation of desiccation cracks which can be exploited by rainfall on forest harvesting.

1.2.6 Triggering factors, which can have an immediate effect on peat stability and act on susceptible slopes, include:

- intensive rainfall or snow melt causing development of high porewater pressures within the peat;
- alterations to drainage patterns generating high porewater pressures within the peat;
- peat extraction at the toe of the slope i.e. fluvial incision, cut slopes etc. reducing the support of the upslope material;
- peat loading commonly due to stockpiling or plant during construction (or natural causes i.e. landslide) causing an increase in shear stress;
- changes to the vegetation cover i.e. by stripping the surface cover or afforestation; and
- earthquakes or man-made rapid ground accelerations, such as blasting or mechanical vibrations, causing an increase in shear stress.

1.2.7 Evidence of the potential for peat instability within an area may be observed through the recording of the geomorphological conditions of the area. These existing geomorphological characteristics may indicate the presence of existing or historical failures or areas of future potential instability. The characteristics of particular interest include the presence of the following:

- historical failure scars and debris;
- tension cracking and tearing;
- compression ridges/thrusts or extrusion;
- peat creep;
- subsurface drainage (pools and/or piping);
- seeps and springs;
- cracking related to drying;
- concentration of surface drainage networks; and
- the presence of organic clays at the peat and bedrock interface.

1.3 Sources of Data

1.3.1 A desk study was undertaken to examine documentary information relating to the Site.

1.3.2 This included the following data sources:

- British Geological Survey, DiGMap and GeoIndex;
- Scottish Natural Heritage (SNH) Carbon and Peatland Map, 2016;
- Hydrogeological Map of Scotland, British Geological Survey, 1988;
- Soil Survey of Scotland Maps, James Hutton Institute;
- Scottish Natural Heritage Natural Spaces;
- Habitat and botanical survey data for the proposed development (refer to **Chapter 8: Ecology and Biodiversity** and **Figures 8.2 and 8.3**); and
- Aerial photography.

1.4 Baseline Conditions

Geography, Topography and Geomorphology

1.4.1 The main development area of the Site comprises mainly conifer plantation forestry. Current use by humans largely comprises forestry management works. Part of the main access road is also used by residents of properties to the south of the Site

1.4.2 The topography of the Site is characterised by a ridge of high hilltops in the north, falling steeply to the Muck Water on the north west Site boundary, and falling to the south and east, with incised watercourse valleys dividing the south-facing slopes which form much of the Site area.

1.4.3 The hilltops in the north range in elevation from 335 m Above Ordnance Datum (AOD) at Pindonnan Craigs towards the west, to 549 m AOD at Pinbreck Hill towards the east. Hills between these, from west to east, are Loch Hill (360 m AOD), Mid Hill (411 m AOD), Fell Hill (465 m AOD), and Cairn Hill (479 m AOD). The land falls to the south, to approximately 250 m to 270 m AOD on the southern boundary of the main body of the Site. As noted above, there are watercourses in valleys dividing the southerly slopes, although the watercourse valleys further east are characterised by fairly shallow sides, rather than deeply incised valleys.

1.4.4 In the east of the Site, there are additional hills south of the highest points (up to approximately 330 m AOD), with the elevation generally falling to the south beyond these hills, along the route of the Drumjohn Road access. The elevation falls fairly steeply along the northern part of the access road, with the slope becoming gentler further south, to reach an elevation of approximately 150 m AOD at the southern end of the access route, where it meets the A714.

1.4.5 The hills along the north and east of the Site are all characterised by concave slopes, falling steeply at their highest elevations, with slopes becoming shallower lower down.

1.4.6 **TA Figures 7.2.1a and 7.21b** shows the main geomorphological features of the Site, including the position of major slope breaks, and major drainage features. Additionally, numerous smaller man-made drainage ditches are present onsite, in particular in the area of deep peat towards the west/south west. These are too numerous to show on the geomorphology map and are not clearly evident on aerial photography due to the forest cover. Additionally, no clear evidence of any historical slope failure could be discerned from aerial photography. Several localised areas of fallen/felled trees are evident within the forestry, however it is unclear whether this is as a result of slope failure, wind blow, localised felling or other reasons. These areas do not exhibit the linear/crescent shape across slopes, that would be expected for a peat slide.

Vegetation

1.4.7 Ecological surveys undertaken have identified that the Site is largely conifer plantation forestry, with areas of marshy grassland along watercourses and in forestry breaks. Larger areas of marshy grassland are present in the north-central and north east Site area, with an area of dry heath also present in the north-central area. The access road is flanked by conifer forest and localised patches of marshy grassland.

Rainfall

1.4.8 Rainfall data has been obtained from the nearest Met Office weather station at Girvan, approximately 11.5 km north west of the Site. The average annual rainfall over the period 1981 to 2010 was 1063 mm. The wettest months are recorded as being October, November and December (126 mm, 116 mm and 115 mm, respectively), with the driest month being June (57 mm).

Geological Conditions

1.4.9 BGS online mapping for the area shows that the bedrock geology underlying the Site comprises Ordovician sedimentary strata (wacke) of the Kirkcolm Formation and Galdenoch Formation, with a small number of localised igneous intrusions.

1.4.10 BGS mapping shows that the superficial geology across most of the study area is hummocky glacial deposits (till, comprising clays, sands and gravels), with localised deposits of peat. The highest areas of the Site in the north west are shown to have little or no superficial deposits.

1.4.11 Areas of peat shown on the BGS mapping include: in the west between Pindonnan Craigs and Loch Hill; several locations between and on the north side of the northern hills; several localised areas around proposed Turbines 15 and 16 and either side of the access track nearby; and a large area in the south, which the existing Drumjohn Road access crosses.

1.4.12 An area in the west of the Site (partly coincident with the area of peat shown on BGS mapping as noted above) is identified as being within an area of Class 1 Peat based on the SNH Carbon and Peatlands Map (2016). This is defined as "nationally important carbon-rich soils, deep peat and priority peatland habitat; areas likely to be of high conservation value." Several other, smaller areas of Class 1 Peat are shown in the north and east of the Site, at least 150 m from any proposed infrastructure.

1.4.13 Much of the remaining Site area is shown as Class 5 ("peat soil"), with areas of Class 3 ("predominantly peaty soil with some peat soil") in the north-central area, and Class 0 ("mineral soil") across the north west, and Class 4 ("predominantly mineral soil with some peat soil") in the north east.

1.4.14 Site observations support the mapping, with peat recorded to variable depth across much of the Site, and exposures of till observed locally along the banks of watercourses. The glacial deposits appear to be discontinuous, based on some peat probes encountering rock at surface or directly below the peat (e.g. in the central area north east of proposed Turbine 9, south of proposed Borrow Pit H, near the southern Site boundary south west of proposed Turbine 2, and in the north east of the site between and north of proposed Turbines 14 and 15).

1.4.15 Peat depth surveys were undertaken as described in Section 1.6, to identify the extent, depth and nature of peat across the Site. Peat depths were recorded varying from nil to 3 m, with five of 1,950 points recording peat depth over 3 m.

1.4.16 Peat across the Site was observed to be disturbed and modified by the presence of tree roots and, in some areas uprooted due to wind blow. Numerous drainage ditches were observed to have been cut into the peat, particularly in the western Site area (see Photographs 1 and 2). Despite the presence of drainage ditches, ground conditions were generally boggy and poorly drained, with areas of flush and standing/slow-flowing water.

Photograph 1: Drainage ditch in peat, SW Site area

Photograph 2: Drainage ditch in peat, W Site area

1.5 Surface Water and Sensitive Receptors

Hydrology

1.5.1 The River Cree (including its northern tributary the Cairnfore Burn) flows generally north to south on the eastern side of the Site, into which flow the Clauchrie Burn and the Fardin Burn from the main body of the proposed Development area. The following describes the main watercourses present within the study area:

River Cree Catchment

- The Cairnfore Burn, which is a direct tributary to the River Cree and is defined as part of the River Cree in terms of SEPA's water quality classification, rises in the north east Site area and flows south into the main River Cree channel, then south west. This watercourse system is mostly outside the Site boundary but crosses the Site along the Drumjohn Road access. The Cree empties into the Solway Firth some 25 km south east of the Site.
- The Fardin Burn/Polmadie Burn rises by Cairn Hill near the northern Site boundary, west of the River Cree. It flows south to join the Cree just west of the Drumjohn Road access. Several smaller tributaries flow from north to south into the Fardin Burn, generally between the proposed locations of Turbine 17 and Turbines 15 and 16.
- The Clauchrie Burn rises on the south west slopes of Cairn Hill near the northern Site boundary, flowing south into the Cree downstream of where it is joined by the Fardin Burn.
- A smaller, unnamed watercourse rises in the north west of the Site (west of the Clauchrie Burn) and flows south into the Clauchrie Burn, just south of the western part of the study area.
- The Scalloch Burn flows from Loch Scalloch (a small loch in the north west Site area), south to join the Clauchrie Burn to the south of the study area.

River Stinchar Catchment

- The Feoch Burn/Roughlea Burn rises just west of Pindonnan Craigs in the north west of the Site, from where it flows south into the Duisk River to the south west of the Site. The Duisk River eventually empties into the River Stinchar to the west of the Site.
- The Muck Water rises near the northern Site boundary north of Mid Hill, and flows south west along the Site boundary to join the Duisk River to the west of the Site.

- Gowan's Burn flows west from Pindonnan Craigs into the Muck Water on the north west site boundary.
- The Water of Gregg (also known as Lead Mine Burn at this location) rises near the northern Site boundary, east of the Muck Water, and flows north into the River Stinchar, to the north of the Site. Several smaller, unnamed tributaries of the Water of Gregg also rise in the northern extents of the Site and flow north.

1.5.2 The 2014 SEPA classification of the River Cree (including the Cairnfore Burn) is bad due to water quality and ecological conditions. The main cause of this is identified as many decades of acid rain. The Fardin Burn is classified as poor, also with pressures from acid rain. The Clauchrie Burn is classified as poor overall, mainly due to poor access for fish migration and acid rain.

1.5.3 The Feoch Burn, Muck Water and Water of Gregg (all within the River Stinchar catchment) are classified as good.

1.5.4 The locations of watercourses on and adjacent to the Site are shown on **TA Figures 7.2.1a and 7.2.1b**.

Hydrogeology

1.5.5 The groundwater body beneath the study area is indicated by SEPA to mostly comprise the Galloway groundwater (ID 150694), with the South Ayrshire Hills groundwater (ID 150660) across the north west and west of the Site. These groundwater bodies were both classified by SEPA in 2017 as having an overall status of good, with good water flows and levels, and good quality.

1.5.6 Hydrogeology mapping data from the BGS shows the bedrock beneath the study area to comprise a low productivity aquifer in which flow is virtually all through fractures and other discontinuities.

1.5.7 Till, where present, is anticipated to be of variable permeability, with clays inhibiting groundwater flow but pockets and lenses of sands and gravels likely to more readily transmit groundwater. Peat and peaty soils are likely to be of low permeability, inhibiting the flow of groundwater.

Human Receptors

1.5.8 Human receptors that may be at risk from peat slide include: forestry workers; construction staff during construction of the development; residential and recreational users of onsite and adjacent roads and paths (largely limited to part of the main Drumjohn Road access, with other onsite roads used almost exclusively for forestry works). Given the transient use of the site by these receptors, there is considered to be a low risk of direct harm from peat slide. However, the potential consequence of peat slide affecting onsite roads and therefore indirectly affecting forestry works and access, is considered further within the assessment.

Ecology

1.5.9 No terrestrial protected species have been identified as likely to be impacted by peat slide within the study area. Therefore, these have not been considered further in this assessment. Ecological resources associated with watercourses are considered as part of the identified surface water receptors noted in the Hydrology section above.

Archaeology

1.5.10 A number of onsite heritage assets have been identified, which have the potential to be disturbed or directly impacted by peat slide. The only statutorily designated asset onsite is a Scheduled Monument (chambered cairn) on the west side of the proposed main access into the Site, near its junction with the A714. The potential consequence of peat slide affecting this Scheduled Monument is considered further within the assessment.

1.6 Peat Surveys

1.6.1 Peat survey work has been undertaken over several phases, as described below.

1.6.2 Initially a desk based review was undertaken of geological, hydrological and geomorphological conditions on the site and surrounding area. The 5 m OS DTM data (Terrain 5) was obtained to show slope gradient (refer to TA **Figures 7.2.1a and 7.2.1b**).

1.6.3 Following on from the desk study, Stage 1 peat depth probing was undertaken by a team of surveyors over a series of Site visits on 3 to 5 June 2019, 10 to 13 June 2019, 9 to 10 June 2019 and 6 to 9 August 2019. The surveys aimed to achieve a good coverage of the Site in line with relevant 2017 peat survey guidance, while recognising the access restrictions resulting from dense conifer forestry cover across much of the Site area. Surveys targeted breaks in the forestry where possible (e.g. forestry rides and watercourses) although wind-blow had resulted in substantial blockage of many forestry rides (refer to **Photographs 3 and 4**). Return visits over the above time periods served to ensure that a suitable coverage of the developable areas of the Site was achieved, in consultation with SEPA.

Photograph 3: Example of dense woodland

Photograph 4: Wind blown trees in forestry ride

1.6.4 Data obtained from the peat depth surveys were used to plot the presence and distribution of peat across the proposed infrastructure development areas at the Site, create a contour plan, and feed into detailed design iteration.

1.6.5 Following "design chill", a Stage 2 peat depth probing exercise was undertaken on 9 to 13 September 2019 and 23 to 27 September 2019, to record peat depth at each proposed turbine and hardstanding location, along the route of proposed access tracks, and at proposed infrastructure locations including construction compounds, substation, and control compound. The following pattern of probing was adopted for Stage 2:

- probe at each proposed turbine location with a 10 m spaced cross-grid out to 50 m from the turbine centre to the north, south, east and west;
- several probes at each proposed turbine hardstanding area;
- seven probes at the proposed substation and permanent compound location;
- six probes at each proposed temporary construction compound;
- several probes at each proposed new borrow pit location, equivalent to approximately a50 m grid or better, with the exception of borrow pit BP-F;
- three probes in the immediate vicinity of the proposed permanent met mast;
- generally every 50 m along proposed new access tracks, plus approximately 10 m either side of each probe, perpendicular to the route of the track, with some minor exceptions where access was particularly challenging and sufficient data was available from Stage 1 probing in nearby, relatively accessible locations; and
- probes on either side of the existing Drumjohn access road, approximately every 200 to 330 m and targeting proposed lay-by areas (in addition to borrow pit search areas and proposed construction compound locations).

1.6.6 In total, data has been obtained from 1,950 peat probe locations across the Site area. **TA Figure 7.2.2** shows the peat survey locations.

1.6.7 Peat sampling was undertaken using a hand auger, at proposed turbine and infrastructure locations. Peat samples were collected and dispatched to Envirolab laboratory and tested for moisture content, bulk density, and carbon

content, in order to help characterise the peat at different locations and depths across the Site. **Table 7.2.1** provides information on the location and depth of peat samples collected, and the sampling locations are illustrated on **TA Figure 7.2.2**.

Sample Location	Easting	Northing	Depth (m below ground level)
Turbine 2	227238	587703	0.50
Turbine 3	228207	587359	0.48
Turbine 6	229454	588246	0.58
Turbine 7	228843	589605	0.50
Turbine 7	228843	589605	1.00
Turbine 8	228887	588760	0.30
Turbine 9	229750	588992	0.38
Turbine 10	229597	589797	0.50
Turbine 11	230627	589167	0.65
Turbine 12	231162	588518	0.50
Turbine 13	230829	589926	0.50
Turbine 13	230829	589926	0.85
Turbine 14	231980	589744	0.50
Borrow Pit E	232783	589205	0.50
Turbine 16	232814	588856	0.50
Turbine 16	232814	588856	0.94
Construction Compound 2	232661	588471	0.30
Turbine 17	231409	589199	0.50
Turbine 17	231409	589199	1.00
Turbine 18	228753	587526	0.50
Turbine 18	228753	587526	1.00
Permanent Construction Compund	227529	587631	0.50
Borrow Pit G	229095	588378	0.40
Borrow Pit H	227448	587526	0.50
Borrow Pit F	230952	589394	0.50
Borrow Pit F	230952	589394	1.00
Construction Compound 1	231615	580152	0.30

Table 7.2.1: Peat Samples Collected for Laboratory Analysis

Survey Results

1.6.8 The peat depth survey identified that, as expected following the desk study and reconnaissance walkover, much of the Site area is underlain by peat deposits. There are areas of the site where peat is absent or thin (mainly in the east, south west and west-central areas). Areas of deeper peat were identified in the lower-lying, flatter parts of the site towards the south west, east of Loch Scalloch and along the Clauchrie Burn valley in the west-central area, and in the Fardin Burn valley between hills.

1.6.9 Laboratory testing identified moisture contents generally within or slightly below the typical values for peat of 85 to 95%. Carbon contents were recorded as being approximately equivalent to the typical value of 55% for peat in many samples, but somewhat lower (41 to 49%) in eleven samples, suggesting these materials may be considered peaty or organo-mineral soils (refer to Paragraph 16.11). In three further samples (proposed Turbines 12 and 18, and proposed construction compound 2, all at 0.5 m depth), the recorded carbon content was low enough to suggest the samples could be classified as organo-mineral soil (4.4 to 24%).

Interpretation of Findings

1.6.10 The general distribution of depth of penetration recorded during the peat investigations is summarised in **Table 7.2.2** and presented in **TA Figures 7.2.3a and 7.2.3b**.

Peat Depth Interval (m)	Number of occurences	% of probes
0	46	2.4
0.01 – 0.49	769	39.4
0.5 – 0.99	695	35.6
1.0 – 1.49	246	12.6
1.5 – 1.99	132	6.8
2.0 – 2.49	35	1.8
2.5 – 2.99	22	1.1
3.0 or greater	5	0.3
Total	1,950	100

Table 7.2.2: Distribution of Peat Depth Recorded at the Site

1.6.11 The Peat Landslide Hazard Best Practice Guidance (2017) uses the following Joint Nature Conservation Committee (JNCC) report 445 '*Towards an Assessment of the State of the UK Peatlands*' definition for classification of peat deposits:

- **Peaty (or organo-mineral) soil:** a soil with a surface organic layer less than 0.5 m deep;
- **Peat:** a soil with a surface organic layer greater than 0.5 m deep which has an organic matter content of more than 60 %;
- **Deep Peat:** a peat soil with a surface organic layer greater than 1.0 m deep.

1.6.12 Applying these definitions indicates that the deposits identified at 41.8% of probe locations across the Site comprise peaty or organo-mineral soil based on depth alone. However, as noted in Paragraph 1.6.9, laboratory testing has indicated that materials identified as peat from probing surveys may be better classified as peaty or organo-mineral soils in some areas, given that carbon content is well below 60%.

1.6.13 The above definition of deep peat (based on depth alone) applies to conditions recorded at 22.6% of probes.

Peat Contour Mapping

1.6.14 **TA Figures 7.2.3a and 7.2.3b** shows the interpreted peat depth, both as individual data points and as a contour plan based on interpolation of those peat sampling data points. The contouring has been undertaken to help visualise peat depth across the site in line with 2017 Peat Survey Guidance. The contour plot was prepared, using Natural Neighbour Interpolation which finds the closest subset of input samples to a query point and applies weights to them based on proportionate areas in order to interpolate a value.

1.6.15 The peat contour mapping shows localised areas of deep peat occupying the relatively low-lying, boggy parts of the Site in the south west, east of Loch Scalloch, within the valley of the Clauchrie Burn, and within the valley of the Fardin Burn system. Peat is shallow or absent on sloping hillsides in the north east, along the Polmaddie Burn in the east, south of Loch Scalloch and around Loch Hill in the west-central area, and in the south west. Additionally, peat is thin or absent along some stretches of the main Drumjohn Road access, but there are localised areas of deep peat along this access.

1.7 Peat Stability Hazard Scoring

Introduction

1.7.1 The Best Practice Guide defines the hazard scoring assessment as 'the likelihood of a peat landslide event occurring'. It states that there are a number of possible methods for hazard scoring and that an initial qualitative

hazard scoring matrix methodology be employed using professional judgement on hazard based on qualitative scoring scales.

Methodology

1.7.2 The allocation of hazard score values for the various parameters which influence peat landslide occurrence (e.g. slope gradient, peat depth) is not defined in the Best Practice Guide and there is no published guide specifically relating to this issue.

1.7.3 As such it is left to assessment teams to develop their own approach for categorising the hazard scoring for the site and the following outlines the approach used for this specific site.

1.7.4 The potential for a peat slide to occur is controlled by a number of natural controlling factors. These are typically:

- Slope gradient;
- Peat depth;
- Peat strength;
- Relief;
- Evidence of historical failures/potential instability (e.g. tension cracks, creep, compression ridges);
- Vegetation cover; and
- Hydrology.

1.7.5 The most important of the above controlling factors are considered by the assessor to be peat depth and slope gradient as without both of these elements a risk of peat slide would be unlikely to exist. No clear evidence of potential instability (e.g. major tension cracks, creep, compression ridges etc.) were observed. These controlling factors have therefore not been utilised as part of this assessment.

1.7.6 The Best Practice Guide relates peat landslide hazard to a scale of 1 to 5, with 1 being negligible likelihood and 5 being almost certain. This scale relates to the final hazard potential for all the controlling factors under consideration. No guidance is provided on how the various factors should be combined to derive a final hazard scoring and the assessment team has derived a numerical scoring system as detailed in the following sections.

1.7.7 Consideration/discussion of the natural controlling factors (excluding peat depth, slope gradient and geomorphological evidence) for this Site in relation to developing an appropriate hazard scoring provided below:

- **Peat Strength:** site specific peat strength data was not collated for the Site given the difficulty in obtaining reliable values of shear strength using common place in situ and laboratory soil strength tests. The shear strength is also linked to peat depth as strength is considered to decrease with thickness. As such this parameter is considered to be factored into the hazard scoring for peat depth.
- **Relief** – this factor is considered relevant as much of the slopes onsite are unconfined, however development of a justifiable scoring system for this parameter is complex. Additionally, given that the main hills onsite display concave slopes, it is considered that the slope gradient parameter adequately addresses relief.
- **Vegetation cover** – The absence of a justifiable scoring system for this parameter prevents the inclusion of this factor in the assessment. It is noted that much of the Site is forested, representing loading on underlying peat soils. However, peat depth and slope angle are considered to remain as the controlling factors. Localised deforestation should be taken into account as a possible triggering factor where potential peat slide risk is identified, and factored into the stipulation of mitigation measures.
- **Hydrology** – No detailed investigation of peat pipe networks (if present) has been completed for the Site given the constraints of dense forestry and vegetation cover likely masking the presence of such features. It was clear from the survey work that there are numerous drains cut across some parts of the Site. Mainly, these correspond to the low-lying, flat areas of the Site and they are not considered to be a controlling factor in the potential for peat slide occurring. However, natural surface water features have been considered in the assessment of exposure as these are considered to be a sensitive receptor to peat slide.

1.7.8 The following hazard scoring, and assessment mapping was conducted using the Spatial Analyst extension of ArcGIS 10.3. This is a qualitative approach utilising available data sets within a multicriteria analysis.

1.7.9 Two GIS layers have been developed for the key controlling factors of peat depth and slope angle. The scoring attributed to each is outlined in the following sections.

1.7.10 It is important to note that this study only focuses on peat soils and the criteria used is specifically tailored to the key factors affecting peat stability. As such it does not account for the stability of other mineral soils or rock.

Input Data Sets

1.7.11 The input data sets used for the analysis were as follows:

- Terrain 5 DTM with a 5 m grid size; and
- Site survey information for peat depth and Site observations.

1.7.12 The assessment has been undertaken at each peat probe location to evaluate the spatial distribution of the hazard factors around the windfarm infrastructure. The DTM represents the bare terrain with tree and other object elevations omitted.

Layers and Score Ranking

Peat Depth Layer

1.7.13 Peat thickness is seen as one of the key factors associated with peat stability. Typically, the deeper the peat the more humified, and therefore potentially weaker and unstable it is. Peat depth surveys have been completed on the Site and these data were then interpolated using the Natural Neighbour method (see **TA Figures 7.2.3 and 7.2.3b**).

1.7.14 The Best Practice Guide details that peat slide risk assessment is needed for sites with peat greater than a depth of 0.5 m and as such this is taken as the lower boundary for the hazard scoring (i.e. negligible likelihood – Score 1). It also states that slides tend to occur in peat up to 2 m deep therefore this has been taken as the upper level for the hazard scoring as almost certain (Score 5).

1.7.15 Intermediate peat depths have been assigned corresponding scores of 2, 3, and 4 assuming peat slide likelihood increases with peat depth.

1.7.16 The depth GIS layer was then given hazard scoring attributes as shown in **Table 7.2.3**.

Score	Peat Depth (m)	Hazard (Likelihood)
1	<0.5	Negligible
2	0.50 – 1.00	Unlikely
3	1.00 – 1.50	Likely
4	1.50 – 2.00	Probable
5	>2.00	Almost Certain

Table 7.2.3: Peat Stability Hazard Scoring (Peat Depth)

Slope Angle Layer

1.7.17 The limiting factor governing the formation of thick peat deposits is topography. In the case of blanket peat, it tends to be deepest in closed depressions, and typically thin as the slope angle increases (Boylan *et al.* 2008).

1.7.18 The Best Practice Guide details that peat slide hazard risk assessment is not needed for blanket bog sites with slopes less than 2° and as such this is taken as the lower boundary for the hazard scoring (i.e. negligible likelihood – Score 1). It states that the majority of recorded failures are on slopes with gradients typically 4° to 8°. The lower end of this range is therefore taken as the break point between an “unlikely” and “likely” hazard ranking. Less frequent peat slides may be recorded on steeper slopes, however this is considered more likely to be related to the

typical absence of or limited peat on such slopes. For conservatism, higher hazard rankings are assigned to slopes with steeper gradients above this 4° threshold level.

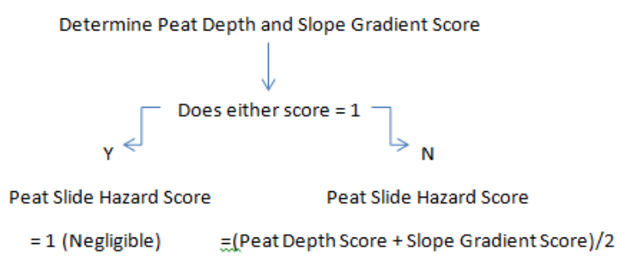
1.7.19 A slope angle GIS layer was generated from the DTM at a 5 m cell resolution. The source DTM is also at a 5 m resolution. This slope at each probe point was calculated in degrees. The slope angle details are provided in **TA Figures 7.2.4a and 7.2.4b**. To assess the Slope Gradients, the following table was used:

Score	Slope (degrees)	Hazard (Likelihood)
1	<2	Negligible
2	2 – 4	Unlikely
3	4 – 6	Likely
4	6 – 15	Probable
5	>15	Almost Certain

Table 7.2.4: Peat Stability Hazard Scoring (Slope)

1.7.20 There is no guidance available on how to combine the hazard scoring for each of the factors used in the assessment. The assessment team have used a dual-criteria analysis approach whereby both factors are equally weighted and averaged. The exception to this is when either the peat depth or slope angle has a score of 1, then the hazard will be classed as 1.

1.7.21 The rule illustrated by the formula below has been applied, as peat slide on a blanket bog site is considered to be unlikely in the instance that the slopes are less than 2° and/or the peat depth is less than 0.5 m.



1.7.22 In addition to this scoring system, professional judgement can be applied when experience of the Site and local peat conditions are known, if a separate score is deemed to be more appropriate.

Peat Slide Hazard Scoring Summary

1.7.23 Table 7.2.5 below presents a summary of the Peat Slide Hazard scoring for the Site, using the decision tree described above. Note that for conservatism, all peat slide hazard scores are rounded up to the nearest whole number. The hazard scores for all probe points are illustrated on **TA Figures 7.2.5a and 7.2.5b**.

Peat Slide Hazard Score	Hazard (Likelihood)	% Occurrence
1	Negligible	50.4
2	Unlikely	9.9
3	Likely	32.3
4	Probable	7.2
5	Almost Certain	0.2

Table 7.2.5: Peat Stability Hazard Scoring (Summary)

1.7.24 As can be seen from **Table 7.2.5** and **TA Figure 7.2.5**, approximately half of the probe locations across the Site had a hazard score of 1 indicating negligible risk, due to either the slope or peat depth score being negligible. Areas with hazard scores of 2 (unlikely) and 3 (likely) coincide with sloping ground and/or deeper peat. Most of the locations with a hazard score of 4 (probable) are in areas where slopes are greater than 4° and peat depth is generally between 1.0 and 2.5 m. Only three probe locations recorded peat deeper than 2.0 m on a steep slope (>15°), resulting in a hazard score of 5.

1.8 Peat Slide Hazard Risk Assessment

Methodology

1.8.1 The level of risk allocated to a particular area relates to the presence of peat, the likelihood of failure occurring (the hazard) and the consequences of such a failure (the exposure). Risk assessment should be based on consideration of the hazard (discussed above) and exposure (consequence of peat failure):

Hazard x Exposure = Risk

Consequences of Peat Failure (Exposure)

1.8.2 The effects of peat failures are felt locally, both in the long and short term, but they can also have wider off-site implications. A key part of the risk assessment process is to identify the potential scale of peat failure, should it occur, and identify the potential environmental effects as well as the receptors of such an event.

1.8.3 Predicting the size of a failure and the distance it may travel is very difficult. The high moisture content of peat makes it especially mobile once it fails and the structure of the peat breaks down. If a peat slide enters a watercourse this can mobilise the slide further and have impacts many kilometres beyond the bounds of the site. In many instances, minor slumps are localised and have little or no impact. Other failures may travel at 100 – 200 m and those entering watercourses, many miles, as was the case of the Derrybrien failure in Co. Galway, Ireland in 2003 (Bragg & Lindsay 2005).

1.8.4 Peat failure associated with the proposed Development could affect the following key receptors:

- The proposed Development itself including associated infrastructure;
- Site workers and plant (risk of injury/death or damage to plant);
- Land based ecological effects (damage to habitats);
- Effects on the quality of onsite and downstream watercourses;
- Site drainage (blocked drains/ditches leading to localised flooding and/or erosion);
- Archaeological assets; and
- Visual amenity (scarring of the landscape).

1.8.5 The surface watercourses on and adjacent to the Site are described in paragraphs 1.5.1 to 1.5.4 above. Based on the baseline poor water quality of onsite watercourses within the River Cree catchment, and the good water quality of watercourses within the small area of the Site that is within the River Stinchar catchment, the surface water receptors are overall considered to have moderate sensitivity.

1.8.6 As noted in paragraph 1.5.10, there are a number of archaeological assets on the Site, however apart from a Scheduled Monument at the south end of the Drumjohn Road access, these are not considered to be highly sensitive to potential impacts from localised peat slide.

1.8.7 Therefore, other than surface watercourses, the above-noted Scheduled Monument, and the proposed Development infrastructure itself, no other sensitive features have been identified on or adjacent to the Site that are likely to be affected by peat slide.

1.8.8 Based on the above, the scale of 1 to 5 shown in Table 7.2.6 below has been qualitatively determined and used to score the exposure (impact) considered appropriate at all peat probe locations:

Score	Consequence	Exposure (Impact)
1	Minor restoration of works.	Low
2	Blockage of Site access roads or local drainage systems.	Low – Medium
3	Damage to rural lands and localised pollution to watercourses.	Medium
4	Blockage of public roads, short to medium term pollution incident.	Medium – High
5	Loss of life, major damage to property, public roads and major pollution incident to watercourses.	High

Table 7.2.6: Peat Slide Exposure Categories

1.8.9 Table 7.2.7 below provides a summary of the qualitive exposure assessment at the peat probe locations.

Score	Number of occurences	% of Total
1	438	22.5
2	1,214	62.3
3	298	15.3
4	0	0.0
5	0	0.0
Total	1,950	100

Table 7.2.7: Peat Slide Exposure Distribution at the Site

1.8.10 As shown in the summary table above, 22.5% of the peat probe points are assessed as being in areas with exposure score of 1. The majority of the probe locations (62.3%) are in areas with exposure score of 2, due to being within 50 m of proposed turbines and infrastructure, or within 50 m of watercourses, or 50 m of the Scheduled Monument. Points within 50m of the A714 and the existing forestry roads onsite are assessed as having exposure score 3, totalling 15.3% of all points.

Peat Slide Hazard Risk Scoring

1.8.11 Following the identification of the above hazards and exposure, it is possible to categorise each peat probe location with a risk score by multiplying the likelihood of the hazards by its potential impact (exposure). The matrix suggested by the Best Practice Guidance to determine the risk category is presented in Table 7.2.8 below:

Peat Slide Hazard Risk Scoring		Action Suggested
1 – 4	Negligble	Project should proceed with monitoring and mitigation of peat landslide hazards at these locations as appropriate
5 – 10	Low	Project may proceed pending further investigation to refine assessment and mitigate hazard through relocation or re-design at theselocations
11 – 16	Medium	Project should not proceed unless risk can be avoided or mitigated at these locations, without significant environmental impact, in order to reduce risk score to low or negligible
17 – 25	High	Avoid project development at these locations

Table 7.2.8: Peat Slide Risk Categories

1.8.12 Table 7.2.9 below presents a summary of the assessment of peat slide hazard risk based on the methodology set out above, and is illustrated in **TA Figures 7.2.6a and 7.2.6b**.

Peat Slide Hazard Risk Scoring		Number of Occurences	% of Total
1 – 4	Negligble	1,340	68.7
5 – 10	Low	592	30.4
11 – 16	Medium	18	0.9
17 – 25	High	0	0
Total		1,950	100

Table 7.2.9: Peat Slide Risk Distribution at the Site

1.8.13 The summary presented in Table 7.2.9 indicates that the risk of peat slide at the large majority of peat probe locations is negligible or low. Only 18 points (0.9%) recorded a risk of medium, and no points were assessed as high risk.

1.8.14 The points with medium risk scores are summarised below:

- Two points near the existing road south of the Little Shalloch at the far west end of the site. The medium risk ranking results in part from an elevated consequence score, due to the proximity to an existing forestry road. Both points are more than 800 m from any proposed Site infrastructure.
- One point adjacent to the existing track in close proximity to the proposed Turbine 8 hardstanding, where peat depth was recorded at just over 1 m and the slope angle is 7.6°. The consequence score at this location is elevated due to the proximity of an existing forestry road. Numerous probes in the immediate vicinity of this single probe recorded conditions indicative of negligible slide risk.
- One point on the proposed track west of proposed Turbine 14, where peat depth was recorded at 1.75 m and the slope angle is 9.5°.
- Nine points in the area of proposed Turbine 14 and its hardstanding. Peat depths up to 2.15 m were recorded in this area, and the slope angle is approximately 6 to 8°. The consequence score at this location is elevated due to the proximity of an existing forestry road. The nearest surface watercourses to this location are approximately 210 m downslope (minor tributaries of the Polmaddie Burn/Fardin Burn system).
- One point in close proximity to the south end of proposed Borrow Pit E, where peat depth was recorded at 1.85 m and the slop angle is approximately 8°. Further detailed survey work of all proposed borrow pit search areas will be undertaken prior to construction, and areas of deep peat will be avoided in siting actual borrow excavations.
- Four isolated points along the existing Drumjohn Road access where deep peat was recorded and slope angles are fairly high. In all of these locations, probes in the immediate vicinity were assessed as low or negligible risk.

2 Proposed Development Design and Mitigation

Detailed Design and Site Investigation

2.1.1 A detailed site investigation would be required to assist detailed design. Intrusive ground investigations would be completed at infrastructure locations prior to construction commencing to ascertain depth to bedrock and suitable founding conditions.

2.1.2 A detailed stability analysis can then be completed at all infrastructure locations using the increased confidence in the shear strength/peat depth data and site-specific topographical survey data, to provide added robustness to the stability assessment.

Turbines and Hardstandings

<u>Design</u>

2.1.3 This peat slide hazard risk assessment has identified that all turbines are at negligible or low risk locations. All turbine hardstandings are also at negligible or low risk locations, with the exception of the proposed Turbine 14 hardstanding, where several probes identified a medium risk. As noted in Paragraph 1.8.14, the elevated risk ranking is due in part to a medium consequence score given the proximity of an existing forestry road.

2.1.4 It should be noted that laboratory testing of a sample collected from the proposed Turbine 14 location indicated that the material could better be described as peaty or organo-mineral soil, given the relatively low carbon content (approximately 41%).

Mitigation

2.1.5 The infrastructure would not be constructed on peat, rather peat would be excavated to allow founding onto a suitable stratum i.e. bedrock.

2.1.6 Prior to construction, a specific construction method statement would be produced which would draw on the findings of intrusive investigations. The method statement would detail the exact construction methodology to be used, in line with the Peat Management Plan and taking into account:

- A geotechnical analysis for each turbine base;
- The method of excavation and the location for placing and storing excavated material to ensure that these operations do not give rise to slope or site instability;
- Methodology for storing and watering surface vegetated turves, for re-sodding bare areas;
- Details of how excavated spoil would be stored;
- Avoidance of construction (if possible) on wet areas, flushes and easily eroded soils;
- Adequate drainage design to cater for expected heavy rainfall events; and
- Monitoring of ground movement and water levels.

2.1.7 The Construction Method Statement would also detail how pumped water from excavated bases would be controlled and monitored to ensure it is appropriately managed and if directed into or conveyed to existing drains/watercourses, to ensure that all have adequate treatment beforehand and capacity to deal with the volumes of water encountered.

Access Tracks

Design

2.1.8 Areas of deep peat have been avoided wherever possible with respect to access track routing, as described in Chapter 3 of the EIAR. However, it has not been possible to entirely avoid all areas of deep peat, therefore mitigation measures are set out below.

Mitigation

2.1.9 Localised stretches of new track would be floated, to avoid the requirement to excavate deep peat. Based on the findings of the peat surveys, it is estimated that 4,335 m of the new roads would be floated (approximately 17% of the total proposed Development track length).

2.1.10 Construction of floated roads would be carried out considering the effects of consolidation and the effect loading would have on stability, hydrology and ecology. Construction would require the placing of a geotextile membrane on existing topsoil and vegetation followed by aggregate layers. Depending on ground conditions identified from further, detailed geotechnical investigations, two or more layers of geotextile would be placed in layers of 300 mm to 500 mm. The access tracks would be capped with layers of Type 1 or similar material. Type 1 is unbound aggregate mixture specified under Clause 803 of the Specification for Highway Works (2016) as suitable for vital load bearing foundation in road construction.

2.1.11 The following additional mitigation measures would be employed to ensure suitable construction of tracks and minimising risk of instability:

- Roads would be constructed to take the required vehicular loadings, having due regard to overall site stability;
- Machinery and vehicles used in track construction would be operated from the already constructed sections of the road as it progresses;
- Conservative design parameters would be used, taking account of potential impacts of localised deforesting and re-planting;
- Good quality rock would be used to construct roads where applicable;
- Ground movement and water level monitoring would be carried out at all times;
- All machinery and construction methods onsite would be selected with a view to minimising impact on the surrounding habitat; and
- All roads would have sufficiently sized culverts, permeable fill or cross drains at the location of each water crossing, flush or other hydrological feature in order to allow the natural flow of water across the Site and prevent ponding and the generation of pore pressures which may initiate instability.

Drainage Areas

2.1.12 Design and construction of a suitable drainage system for the proposed Development would follow Sustainable Urban Drainage Systems (SUDS) principles and would ensure natural drainage without significant alteration of the hydrological regime of the local Site area.

2.1.13 Any construction activity relating to, or undertaken in the vicinity of watercourses would be carried out in general accordance with relevant SEPA Pollution Prevention Guidelines, The Water Framework Directive (WFD), The Water Environment and Water Services (Scotland) Act 2003 (WEWS) and the Controlled Activities Regulations (CAR) 2011 (as amended).

Borrow Pits

2.1.14 Pre-construction site investigation works would be undertaken to further assess the borrow pit search areas and to identify the specific excavation locations and extents within the search areas. This would be based on peat depth and distribution, with deep peat avoided, and suitability of rock for excavation. These further investigations would also establish the method of extraction, determining whether any blasting is required. If blasting is required, further analysis of potential impacts on peat stability in the vicinity would be undertaken and appropriate mitigation stipulated.

Monitoring and Management

2.1.15 A line of surveyed and levelled pegs and visual monitoring is an acceptable method of monitoring movement adjacent to roads, excavations and stockpile areas.

2.1.16 Thus, as construction activities commence, the appearance of the area and surrounding land would be monitored visually by installing a line of levelled pegs adjacent to the activity location. Specifically, the following signs would be looked for:

- An increased rate of sinking or tilting;
- The rising of adjacent peat/peaty soils;
- Cracking and lateral movement of the soil surface; and
- A rise in water levels.

2.1.17 The Principal Contractor would ensure that suitably qualified and experienced construction staff are engaged on the project, including a senior geotechnical engineer with extensive practical knowledge and experience of similar conditions to those at the Site. The senior geotechnical engineer would have responsibility for maintaining and actively monitoring a geotechnical risk register for the construction works.

2.1.18 On a similar note, all staff would undergo a site induction and suitable training relating to construction on peatland sites. This would raise awareness of ground instability indicators, best practice construction techniques, mitigation and emergency procedures. All staff should be responsible for observational monitoring and reporting.

3 Conclusion

3.1.1 Based on an extensive peat survey programme, the proposed Development is characterised as a blanket bog site with variable peat depths across the Site. The proposed Development layout, including turbines and associated infrastructure, has been designed to avoid the areas of deep peat wherever possible and areas where peat landslide may occur. Further detailed design would be informed by detailed ground investigations to be undertaken prior to commencement of any works onsite.

3.1.2 The peat side risk assessment has identified that the large majority of the assessed area has a negligible or low peat slide risk level. Only 18 specific probe locations (or 1,950 points surveyed) were identified as medium risk, and none were identified as high risk.

3.1.3 Mitigation measures are detailed herein which would assist in reduction of any potential risks associated with construction activities causing ground instability, including undertaking detailed intrusive ground investigations to clarify risks and allow stipulation of specific geotechnical mitigation measures and/or micro-siting as required.

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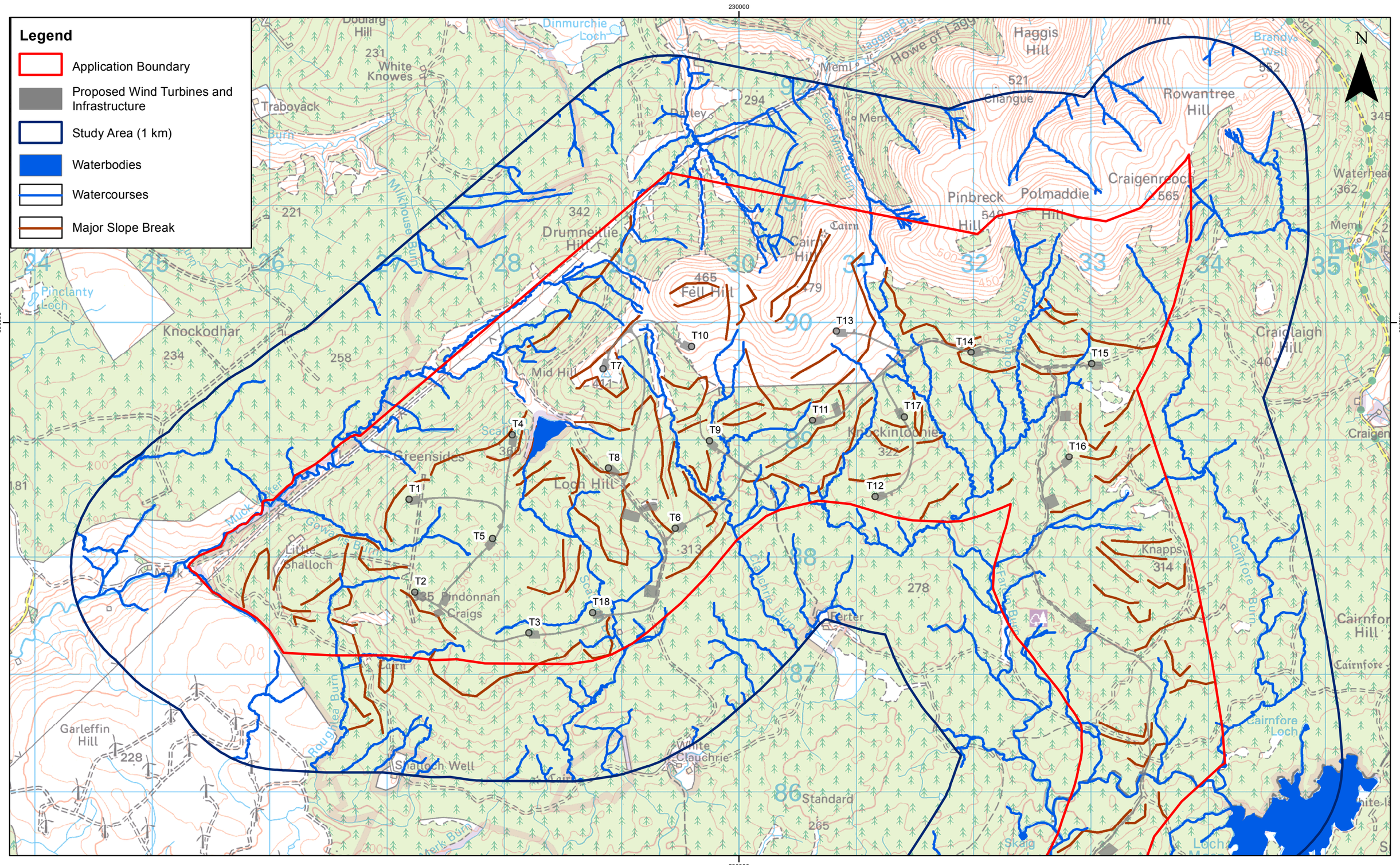
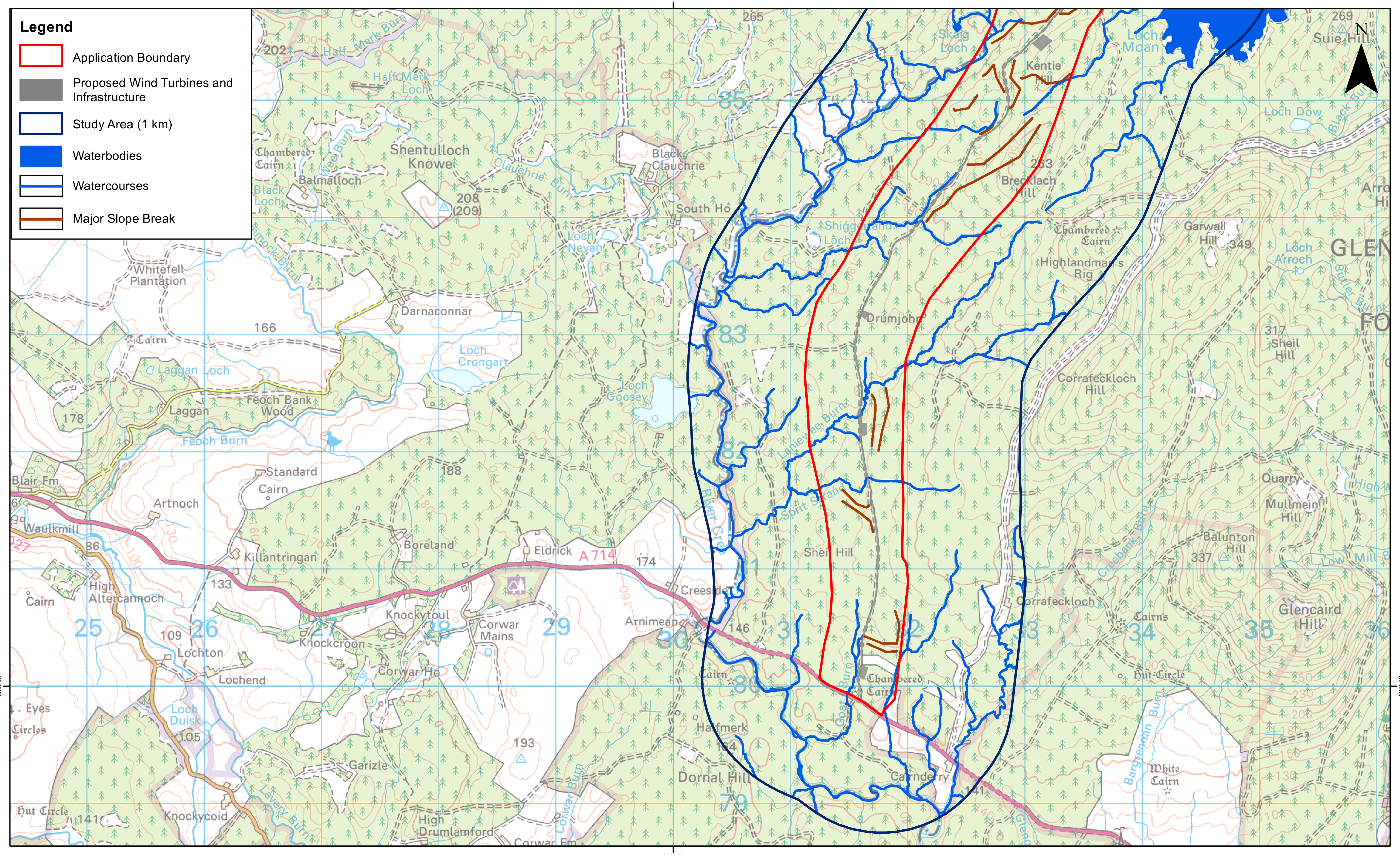
Figures



SCOTTISHPOWER RENEWABLES					1:30,000 Scale @ A3	**Clauchrie Windfarm**	**Drg No** EDI_1263_EIAR
						EIA Report: Technical Appendix 7.2	**Rev** A
	A	2019/11/11	JH	First Issue.		Slope Breaks and Watercourses	**Date** 15/11/19
	Rev	**Date**	**By**	**Comment**			**Figure** TA_7.2.1a
							Datum: OSGB36 Projection: TM



SCOTTISHPOWER RENEWABLES

Rev	Date	By	Comment
A	2019/11/11	JH	First Issue.

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Clauchrie Windfarm

EIA Report: Technical Appendix 7.2

Slope Breaks and Watercourses

Drg No	EDI_1263_EIAR	
Rev	A	Datum: OSGB36 Projection: TM
Date	15/11/19	
Figure	TA_7.2.1b	

Legend

- Application Boundary
- Proposed Wind Turbines and Infrastructure
- Peat Probe Locations
- Peat Sample Locations

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T16 T17 T18

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SCOTTISHPOWER RENEWABLES

Rev	Date	By	Comment
A	2019/11/11	JH	First Issue.

1:50,000 Scale @ A3

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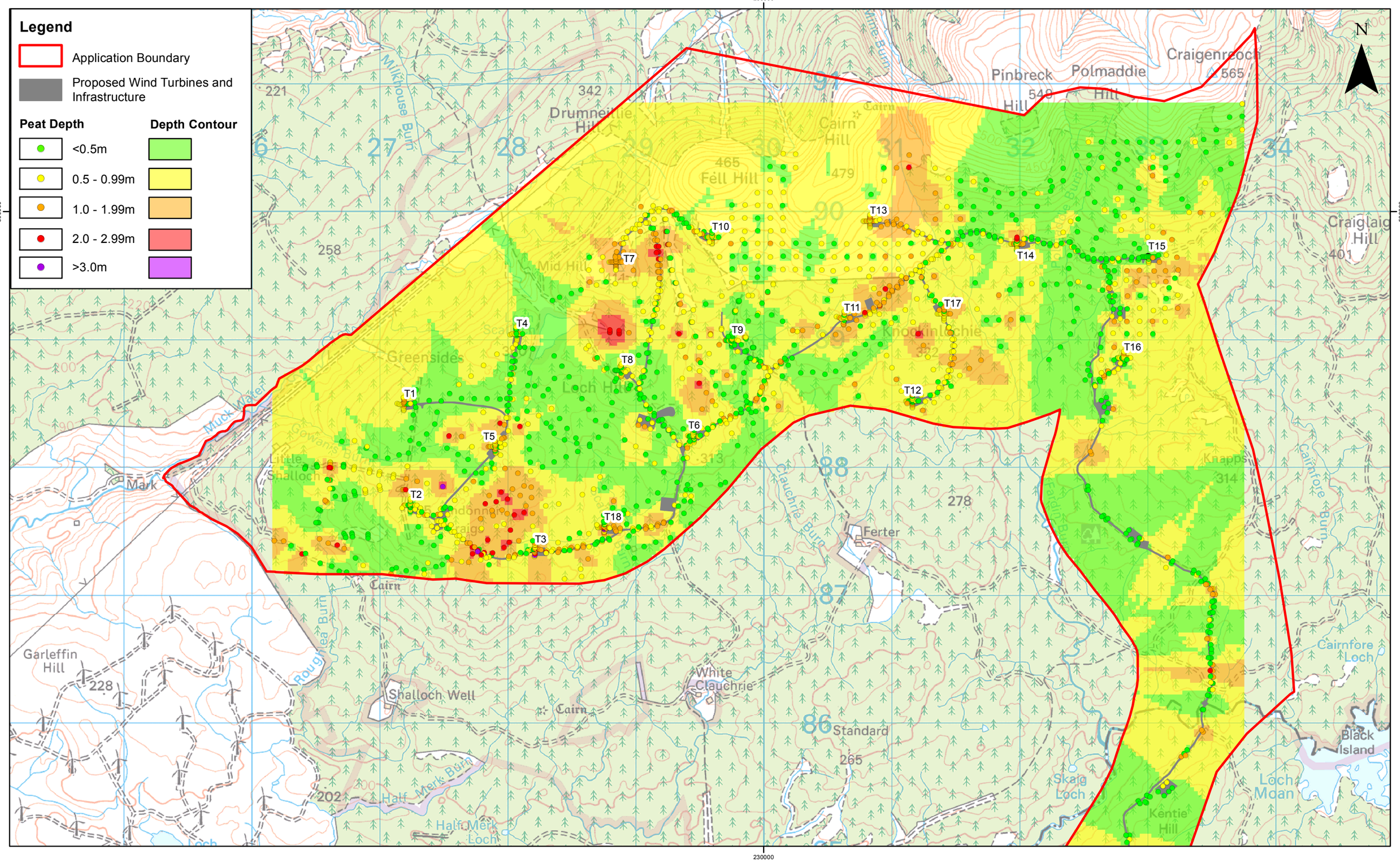
Clauchrie Windfarm

EIA Report: Technical Appendix 7.2
Peat Survey Locations

Drg No	EDI_1263_EIAR
Rev	A
Date	12/11/19
Figure	TA_7.2.2

Datum: OSGB36
Projection: TM



Rev	Date	By	Comment
B	2019/11/20	JH	Legend revised

SCOTTISHPOWER RENEWABLES

1:27,500 Scale @ A3

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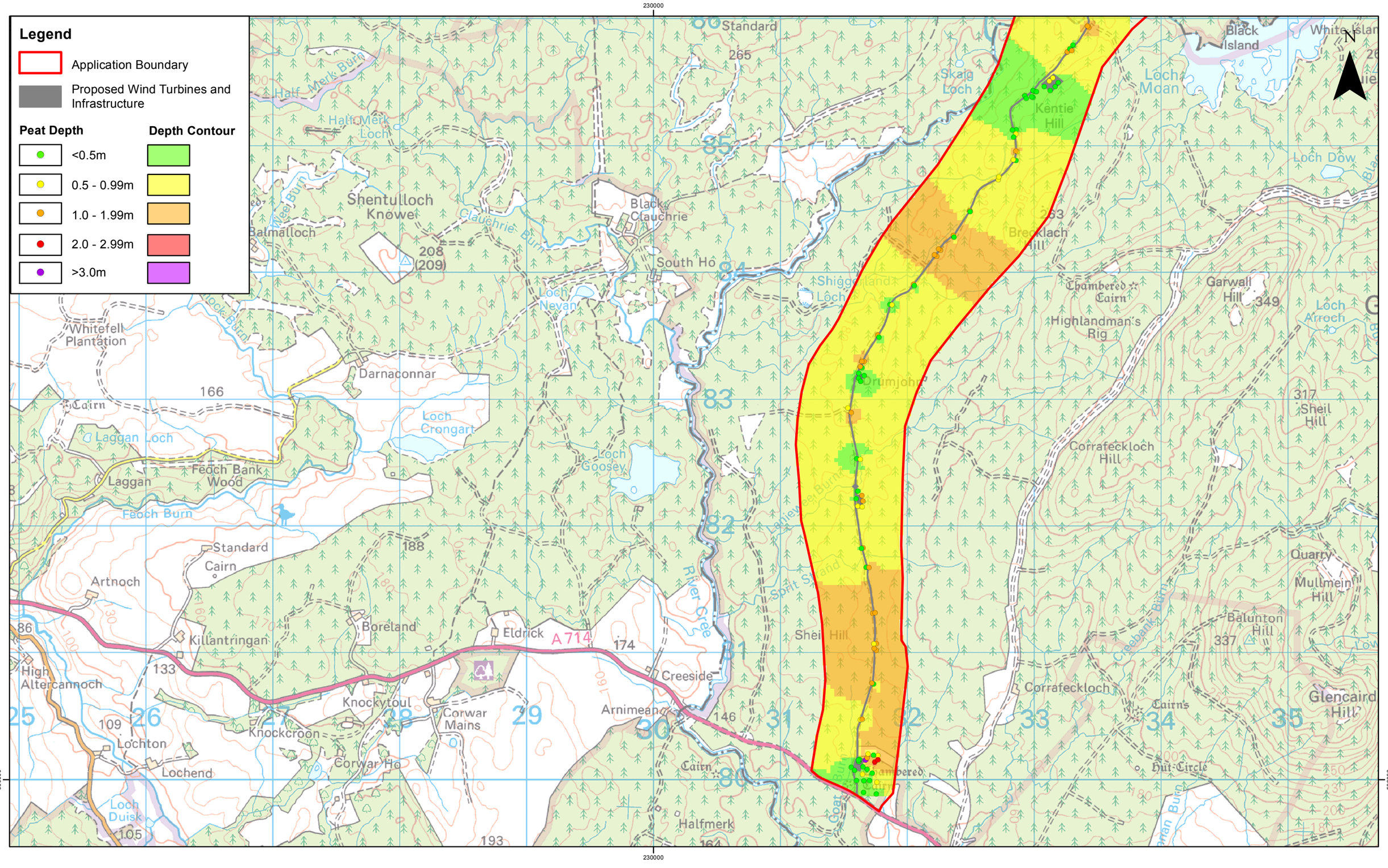
Clauchrie Windfarm

EIA Report: Technical Appendix 7.2
Peat Depth Survey Results and Contour Plot

Drg No	EDI_1263_EIAR
Rev	A
Date	20/11/19
Figure	7.2.3a

Datum: OSGB36
Projection: TM



Rev	Date	By	Comment
B	2019/11/20	JH	Legend revised

SCOTTISHPOWER RENEWABLES

1:27,500 Scale @ A3

0 0.75 1.5 Km

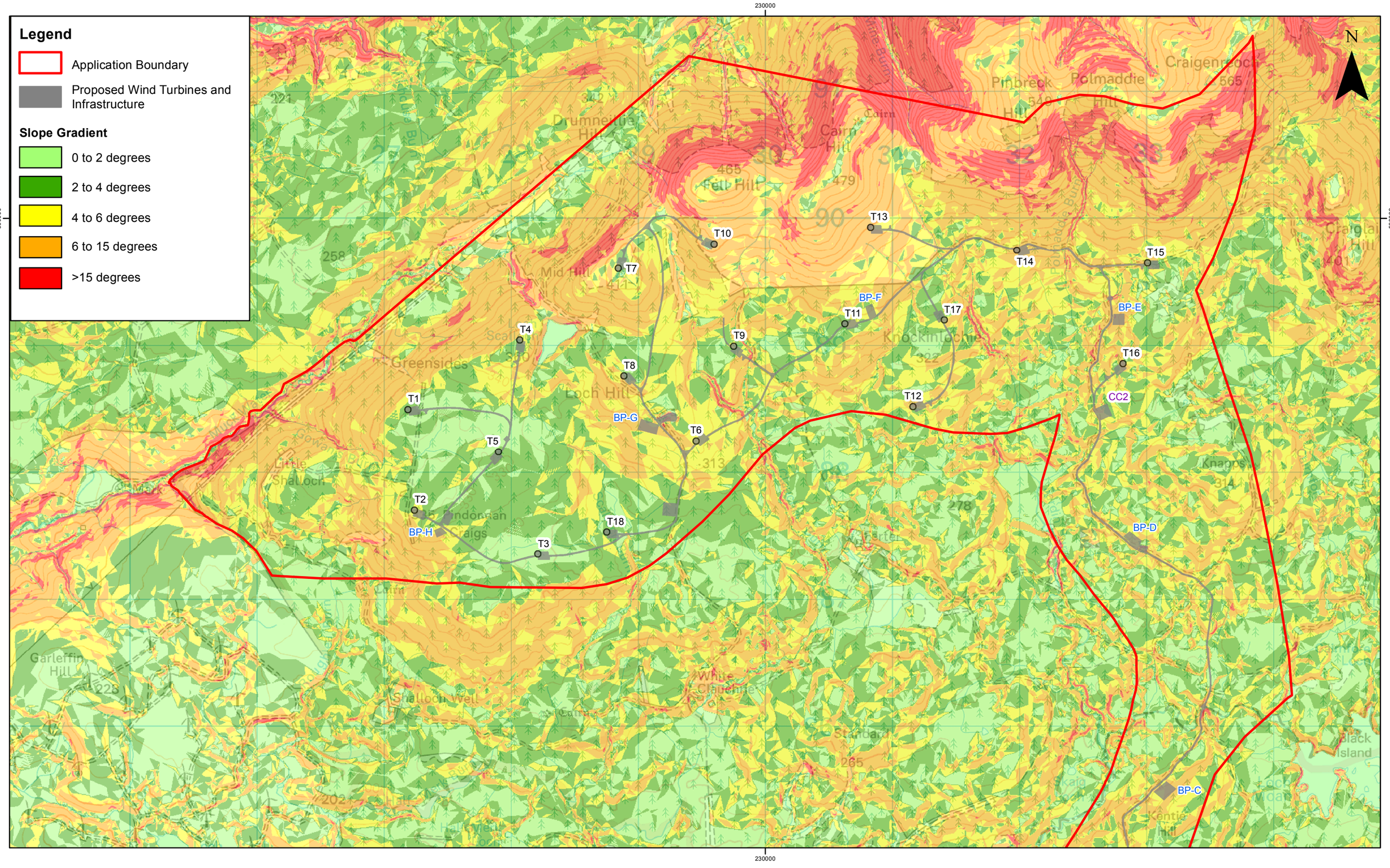
Clauchrie Windfarm

EIA Report: Technical Appendix 7.2

Peat Depth Survey Results and Contour Plot

Drg No	EDI_1263_EIAR
Rev	A
Date	20/11/19
Figure	7.2.3b

Datum: OSGB36
Projection: TM



SCOTTISHPOWER RENEWABLES					1:27,500 Scale @ A3	0 0.75 1.5 Km	**Clauchrie Windfarm** EIA Report: Technical Appendix 7.2 Slope Gradient
	A	2019/11/11	JH	First Issue.			
	Rev	**Date**	**By**	**Comment**			

Drg No	EDI_1263_EIAR	
Rev	A	Datum: OSGB36 Projection: TM
Date	11/11/19	
Figure	TA_7.2.4a	

230000

Legend

- Application Boundary
- Proposed Wind Turbines and Infrastructure

Slope Gradient

- 0 to 2 degrees
- 2 to 4 degrees
- 4 to 6 degrees
- 6 to 15 degrees
- >15 degrees

BP-C
BP-B
BP-A
CC1
N
580000
230000

SCOTTISHPOWER RENEWABLES

Rev	Date	By	Comment
A	2019/11/11	JH	First Issue.

1:27,500 Scale @ A3

0 0.75 1.5 Km

Clauchrie Windfarm

EIA Report: Technical Appendix 7.2
Slope Gradient

Drg No	EDI_1263_EIAR
Rev	A
Date	11/11/19
Figure	TA_7.2.4b

Datum: OSGB36
Projection: TM

Legend

- Application Boundary
- Proposed Wind Turbines and Infrastructure

Peat Slide Hazard Score

- 1 - Negligible
- 2 - Unlikely
- 3 - Likely
- 4 - Probable
- 5 - Almost Certain

230000

590000

N

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T16 T17 T18

Greensides
Loch Hill
Mid Hill
Drumneitlie Hill
Fell Hill
Cairn Hill
Pinbreck Hill
Polmaddie Hill
Craigenreoch
Craiglaig Hill
Knockinlochie
Little Shalloch
Mark
Garleffin Hill
Shalloch Well
White Clauchrie
Ferter
Standard
Knapps
Cairnfore Loch
Black Island
Loch Moan
Skaig Loch
Kentie Hill

Milkhouse Burn
Muck Water
Cowan's Burn
Rough Lea Burn
Merk Burn
Half Merk Loch
Clauchrie Burn
Polmaddie Burn
Fardin Burn
Cairnfore Burn

230000

				1:27,500 Scale @ A3	0 0.75 1.5 Km
A	2019/11/11	JH	First Issue.		
Rev	Date	By	Comment		

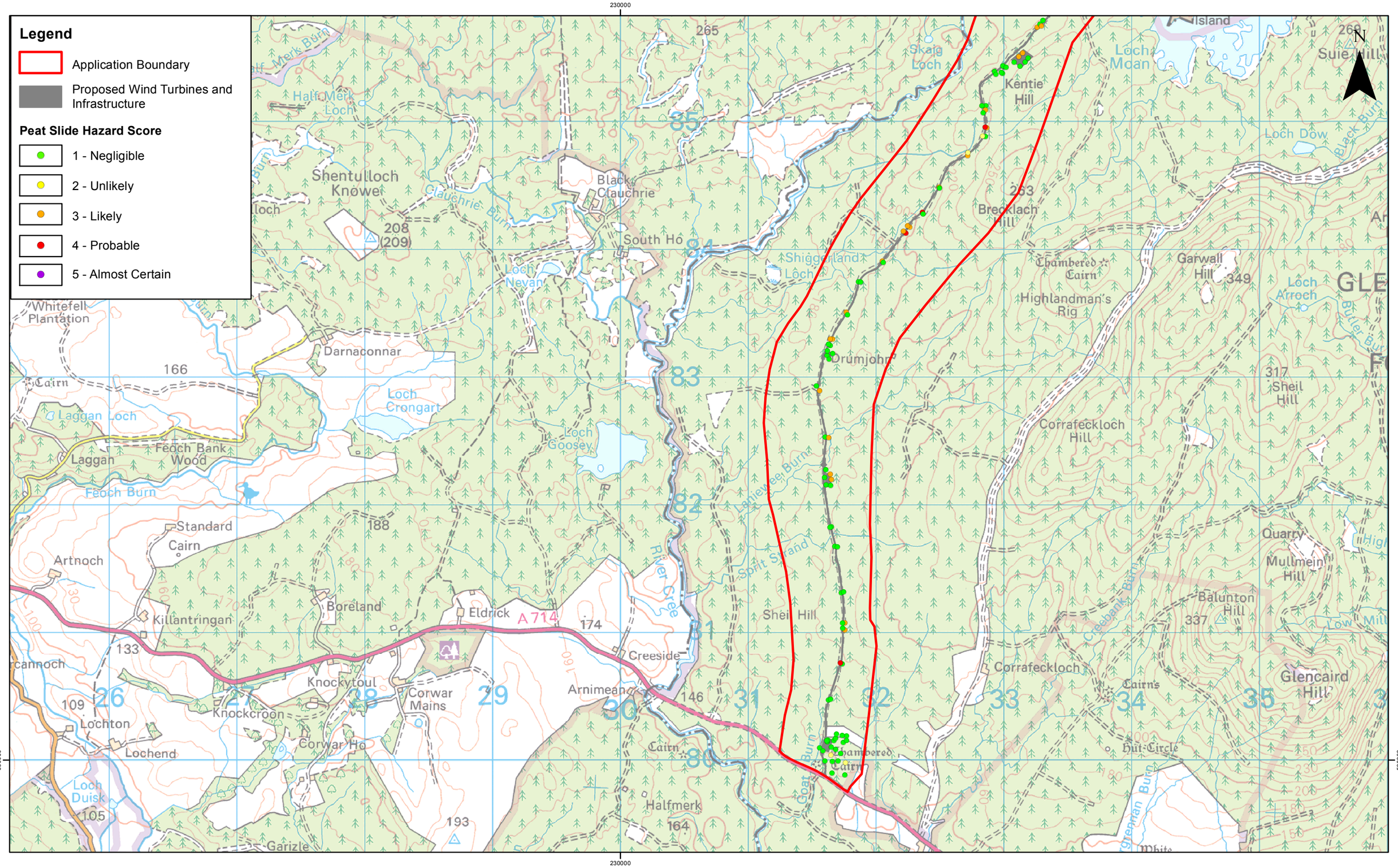
SCOTTISHPOWER RENEWABLES

Clauchrie Windfarm

EIA Report: Technical Appendix 7.2

Peat Slide Hazard Scores

Drg No	EDI_1263_EIAR
Rev	A
Date	14/11/19
Figure	TA_7.2.5a
Datum:	OSGB36
Projection:	TM



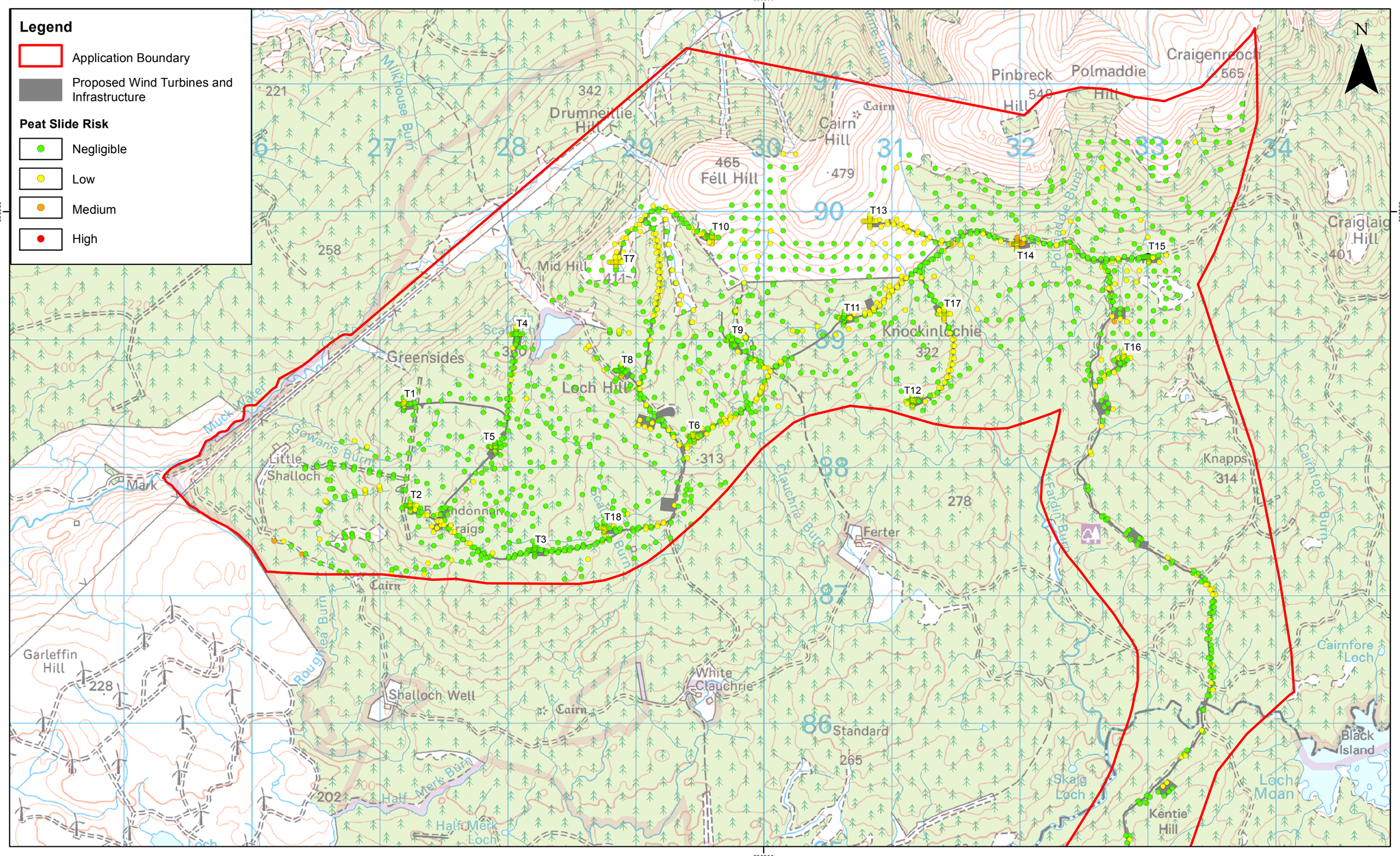
SCOTTISHPOWER RENEWABLES					1:27,500 Scale @ A3	0 0.75 1.5 Km
	A	2019/11/11	JH	First Issue.	© Crown Copyright 2019. All rights reserved. Ordnance Survey Licence 0100031673.	
	Rev	Date	By	Comment		

Clauchrie Windfarm

EIA Report: Technical Appendix 7.2

Peat Slide Hazard Scores

Drg No	EDI_1263_EIAR	
Rev	A	Datum: OSGB36
Date	14/11/19	Projection: TM
Figure	TA_7.2.5b	



SCOTTISHPOWER RENEWABLES

Rev	Date	By	Comment
A	2019/11/11	JH	First Issue.

1:27,500 Scale @ A3

0 0.75 1.5 Km

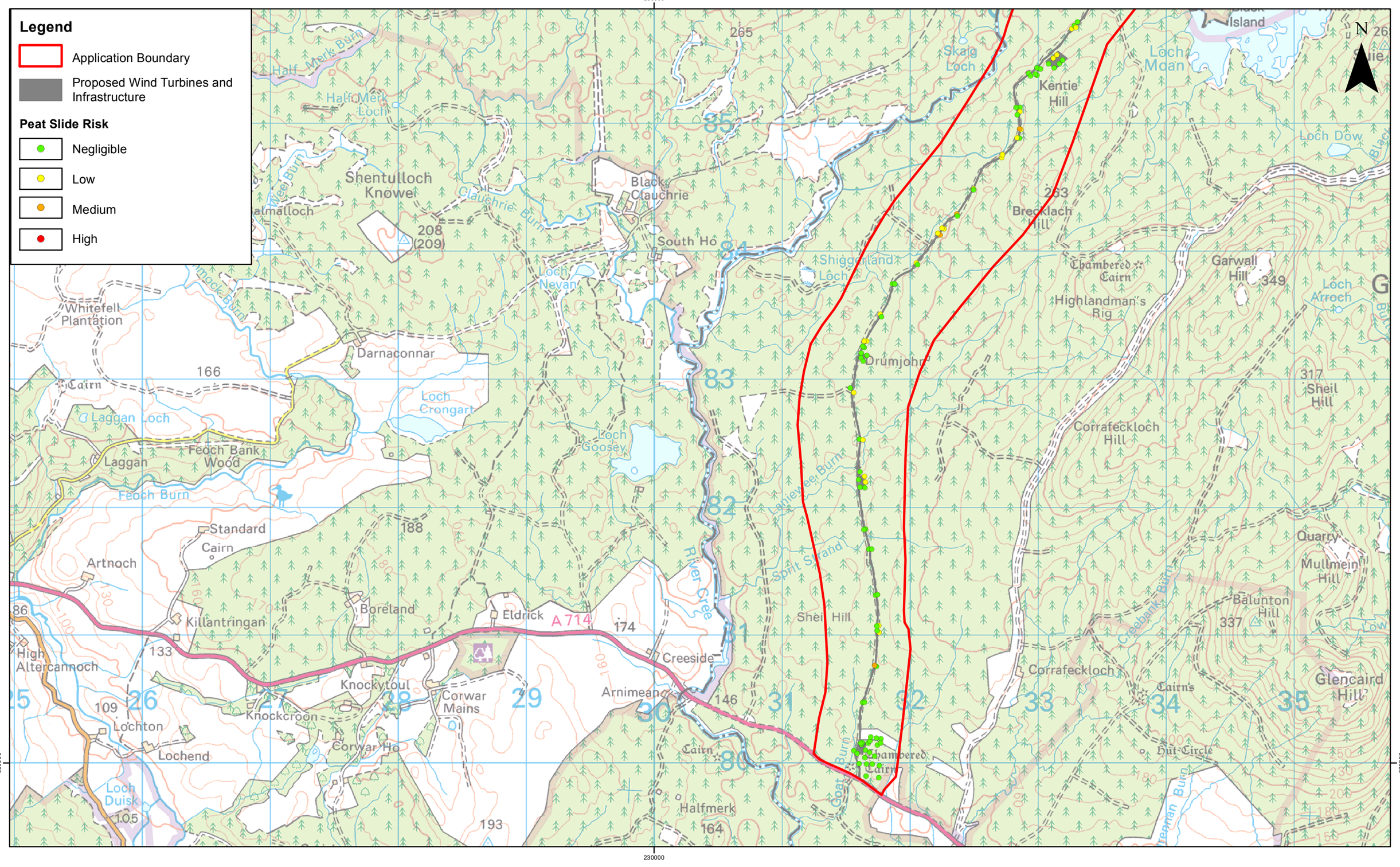
Clauchrie Windfarm

EIA Report: Technical Appendix 7.2

Peat Slide Risk

Drg No	EDI_1263_EIAR
Rev	A
Date	12/11/19
Figure	TA_7.2.6a

Datum: OSGB36 Projection: TM



SCOTTISHPOWER RENEWABLES					1:27,500 Scale @ A3	0 0.75 1.5 Km
	A	2019/11/11	JH	First Issue.		
	Rev	Date	By	Comment		

Clauchrie Windfarm

EIA Report: Technical Appendix 7.2
Peat Slide Risk

Drg No	EDI_1263_EIAR	
Rev	A	Datum: OSGB36
Date	12/11/19	Projection: TM
Figure	TA_7.2.6b	

Annex 1 Peat Probe Records & Risk Ranking

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1	228208	587304	55	2	1.84	1	1	2	2
2	228211	587311	300	5	1.78	1	1	2	2
3	228212	587323	260	5	1.79	1	1	2	2
4	228209	587335	150	4	1.86	1	1	2	2
5	228207	587342	140	3	1.85	1	1	2	2
6	228157	587354	40	1	1.84	1	1	2	2
7	228171	587350	35	1	1.86	1	1	2	2
8	228177	587353	35	1	1.85	1	1	2	2
9	228186	587359	50	2	1.88	1	1	2	2
10	228198	587356	45	1	1.85	1	1	2	2
11	228207	587359	48	1	1.88	1	1	2	2
12	228218	587357	135	3	1.84	1	1	2	2
13	228224	587355	150	4	1.85	1	1	2	2
14	228239	587360	260	5	1.85	1	1	2	2
15	228249	587357	195	4	1.88	1	1	2	2
16	228260	587353	115	3	1.77	1	1	2	2
17	228211	587365	120	3	1.85	1	1	2	2
18	228214	587375	80	2	1.85	1	1	2	2
19	228215	587388	130	3	1.88	1	1	2	2
20	228211	587396	70	2	1.88	1	1	2	2
21	228211	587406	145	3	1.85	1	1	2	2
22	228753	587478	150	4	4.08	3	4	2	8
23	228750	587490	140	3	3.32	2	3	2	6
24	228752	587496	98	2	2.29	2	2	2	4
25	228754	587507	125	3	2.22	2	3	2	6
26	228754	587517	300	5	2.22	2	4	2	8
27	228701	587531	50	2	2.45	2	2	2	4
28	228710	587529	50	2	1.89	1	1	2	2
29	228720	587530	75	2	2.19	2	2	2	4
30	228732	587531	175	4	2.17	2	3	2	6
31	228743	587529	105	3	2.19	2	3	2	6
32	228753	587526	250	5	2.21	2	4	2	8
33	228761	587529	135	3	2.22	2	3	2	6
34	228772	587521	100	3	2.22	2	3	2	6
35	228783	587528	180	4	2.22	2	3	2	6
36	228791	587527	120	3	2.24	2	3	2	6
37	228797	587526	50	2	2.22	2	2	2	4
38	228750	587537	170	4	2.18	2	3	2	6
39	228752	587550	47	1	2.18	2	1	2	2
40	228758	587558	50	2	2.18	2	2	2	4
41	228752	587568	43	1	2.18	2	1	2	2
42	228748	587576	38	1	2.17	2	1	2	2
43	227238	587653	40	1	4.35	3	1	2	2
44	227238	587663	60	2	4.35	3	3	2	6
45	227238	587673	57	2	4.35	3	3	2	6
46	227238	587683	42	1	4.23	3	1	2	2
47	227238	587693	45	1	4.21	3	1	2	2
48	227188	587703	102	3	3.67	2	3	2	6
49	227198	587703	58	2	3.51	2	2	2	4
50	227208	587703	51	2	2.97	2	2	2	4
51	227218	587703	43	1	4.14	3	1	2	2
52	227228	587703	42	1	4.2	3	1	2	2
53	227238	587703	56	2	4.21	3	3	2	6
54	227248	587703	31	1	4.2	3	1	2	2
55	227258	587703	42	1	4.23	3	1	2	2
56	227268	587703	43	1	4.21	3	1	2	2
57	227278	587703	67	2	4.2	3	3	2	6
58	227288	587703	55	2	4.23	3	3	2	6
59	227238	587713	61	2	4.21	3	3	2	6
60	227238	587723	55	2	4.21	3	3	2	6
61	227238	587733	39	1	4.21	3	1	2	2
62	227238	587743	50	2	4.12	3	3	2	6
63	227238	587753	75	2	3.57	2	2	2	4
64	229455	588193	50	2	3.97	2	2	2	4
65	229457	588207	55	2	4.33	3	3	2	6
66	229455	588215	43	1	4.47	3	1	2	2
67	229456	588226	68	2	4.25	3	3	2	6
68	229456	588236	49	1	4.27	3	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
69	229407	588248	83	2	5.36	3	3	2	6
70	229417	588243	43	1	4.48	3	1	2	2
71	229423	588243	45	1	4.27	3	1	2	2
72	229433	588247	45	1	4.25	3	1	2	2
73	229447	588244	60	2	4.27	3	3	2	6
74	229454	588246	58	2	4.27	3	3	2	6
75	229466	588251	50	2	4.19	3	3	2	6
76	229477	588245	40	1	4.39	3	1	2	2
77	229487	588240	105	3	4.41	3	3	2	6
78	229495	588243	73	2	4.29	3	3	2	6
79	229506	588250	30	1	4.22	3	1	2	2
80	229449	588257	50	2	4.23	3	3	2	6
81	229448	588270	55	2	4.13	3	3	2	6
82	229455	588277	70	2	4.09	3	3	2	6
83	229457	588287	25	1	4.1	3	1	2	2
84	229459	588296	44	1	4.1	3	1	2	2
85	231162	588467	70	2	4.94	3	3	2	6
86	231162	588478	92	2	2.61	2	2	2	4
87	231162	588488	187	4	2.55	2	3	2	6
88	231162	588498	170	4	5.78	3	4	2	8
89	231162	588508	42	1	5.98	3	1	2	2
90	231112	588518	93	2	6.74	4	3	2	6
91	231122	588518	82	2	6.74	4	3	2	6
92	231132	588518	25	1	6.06	4	1	2	2
93	231142	588518	31	1	5.98	3	1	2	2
94	231152	588519	38	1	5.97	3	1	2	2
95	231162	588518	42	1	6.01	4	1	2	2
96	231172	588516	32	1	6.27	4	1	2	2
97	231182	588518	38	1	6.58	4	1	2	2
98	231190	588518	77	2	6.62	4	3	2	6
99	231205	588518	40	1	5.57	3	1	2	2
100	231212	588518	30	1	5.4	3	1	2	2
101	231162	588528	69	2	6.55	4	3	2	6
102	231162	588538	75	2	6.64	4	3	2	6
103	231162	588548	80	2	6.63	4	3	2	6
104	231162	588558	32	1	6.65	4	1	2	2
105	231162	588567	150	4	6.62	4	4	2	8
106	228886	588710	105	3	7.57	4	4	3	12
107	228888	588720	80	2	6.82	4	3	2	6
108	228893	588732	59	2	5.97	3	3	2	6
109	228886	588737	43	1	6.1	4	1	2	2
110	228887	588751	25	1	4.81	3	1	2	2
111	228836	588758	20	1	5.54	3	1	2	2
112	228847	588756	10	1	5.24	3	1	2	2
113	228854	588756	25	1	5.26	3	1	2	2
114	228866	588758	40	1	6.1	4	1	2	2
115	228876	588760	25	1	6.13	4	1	2	2
116	228887	588760	30	1	3.93	2	1	2	2
117	228896	588761	40	1	2.54	2	1	2	2
118	228908	588754	78	2	2.56	2	2	2	4
119	228922	588757	90	2	2.26	2	2	2	4
120	228928	588758	85	2	2.58	2	2	2	4
121	228937	588759	63	2	2.63	2	2	2	4
122	228893	588772	64	2	1.24	1	1	2	2
123	228889	588777	45	1	0.84	1	1	2	2
124	228880	588793	55	2	2.11	2	2	2	4
125	228886	588799	59	2	1.83	1	1	2	2
126	228889	588808	86	2	4.01	3	3	2	6
127	232818	588807	20	1	9.97	4	1	2	2
128	232819	588818	30	1	10.07	4	1	2	2
129	232814	588829	30	1	9.42	4	1	2	2
130	232816	588834	45	1	9.32	4	1	2	2
131	232819	588844	35	1	8.49	4	1	2	2
132	232765	588854	30	1	2.14	2	1	2	2
133	232775	588857	70	2	6.13	4	3	2	6
134	232783	588854	50	2	6.54	4	3	2	6
135	232799	588855	20	1	10.78	4	1	2	2
136	232803	588858	40	1	9.62	4	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
137	232814	588856	93	2	8.29	4	3	2	6
138	232827	588856	70	2	5.83	3	3	2	6
139	232835	588857	110	3	2.96	2	3	2	6
140	232849	588855	80	2	4.93	3	3	2	6
141	232858	588858	105	3	5.19	3	3	2	6
142	232868	588858	60	2	5.32	3	3	2	6
143	232814	588865	90	2	8.63	4	3	2	6
144	232814	588874	70	2	8.95	4	3	2	6
145	232814	588887	100	3	5.13	3	3	2	6
146	232817	588899	80	2	3.98	2	2	2	4
147	232813	588905	85	2	5.11	3	3	2	6
148	229750	588943	25	1	2.91	2	1	2	2
149	229752	588954	30	1	2.9	2	1	2	2
150	229754	588966	30	1	2.25	2	1	2	2
151	229750	588974	50	2	2.58	2	2	2	4
152	229753	588982	45	1	4.51	3	1	2	2
153	229700	588992	110	3	3.35	2	3	2	6
154	229707	588992	40	1	3.79	2	1	2	2
155	229721	588991	40	1	4.51	3	1	2	2
156	229731	588992	65	2	4.51	3	3	2	6
157	229741	588992	34	1	4.5	3	1	2	2
158	229750	588992	38	1	3.84	2	1	2	2
159	229761	588991	23	1	4.45	3	1	2	2
160	229772	588992	24	1	2.12	2	1	2	2
161	229780	588994	35	1	2.4	2	1	2	2
162	229792	588994	65	2	2.52	2	2	2	4
163	229800	588991	80	2	2.47	2	2	2	4
164	229752	589002	65	2	3.76	2	2	2	4
165	229753	589011	50	2	4.55	3	3	2	6
166	229754	589023	22	1	4.54	3	1	2	2
167	229752	589034	25	1	3.92	2	1	2	2
168	229753	589043	30	1	4.51	3	1	2	2
169	230626	589115	174	4	3.29	2	3	2	6
170	230623	589123	144	3	1.89	1	1	2	2
171	230624	589138	50	2	3.58	2	2	2	4
172	230629	589148	20	1	3.67	2	1	2	2
173	231409	589149	98	2	5.49	3	3	2	6
174	230633	589156	29	1	3.24	2	1	2	2
175	231409	589159	76	2	5.44	3	3	2	6
176	230570	589178	58	2	3.83	2	2	2	4
177	230587	589174	99	2	3.85	2	2	2	4
178	230598	589166	125	3	3.87	2	3	2	6
179	230608	589162	65	2	3.87	2	2	2	4
180	230617	589169	75	2	3.68	2	2	2	4
181	230627	589167	65	2	3.24	2	2	2	4
182	230635	589171	50	2	3.25	2	2	2	4
183	230644	589170	57	2	3.37	2	2	2	4
184	230655	589168	80	2	3.95	2	2	2	4
185	230669	589167	129	3	4.82	3	3	2	6
186	230677	589166	100	3	4.84	3	3	2	6
187	231409	589169	58	2	5.48	3	3	2	6
188	230624	589176	61	2	3.31	2	2	2	4
189	231409	589179	72	2	5.45	3	3	2	6
190	230630	589187	34	1	3.22	2	1	2	2
191	231409	589189	65	2	5.34	3	3	2	6
192	230631	589197	78	2	3.22	2	2	2	4
193	231359	589199	92	2	3.9	2	2	2	4
194	231368	589199	93	2	4.52	3	3	2	6
195	231379	589199	87	2	4.75	3	3	2	6
196	231389	589199	55	2	4.67	3	3	2	6
197	231409	589199	102	3	4.66	3	3	2	6
198	231418	589199	82	2	4.64	3	3	2	6
199	231429	589199	85	2	5.25	3	3	2	6
200	231439	589199	86	2	6.98	4	3	2	6
201	231449	589199	127	3	7.16	4	4	2	8
202	231459	589199	166	4	7.18	4	4	2	8
203	230631	589208	104	3	3.22	2	3	2	6
204	231409	589209	60	2	4.64	3	3	2	6

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
205	230629	589218	98	2	2.58	2	2	2	4
206	231409	589219	25	1	4.13	3	1	2	2
207	231409	589230	146	3	2.73	2	3	2	6
208	231409	589239	160	4	2.61	2	3	2	6
209	231408	589250	110	3	2.8	2	3	2	6
210	228843	589555	75	2	3.79	2	2	2	4
211	228843	589565	162	4	3.67	2	3	2	6
212	228843	589575	150	4	3.84	2	3	2	6
213	228843	589585	136	3	4.01	3	3	2	6
214	228843	589595	142	3	4.03	3	3	2	6
215	233008	589597	80	2	3.58	2	2	2	4
216	228793	589605	65	2	5.72	3	3	2	6
217	228803	589605	160	4	4.55	3	4	2	8
218	228813	589605	156	4	4.83	3	4	2	8
219	228823	589605	170	4	4.5	3	4	2	8
220	228833	589605	163	4	4	3	4	2	8
221	228843	589605	130	3	4.07	3	3	2	6
222	228853	589605	151	4	4.04	3	4	2	8
223	228863	589605	149	3	3.04	2	3	2	6
224	228873	589605	150	4	2.24	2	3	2	6
225	228883	589605	120	3	2.67	2	3	2	6
226	228893	589605	140	3	2.66	2	3	2	6
227	233008	589607	90	2	3.59	2	2	3	6
228	228843	589615	158	4	4.06	3	4	2	8
229	233008	589617	53	2	4.08	3	3	3	9
230	228843	589625	130	3	4.09	3	3	2	6
231	233008	589627	45	1	5.13	3	1	3	3
232	228843	589635	135	3	4.07	3	3	2	6
233	233008	589637	65	2	4.81	3	3	3	9
234	232958	589647	0	1	8.25	4	1	3	3
235	232968	589647	0	1	7.69	4	1	3	3
236	232978	589647	0	1	7.59	4	1	3	3
237	232988	589647	0	1	6.85	4	1	3	3
238	232998	589647	0	1	5.77	3	1	3	3
239	233008	589647	10	1	4.01	3	1	3	3
240	233018	589647	0	1	3.79	2	1	3	3
241	233028	589647	0	1	3.68	2	1	3	3
242	233038	589647	0	1	3.73	2	1	3	3
243	233048	589647	0	1	3.72	2	1	3	3
244	233058	589647	0	1	3.57	2	1	3	3
245	228842	589655	157	4	3.54	2	3	2	6
246	231978	589697	43	1	6.88	4	1	2	2
247	231978	589707	60	2	6.85	4	3	2	6
248	231980	589719	88	2	6.84	4	3	3	9
249	231980	589730	98	2	6.83	4	3	3	9
250	231978	589738	54	2	6.8	4	3	3	9
251	229597	589747	86	2	6.92	4	3	2	6
252	231930	589747	52	2	8.26	4	3	3	9
253	231940	589747	53	2	8.25	4	3	3	9
254	231953	589747	140	3	8.25	4	4	3	12
255	231960	589747	103	3	8.04	4	4	3	12
256	231970	589747	45	1	7.61	4	1	3	3
257	231980	589744	53	2	6.79	4	3	3	9
258	231990	589747	72	2	7.64	4	3	3	9
259	232000	589747	103	3	7.82	4	4	3	12
260	232010	589747	104	3	7.77	4	4	3	12
261	232020	589745	110	3	7.77	4	4	3	12
262	232030	589747	160	4	7.06	4	4	3	12
263	229597	589757	85	2	7.3	4	3	2	6
264	231980	589757	63	2	9.42	4	3	3	9
265	229597	589767	82	2	7.4	4	3	2	6
266	231980	589767	25	1	9.52	4	1	3	3
267	229597	589777	51	2	7.42	4	3	2	6
268	231980	589776	173	4	8.09	4	4	3	12
269	229597	589787	172	4	7.4	4	4	2	8
270	231980	589787	210	5	6.55	4	5	3	15
271	229547	589797	190	4	3	2	3	2	6
272	229557	589797	43	1	3	2	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
273	229567	589797	89	2	2.64	2	2	2	4
274	229577	589797	82	2	1.8	1	1	2	2
275	229587	589797	55	2	2.49	2	2	2	4
276	229597	589797	45	1	7.32	4	1	2	2
277	229607	589797	65	2	7.35	4	3	2	6
278	229617	589797	42	1	7.09	4	1	2	2
279	229627	589797	50	2	7.04	4	3	2	6
280	229637	589797	55	2	7.04	4	3	2	6
281	229647	589797	34	1	7.06	4	1	2	2
282	231980	589797	215	5	4.77	3	4	3	12
283	229597	589807	80	2	5.45	3	3	2	6
284	229597	589817	97	2	4.18	3	3	2	6
285	229597	589827	28	1	8.26	4	1	2	2
286	229597	589837	58	2	6.89	4	3	2	6
287	229597	589847	40	1	6.3	4	1	2	2
288	230831	589875	95	2	6.35	4	3	2	6
289	230832	589885	90	2	6.28	4	3	2	6
290	230830	589895	95	2	6.19	4	3	2	6
291	230831	589905	105	3	6.05	4	4	2	8
292	230832	589915	54	2	6.02	4	3	2	6
293	230779	589927	80	2	7.22	4	3	2	6
294	230788	589926	70	2	7.19	4	3	2	6
295	230799	589926	100	3	7.17	4	4	2	8
296	230810	589925	80	2	6.83	4	3	2	6
297	230819	589926	100	3	7.06	4	4	2	8
298	230829	589926	85	2	7.09	4	3	2	6
299	230840	589926	87	2	5.63	3	3	2	6
300	230850	589927	100	3	5.63	3	3	2	6
301	230860	589926	120	3	5.65	3	3	2	6
302	230869	589926	110	3	5.65	3	3	2	6
303	230881	589928	92	2	5.65	3	3	2	6
304	230831	589936	65	2	8.78	4	3	2	6
305	230829	589947	100	3	7.95	4	4	2	8
306	230830	589955	110	3	8.59	4	4	2	8
307	230832	589966	115	3	8.11	4	4	2	8
308	230830	589975	95	2	7.85	4	3	2	6
309	227419	587496	70	2	7.17	4	3	2	6
310	227404	587540	67	2	5.81	3	3	2	6
311	227448	587526	57	2	5.97	3	3	2	6
312	227275	587671	63	2	4.35	3	3	2	6
313	232788	588813	55	2	3.28	2	2	2	4
314	229772	588954	30	1	4.05	3	1	2	2
315	231372	589229	125	3	2.73	2	3	2	6
316	228868	589644	129	3	2.22	2	3	2	6
317	228975	588713	70	2	3.87	2	2	2	4
318	228827	587541	130	3	2.29	2	3	2	6
319	227305	587625	77	2	-9999	1	1	2	2
320	227317	587681	93	2	-9999	1	1	2	2
321	229517	588305	80	2	4.65	3	3	2	6
322	229555	588261	60	2	4.78	3	3	2	6
323	231230	588563	76	2	6.54	4	3	2	6
324	231262	588515	60	2	5.71	3	3	2	6
325	232771	588768	88	2	3.11	2	2	2	4
326	229797	588905	85	2	7.67	4	3	2	6
327	229824	588958	30	1	4.18	3	1	2	2
328	230708	589200	134	3	4.76	3	3	2	6
329	230726	589150	160	4	1.99	1	1	2	2
330	231382	589274	40	1	2.65	2	1	2	2
331	233086	589657	0	1	2.46	2	1	3	3
332	233092	589604	158	4	3.26	2	3	2	6
333	228851	589687	135	3	3.73	2	3	2	6
334	228905	589683	110	3	3.43	2	3	2	6
335	229534	589842	24	1	5.31	3	1	2	2
336	229574	589762	72	2	6.69	4	3	2	6
337	230907	589938	84	2	5.63	3	3	2	6
338	230919	589881	173	4	6.03	4	4	2	8
339	229032	588370	68	2	7.81	4	3	2	6
340	229095	588378	40	1	4.28	3	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
341	229129	588347	55	2	7.28	4	3	3	9
342	229020	588328	109	3	6.77	4	4	2	8
343	229070	588317	143	3	6.9	4	4	2	8
344	229114	588301	75	2	5.68	3	3	2	6
345	231621	580142	30	1	0.96	1	1	3	3
346	231626	580157	15	1	0.96	1	1	3	3
347	231615	580152	30	1	0.93	1	1	3	3
348	227551	587676	48	1	2.72	2	1	2	2
349	227529	587631	68	2	2.52	2	2	2	4
350	227507	587586	44	1	3.1	2	1	2	2
351	232685	588426	24	1	4.85	3	1	3	3
352	232733	588457	149	3	3.52	2	3	2	6
353	232661	588471	30	1	4.85	3	1	3	3
354	232693	588498	48	1	3.52	2	1	2	2
355	232640	588521	28	1	3.91	2	1	2	2
356	232679	588545	18	1	3.72	2	1	2	2
357	232723	589181	80	2	14.46	4	3	3	9
358	230952	589394	230	5	7.18	4	5	2	10
359	230904	589357	125	3	7.45	4	4	1	4
360	230983	589419	195	4	6.73	4	4	2	8
361	232783	589205	49	1	7.93	4	1	2	2
362	232787	589162	75	2	7.94	4	3	2	6
363	232789	589243	40	1	9.79	4	1	2	2
364	228156	587343	50	2	1.86	1	1	2	2
365	228101	587326	43	1	0.82	1	1	2	2
366	228055	587318	120	3	0.25	1	1	2	2
367	228008	587295	75	2	0.85	1	1	2	2
368	227870	587311	45	1	2.95	2	1	2	2
369	227815	587332	288	5	1.35	1	1	2	2
370	227776	587359	40	1	1.35	1	1	2	2
371	227732	587376	214	5	1.63	1	1	2	2
372	227692	587406	146	3	3.42	2	3	2	6
373	227652	587436	87	2	3.17	2	2	2	4
374	227612	587465	78	2	3.18	2	2	2	4
375	227571	587495	73	2	4.94	3	3	2	6
376	227531	587524	38	1	5.01	3	1	2	2
377	227489	587552	80	2	5.52	3	3	2	6
378	227447	587579	65	2	4.43	3	3	2	6
379	227360	587628	94	2	5.7	3	3	2	6
380	227317	587651	40	1	2.57	2	1	2	2
381	227462	587630	72	2	3.44	2	2	2	4
382	227485	587675	41	1	3.57	2	1	2	2
383	228788	587448	60	2	4	3	3	2	6
384	228737	587421	90	2	4.06	3	3	2	6
385	228699	587417	45	1	3.1	2	1	2	2
386	228589	587397	80	2	2.59	2	2	2	4
387	228545	587372	92	2	1.91	1	1	2	2
388	228494	587372	125	3	1.09	1	1	2	2
389	228447	587352	43	1	1.88	1	1	2	2
390	228399	587357	100	3	1.56	1	1	2	2
391	228349	587347	45	1	1.64	1	1	2	2
392	228303	587348	80	2	1.67	1	1	2	2
393	229423	588181	65	2	5.37	3	3	2	6
394	229394	588170	38	1	5.54	3	1	3	3
395	229218	587565	110	3	3.21	2	3	2	6
396	229172	587556	185	4	3.12	2	3	2	6
397	229121	587533	70	2	1.9	1	1	2	2
398	229077	587539	193	4	1.61	1	1	2	2
399	229025	587525	30	1	2.24	2	1	2	2
400	228976	587523	65	2	3.95	2	2	2	4
401	228875	587503	65	2	1.23	1	1	2	2
402	228838	587521	140	3	1.33	1	1	2	2
403	229082	588478	20	1	5.09	3	1	3	3
404	229112	588440	90	2	1.73	1	1	3	3
405	229144	588420	10	1	7.16	4	1	3	3
406	229177	588364	0	1	3.3	2	1	3	3
407	229213	588324	0	1	8.77	4	1	3	3
408	229254	588289	25	1	10.45	4	1	3	3

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
409	229287	588256	0	1	11.6	4	1	3	3
410	229339	588173	85	2	4.09	3	3	3	9
411	229033	588566	10	1	4.98	3	1	3	3
412	229023	588615	62	2	6.05	4	3	3	9
413	229033	588660	45	1	6.73	4	1	2	2
414	229054	588709	52	2	5.36	3	3	2	6
415	229067	588758	46	1	3.66	2	1	2	2
416	229093	588891	40	1	3.86	2	1	2	2
417	229106	588994	82	2	4.23	3	3	2	6
418	229132	589143	32	1	4.07	3	1	2	2
419	229145	589190	92	2	7.12	4	3	2	6
420	229160	589236	85	2	5.56	3	3	2	6
421	229169	589282	75	2	6.52	4	3	2	6
422	229178	589331	97	2	5.81	3	3	2	6
423	229184	589378	80	2	8.58	4	3	2	6
424	229194	589430	69	2	6.76	4	3	2	6
425	229194	589480	52	2	5.62	3	3	2	6
426	229193	589530	130	3	4.36	3	3	2	6
427	229190	589582	160	4	3.67	2	3	2	6
428	229186	589628	228	5	4.92	3	4	2	8
429	229180	589683	278	5	5.05	3	4	2	8
430	229169	589727	162	4	5.09	3	4	2	8
431	229160	589776	80	2	5.06	3	3	2	6
432	229147	589825	126	3	4.86	3	3	2	6
433	229126	589871	28	1	4.47	3	1	2	2
434	229097	589911	80	2	2.34	2	2	2	4
435	229509	589823	110	3	5.46	3	3	2	6
436	229466	589843	100	3	7.98	4	4	2	8
437	229429	589877	61	2	8.89	4	3	2	6
438	229388	589910	40	1	9.94	4	1	2	2
439	229351	589943	81	2	10.37	4	3	2	6
440	229316	589977	38	1	9.64	4	1	2	2
441	229274	590007	160	4	6.32	4	4	2	8
442	229175	590019	80	2	1.93	1	1	2	2
443	229130	590003	61	2	3.14	2	2	2	4
444	229091	589971	40	1	4.18	3	1	2	2
445	229020	589899	72	2	5.36	3	3	2	6
446	228985	589865	75	2	3.97	2	2	2	4
447	228915	589795	62	2	5.63	3	3	2	6
448	228893	589747	86	2	2.54	2	2	2	4
449	230167	588845	85	2	2.32	2	2	2	4
450	230136	588808	43	1	2.48	2	1	2	2
451	230094	588792	65	2	3.4	2	2	2	4
452	230035	588706	63	2	5.79	3	3	2	6
453	230013	588656	59	2	4.7	3	3	2	6
454	229988	588612	54	2	4.82	3	3	2	6
455	229969	588570	40	1	4.33	3	1	2	2
456	229940	588533	185	4	2.11	2	3	2	6
457	229877	588506	37	1	1.49	1	1	2	2
458	229865	588478	10	1	2.68	2	1	2	2
459	229825	588427	35	1	12.64	4	1	2	2
460	229781	588399	64	2	7.68	4	3	2	6
461	229738	588400	115	3	5.43	3	3	2	6
462	229692	588368	100	3	5.34	3	3	2	6
463	229660	588351	54	2	5.32	3	3	2	6
464	229602	588333	50	2	5.51	3	3	2	6
465	229564	588298	55	2	5.73	3	3	2	6
466	229861	588904	23	1	14.3	4	1	2	2
467	229946	588841	37	1	3.72	2	1	2	2
468	229978	588803	84	2	5.75	3	3	2	6
469	230033	588778	57	2	5.87	3	3	2	6
470	231554	589814	20	1	2.98	2	1	3	3
471	231516	589780	10	1	1.04	1	1	3	3
472	231475	589740	130	3	5.62	3	3	3	9
473	231400	589692	50	2	4.87	3	3	2	6
474	231360	589660	60	2	0.45	1	1	2	2
475	231318	589630	90	2	1.51	1	1	2	2
476	231272	589600	60	2	2.83	2	2	2	4

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
477	231235	589579	70	2	2.81	2	2	2	4
478	231194	589540	69	2	2.7	2	2	2	4
479	231157	589511	95	2	2.68	2	2	2	4
480	231115	589476	105	3	6.72	4	4	2	8
481	231077	589495	85	2	6.33	4	3	2	6
482	231046	589412	150	4	6.33	4	4	2	8
483	231007	589379	174	4	6.73	4	4	2	8
484	230978	589355	192	4	6.65	4	4	2	8
485	230941	589312	75	2	7.05	4	3	2	6
486	230907	589256	148	3	6.96	4	4	2	8
487	230867	589220	65	2	3.23	2	2	2	4
488	230829	589208	60	2	4.95	3	3	2	6
489	230792	589186	73	2	2.85	2	2	2	4
490	231230	589529	80	2	2.89	2	2	2	4
491	231236	589483	108	3	6.6	4	4	2	8
492	231300	589345	37	1	1.38	1	1	2	2
493	231334	589305	60	2	2.63	2	2	2	4
494	231388	589764	60	2	5.98	3	3	2	6
495	231293	589794	103	3	4.42	3	3	2	6
496	231201	589833	59	2	5.44	3	3	2	6
497	231112	589876	130	3	6.72	4	4	2	8
498	231065	589896	159	4	6.72	4	4	2	8
499	231015	589904	183	4	6.77	4	4	2	8
500	230966	589909	144	3	5.65	3	3	2	6
501	231446	589096	40	1	1.47	1	1	2	2
502	231468	589052	49	1	3.55	2	1	2	2
503	231482	589000	72	2	5.33	3	3	2	6
504	231484	588952	28	1	5.31	3	1	2	2
505	231478	588905	87	2	9.45	4	3	2	6
506	231477	588855	110	3	6.68	4	4	2	8
507	231467	588807	155	4	5.39	3	4	2	8
508	231453	588757	85	2	6.03	4	3	2	6
509	231441	588705	79	2	6.77	4	3	2	6
510	231420	588663	70	2	5.72	3	3	2	6
511	231391	588620	52	2	6.28	4	3	2	6
512	231359	588584	35	1	7.25	4	1	2	2
513	231312	588564	40	1	5.75	3	1	2	2
514	232580	589611	42	1	8.64	4	1	3	3
515	232533	589628	20	1	7.66	4	1	3	3
516	232491	589654	45	1	9.13	4	1	3	3
517	232440	589692	70	2	8.14	4	3	3	9
518	232408	589723	50	2	8.21	4	3	3	9
519	232397	589763	20	1	8.95	4	1	3	3
520	232336	589749	70	2	8.48	4	3	3	9
521	232288	589733	91	2	6.87	4	3	3	9
522	232239	589732	42	1	7.73	4	1	3	3
523	232190	589749	32	1	7	4	1	3	3
524	232142	589766	57	2	8.56	4	3	3	9
525	232095	589781	43	1	9.08	4	1	3	3
526	232047	589789	39	1	9.98	4	1	3	3
527	231854	589785	30	1	9.04	4	1	3	3
528	231806	589790	10	1	7.53	4	1	3	3
529	231762	589817	10	1	5.89	3	1	3	3
530	231715	589849	20	1	8.5	4	1	3	3
531	231666	589848	15	1	3.95	2	1	3	3
532	231617	589839	40	1	4.67	3	1	3	3
533	232678	589611	40	1	7.08	4	1	3	3
534	232725	589612	72	2	6.03	4	3	3	9
535	232777	589615	40	1	6.43	4	1	3	3
536	232875	589621	20	1	5.41	3	1	3	3
537	232928	589622	25	1	7.14	4	1	3	3
538	232636	589630	39	1	7.9	4	1	3	3
539	232652	589576	0	1	4.06	3	1	3	3
540	232683	589537	0	1	5.54	3	1	3	3
541	232704	589495	0	1	4.89	3	1	3	3
542	232707	589445	45	1	4.91	3	1	3	3
543	232707	589395	98	2	4.9	3	3	3	9
544	232715	589340	10	1	9.68	4	1	3	3

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
545	232722	589296	15	1	8.81	4	1	3	3
546	232590	588640	30	1	5.56	3	1	3	3
547	232628	588680	42	1	6.42	4	1	2	2
548	232661	588713	100	3	3.82	2	3	2	6
549	232699	588746	27	1	8.06	4	1	2	2
550	228150	587330	50	2	1.8	1	1	2	2
551	228095	587322	55	2	0.82	1	1	2	2
552	228054	587309	100	3	0.26	1	1	2	2
553	228006	587287	65	2	0.52	1	1	2	2
554	227852	587298	50	2	2.02	2	2	2	4
555	227808	587323	60	2	1.31	1	1	2	2
556	227767	587351	295	5	1.3	1	1	2	2
557	227722	587376	209	5	1.65	1	1	2	2
558	227682	587406	120	3	3.43	2	3	2	6
559	227642	587436	81	2	3.2	2	2	2	4
560	227602	587465	86	2	3.16	2	2	2	4
561	227561	587495	65	2	4.95	3	3	2	6
562	227521	587524	45	1	5.41	3	1	2	2
563	227479	587552	73	2	5.96	3	3	2	6
564	227457	587579	74	2	4.72	3	3	2	6
565	227350	587628	103	3	5.46	3	3	2	6
566	227307	587651	72	2	3.85	2	2	2	4
567	227452	587630	101	3	3.28	2	3	2	6
568	227475	587675	61	2	1.21	1	1	2	2
569	228789	587441	35	1	4.08	3	1	2	2
570	228736	587428	30	1	4.06	3	1	2	2
571	228692	587407	33	1	3.11	2	1	2	2
572	228588	587386	110	3	1.04	1	1	2	2
573	228541	587368	160	4	1.84	1	1	2	2
574	228484	587362	170	4	1.09	1	1	2	2
575	228446	587365	78	2	1.88	1	1	2	2
576	228396	587343	100	3	1.61	1	1	2	2
577	228352	587357	55	2	1.66	1	1	2	2
578	228298	587338	205	5	1.67	1	1	2	2
579	229417	588193	55	2	5.54	3	3	2	6
580	229402	588161	74	2	5.32	3	3	2	6
581	229218	587571	100	3	3.18	2	3	2	6
582	229167	587547	110	3	3.14	2	3	2	6
583	229123	587526	75	2	1.89	1	1	2	2
584	229083	587527	173	4	2.03	2	3	2	6
585	229015	587518	75	2	2.47	2	2	2	4
586	228977	587509	65	2	3.97	2	2	2	4
587	228876	587513	84	2	1.26	1	1	2	2
588	228840	587509	170	4	1.33	1	1	2	2
589	229028	588570	5	1	4.69	3	1	3	3
590	229012	588615	20	1	6.91	4	1	3	3
591	229039	588661	40	1	5.41	3	1	2	2
592	229045	588707	40	1	5.46	3	1	2	2
593	229072	588755	46	1	3.96	2	1	2	2
594	229097	588895	43	1	3.89	2	1	2	2
595	229100	588993	79	2	3.11	2	2	2	4
596	229125	589142	19	1	4.05	3	1	2	2
597	229150	589190	80	2	6.61	4	3	2	6
598	229151	589232	44	1	5.62	3	1	2	2
599	229159	589282	40	1	7.19	4	1	2	2
600	229169	589331	95	2	6.95	4	3	2	6
601	229195	589380	81	2	8.59	4	3	2	6
602	229182	589430	95	2	6.76	4	3	2	6
603	229184	589480	102	3	4.45	3	3	2	6
604	229173	589530	104	3	4.39	3	3	2	6
605	229180	589580	110	3	3.55	2	3	2	6
606	229180	589628	210	5	5.11	3	4	2	8
607	229170	589683	230	5	5.05	3	4	2	8
608	229161	589727	203	5	5.09	3	4	2	8
609	229150	589777	164	4	5.05	3	4	2	8
610	229140	589825	105	3	4.89	3	3	2	6
611	229120	589871	15	1	3.71	2	1	2	2
612	229087	589911	87	2	2.67	2	2	2	4

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
613	229519	589823	120	3	5.45	3	3	2	6
614	229456	589847	122	3	8.49	4	4	2	8
615	229436	589877	72	2	8.7	4	3	2	6
616	229378	589910	35	1	10.06	4	1	2	2
617	229343	589943	42	1	10.91	4	1	2	2
618	229300	589977	40	1	10.34	4	1	2	2
619	229262	590006	130	3	5.9	3	3	2	6
620	229170	590020	95	2	2.23	2	2	2	4
621	229121	590003	75	2	2.88	2	2	2	4
622	229080	589972	41	1	5.73	3	1	2	2
623	229010	589898	83	2	5.56	3	3	2	6
624	228975	589866	95	2	5.27	3	3	2	6
625	228905	589794	65	2	6.44	4	3	2	6
626	228885	589748	119	3	2.54	2	3	2	6
627	230176	588839	5	1	2.32	2	1	2	2
628	230136	588820	100	3	2.32	2	3	2	6
629	230103	588786	65	2	3.43	2	2	2	4
630	230034	588712	29	1	5.79	3	1	2	2
631	230009	588666	83	2	4.77	3	3	2	6
632	229989	588623	72	2	5.15	3	3	2	6
633	229975	588583	58	2	4.74	3	3	2	6
634	229936	588522	100	3	2.13	2	3	2	6
635	229897	588496	38	1	4.22	3	1	2	2
636	229876	588463	75	2	3.61	2	2	2	4
637	229825	588432	43	1	15.38	5	1	2	2
638	229783	588416	65	2	7.71	4	3	2	6
639	229743	588392	105	3	5.43	3	3	2	6
640	229687	588383	130	3	3.28	2	3	2	6
641	229666	588344	90	2	5.34	3	3	2	6
642	229607	588324	45	1	5.32	3	1	2	2
643	229568	588294	45	1	5.74	3	1	2	2
644	229867	588914	25	1	6.85	4	1	2	2
645	229936	588840	36	1	5.94	3	1	2	2
646	229976	588812	110	3	5.81	3	3	2	6
647	230017	588780	143	3	5.79	3	3	2	6
648	231485	589748	70	2	7.27	4	3	3	9
649	231407	589693	60	2	4.96	3	3	2	6
650	231368	589658	70	2	1.9	1	1	2	2
651	231324	589629	60	2	1.51	1	1	2	2
652	231281	589602	55	2	2.99	2	2	2	4
653	231244	589581	80	2	2.81	2	2	2	4
654	231193	589539	35	1	2.7	2	1	2	2
655	231150	589514	75	2	2.76	2	2	2	4
656	231111	589481	123	3	6.75	4	4	2	8
657	231071	589453	108	3	6.36	4	4	2	8
658	231048	589404	150	4	6.33	4	4	2	8
659	231007	589375	173	4	6.72	4	4	2	8
660	230979	589346	195	4	6.65	4	4	2	8
661	230939	589306	77	2	7.05	4	3	2	6
662	230907	589265	220	5	7.21	4	5	2	10
663	230862	589233	55	2	4.84	3	3	2	6
664	230822	589213	100	3	4.98	3	3	2	6
665	230791	589198	160	4	3.44	2	3	2	6
666	231239	589529	60	2	2.93	2	2	2	4
667	231237	589482	39	1	6.6	4	1	2	2
668	231303	589350	52	2	1.34	1	1	2	2
669	231328	589305	80	2	2.63	2	2	2	4
670	231385	589757	68	2	5.31	3	3	2	6
671	231286	589786	130	3	4.4	3	3	2	6
672	231196	589822	70	2	5.68	3	3	2	6
673	231102	589869	150	4	6.79	4	4	2	8
674	231058	589888	154	4	6.87	4	4	2	8
675	231015	589916	175	4	6.03	4	4	2	8
676	230962	589918	130	3	5.65	3	3	2	6
677	231442	589090	101	3	1.47	1	1	2	2
678	231463	589051	89	2	2.6	2	2	2	4
679	231489	589001	74	2	5.72	3	3	2	6
680	231480	588951	88	2	5.31	3	3	2	6

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
681	231470	588904	94	2	8.75	4	3	2	6
682	231468	588853	83	2	7.45	4	3	2	6
683	231458	588806	139	3	4.97	3	3	2	6
684	231463	588757	59	2	6.18	4	3	2	6
685	231452	588709	94	2	6.79	4	3	2	6
686	231430	588663	25	1	5.72	3	1	2	2
687	231381	588624	98	2	6.25	4	3	2	6
688	231323	588564	71	2	5.96	3	3	2	6
689	232644	589568	104	3	2.77	2	3	3	9
690	232679	589534	56	2	5.5	3	3	3	9
691	232696	589493	38	1	4.89	3	1	3	3
692	232700	589448	40	1	4.94	3	1	3	3
693	232705	589398	78	2	4.41	3	3	3	9
694	232723	589339	65	2	6.34	4	3	3	9
695	232710	589296	30	1	8.97	4	1	3	3
696	232586	588645	17	1	5.56	3	1	3	3
697	232622	588687	16	1	6.9	4	1	2	2
698	232662	588703	100	3	4.63	3	3	2	6
699	232690	588753	107	3	7.42	4	4	2	8
700	228143	587325	40	1	1.84	1	1	2	2
701	228100	587332	39	1	0.82	1	1	2	2
702	228048	587296	70	2	0.3	1	1	2	2
703	228007	587305	100	3	0.57	1	1	2	2
704	227830	587292	60	2	2.85	2	2	2	4
705	227792	587314	245	5	1.31	1	1	2	2
706	227763	587342	300	5	1.55	1	1	2	2
707	227740	587376	180	4	1.58	1	1	2	2
708	227702	587406	110	3	3.4	2	3	2	6
709	227652	587436	77	2	3.17	2	2	2	4
710	227622	587465	77	2	3.16	2	2	2	4
711	227581	587495	68	2	4.94	3	3	2	6
712	227541	587524	48	1	4.94	3	1	2	2
713	227499	587552	82	2	5.45	3	3	2	6
714	227477	587579	72	2	5.18	3	3	2	6
715	227370	587628	84	2	5.28	3	3	2	6
716	227327	587651	40	1	2.57	2	1	2	2
717	227472	587630	75	2	3.49	2	2	2	4
718	227495	587675	31	1	2.58	2	1	2	2
719	228795	587429	39	1	4.06	3	1	2	2
720	228739	587436	44	1	4.08	3	1	2	2
721	228680	587398	48	1	2.64	2	1	2	2
722	228589	587376	125	3	1	1	1	2	2
723	228543	587380	58	2	1.93	1	1	2	2
724	228483	587350	45	1	1.23	1	1	2	2
725	228441	587348	40	1	1.85	1	1	2	2
726	228392	587334	100	3	1.61	1	1	2	2
727	228342	587343	85	2	1.58	1	1	2	2
728	228298	587327	50	2	1.62	1	1	2	2
729	229422	588202	44	1	5.95	3	1	2	2
730	229403	588152	100	3	4.95	3	3	2	6
731	229216	587562	100	3	3.21	2	3	2	6
732	229169	587540	125	3	2.81	2	3	2	6
733	229118	587539	60	2	1.89	1	1	2	2
734	229077	587518	145	3	2.03	2	3	2	6
735	229023	587533	35	1	1.03	1	1	2	2
736	228981	587500	40	1	4.01	3	1	2	2
737	228878	587524	130	3	1.95	1	1	2	2
738	228847	587499	164	4	1.33	1	1	2	2
739	229082	588490	80	2	2.05	2	2	3	6
740	229112	588455	20	1	2.91	2	1	3	3
741	229144	588401	5	1	1.11	1	1	3	3
742	229189	588371	0	1	11.89	4	1	3	3
743	229220	588331	25	1	8.85	4	1	3	3
744	229259	588292	50	2	10.51	4	3	3	9
745	229291	588259	23	1	11.64	4	1	3	3
746	229340	588174	68	2	3.94	2	2	3	6
747	229040	588570	30	1	5.01	3	1	3	3
748	229030	588615	51	2	6.23	4	3	3	9

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749	229025	588660	56	2	6.34	4	3	2	6
750	229062	588708	48	1	5.35	3	1	2	2
751	229060	588755	71	2	4.3	3	3	2	6
752	229086	588892	41	1	3.86	2	1	2	2
753	229115	588994	83	2	4.59	3	3	2	6
754	229138	589142	32	1	4.07	3	1	2	2
755	229137	589187	50	2	7.36	4	3	2	6
756	229168	589237	82	2	5.56	3	3	2	6
757	229148	589282	57	2	7.35	4	3	2	6
758	229158	589331	89	2	7.54	4	3	2	6
759	229175	589380	93	2	8.58	4	3	2	6
760	229176	589431	52	2	6.76	4	3	2	6
761	229186	589480	102	3	4.89	3	3	2	6
762	229180	589530	121	3	4.35	3	3	2	6
763	229170	589581	104	3	4.54	3	3	2	6
764	229196	589628	180	4	3.33	2	3	2	6
765	229160	589680	210	5	5.1	3	4	2	8
766	229179	589727	200	5	5.05	3	4	2	8
767	229170	589775	140	3	5.1	3	3	2	6
768	229155	589825	172	4	4.86	3	4	2	8
769	229137	589870	32	1	4.89	3	1	2	2
770	229078	589911	71	2	2.31	2	2	2	4
771	229500	589823	60	2	4.19	3	3	2	6
772	229478	589847	94	2	3.67	2	2	2	4
773	229414	589877	32	1	9.21	4	1	2	2
774	229396	589910	48	1	9.63	4	1	2	2
775	229360	589943	39	1	9.94	4	1	2	2
776	229321	589977	28	1	11.39	4	1	2	2
777	229284	590006	120	3	7.29	4	4	2	8
778	229183	590021	78	2	1.31	1	1	2	2
779	229180	590003	73	2	3.21	2	2	2	4
780	229071	589972	52	2	6.26	4	3	2	6
781	229030	589899	68	2	5.09	3	3	2	6
782	228995	589863	90	2	3.92	2	2	2	4
783	228925	589795	78	2	5.93	3	3	2	6
784	228905	589748	92	2	3.38	2	2	2	4
785	230164	588853	30	1	2.32	2	1	2	2
786	230129	588830	105	3	2.35	2	3	2	6
787	230095	588795	85	2	3.4	2	2	2	4
788	230031	588716	65	2	5.75	3	3	2	6
789	230003	588675	45	1	4.97	3	1	2	2
790	229988	588629	148	3	5.01	3	3	2	6
791	229974	588591	65	2	4.24	3	3	2	6
792	229944	588539	165	4	2.1	2	3	2	6
793	229866	588516	5	1	4.46	3	1	2	2
794	229883	588454	26	1	4.58	3	1	2	2
795	229822	588455	15	1	19.71	5	1	2	2
796	229784	588422	45	1	7.71	4	1	2	2
797	229739	588376	55	2	5.43	3	3	2	6
798	229700	588364	93	2	5.08	3	3	2	6
799	229657	588362	35	1	5.31	3	1	2	2
800	229601	588312	70	2	5.32	3	3	2	6
801	229560	588306	48	1	5.71	3	1	2	2
802	229853	588907	20	1	4.67	3	1	2	2
803	229926	588835	55	2	8.17	4	3	2	6
804	229975	588828	45	1	6.11	4	1	2	2
805	230004	588779	70	2	5.77	3	3	2	6
806	231556	589808	5	1	6.81	4	1	3	3
807	231462	589748	175	4	9.47	4	4	3	12
808	231391	589696	20	1	5.1	3	1	2	2
809	231352	589659	80	2	0.24	1	1	2	2
810	231310	589629	70	2	1.51	1	1	2	2
811	231265	589600	40	1	2.81	2	1	2	2
812	231224	589575	60	2	2.85	2	2	2	4
813	231189	589542	94	2	2.72	2	2	2	4
814	231157	589506	67	2	2.83	2	2	2	4
815	231115	589482	115	3	6.73	4	4	2	8
816	231080	589441	112	3	6.45	4	4	2	8

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817	231041	589414	146	3	6.36	4	4	2	8
818	231001	589383	150	4	6.75	4	4	2	8
819	230979	589337	170	4	6.65	4	4	2	8
820	230940	589291	120	3	7.05	4	4	2	8
821	230905	589269	185	4	7.26	4	4	2	8
822	230858	589247	100	3	4.92	3	3	2	6
823	230832	589198	52	2	5.02	3	3	2	6
824	230790	589209	244	5	5.32	3	4	2	8
825	231219	589529	80	2	2.7	2	2	2	4
826	231233	589485	130	3	6.58	4	4	2	8
827	231313	589341	38	1	1.34	1	1	2	2
828	231341	589303	40	1	2.65	2	1	2	2
829	231394	589774	67	2	5.36	3	3	2	6
830	231300	589800	75	2	4.44	3	3	2	6
831	231204	589842	80	2	4.2	3	3	2	6
832	231116	589883	90	2	6.73	4	3	2	6
833	231071	589903	165	4	6.73	4	4	2	8
834	231015	589897	192	4	6.85	4	4	2	8
835	230967	589901	129	3	5.65	3	3	2	6
836	231448	589094	72	2	1.46	1	1	2	2
837	231455	589050	103	3	2.6	2	3	2	6
838	231475	589002	79	2	5.34	3	3	2	6
839	231490	588951	65	2	5.84	3	3	2	6
840	231484	588906	78	2	9.28	4	3	2	6
841	231488	588853	148	3	6.43	4	4	2	8
842	231477	588807	152	4	5.56	3	4	2	8
843	231444	588756	54	2	6.07	4	3	2	6
844	231430	588709	75	2	5.32	3	3	2	6
845	231411	588663	71	2	5.72	3	3	2	6
846	231370	588624	75	2	6.31	4	3	2	6
847	231302	588564	40	1	1.71	1	1	2	2
848	232580	589630	5	1	7.14	4	1	3	3
849	232533	589641	10	1	6.02	4	1	3	3
850	232496	589656	30	1	9.12	4	1	3	3
851	232456	589692	15	1	9.41	4	1	3	3
852	232425	589722	20	1	9.8	4	1	3	3
853	232387	589763	5	1	8.85	4	1	3	3
854	232328	589751	10	1	7.97	4	1	3	3
855	232288	589740	80	2	7.72	4	3	3	9
856	232239	589748	22	1	11.48	4	1	3	3
857	232190	589752	45	1	8.7	4	1	3	3
858	232143	589782	25	1	8.58	4	1	3	3
859	232095	589799	45	1	8.05	4	1	3	3
860	232034	589786	55	2	8.97	4	3	3	9
861	231854	589770	80	2	5.44	3	3	3	9
862	231806	589805	20	1	6.71	4	1	3	3
863	231762	589808	20	1	5.67	3	1	3	3
864	231715	589825	70	2	5.21	3	3	3	9
865	231666	589832	30	1	3.23	2	1	3	3
866	231617	589829	35	1	4.56	3	1	3	3
867	232678	589630	25	1	8.87	4	1	3	3
868	232724	589633	25	1	6.03	4	1	3	3
869	232772	589634	55	2	6.43	4	3	3	9
870	232878	589642	15	1	6.09	4	1	3	3
871	232933	589637	10	1	8.37	4	1	3	3
872	232665	589569	25	1	3.78	2	1	3	3
873	232693	589536	60	2	5.5	3	3	3	9
874	232708	589483	15	1	4.89	3	1	3	3
875	232690	589538	22	1	5.5	3	1	3	3
876	232695	589402	106	3	4.37	3	3	3	9
877	232701	589338	20	1	12.62	4	1	3	3
878	232732	589295	25	1	10.41	4	1	3	3
879	232592	588634	73	2	5.54	3	3	3	9
880	232632	588671	32	1	6.42	4	1	2	2
881	232658	588721	170	4	2.82	2	3	2	6
882	232698	588735	28	1	4.86	3	1	2	2
883	233654	590376	8	1	11.75	4	1	1	1
884	233569	590329	22	1	10.87	4	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
885	233452	590223	62	2	9.26	4	3	1	3
886	233238	589243	148	3	4.73	3	3	1	3
887	233191	589779	100	3	5.34	3	3	1	3
888	233140	589138	95	2	1.76	1	1	1	1
889	233124	589834	108	3	6.36	4	4	1	4
890	233039	589883	50	2	9.76	4	3	1	3
891	233042	589041	43	1	3.22	2	1	1	1
892	233040	589142	126	3	1.94	1	1	1	1
893	233040	590279	117	3	10.52	4	4	1	4
894	233002	589800	80	2	4.25	3	3	2	6
895	232947	589935	63	2	6.51	4	3	2	6
896	232936	589712	40	1	3.62	2	1	2	2
897	232940	588942	68	2	3.32	2	2	1	2
898	232939	589041	64	2	8.85	4	3	1	3
899	232939	589141	70	2	2.82	2	2	1	2
900	232932	590182	27	1	11.47	4	1	1	1
901	232921	590017	44	1	11.29	4	1	1	1
902	232884	590092	26	1	5.51	3	1	1	1
903	232819	589964	67	2	7.13	4	3	1	3
904	232898	589746	36	1	8.68	4	1	1	1
905	232838	588841	30	1	6.43	4	1	2	2
906	232840	588941	40	1	6.9	4	1	1	1
907	232840	589043	35	1	4.57	3	1	1	1
908	232838	589140	108	3	5.69	3	3	2	6
909	232789	590191	10	1	7.91	4	1	1	1
910	232757	589967	45	1	7.17	4	1	1	1
911	232768	590096	73	2	7.25	4	3	1	3
912	232749	590002	25	1	2.25	2	1	1	1
913	232738	588742	63	2	4.45	3	3	2	6
914	232739	588839	27	1	2.8	2	1	2	2
915	232740	588939	132	3	4.35	3	3	1	3
916	232731	589047	83	2	5.43	3	3	1	3
917	232741	589139	185	4	8.21	4	4	3	12
918	232735	589236	15	1	8.78	4	1	3	3
919	232637	589856	0	1	7.62	4	1	1	1
920	232664	590013	64	2	7.37	4	3	1	3
921	232647	590346	58	2	8.84	4	3	2	6
922	232641	588741	98	2	2.96	2	2	2	4
923	232640	588840	86	2	7.92	4	3	3	9
924	232634	588939	5	1	6.04	4	1	3	3
925	232635	589040	0	1	6.63	4	1	3	3
926	232647	589385	48	1	5.58	3	1	3	3
927	232794	589857	79	2	6.81	4	3	1	3
928	232606	590254	13	1	11.29	4	1	2	2
929	232599	589794	0	1	8.37	4	1	1	1
930	232587	590072	18	1	8.08	4	1	2	2
931	232572	589699	0	1	3.41	2	1	1	1
932	232550	588717	28	1	11.35	4	1	3	3
933	232544	589412	12	1	9.18	4	1	1	1
934	232534	590141	7	1	8.94	4	1	2	2
935	232540	590338	43	1	12.56	4	1	2	2
936	232397	589042	17	1	9.31	4	1	2	2
937	232425	589140	19	1	1.69	1	1	2	2
938	232450	589241	18	1	3.06	2	1	2	2
939	232452	589843	24	1	5.5	3	1	2	2
940	232457	589942	48	1	5.44	3	1	2	2
941	232403	589343	42	1	2.92	2	1	2	2
942	232385	589556	35	1	10.61	4	1	2	2
943	232393	589655	46	1	16.71	5	1	2	2
944	232319	588941	27	1	1.54	1	1	2	2
945	232342	589838	80	2	10.01	4	3	2	6
946	232341	590241	33	1	14.04	4	1	1	1
947	232342	590339	27	1	13.73	4	1	1	1
948	232400	589924	77	2	21.09	5	4	2	8
949	232293	589430	38	1	4.01	3	1	1	1
950	232228	588840	29	1	2.24	2	1	2	2
951	232243	590160	35	1	13.31	4	1	1	1
952	232240	590241	38	1	15.43	5	1	1	1

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
953	232195	589425	42	1	4.99	3	1	2	2
954	232139	590040	20	1	12.56	4	1	1	1
955	232140	590143	60	2	11.9	4	3	1	3
956	232097	589436	83	2	4	3	3	1	3
957	232023	589160	31	1	5.71	3	1	2	2
958	232039	590140	25	1	17.41	5	1	1	1
959	232003	589424	28	1	5.17	3	1	2	2
960	231974	589935	15	1	9.43	4	1	1	1
961	231942	589972	0	1	10.26	4	1	1	1
962	231931	589155	180	4	4.39	3	4	1	4
963	231940	590140	20	1	11.04	4	1	1	1
964	231924	589388	38	1	3.49	2	1	2	2
965	231852	588945	31	1	13.4	4	1	2	2
966	231837	589154	38	1	9.28	4	1	1	1
967	231838	589346	108	3	0.97	1	1	1	1
968	231841	590037	0	1	10.52	4	1	1	1
969	231835	590146	25	1	14.77	4	1	1	1
970	231776	589988	5	1	10.36	4	1	1	1
971	231742	589150	34	1	4.57	3	1	1	1
972	231732	590171	14	1	11.03	4	1	1	1
973	231743	590247	32	1	10.44	4	1	1	1
974	231699	588838	146	3	3.82	2	3	1	3
975	231669	589238	65	2	8.66	4	3	2	6
976	231654	589441	32	1	4.6	3	1	2	2
977	231628	589644	68	2	7.46	4	3	2	6
978	231617	589743	47	1	5.15	3	1	1	1
979	231637	589937	27	1	5.13	3	1	1	1
980	231639	590037	26	1	7.14	4	1	1	1
981	231639	590236	68	2	13.15	4	3	1	3
982	231608	588774	167	4	3.42	2	3	1	3
983	231538	589739	81	2	7.54	4	3	3	9
984	231540	589840	43	1	7.96	4	1	3	3
985	231537	589943	168	4	1.07	1	1	1	1
986	231543	590040	40	1	10.15	4	1	1	1
987	231535	590138	28	1	12.16	4	1	1	1
988	231539	590240	10	1	12.14	4	1	1	1
989	231533	588718	79	2	3.85	2	2	1	2
990	231463	588634	48	1	5.75	3	1	2	2
991	231439	588547	52	2	5.36	3	3	1	3
992	231362	588667	45	1	6.28	4	1	2	2
993	231332	588507	82	2	2.97	2	2	2	4
994	231325	588764	84	2	4.38	3	3	1	3
995	231285	588861	51	2	8.29	4	3	1	3
996	231248	588953	136	3	1.17	1	1	1	1
997	231245	588446	121	3	4.23	3	3	1	3
998	231208	589044	272	5	0.54	1	1	1	1
999	231168	589135	54	2	2.44	2	2	2	4
1000	231155	589449	19	1	5.05	3	1	2	2
1001	231120	588502	115	3	5.28	3	3	2	6
1002	231076	588596	66	2	3.11	2	2	1	2
1003	231037	588687	105	3	4.47	3	3	1	3
1004	231003	588779	78	2	4.34	3	3	1	3
1005	230960	588874	72	2	2.74	2	2	2	4
1006	230912	588962	26	1	7.83	4	1	1	1
1007	230740	588556	43	1	4.6	3	1	2	2
1008	230712	588650	115	3	6.03	4	4	1	4
1009	230675	588738	32	1	7.58	4	1	1	1
1010	228828	587736	158	4	0.96	1	1	2	2
1011	228748	587626	39	1	2.57	2	1	2	2
1012	228695	587552	95	2	0.89	1	1	2	2
1013	228633	587482	53	2	1.23	1	1	2	2
1014	228635	587380	53	2	3.08	2	2	2	4
1015	228628	587284	165	4	2.46	2	3	2	6
1016	228577	587147	55	2	7.42	4	3	1	3
1017	228569	587204	83	2	5.73	3	3	1	3
1018	228444	587127	63	2	7.22	4	3	1	3
1019	228095	588316	208	5	1.65	1	1	1	1
1020	228003	588285	90	2	1.82	1	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1021	227976	588178	58	2	2.84	2	2	2	4
1022	227938	588343	210	5	0.34	1	1	2	2
1023	227942	588097	50	2	2.35	2	2	2	4
1024	227872	588032	20	1	2.29	2	1	2	2
1025	227719	588160	56	2	0.47	1	1	1	1
1026	227638	588243	111	3	1.42	1	1	1	1
1027	227539	588244	214	5	0.57	1	1	1	1
1028	227060	588070	20	1	4.11	3	1	2	2
1029	226963	588084	14	1	11.52	4	1	2	2
1030	226892	588150	10	1	2.38	2	1	2	2
1031	226802	588207	84	2	7.74	4	3	2	6
1032	226701	588201	17	1	16.24	5	1	2	2
1033	231672	580152	300	5	0.96	1	1	2	2
1034	231685	580081	35	1	0.93	1	1	2	2
1035	231725	580051	35	1	0.99	1	1	1	1
1036	231561	580096	15	1	3.37	2	1	3	3
1037	231705	579991	25	1	4.29	3	1	1	1
1038	231652	580100	10	1	0.91	1	1	2	2
1039	231762	579979	77	2	3.28	2	2	1	2
1040	231757	579884	27	1	4.6	3	1	1	1
1041	231686	580171	180	4	0.96	1	1	2	2
1042	231746	580138	280	5	1.41	1	1	1	1
1043	227730	587889	103	3	2.39	2	3	2	6
1044	227674	587830	52	2	2.69	2	2	2	4
1045	227509	587689	45	1	2.63	2	1	2	2
1046	227419	587623	31	1	2.37	2	1	2	2
1047	227300	587534	22	1	4.59	3	1	1	1
1048	227323	587412	35	1	8.52	4	1	1	1
1049	227421	587389	40	1	6.82	4	1	1	1
1050	227472	587459	35	1	5.08	3	1	2	2
1051	227553	587549	70	2	4.94	3	3	2	6
1052	227604	587412	78	2	3.89	2	2	2	4
1053	229270	587448	14	1	1.5	1	1	3	3
1054	229274	587570	39	1	3.33	2	1	3	3
1055	229303	587703	65	2	3.12	2	2	3	6
1056	229333	587696	45	1	3.6	2	1	3	3
1057	229324	587885	15	1	3.6	2	1	3	3
1058	229372	588068	30	1	4.08	3	1	3	3
1059	229402	588075	55	2	5.28	3	3	3	9
1060	229296	588235	53	2	4.85	3	3	3	9
1061	229179	588248	18	1	5.64	3	1	2	2
1062	229206	588373	45	1	15.61	5	1	3	3
1063	229032	588533	10	1	3.72	2	1	3	3
1064	229064	588542	8	1	4.33	3	1	3	3
1065	228945	588616	30	1	8.39	4	1	3	3
1066	228958	588640	35	1	6.89	4	1	3	3
1067	228920	588746	85	2	1.4	1	1	2	2
1068	228837	588674	10	1	7.53	4	1	3	3
1069	228848	588695	15	1	7.67	4	1	3	3
1070	228752	588761	70	2	7.33	4	3	3	9
1071	228773	588773	5	1	4.53	3	1	3	3
1072	228681	588848	110	3	5.87	3	3	3	9
1073	228697	588857	45	1	5.92	3	1	3	3
1074	228611	588929	55	2	6.13	4	3	3	9
1075	228633	588950	60	2	2.77	2	2	3	6
1076	232533	588757	28	1	16.09	5	1	3	3
1077	232537	588809	27	1	0.16	1	1	3	3
1078	232513	588683	45	1	9.71	4	1	2	2
1079	232396	589434	32	1	11.62	4	1	2	2
1080	232457	589451	55	2	6.78	4	3	1	3
1081	226899	588160	55	2	6.66	4	3	2	6
1082	231772	580189	95	2	1.02	1	1	1	1
1083	231693	580202	65	2	0.96	1	1	1	1
1084	231771	580155	200	5	1.21	1	1	1	1
1085	231737	580192	45	1	1.25	1	1	1	1
1086	228194	588925	43	1	9.53	4	1	2	2
1087	228132	588939	40	1	6.2	4	1	2	2
1088	228038	588934	88	2	4.89	3	3	2	6

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1089	227915	588886	90	2	2.38	2	2	1	2
1090	227618	588647	51	2	3.14	2	2	1	2
1091	227712	588716	77	2	3.37	2	2	1	2
1092	227811	588800	50	2	5.25	3	3	1	3
1093	231657	579898	45	1	6.05	4	1	2	2
1094	231661	579989	46	1	2.86	2	1	1	1
1095	231603	579992	25	1	3.33	2	1	3	3
1096	231648	580041	61	2	2.88	2	2	2	4
1097	231586	580073	26	1	4.18	3	1	3	3
1098	233740	590640	51	2	13.08	4	3	1	3
1099	233739	590742	38	1	13.76	4	1	1	1
1100	233740	590843	50	2	15.37	5	4	1	4
1101	233640	590540	67	2	17.14	5	4	1	4
1102	233537	590640	38	1	13.17	4	1	1	1
1103	233642	590739	40	1	13.37	4	1	1	1
1104	233541	590545	42	1	15.72	5	1	1	1
1105	233510	589980	95	2	6.91	4	3	1	3
1106	233372	590545	70	2	12.2	4	3	2	6
1107	233458	590464	15	1	11.04	4	1	2	2
1108	233439	590564	19	1	11.28	4	1	1	1
1109	233413	589991	110	3	11.12	4	4	1	4
1110	233317	590038	8	1	8.19	4	1	1	1
1111	233270	590096	5	1	16.55	5	1	1	1
1112	233238	589347	88	2	0.35	1	1	1	1
1113	233214	589480	37	1	1.76	1	1	1	1
1114	233240	589543	146	3	1.41	1	1	1	1
1115	233147	589660	65	2	6.55	4	3	3	9
1116	233240	590440	16	1	15.21	5	1	1	1
1117	233242	590544	24	1	17.92	5	1	1	1
1118	232254	590195	22	1	15.5	5	1	1	1
1119	233326	589994	55	2	11.13	4	3	1	3
1120	233137	589243	54	2	1.48	1	1	1	1
1121	233170	589404	35	1	6.06	4	1	1	1
1122	233144	589453	142	3	3.59	2	3	1	3
1123	233142	589538	172	4	1.95	1	1	1	1
1124	233231	589641	100	3	2.62	2	3	1	3
1125	233232	590282	43	1	7.92	4	1	1	1
1126	233143	590241	49	1	9.92	4	1	1	1
1127	233141	590342	32	1	9.84	4	1	1	1
1128	233141	590426	39	1	10.57	4	1	1	1
1129	233046	589224	61	2	3.53	2	2	1	2
1130	233025	590340	146	3	17.11	5	4	1	4
1131	233042	590344	16	1	13.71	4	1	1	1
1132	233043	590423	52	2	13.81	4	3	1	3
1133	233038	590544	28	1	16.27	5	1	1	1
1134	232940	589246	50	2	1.87	1	1	1	1
1135	232944	589341	20	1	5.43	3	1	1	1
1136	232937	589540	178	4	3.14	2	3	2	6
1137	232945	590418	30	1	17.04	5	1	1	1
1138	232939	590542	25	1	16.93	5	1	1	1
1139	232842	589238	45	1	11.48	4	1	2	2
1140	232844	589339	175	4	4.59	3	4	1	4
1141	232834	589466	61	2	7.76	4	3	2	6
1142	232840	589538	140	3	9.2	4	4	2	8
1143	232841	590405	30	1	16.86	5	1	1	1
1144	232838	590545	12	1	19.21	5	1	1	1
1145	232743	589340	15	1	4.47	3	1	2	2
1146	232747	589434	99	2	5.34	3	3	2	6
1147	232741	589538	39	1	5.23	3	1	3	3
1148	232744	590329	15	1	8.3	4	1	1	1
1149	232739	590544	5	1	18.25	5	1	2	2
1150	232639	590545	2	1	14.66	4	1	2	2
1151	232544	590441	5	1	11.13	4	1	1	1
1152	232539	590546	67	2	15.5	5	4	1	4
1153	232447	590438	25	1	11.29	4	1	2	2
1154	230998	589130	66	2	11.26	4	3	1	3
1155	230904	589198	51	2	3.35	2	2	2	4
1156	230883	589290	164	4	6.11	4	4	2	8

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1157	230853	589016	36	1	7.57	4	1	1	1
1158	230862	589397	69	2	6.47	4	3	1	3
1159	230795	588959	30	1	10.52	4	1	1	1
1160	230711	588888	26	1	6.56	4	1	1	1
1161	230644	588837	41	1	6.15	4	1	1	1
1162	230563	588751	39	1	5.99	3	1	1	1
1163	230525	589384	90	2	5.08	3	3	1	3
1164	230478	588728	21	1	10.15	4	1	1	1
1165	230496	589308	29	1	6.31	4	1	1	1
1166	230455	589199	41	1	6.43	4	1	1	1
1167	230419	589102	100	3	3.87	2	3	2	6
1168	230384	588742	25	1	10.1	4	1	1	1
1169	230289	588738	20	1	9.1	4	1	1	1
1170	230238	588956	34	1	5.33	3	1	1	1
1171	230222	588854	38	1	3.86	2	1	2	2
1172	230191	588798	20	1	2.67	2	1	2	2
1173	230145	588713	44	1	3.93	2	1	2	2
1174	230114	588477	124	3	5.94	3	3	2	6
1175	230078	588578	78	2	5.01	3	3	1	3
1176	230053	588751	67	2	5.75	3	3	2	6
1177	230002	588529	42	1	7.6	4	1	1	1
1178	230032	589367	137	3	2.43	2	3	1	3
1179	230076	589440	57	2	3.34	2	2	1	2
1180	230023	588460	45	1	2.27	2	1	1	1
1181	229987	589281	46	1	3.52	2	1	1	1
1182	230032	589372	44	1	3.02	2	1	1	1
1183	229916	588249	43	1	9.03	4	1	2	2
1184	229963	588788	45	1	3.4	2	1	2	2
1185	229938	588436	27	1	6.97	4	1	2	2
1186	229918	588345	0	1	1.34	1	1	2	2
1187	229912	588936	10	1	11.69	4	1	2	2
1188	229922	588936	32	1	10.94	4	1	2	2
1189	229917	588936	0	1	13.11	4	1	2	2
1190	229904	588429	35	1	1.22	1	1	2	2
1191	229888	588852	5	1	11.55	4	1	2	2
1192	229893	588852	5	1	9.6	4	1	2	2
1193	229867	588822	0	1	2.19	2	1	2	2
1194	229898	588852	33	1	7.71	4	1	2	2
1195	229849	589016	102	3	2.63	2	3	2	6
1196	229861	589003	0	1	6.11	4	1	2	2
1197	229859	589016	75	2	4.57	3	3	2	6
1198	229859	588556	0	1	3.46	2	1	2	2
1199	229846	588739	30	1	8.25	4	1	2	2
1200	229795	588167	0	1	6.64	4	1	1	1
1201	229845	588663	32	1	4.19	3	1	2	2
1202	229803	589294	0	1	10.04	4	1	2	2
1203	229800	589302	46	1	10.68	4	1	2	2
1204	229810	589302	36	1	10.77	4	1	2	2
1205	229765	588784	32	1	6.04	4	1	1	1
1206	229750	588269	52	2	5.15	3	3	1	3
1207	229773	589222	10	1	4.36	3	1	2	2
1208	229774	589210	30	1	4.79	3	1	2	2
1209	229782	589222	80	2	8.1	4	3	2	6
1210	229787	588584	10	1	8.61	4	1	2	2
1211	229711	588342	85	2	4.57	3	3	2	6
1212	229713	588721	173	4	4.01	3	4	1	4
1213	229701	587881	22	1	2.19	2	1	1	1
1214	229670	588418	54	2	3.18	2	2	1	2
1215	229687	588572	0	1	11	4	1	2	2
1216	229664	587862	15	1	5	3	1	1	1
1217	229670	589087	70	2	3.13	2	2	2	4
1218	229670	589077	98	2	3.15	2	2	2	4
1219	229625	588484	58	2	2.97	2	2	1	2
1220	229624	588639	0	1	2.63	2	1	2	2
1221	229599	588517	118	3	5.44	3	3	1	3
1222	229598	588742	25	1	18.11	5	1	2	2
1223	229584	589046	156	4	3.58	2	3	1	3
1224	229584	589036	87	2	3.62	2	2	1	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1225	229551	588583	167	4	3.84	2	3	1	3
1226	229520	588455	174	4	5.44	3	4	1	4
1227	229505	587864	21	1	5.24	3	1	1	1
1228	229492	588839	168	4	1.06	1	1	2	2
1229	229506	588818	43	1	1.32	1	1	2	2
1230	229496	588656	285	5	2.98	2	4	1	4
1231	229497	588938	98	2	2.5	2	2	2	4
1232	229458	589024	79	2	7.36	4	3	2	6
1233	229468	589024	24	1	2.42	2	1	2	2
1234	229432	587556	22	1	2.68	2	1	1	1
1235	229433	589136	35	1	16.38	5	1	2	2
1236	229438	589136	67	2	15.58	5	4	2	8
1237	229443	589136	64	2	13.06	4	3	2	6
1238	229406	587864	18	1	6.23	4	1	1	1
1239	229377	587640	19	1	3.52	2	1	1	1
1240	229370	588300	38	1	4.11	3	1	1	1
1241	229363	588696	73	2	11.5	4	3	1	3
1242	229338	589276	45	1	10.61	4	1	2	2
1243	229343	589276	143	3	10.64	4	4	2	8
1244	229348	589276	161	4	9.76	4	4	2	8
1245	229346	589341	57	2	7.48	4	3	2	6
1246	229351	589341	75	2	6.93	4	3	2	6
1247	229356	589341	76	2	6.5	4	3	2	6
1248	229307	589442	39	1	10.35	4	1	2	2
1249	229312	589442	43	1	8.97	4	1	2	2
1250	229317	589442	61	2	8.2	4	3	2	6
1251	229276	589542	15	1	12.92	4	1	2	2
1252	229281	589542	54	2	12.1	4	3	2	6
1253	229286	589542	77	2	11.32	4	3	2	6
1254	229262	589637	10	1	11.15	4	1	2	2
1255	229267	589637	54	2	11.07	4	3	2	6
1256	229272	589637	42	1	10.93	4	1	2	2
1257	229250	589741	205	5	4.15	3	4	2	8
1258	229255	589741	173	4	2.53	2	3	2	6
1259	229260	589741	119	3	3.49	2	3	2	6
1260	229235	589845	129	3	4.08	3	3	2	6
1261	229240	589845	232	5	3	2	4	2	8
1262	229245	589845	45	1	2.61	2	1	2	2
1263	229225	589939	60	2	7.19	4	3	2	6
1264	229230	589939	63	2	7.17	4	3	2	6
1265	229235	589939	87	2	7.15	4	3	2	6
1266	229236	590036	55	2	7.66	4	3	2	6
1267	229219	587960	48	1	4.39	3	1	1	1
1268	229172	587800	16	1	5.52	3	1	2	2
1269	229166	588743	21	1	4.02	3	1	1	1
1270	229157	587413	12	1	1.76	1	1	2	2
1271	229147	588030	50	2	5.29	3	3	1	3
1272	229146	588548	19	1	1.74	1	1	1	1
1273	229142	589941	89	2	3.56	2	2	2	4
1274	229136	590047	80	2	4.1	3	3	2	6
1275	229108	588824	18	1	3.95	2	1	2	2
1276	229096	587736	11	1	1.78	1	1	2	2
1277	229076	588957	17	1	1.52	1	1	2	2
1278	229076	588100	48	1	5.29	3	1	1	1
1279	229064	587379	17	1	3.29	2	1	1	1
1280	229040	589938	78	2	7.59	4	3	2	6
1281	229039	590038	111	3	8.01	4	4	1	4
1282	229034	589844	112	3	2.14	2	3	2	6
1283	229023	588877	15	1	3	2	1	1	1
1284	229004	587696	11	1	2.52	2	1	1	1
1285	228999	588163	54	2	6.28	4	3	1	3
1286	228989	587287	15	1	5.68	3	1	2	2
1287	228946	587463	22	1	2.13	2	1	2	2
1288	228981	589540	119	3	4.05	3	3	1	3
1289	228939	587374	18	1	4.68	3	1	2	2
1290	228938	587637	64	2	4.53	3	3	2	6
1291	228935	589845	55	2	3.94	2	2	2	4
1292	229833	589780	84	2	6.24	4	3	2	6

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1293	228928	587555	23	1	2.06	2	1	2	2
1294	228913	588214	49	1	6.21	4	1	1	1
1295	228910	587664	17	1	5.73	3	1	2	2
1296	228901	587634	19	1	1.87	1	1	2	2
1297	228848	588595	16	1	7.91	4	1	1	1
1298	228844	589542	83	2	3.5	2	2	2	4
1299	228839	589438	71	2	6.15	4	3	1	3
1300	228840	589644	153	4	4.06	3	4	2	8
1301	228835	589746	105	3	8	4	4	2	8
1302	228820	587681	18	1	1.06	1	1	2	2
1303	228814	588505	17	1	6.02	4	1	1	1
1304	228813	588405	10	1	11.99	4	1	1	1
1305	228768	588325	12	1	5.89	3	1	1	1
1306	228754	587841	17	1	0.7	1	1	2	2
1307	228742	589643	91	2	9.06	4	3	1	3
1308	228734	589539	84	2	5.59	3	3	1	3
1309	228737	588025	15	1	2.25	2	1	2	2
1310	228721	587926	58	2	1.8	1	1	2	2
1311	228708	588234	45	1	4.73	3	1	1	1
1312	228685	588367	16	1	7.1	4	1	1	1
1313	228671	587831	67	2	5.05	3	3	1	3
1314	228639	588180	0	1	5.24	3	1	2	2
1315	228636	589642	32	1	17.66	5	1	1	1
1316	228638	589449	147	3	5.92	3	3	1	3
1317	228638	588163	10	1	4.36	3	1	2	2
1318	228632	589545	52	2	5.06	3	3	1	3
1319	228631	588451	18	1	7.12	4	1	2	2
1320	228582	587786	80	2	5.36	3	3	1	3
1321	228579	588536	22	1	5.68	3	1	2	2
1322	228561	587487	45	1	0.98	1	1	2	2
1323	228546	588123	15	1	5.33	3	1	1	1
1324	228539	588186	15	1	6.83	4	1	2	2
1325	228531	588228	6	1	4.95	3	1	2	2
1326	228530	588623	19	1	5.83	3	1	1	1
1327	228480	587442	30	1	2.08	2	1	2	2
1328	228478	588708	10	1	5.52	3	1	1	1
1329	228463	588302	26	1	5.52	3	1	1	1
1330	228455	588083	17	1	3.74	2	1	1	1
1331	228443	588214	27	1	6.05	4	1	2	2
1332	228422	588791	34	1	3.78	2	1	1	1
1333	228404	588382	39	1	3.43	2	1	1	1
1334	228396	587714	63	2	3.95	2	2	1	2
1335	228393	587412	50	2	1.83	1	1	2	2
1336	228364	588695	19	1	7.46	4	1	1	1
1337	228363	588043	30	1	3.47	2	1	1	1
1338	228363	588265	33	1	3.17	2	1	2	2
1339	228362	588871	24	1	1.96	1	1	1	1
1340	228340	588459	56	2	2.33	2	2	1	2
1341	228336	588315	40	1	2.01	2	1	2	2
1342	228316	588608	17	1	2.71	2	1	1	1
1343	228302	588345	45	1	0.12	1	1	2	2
1344	228297	587697	50	2	7.14	4	3	1	3
1345	228293	587414	60	2	1.52	1	1	2	2
1346	228275	588560	29	1	2.13	2	1	1	1
1347	228271	588003	43	1	4	3	1	1	1
1348	228241	588404	50	2	3.25	2	2	2	4
1349	228211	588637	14	1	9.06	4	1	2	2
1350	228195	587540	89	2	2.91	2	2	1	2
1351	228194	587425	5	1	1.88	1	1	2	2
1352	228191	587640	161	4	2.88	2	3	1	3
1353	228185	587763	148	3	1.98	1	1	1	1
1354	228183	587845	110	3	3.63	2	3	1	3
1355	228177	587968	88	2	2.19	2	2	1	2
1356	228175	588039	24	1	2.51	2	1	1	1
1357	228170	588737	10	1	1.28	1	1	2	2
1358	228169	588139	19	1	2.8	2	1	1	1
1359	228163	588239	22	1	1.27	1	1	1	1
1360	228158	588638	21	1	8.44	4	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1361	228157	588339	51	2	1.64	1	1	1	1
1362	228151	588439	45	1	1.2	1	1	2	2
1363	228128	587854	114	3	3.41	2	3	1	3
1364	228141	587698	151	4	2.89	2	3	1	3
1365	228146	588538	59	2	7.92	4	3	2	6
1366	228085	587426	149	3	0.58	1	1	2	2
1367	228128	587644	275	5	2.17	2	4	1	4
1368	228096	587779	153	4	3.89	2	3	1	3
1369	228073	588377	19	1	1.72	1	1	1	1
1370	228077	587953	173	4	2.72	2	3	1	3
1371	228011	587411	259	5	1.52	1	1	2	2
1372	228035	587830	151	4	2.91	2	3	1	3
1373	228049	587629	227	5	2.58	2	4	1	4
1374	228038	588532	61	2	4.36	3	3	2	6
1375	228020	587510	223	5	2.03	2	4	1	4
1376	227998	588439	40	1	1.36	1	1	2	2
1377	227994	587638	186	4	2.51	2	3	1	3
1378	227996	587752	231	5	3.22	2	4	1	4
1379	227977	587991	108	3	2.03	2	3	1	3
1380	227972	587556	77	2	2.07	2	2	1	2
1381	227971	587371	260	5	1.14	1	1	2	2
1382	227947	587806	231	5	3.15	2	4	1	4
1383	227955	587666	114	3	2.41	2	3	1	3
1384	227938	588533	36	1	3.57	2	1	1	1
1385	227909	587731	201	5	2.8	2	4	1	4
1386	227883	587993	15	1	2.8	2	1	1	1
1387	227884	587620	112	3	2.84	2	3	1	3
1388	227725	587324	231	5	1.53	1	1	2	2
1389	227879	587331	287	5	2.67	2	4	2	8
1390	227897	587991	92	2	2.8	2	2	1	2
1391	227876	587662	199	4	2.35	2	3	1	3
1392	227842	587433	225	5	1.49	1	1	1	1
1393	227854	587779	183	4	2.91	2	3	1	3
1394	227838	588535	22	1	5.23	3	1	1	1
1395	227807	588432	56	2	1.19	1	1	2	2
1396	227797	587956	4	1	2.26	2	1	2	2
1397	227796	587878	15	1	1.68	1	1	1	1
1398	227795	587521	92	2	3.31	2	2	1	2
1399	227786	587276	55	2	0.74	1	1	1	1
1400	227788	587598	172	4	4	3	4	1	4
1401	227824	587713	204	5	2.01	2	4	1	4
1402	227829	587989	64	2	2.26	2	2	2	4
1403	227749	587955	43	1	1.58	1	1	2	2
1404	227911	587540	81	2	2.84	2	2	1	2
1405	227738	588536	31	1	4.74	3	1	2	2
1406	227693	587258	175	4	2.47	2	3	1	3
1407	227689	588062	21	1	4.19	3	1	2	2
1408	227852	587236	48	1	0.53	1	1	1	1
1409	227661	587967	20	1	7.49	4	1	1	1
1410	227637	587262	95	2	2.27	2	2	2	4
1411	227638	588538	23	1	1.97	1	1	2	2
1412	227611	588101	18	1	3.48	2	1	2	2
1413	227584	587742	68	2	2.57	2	2	2	4
1414	227545	588575	20	1	1.2	1	1	1	1
1415	227558	587277	183	4	6.62	4	4	2	8
1416	227523	588150	20	1	2.03	2	1	2	2
1417	227492	587848	300	5	1.32	1	1	1	1
1418	227488	587240	0	1	6.5	4	1	2	2
1419	227480	588517	15	1	1.33	1	1	2	2
1420	227526	587296	36	1	5.98	3	1	2	2
1421	227447	588432	30	1	2.07	2	1	2	2
1422	227438	587223	15	1	4.47	3	1	2	2
1423	227428	588338	25	1	0.26	1	1	2	2
1424	227368	587874	64	2	2.89	2	2	1	2
1425	227383	588521	21	1	1.74	1	1	2	2
1426	227374	587254	51	2	7.87	4	3	2	6
1427	227366	588260	10	1	0.62	1	1	2	2
1428	227345	587200	33	1	10.72	4	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1429	227339	588141	13	1	2.38	2	1	2	2
1430	227348	587165	91	2	8.13	4	3	2	6
1431	227305	588184	18	1	1.44	1	1	2	2
1432	227291	587890	166	4	2.84	2	3	1	3
1433	227285	588606	24	1	3.93	2	1	1	1
1434	227281	587215	41	1	8.45	4	1	2	2
1435	227272	588506	5	1	1.97	1	1	2	2
1436	227260	588407	0	1	0.88	1	1	1	1
1437	227248	588308	10	1	2.32	2	1	1	1
1438	227236	588209	25	1	1.16	1	1	1	1
1439	227223	588109	0	1	6.39	4	1	2	2
1440	227214	588010	80	2	3.72	2	2	1	2
1441	227206	587910	141	3	0.28	1	1	1	1
1442	227204	587191	34	1	5	3	1	2	2
1443	227150	588095	10	1	3.08	2	1	2	2
1444	227086	587166	116	3	8.33	4	4	2	8
1445	227095	587201	0	1	12.21	4	1	1	1
1446	227129	587213	45	1	11.93	4	1	1	1
1447	233644	590014	30	1	9.66	4	1	3	3
1448	233140	590543	18	1	13.65	4	1	1	1
1449	233147	589319	28	1	6.13	4	1	1	1
1450	232769	590448	10	1	11.44	4	1	1	1
1451	232771	590377	25	1	10.77	4	1	1	1
1452	232640	590421	0	1	12.63	4	1	2	2
1453	229105	589069	50	2	2.47	2	2	2	4
1454	229081	589139	40	1	3.9	2	1	2	2
1455	228990	589434	58	2	6.56	4	3	1	3
1456	229058	589218	75	2	6.62	4	3	1	3
1457	229030	589294	30	1	7.62	4	1	1	1
1458	228767	589449	20	1	10.47	4	1	1	1
1459	228692	589426	64	2	7.05	4	3	1	3
1460	228571	589389	43	1	6.29	4	1	1	1
1461	228498	589358	40	1	8.06	4	1	1	1
1462	228404	589329	39	1	8.97	4	1	1	1
1463	228349	589304	34	1	9.41	4	1	3	3
1464	229911	589343	77	2	1.97	1	1	2	2
1465	229957	589203	58	2	6.47	4	3	1	3
1466	230075	589429	60	2	3.38	2	2	1	2
1467	230262	589061	69	2	2.55	2	2	2	4
1468	230942	589129	16	1	9.51	4	1	1	1
1469	230550	589459	35	1	7.33	4	1	1	1
1470	230822	589493	95	2	5.71	3	3	1	3
1471	229879	589344	53	2	1.72	1	1	2	2
1472	226174	587426	123	3	9.34	4	4	3	12
1473	226249	587422	168	4	2.51	2	3	3	9
1474	226307	587386	3	1	2.05	2	1	3	3
1475	226418	588005	26	1	1.63	1	1	1	1
1476	226416	587997	15	1	1.66	1	1	1	1
1477	226414	587989	16	1	1.89	1	1	1	1
1478	226390	587320	218	5	2.48	2	4	3	12
1479	226417	587325	37	1	9.56	4	1	3	3
1480	226504	588021	30	1	1.4	1	1	1	1
1481	226507	588012	31	1	1.42	1	1	1	1
1482	226510	588003	43	1	1.71	1	1	1	1
1483	226520	587568	4	1	14.36	4	1	2	2
1484	226512	587567	8	1	14.76	4	1	2	2
1485	226499	587568	3	1	18.5	5	1	2	2
1486	226535	587661	2	1	7.41	4	1	2	2
1487	226528	587666	3	1	7.83	4	1	2	2
1488	226519	587672	28	1	5.28	3	1	2	2
1489	226528	587440	140	3	4.42	3	3	2	6
1490	226531	587250	47	1	1.25	1	1	3	3
1491	226588	587725	98	2	2.06	2	2	2	4
1492	226580	587732	125	3	5.48	3	3	2	6
1493	226572	587739	114	3	5.7	3	3	2	6
1494	226611	587900	43	1	3.94	2	1	2	2
1495	226600	587900	168	4	6.05	4	4	2	8
1496	226587	587902	40	1	3.62	2	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1497	226612	588042	78	2	1.07	1	1	1	1
1498	226612	588033	99	2	1.77	1	1	1	1
1499	226611	588022	111	3	3.19	2	3	1	3
1500	226626	587994	57	2	2	2	2	1	2
1501	226615	587996	243	5	2.1	2	4	1	4
1502	226604	587998	250	5	2.25	2	4	1	4
1503	226595	587406	159	4	2.72	2	3	1	3
1504	226633	587832	36	1	7.71	4	1	2	2
1505	226623	587832	42	1	5.11	3	1	2	2
1506	226610	587832	55	2	3.38	2	2	2	4
1507	226623	587228	17	1	1.94	1	1	3	3
1508	226651	587773	1	1	9.34	4	1	2	2
1509	226667	587390	235	5	2.64	2	4	1	4
1510	226682	587187	29	1	3.54	2	1	3	3
1511	226715	588021	36	1	5.89	3	1	1	1
1512	226715	588012	30	1	5.94	3	1	1	1
1513	226714	588002	38	1	5.83	3	1	1	1
1514	226725	587748	1	1	5.7	3	1	2	2
1515	226722	587761	1	1	13.64	4	1	2	2
1516	226721	587772	2	1	14.82	4	1	2	2
1517	226720	587366	170	4	4.11	3	4	1	4
1518	226718	587482	4	1	8.83	4	1	1	1
1519	226728	587467	5	1	14.49	4	1	1	1
1520	226733	587451	4	1	9.14	4	1	1	1
1521	226740	587178	18	1	3.43	2	1	3	3
1522	226800	588005	72	2	5.65	3	3	1	3
1523	226798	587993	91	2	5.25	3	3	1	3
1524	226796	587982	83	2	5.31	3	3	1	3
1525	226781	587487	0	1	11.71	4	1	1	1
1526	226784	587472	0	1	21.46	5	1	1	1
1527	226785	587455	0	1	12.07	4	1	1	1
1528	226806	587780	24	1	10.29	4	1	2	2
1529	226802	587801	25	1	12.36	4	1	2	2
1530	226798	587813	20	1	10.25	4	1	2	2
1531	226809	587290	0	1	7.76	4	1	1	1
1532	226887	587800	60	2	8.19	4	3	2	6
1533	226885	587817	75	2	6.81	4	3	2	6
1534	226883	587829	55	2	6.7	4	3	2	6
1535	226869	587233	65	2	7.19	4	3	1	3
1536	226922	587980	50	2	6.02	4	3	1	3
1537	226920	587968	76	2	6.47	4	3	1	3
1538	226917	587958	75	2	5.23	3	3	1	3
1539	226906	587480	5	1	11.52	4	1	1	1
1540	226907	587463	4	1	16.51	5	1	1	1
1541	226908	587444	0	1	16.05	5	1	1	1
1542	226997	587964	65	2	5.5	3	3	1	3
1543	226995	587951	55	2	4.24	3	3	1	3
1544	226993	587941	66	2	5.85	3	3	1	3
1545	227003	587824	65	2	4.34	3	3	2	6
1546	226998	587843	75	2	4.5	3	3	2	6
1547	226995	587856	70	2	5.53	3	3	2	6
1548	227106	587943	62	2	3.49	2	2	1	2
1549	227104	587931	84	2	3.46	2	2	1	2
1550	227102	587920	82	2	4.15	3	3	1	3
1551	227172	587681	69	2	4.21	3	3	1	3
1552	227179	587826	175	4	3.97	2	3	1	3
1553	227190	587826	190	4	2.86	2	3	1	3
1554	227201	587826	213	5	2.86	2	4	1	4
1555	228797	589052	250	5	1.11	1	1	2	2
1556	228797	589060	250	5	1.11	1	1	2	2
1557	228797	589073	230	5	1.26	1	1	2	2
1558	228869	589044	250	5	1.07	1	1	2	2
1559	228869	589055	250	5	2.23	2	4	2	8
1560	228869	589069	250	5	3	2	4	2	8
1561	228946	589053	155	4	2.02	2	3	2	6
1562	229120	589053	82	2	3.9	2	2	2	4
1563	229206	589097	64	2	5.6	3	3	1	3
1564	229337	589042	250	5	3.85	2	4	1	4

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1565	229370	588953	70	2	5.77	3	3	1	3
1566	229361	588951	50	2	5.76	3	3	1	3
1567	229350	588948	52	2	5.76	3	3	1	3
1568	229375	589216	82	2	3.99	2	2	2	4
1569	229388	588859	100	3	9.96	4	4	1	4
1570	229418	588772	60	2	12.06	4	3	1	3
1571	229449	589233	57	2	4.12	3	3	2	6
1572	229498	588752	75	2	6.86	4	3	2	6
1573	229548	589277	33	1	5.84	3	1	1	1
1574	229572	588890	73	2	2.63	2	2	1	2
1575	229654	589647	76	2	6.27	4	3	1	3
1576	229652	588958	118	3	1.73	1	1	1	1
1577	229673	589340	91	2	4.16	3	3	1	3
1578	229752	590051	40	1	10.39	4	1	1	1
1579	229743	589749	101	3	5.98	3	3	1	3
1580	229751	589951	58	2	8.54	4	3	1	3
1581	229748	589850	79	2	7.61	4	3	1	3
1582	229725	589023	33	1	3.29	2	1	2	2
1583	229757	589648	41	1	6.3	4	1	2	2
1584	229754	589551	42	1	6.03	4	1	1	1
1585	229753	589445	90	2	7.6	4	3	1	3
1586	229802	589089	45	1	5	3	1	2	2
1587	229854	590051	82	2	8.97	4	3	1	3
1588	229853	589948	77	2	6.96	4	3	1	3
1589	229852	589847	92	2	6.62	4	3	1	3
1590	229853	589750	10	1	5.58	3	1	2	2
1591	229848	589443	72	2	5.26	3	3	2	6
1592	229855	589646	37	1	4.84	3	1	1	1
1593	229853	589552	60	2	7.96	4	3	2	6
1594	229881	589143	26	1	6.27	4	1	1	1
1595	229949	590148	74	2	4.85	3	3	1	3
1596	229952	590049	63	2	5.19	3	3	1	3
1597	229952	589947	22	1	6.8	4	1	2	2
1598	229951	589850	44	1	5.8	3	1	2	2
1599	229952	589751	82	2	6.71	4	3	1	3
1600	229949	589486	12	1	4.31	3	1	2	2
1601	229956	589650	90	2	7.12	4	3	2	6
1602	229955	589549	0	1	6.81	4	1	2	2
1603	229949	589188	48	1	6.31	4	1	1	1
1604	230050	590351	25	1	6.73	4	1	1	1
1605	230051	590247	65	2	1.07	1	1	1	1
1606	230051	590152	86	2	6.43	4	3	1	3
1607	230051	590048	72	2	5.2	3	3	1	3
1608	230052	589948	74	2	6.32	4	3	1	3
1609	230054	589849	56	2	6.13	4	3	2	6
1610	230052	589751	118	3	5.54	3	3	2	6
1611	230049	589550	28	1	10.39	4	1	1	1
1612	230053	589646	92	2	6.18	4	3	1	3
1613	230062	589190	18	1	5.91	3	1	1	1
1614	230153	590451	94	2	12.93	4	3	2	6
1615	230153	590350	44	1	12.61	4	1	1	1
1616	230153	590249	39	1	4.77	3	1	1	1
1617	230148	590047	39	1	16.74	5	1	1	1
1618	230155	590152	51	2	10.2	4	3	1	3
1619	230151	589952	84	2	19.21	5	4	1	4
1620	230146	589750	68	2	9.98	4	3	1	3
1621	230153	589851	61	2	16.38	5	4	1	4
1622	230152	589650	5	1	8.48	4	1	1	1
1623	230150	589547	87	2	4.75	3	3	1	3
1624	230148	589141	42	1	6.85	4	1	1	1
1625	230251	590450	50	2	13.82	4	3	2	6
1626	230249	590346	52	2	13.07	4	3	1	3
1627	230252	589753	41	1	13.03	4	1	1	1
1628	230227	589069	107	3	2.02	2	3	2	6
1629	230248	589547	63	2	9	4	3	1	3
1630	230254	589648	66	2	10.44	4	3	1	3
1631	230304	589070	190	4	2.91	2	3	2	6
1632	230350	589750	37	1	11.26	4	1	1	1

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1633	230349	589554	37	1	14.65	4	1	1	1
1634	230357	589652	30	1	13.01	4	1	1	1
1635	230452	589750	58	2	9.37	4	3	1	3
1636	230456	589650	41	1	7.72	4	1	1	1
1637	230455	589545	59	2	11.5	4	3	1	3
1638	230463	589036	60	2	2.95	2	2	2	4
1639	230543	589537	75	2	4.79	3	3	1	3
1640	230551	589748	26	1	10.69	4	1	1	1
1641	230553	589646	61	2	10.37	4	3	1	3
1642	230562	589039	158	4	2.86	2	3	2	6
1643	230648	589746	98	2	8.23	4	3	1	3
1644	230651	589647	41	1	5.15	3	1	1	1
1645	230648	589550	62	2	9.23	4	3	1	3
1646	230664	589083	195	4	3.62	2	3	2	6
1647	230755	589749	77	2	5.66	3	3	1	3
1648	230753	589649	100	3	3.72	2	3	1	3
1649	230751	589551	84	2	6.2	4	3	1	3
1650	230755	589103	38	1	6.43	4	1	1	1
1651	230840	590134	8	1	11.97	4	1	1	1
1652	230852	589747	55	2	5.5	3	3	2	6
1653	230849	589546	80	2	5.64	3	3	1	3
1654	230854	589649	32	1	4.8	3	1	1	1
1655	230855	589115	56	2	3.14	2	2	1	2
1656	230939	590340	43	1	7.03	4	1	1	1
1657	230942	590241	61	2	7.25	4	3	1	3
1658	230942	590041	60	2	8.46	4	3	1	3
1659	230951	589749	52	2	5.8	3	3	2	6
1660	230952	589649	111	3	5.83	3	3	2	6
1661	230952	589551	56	2	5.89	3	3	1	3
1662	231039	590342	143	3	4.57	3	3	2	6
1663	231039	589940	165	4	7.19	4	4	2	8
1664	231050	589747	52	2	7.18	4	3	1	3
1665	231028	589166	8	1	5.27	3	1	1	1
1666	231052	589647	98	2	4.86	3	3	2	6
1667	231054	589549	51	2	5.09	3	3	2	6
1668	231137	590442	140	3	2.39	2	3	1	3
1669	231136	590344	205	5	4.97	3	4	1	4
1670	231107	589232	72	2	4.67	3	3	2	6
1671	231134	589843	142	3	5.86	3	3	2	6
1672	231150	589751	25	1	6.56	4	1	1	1
1673	231151	589650	103	3	5.43	3	3	1	3
1674	231197	589317	63	2	3.5	2	2	2	4
1675	231241	589826	82	2	3.72	2	2	2	4
1676	231244	589671	92	2	3.88	2	2	1	2
1677	231253	589751	67	2	4.94	3	3	2	6
1678	231269	589414	57	2	3.36	2	2	2	4
1679	231340	590337	54	2	11.79	4	3	1	3
1680	231343	590144	150	4	5.64	3	4	1	4
1681	231341	589940	140	3	5.82	3	3	1	3
1682	231332	589495	138	3	3.29	2	3	2	6
1683	231342	589758	26	1	4.97	3	1	2	2
1684	231432	590037	81	2	6.9	4	3	1	3
1685	231443	590260	76	2	8.94	4	3	1	3
1686	231439	589838	48	1	3.53	2	1	2	2
1687	231445	589746	35	1	8.45	4	1	2	2
1688	231442	589635	37	1	2.97	2	1	2	2
1689	232821	589649	25	1	5.18	3	1	3	3
1690	232914	589449	153	4	4.95	3	4	2	8
1691	233042	589640	195	4	3.5	2	3	3	9
1692	233053	589534	130	3	3.4	2	3	1	3
1693	233051	589425	93	2	3.99	2	2	1	2
1694	227904	588111	95	2	3	2	2	2	4
1695	227905	588117	50	2	2.82	2	2	2	4
1696	227902	588126	39	1	2.72	2	1	2	2
1697	227898	588136	100	3	2.72	2	3	2	6
1698	227898	588146	110	3	2.72	2	3	2	6
1699	227848	588162	150	4	1.35	1	1	2	2
1700	227859	588162	130	3	1.38	1	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1701	227868	588160	50	2	2.62	2	2	2	4
1702	227877	588162	110	3	2.72	2	3	2	6
1703	227889	588160	80	2	2.72	2	2	2	4
1704	227899	588160	30	1	2.72	2	1	2	2
1705	227905	588153	52	2	2.75	2	2	2	4
1706	227918	588156	59	2	2.72	2	2	2	4
1707	227929	588159	35	1	2.8	2	1	2	2
1708	227939	588159	35	1	2.92	2	1	2	2
1709	227948	588159	60	2	2.91	2	2	2	4
1710	227900	588168	130	3	2.72	2	3	2	6
1711	227902	588179	50	2	2.72	2	2	2	4
1712	227898	588191	60	2	1.92	1	1	2	2
1713	227902	588200	190	4	1.88	1	1	2	2
1714	227897	588209	65	2	1.85	1	1	2	2
1715	227187	588444	65	2	1.81	1	1	2	2
1716	227187	588451	50	2	1.85	1	1	2	2
1717	227185	588464	85	2	2.8	2	2	2	4
1718	227186	588474	95	2	3.22	2	2	2	4
1719	227190	588483	115	3	3.22	2	3	2	6
1720	227135	588498	70	2	3.18	2	2	2	4
1721	227146	588494	58	2	3.21	2	2	2	4
1722	227157	588492	63	2	3.22	2	2	2	4
1723	227167	588492	58	2	3.18	2	2	2	4
1724	227177	588493	60	2	3.22	2	2	2	4
1725	227188	588494	110	3	3.22	2	3	2	6
1726	227196	588497	100	3	3.22	2	3	2	6
1727	227205	588497	20	1	3.18	2	1	2	2
1728	227218	588494	30	1	2.7	2	1	2	2
1729	227226	588495	45	1	2.19	2	1	2	2
1730	227239	588499	81	2	2.2	2	2	2	4
1731	227187	588505	100	3	3.18	2	3	2	6
1732	227190	588515	123	3	3.44	2	3	2	6
1733	227190	588526	130	3	3.44	2	3	2	6
1734	227186	588536	115	3	3.5	2	3	2	6
1735	227184	588547	60	2	3.61	2	2	2	4
1736	228072	588992	67	2	2.98	2	2	2	4
1737	228072	589001	88	2	2.98	2	2	2	4
1738	228070	589012	90	2	2.93	2	2	2	4
1739	228068	589022	50	2	2.92	2	2	2	4
1740	228068	589030	38	1	2.99	2	1	2	2
1741	228017	589037	65	2	5.54	3	3	2	6
1742	228028	589041	80	2	4.32	3	3	2	6
1743	228037	589044	90	2	0.55	1	1	2	2
1744	228048	589043	58	2	3.59	2	2	2	4
1745	228057	589040	65	2	2.99	2	2	2	4
1746	228077	589042	15	1	4.28	3	1	2	2
1747	228088	589041	40	1	4.28	3	1	2	2
1748	228096	589042	80	2	4.64	3	3	2	6
1749	228108	589040	70	2	4.82	3	3	2	6
1750	228115	589044	30	1	5.26	3	1	2	2
1751	228066	589052	50	2	4.28	3	3	2	6
1752	228067	589065	55	2	4.67	3	3	2	6
1753	228067	589076	20	1	6.58	4	1	2	2
1754	228065	589083	43	1	7.58	4	1	2	2
1755	228063	589097	53	2	9.28	4	3	2	6
1756	228067	589043	45	1	4.29	3	1	2	2
1757	228093	588939	35	1	2.69	2	1	2	2
1758	228062	588962	80	2	3.73	2	2	2	4
1759	227279	588469	43	1	2.26	2	1	2	2
1760	231611	582154	60	2	1.3	1	1	3	3
1761	231647	582150	60	2	1.68	1	1	2	2
1762	231653	582195	100	3	3.17	2	3	2	6
1763	231644	582238	105	3	3.27	2	3	2	6
1764	231618	583166	15	1	12.58	4	1	3	3
1765	231635	583139	10	1	1.2	1	1	2	2
1766	231620	583203	20	1	7.1	4	1	3	3
1767	231663	583184	0	1	0.06	1	1	2	2
1768	233129	585433	25	1	4.94	3	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1769	233168	585464	30	1	7.33	4	1	2	2
1770	233192	585494	30	1	7.35	4	1	2	2
1771	233150	585534	50	2	6.98	4	3	3	9
1772	233083	585463	30	1	4.94	3	1	2	2
1773	233121	585507	90	2	9.74	4	3	3	9
1774	229380	587734	40	1	3.58	2	1	1	1
1775	229428	587732	35	1	3.76	2	1	1	1
1776	229387	587785	90	2	3.89	2	2	1	2
1777	229433	587774	70	2	3.26	2	2	1	2
1778	229394	587826	30	1	4.07	3	1	1	1
1779	229428	587826	30	1	5.02	3	1	1	1
1780	231758	581019	130	3	3.74	2	3	3	9
1781	231757	581073	135	3	2.51	2	3	3	9
1782	231610	582273	35	1	3.44	2	1	3	3
1783	231599	582213	30	1	5.33	3	1	3	3
1784	231663	583295	105	3	2.54	2	3	3	9
1785	231643	583247	15	1	2.44	2	1	3	3
1786	232266	584173	110	3	3.05	2	3	3	9
1787	232236	584124	115	3	7.27	4	4	3	12
1788	232868	584951	95	2	7.41	4	3	3	9
1789	232859	584881	25	1	5.56	3	1	3	3
1790	233309	585791	35	1	7.93	4	1	3	3
1791	233265	585738	125	3	2.8	2	3	3	9
1792	233495	586613	20	1	7.43	4	1	2	2
1793	233501	586551	20	1	11.68	4	1	2	2
1794	232876	587440	15	1	4.92	3	1	3	3
1795	232925	587405	25	1	8.29	4	1	3	3
1796	232648	588366	35	1	4.78	3	1	3	3
1797	232642	588323	60	2	5.84	3	3	3	9
1798	232856	587509	35	1	5.57	3	1	3	3
1799	232953	587436	85	2	3.18	2	2	2	4
1800	231740	581071	70	2	1.34	1	1	3	3
1801	231742	581032	160	4	1.38	1	1	3	3
1802	231631	583256	175	4	0.32	1	1	3	3
1803	231643	583297	155	4	3.51	2	3	3	9
1804	232217	584139	140	3	4.71	3	3	3	9
1805	232250	584182	190	4	3.12	2	3	3	9
1806	232837	584886	70	2	3.63	2	2	3	6
1807	232858	584955	150	4	8.4	4	4	3	12
1808	232918	587394	25	1	7.39	4	1	3	3
1809	232865	587434	40	1	6.19	4	1	3	3
1810	232833	587482	45	1	5.54	3	1	3	3
1811	232937	587446	40	1	4.49	3	1	2	2
1812	233500	586578	25	1	9.08	4	1	2	2
1813	227940	588194	55	2	2.87	2	2	2	4
1814	227973	588232	120	3	1.56	1	1	2	2
1815	227973	588334	115	3	1.43	1	1	2	2
1816	228005	588388	70	2	1.54	1	1	2	2
1817	227995	588482	40	1	0.52	1	1	2	2
1818	228006	588535	50	2	3.16	2	2	2	4
1819	228014	588586	20	1	4.84	3	1	2	2
1820	228013	588633	40	1	4.18	3	1	2	2
1821	228025	588685	78	2	5.77	3	3	2	6
1822	228039	588732	55	2	5.51	3	3	2	6
1823	228051	588777	40	1	5.99	3	1	2	2
1824	228056	588832	30	1	6.78	4	1	2	2
1825	228056	588883	40	1	4.37	3	1	2	2
1826	227963	588228	100	3	1.32	1	1	2	2
1827	227994	588387	65	2	1.54	1	1	2	2
1828	228005	588486	35	1	1.41	1	1	2	2
1829	228017	588535	25	1	3.06	2	1	2	2
1830	228030	588727	40	1	4.86	3	1	2	2
1831	228036	588775	50	2	6.05	4	3	2	6
1832	228043	588829	35	1	6.81	4	1	2	2
1833	227953	588224	105	3	1.32	1	1	2	2
1834	227986	588386	65	2	1.51	1	1	2	2
1835	227992	588538	15	1	4.9	3	1	2	2
1836	228018	588727	40	1	5.37	3	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1837	228028	588775	45	1	6.17	4	1	2	2
1838	228033	588826	25	1	6.72	4	1	2	2
1839	232561	588102	138	3	5.09	3	3	3	9
1840	232528	587821	10	1	6.48	4	1	3	3
1841	232534	587851	30	1	9.18	4	1	3	3
1842	232657	587623	25	1	10.09	4	1	3	3
1843	232676	587588	15	1	7.63	4	1	3	3
1844	233157	587295	120	3	5.21	3	3	3	9
1845	233186	587249	45	1	6.19	4	1	3	3
1846	233356	587175	20	1	5.19	3	1	3	3
1847	233387	587161	80	2	4.9	3	3	3	9
1848	233434	587112	45	1	6.7	4	1	3	3
1849	233475	587089	30	1	2.9	2	1	2	2
1850	233512	587052	95	2	4.36	3	3	2	6
1851	233519	587006	110	3	4.11	3	3	2	6
1852	233523	586954	40	1	2.88	2	1	2	2
1853	233500	586906	80	2	2.86	2	2	2	4
1854	233487	586859	30	1	4.89	3	1	2	2
1855	233491	586808	35	1	4.09	3	1	2	2
1856	233487	586759	35	1	4.16	3	1	2	2
1857	233483	586708	20	1	9.13	4	1	2	2
1858	233486	586657	75	2	2.66	2	2	2	4
1859	233498	586508	15	1	9.37	4	1	2	2
1860	233497	586462	10	1	2.37	2	1	2	2
1861	233500	586409	250	5	0.75	1	1	2	2
1862	233507	586361	180	4	1.72	1	1	2	2
1863	233512	586311	10	1	1.33	1	1	3	3
1864	233489	586262	35	1	7.32	4	1	3	3
1865	233485	586213	15	1	5.08	3	1	3	3
1866	233427	586106	10	1	10.46	4	1	3	3
1867	233435	585931	150	4	1.98	1	1	3	3
1868	233285	585761	35	1	4.06	3	1	3	3
1869	233002	585429	45	1	8.9	4	1	3	3
1870	232993	585376	30	1	6.79	4	1	3	3
1871	232928	585390	20	1	4.91	3	1	3	3
1872	232861	585123	30	1	6.09	4	1	3	3
1873	232860	585090	83	2	7.62	4	3	3	9
1874	232719	584731	70	2	5.57	3	3	3	9
1875	232497	584485	120	3	2.47	2	3	3	9
1876	232366	584290	195	4	4.27	3	4	3	12
1877	232051	583906	100	3	3.26	2	3	3	9
1878	231864	583744	40	1	6.59	4	1	3	3
1879	231769	583506	115	3	4.32	3	3	3	9
1880	231534	582930	50	2	1.47	1	1	3	3
1881	231605	582530	10	1	11.3	4	1	3	3
1882	231653	581827	105	3	1.65	1	1	3	3
1883	231678	581672	40	1	2.93	2	1	3	3
1884	231731	581310	115	3	1.95	1	1	3	3
1885	231738	580753	35	1	3.77	2	1	3	3
1886	231631	580471	75	2	1.55	1	1	3	3
1887	232552	588125	160	4	3.87	2	3	3	9
1888	232539	587822	15	1	5.56	3	1	3	3
1889	232644	587613	25	1	9.97	4	1	3	3
1890	232689	587599	5	1	7.37	4	1	3	3
1891	233143	587217	95	2	3.49	2	2	1	2
1892	233198	587268	10	1	9.38	4	1	3	3
1893	233364	587194	15	1	5.43	3	1	3	3
1894	233399	587172	30	1	5.36	3	1	3	3
1895	233419	587106	10	1	6.11	4	1	3	3
1896	233466	587083	105	3	2.92	2	3	2	6
1897	233503	587050	105	3	4.35	3	3	2	6
1898	233531	587007	100	3	4.33	3	3	2	6
1899	233514	586953	10	1	2.98	2	1	2	2
1900	233511	586909	40	1	2.86	2	1	2	2
1901	233499	586861	20	1	4.96	3	1	2	2
1902	233497	586808	30	1	4.13	3	1	2	2
1903	233480	586759	20	1	4.72	3	1	2	2
1904	233473	586713	30	1	9.18	4	1	2	2

ID	Easting	Northing	Peat Depth (cm)	Peat Depth Score	Slope (degrees)	Slope Score	Hazard Score	Consequence Score	Risk Ranking
1905	233474	586659	125	3	2.25	2	3	2	6
1906	233488	586511	35	1	10.45	4	1	2	2
1907	233509	586458	195	4	2.33	2	3	2	6
1908	233510	586407	170	4	0.75	1	1	2	2
1909	233514	586359	165	4	1.7	1	1	2	2
1910	233505	586313	45	1	3.32	2	1	3	3
1911	232994	585434	45	1	11.11	4	1	3	3
1912	232982	585384	10	1	10.35	4	1	3	3
1913	232941	585369	10	1	2.28	2	1	3	3
1914	232831	585122	25	1	9.6	4	1	3	3
1915	232840	585066	35	1	8.7	4	1	3	3
1916	232723	584754	75	2	3.06	2	2	3	6
1917	232498	584478	40	1	3.01	2	1	3	3
1918	232371	584275	40	1	7.91	4	1	3	3
1919	232059	583895	10	1	6.25	4	1	3	3
1920	231881	583742	50	2	1.58	1	1	3	3
1921	231778	583486	10	1	1.11	1	1	3	3
1922	231560	582893	150	4	2.64	2	3	3	9
1923	231633	582525	65	2	4.03	3	3	3	9
1924	231641	581822	25	1	1.58	1	1	3	3
1925	231700	581670	150	4	1.88	1	1	3	3
1926	231748	581315	195	4	0.19	1	1	3	3
1927	231723	580760	195	4	5.39	3	4	3	12
1928	231646	580475	100	3	1.52	1	1	3	3
1929	233451	587127	5	1	7.4	4	1	3	3
1930	233455	587083	105	3	2.82	2	3	2	6
1931	233491	587046	165	4	4.36	3	4	2	8
1932	233509	587007	135	3	4.39	3	3	2	6
1933	233506	586949	30	1	3.46	2	1	2	2
1934	233522	586909	35	1	2.87	2	1	2	2
1935	233512	586864	30	1	6.52	4	1	2	2
1936	233485	586806	50	2	4.09	3	3	2	6
1937	233498	586763	10	1	4.09	3	1	2	2
1938	233490	586707	25	1	8.47	4	1	2	2
1939	233465	586659	125	3	1.94	1	1	2	2
1940	233478	586510	25	1	7.32	4	1	2	2
1941	233491	586466	35	1	2.35	2	1	2	2
1942	233492	586410	250	5	0.52	1	1	2	2
1943	233494	586363	25	1	1.72	1	1	3	3
1944	233495	586317	80	2	2	2	2	3	6
1945	233509	586261	85	2	6.03	4	3	3	9
1946	233470	586216	25	1	13.52	4	1	3	3
1947	233437	586105	15	1	18.53	5	1	3	3
1948	233423	585944	100	3	4.86	3	3	3	9
1949	233298	585747	115	3	3.7	2	3	3	9
1950	233020	585424	10	1	9.98	4	1	3	3

Annex 2 Lab Reports

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 19/08782
Issue Number: 1 **Date:** 03 October, 2019

Client: Energised Environments Ltd
7 Dundas Street
Edinburgh
EH3 6QG

Project Manager: Jessica Yanetta/Sarah Tullie
Project Name: Clav
Project Ref: ED1_1263
Order No: EE131407
Date Samples Received: 18/09/19
Date Instructions Received: 19/09/19
Date Analysis Completed: 02/10/19

Prepared by: **Approved by:**

[redacted]
Laboratory Coordinator

[redacted]
Client Manager

Envirolab Job Number: 19/08782 **Client Project Name: Clav**

Client Project Ref: ED1_1263

Lab Sample ID	19/08782/1	19/08782/2	19/08782/3	19/08782/4	19/08782/5	19/08782/6	19/08782/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	T2	T3	T6	T7	T7	T8	T9			
Depth to Top	0.50	0.48	0.58	0.50	1.00	0.30	0.38			
Depth To Bottom										
Date Sampled	12-Sep-19	12-Sep-19	11-Sep-19	11-Sep-19	11-Sep-19	11-Sep-19	11-Sep-19			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE	6AE	6AE			
% Moisture at <40C$_A$	84.6	84.1	84.5	87.6	88.2	81.8	67.9	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	550.62	529.76	545.70	705.98	746.01	450.49	211.55	% w/w	0.1	A-T-044
% Moisture at 105C$_A$	84.4	85.2	83.8	88.3	87.7	81.6	82.0	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	539.4	576.9	517.6	751.9	711.2	444.8	456.2	% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
Total Organic Carbon$_D^{M\#}$	56	46.9	54.6	54.4	53.3	50.8	50.4	% w/w	0.03	A-T-032s
Total Carbon$_D$	54.9	56.4	52.7	51.9	50.6	48.5	51.6	% w/w	0.1	A-T-032s
Density (soil)$_A$	0.8	1.0	0.9	0.9	1.0	0.9	0.8	g/ml	0.1	Gravimetry - AR

Lab Sample ID	19/08782/8	19/08782/9	19/08782/10	19/08782/11	19/08782/12	19/08782/13	19/08782/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	T10	T11	T12	T13	T13	T14	Borrow Pit 910			
Depth to Top	0.50	0.65	0.50	0.50	0.85	0.50	0.50			
Depth To Bottom										
Date Sampled	11-Sep-19	10-Sep-19	10-Sep-19	10-Sep-19	10-Sep-19	13-Sep-19	09-Sep-19			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Sample Matrix Code	6AE	6AE	5E	6AE	6AE	6AE	6AE			
% Moisture at <40C$_A$	74.7	85.9	43.3	88.4	86.1	83.2	82.7	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	295.17	608.92	76.4	765.70	618.58	496.23	478.77	% w/w	0.1	A-T-044
% Moisture at 105C$_A$	76.5	86.7	41.8	87.6	86.2	82.7	82.7	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	324.7	649.7	71.8	707.2	624.3	477.2	476.9	% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
Total Organic Carbon$_D$$^{M\#}$	42.1	54.8	4.36	50.9	54.4	24.1	31.6	% w/w	0.03	A-T-032s
Total Carbon$_D$	43.3	54.1	4.4	51.8	51.8	41.1	44.1	% w/w	0.1	A-T-032s
Density (soil)$_A$	0.8	1.0	1.0	1.0	0.9	1.0	0.9	g/ml	0.1	Gravimetry - AR

Lab Sample ID	19/08782/15	19/08782/16	19/08782/17	19/08782/18	19/08782/19	19/08782/20	19/08782/21	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	T16	T16	Construction Compound 884	T17	T17	T18	T18			
Depth to Top	0.50	0.94	0.30	0.50	1.00	0.50	1.00			
Depth To Bottom										
Date Sampled	09-Sep-19	09-Sep-19	09-Sep-19	10-Sep-19	10-Sep-19	12-Sep-19	12-Sep-19			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE	6AE	6AE			
% Moisture at <40C$_A$	84.8	81.4	66.6	86.9	86.6	92.0	91.1	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	556.84	438.90	199.20	660.83	645.29	1142.58	1029.37	% w/w	0.1	A-T-044
% Moisture at 105C$_A$	82.8	84.2	50.6	87.9	86.4	91.5	91.6	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	481.0	533.1	102.5	723.7	635.3	1073.9	1086.2	% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
Total Organic Carbon$_D$$^{M\#}$	50.1	43.9	6.11	54.7	53.2	23.9	44.5	% w/w	0.03	A-T-032s
Total Carbon$_D$	49.1	46.4	10.9	55.2	56.6	24.2	46.2	% w/w	0.1	A-T-032s
Density (soil)$_A$	1.1	1.1	1.2	1.0	1.0	1.0	1.1	g/ml	0.1	Gravimetry - AR

Envirolab Job Number: 19/08782 **Client Project Name: Clav**

Client Project Ref: ED1_1263

Lab Sample ID	19/08782/22	19/08782/23	19/08782/24	19/08782/25	19/08782/26	19/08782/27		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Construction Compound 880	Borrow Pit 850	Borrow Pit 380	Borrow Pit 907	Borrow Pit 907	Construction Compound 878				
Depth to Top	0.50	0.40	0.50	0.50	1.00	0.30				
Depth To Bottom										
Date Sampled	12-Sep-19	11-Sep-19	12-Sep-19	10-Sep-19	10-Sep-19	13-Sep-19				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil				
Sample Matrix Code	5AE	6AE	6AE	6AE	6AE	6AE				
% Moisture at <40C$_A$	83.7	79.4	81.7	86.7	87.9	81.3		% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	514.33	384.88	445.66	653.15	726.10	434.22		% w/w	0.1	A-T-044
% Moisture at 105C$_A$	83.6	78.6	80.8	85.4	87.5	82.7		% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	510.7	367.0	419.7	586.8	696.8	479.0		% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		% w/w	0.1	A-T-044
Total Organic Carbon$_D^{M\#}$	49.6	52	49.5	48.6	49	41.7		% w/w	0.03	A-T-032s
Total Carbon$_D$	48.5	53.8	51.7	48.6	49.0	38.9		% w/w	0.1	A-T-032s
Density (soil)$_A$	1.0	0.9	0.8	1.0	1.0	1.1		g/ml	0.1	Gravimetry - AR

REPORT NOTES

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The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:
Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:
Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:
Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis.
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:
1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.
Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.
Secondary Matrix Codes:
A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,
E = contains roots/twigs.

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N/A indicates Not Applicable.
Superscript # indicates method accredited to ISO 17025.
Superscript "M" indicates method accredited to MCERTS.
Subscript "A" indicates analysis performed on the sample as received.
Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Energised Environments Ltd, 7 Dundas Street, Edinburgh, EH3 6QG

Project: Clav
Clients Project No: ED1_1263

Project No: 19/08782
Date Received: 19/09/2019 (am)
Cool Box Temperatures (°C): 15.1, 15.7, 15.4

NO DEVIATIONS IDENTIFIED
If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 19/09151
Issue Number: 1 **Date:** 14 October, 2019

Client: Energised Environments Ltd
7 Dundas Street
Edinburgh
EH3 6QG

Project Manager: Paul Darnbrough/Sarah Tullie
Project Name: Clau
Project Ref: EDI_ 1263
Order No: EE131407
Date Samples Received: 30/09/19
Date Instructions Received: 01/10/19
Date Analysis Completed: 14/10/19

Prepared by: **Approved by:**

[redacted] [redacted]

Laboratory Coordinator Client Manager

Envirolab Job Number: 19/09151 **Client Project Name: Clau**

Client Project Ref: EDI_ 1263

Lab Sample ID	19/09151/1	19/09151/2	19/09151/3	19/09151/4	19/09151/5	19/09151/6	19/09151/7	Units	Limit of Detection	Method ref
Client Sample No	119	119	377	74	858	858	869			
Client Sample ID	T1	T1	T4	T5	Borrowpit	Borrowpit	Borrowpit			
Depth to Top	0.50	1.00	0.45	0.30	0.50	1.00	0.50			
Depth To Bottom										
Date Sampled	24-Sep-19	24-Sep-19	24-Sep-19	24-Sep-19	25-Sep-19	25-Sep-19	25-Sep-19			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Sample Matrix Code	4E	4E	4E	4E	4E	4E	4E			
% Moisture at <40C$_A$	84.6	83.7	83.1	76.8	81.7	81.7	83.1	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	550.6	514.5	491.2	330.5	446.5	447.5	492.1	% w/w	0.1	A-T-044
% Moisture at 105C$_A$	87.9	88.9	86.1	86.2	85.3	88.0	83.3	% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	724.7	797.4	620.9	626.3	578.2	735.8	499.7	% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
Total Organic Carbon$_D^{M\#}$	41	32.9	39.8	35.2	46.9	37.3	42.2	% w/w	0.03	A-T-032s
Total Carbon$_D$	43.1	33.5	46.7	38.7	50.2	40.0	44.2	% w/w	0.1	A-T-032s
Density (soil)$_A$	0.5	0.5	0.6	0.6	0.7	1.0	0.6	g/ml	0.1	Gravimetry - AR

Envirolab Job Number: 19/09151 **Client Project Name: Clau**

Client Project Ref: EDI_ 1263

Lab Sample ID	19/09151/8	19/09151/9	19/09151/10	19/09151/11				Units	Limit of Detection	Method ref
Client Sample No	869	913	872	872						
Client Sample ID	Borrowpit	Borrowpit	Laydown Area	Laydown Area						
Depth to Top	0.90	0.35	0.50	0.90						
Depth To Bottom										
Date Sampled	25-Sep-19	26-Sep-19	25-Sep-19	25-Sep-19						
Sample Type	Soil	Soil	Soil	Soil						
Sample Matrix Code	4E	4E	4E	4E						
% Moisture at <40C$_A$	82.2	83.9	83.9	82.0				% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 40C$_A$	462.2	520.7	519.7	455.6				% w/w	0.1	A-T-044
% Moisture at 105C$_A$	84.2	86.4	87.4	88.5				% w/w	0.1	A-T-044
% Natural Moisture Content (NMC) at 105C$_A$	532.6	637.1	691.6	766.1				% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1				% w/w	0.1	A-T-044
Total Organic Carbon$_D^{M\#}$	41.5	28.5	43.7	38.8				% w/w	0.03	A-T-032s
Total Carbon$_D$	45.1	29.2	46.7	38.7				% w/w	0.1	A-T-032s
Density (soil)$_A$	0.8	0.9	0.9	1.0				g/ml	0.1	Gravimetry - AR

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Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Energised Environments Ltd, 7 Dundas Street, Edinburgh, EH3 6QG

Project: Clau
Clients Project No: EDI_ 1263

Project No: 19/09151
Date Received: 01/10/2019 (am)
Cool Box Temperatures (°C): 14.5

NO DEVIATIONS IDENTIFIED
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Earth. Smart. Solutions

Registered Address:

7 Dundas Street

Edinburgh

EH3 6QG

+44 (0) 131 557 8325