



A specialist energy consultancy

# Peat Probing Survey

## Coylton Greener Grid Park

Statkraft UK Limited

15627-017-R0  
25 October 2023

COMMERCIAL IN CONFIDENCE



# Statkraft

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## Document Control

Revision	Status	Prepared by	Checked by	Approved by	Date
d0	DRAFT	HM	SAB	RL	23/02/2023
d1	Updated Draft	RL	RL	RL	05/10/2023
d3	CLIENT COMMENTS	RL	RL	RL	19/10/2023
R0	FINAL	RL	RL	RL	25/10/2023

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# 1 Introduction

## 1.1 General

TNEI Services Ltd (“TNEI”) were commissioned by Statkraft UK Limited (the “Applicant”), to undertake a Peat Probing Survey for the proposed Coylton Greener Grid Park (GPP) (the “Proposed Development”), on land adjacent to the operational Coylton substation, located off the A70, Ayr, KA6 6NF.

## 1.2 Site Description

The Site comprises of an approximate land parcel of 13.1 hectares, located on undeveloped open farmland, mainly used for grazing. The Site is located approximately 5.5 km west of Coylton village and the National Grid reference of the approximate Site entrance is E 246672, N 619822.

The Site is bordered by farmland to the east, south and west. The A70 forms the northern boundary of the site. The Coylton substation are situated to the north-west of the site.

## 1.3 Proposed Development

The Proposed Development is intended to balance the supply and demand of electricity to the National Grid and to support its flexible operation.

The Proposed Development will be constructed in two phases (Phase 1 & Phase 2). The Site Layout (Drawing 15627-023) is presented in Appendix A.

## 2 Desk Study

### 2.1 Published Information

The published information available was reviewed from the British Geological Survey (BGS) GeoIndex Onshore online viewer<sup>1</sup> and Scotland Environment (SE's) web map<sup>2</sup>.

Where descriptions have been obtained from external sources they have been indicated in italics.

#### 2.1.1 Peat and Soils

Based on the National Soil Map of Scotland, available on the SE's web map, underlying and surrounding the Site is *Drifts derived mainly from Coal Measures marls*.

Based on the Carbon and Peatland 2016 map, available on the SE's web map, there is no peat recorded underlying or surrounding the Site.

#### 2.1.2 Superficial Deposits

Based on the Superficial Deposits (1:50,000) map, available on the BGS GeoIndex online viewer, the Site is underlain by Till of the Devensian Age (Diamiction) deposits of glacial origin typically comprising *unsorted and unstratified drift, generally over consolidated, heterogenous mixture of clay, sand, gravel, and boulders varying widely in size and shape*.

#### 2.1.3 Solid Geology

Based on the Bedrock Geology (1:50,000) map, available on the BGS GeoIndex online viewer, underlying and surrounding the Site is Sedimentary rock cycles of the Scottish Upper Coal Measures Formation which characteristically comprises of *sandstone, siltstone and mudstone in repeated cycles, most commonly fining upwards; argillaceous rocks commonly as structureless beds and seatearth; commonly reddish brown or purple due to oxidation of originally grey strata; some reddening may be primary*.

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<sup>1</sup> British Geological Survey–GeoIndex Onshore –  
[https://mapapps2.bgs.ac.uk/geoindex/home.html?\\_ga=2.194822893.1180855443.1626106349-182701794.1607962172](https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.194822893.1180855443.1626106349-182701794.1607962172)

<sup>2</sup> Scotland's Environment–Web Map – <https://map.environment.gov.scot/sewebmap/>



## 3 Field Survey

### 3.1 Previous Survey

The Applicant previously commissioned Arcus Consultancy Services Ltd to carry out a peat depth survey of the extent of the consented 20MW site. The purpose of the survey was to inform good practice during the construction and operation of the proposed BESS by assessing the characteristics of the terrain under the development, with a focus on the nature of peat deposits. The survey was conducted using intrusive ground survey techniques and aimed to provide insights into the peat depth and characteristics at the Proposed Development.

The January 2022 peat depth survey of the Proposed Development found that there was no evidence of peatland present on the Site or the surrounding agricultural land. The survey involved sinking 18 probes at 50m intervals and concluded that no peat or peaty soils will be affected by the development.

### 3.2 TNEI Survey

Due to the revised Site boundary of the GPP an additional peat depth survey was required to be carried out at the Proposed Development covering the additional area not covered in the January 2022 survey.

A total of 13 probes were sunk during the survey, all of which did not register any peat. The Peat Probe Locations drawing (15627-013-R0) are presented in Appendix A and conveys the results from both surveys.

A selection of photographs taken during the Site visit are presented in Appendix B.

## 4 Conclusion

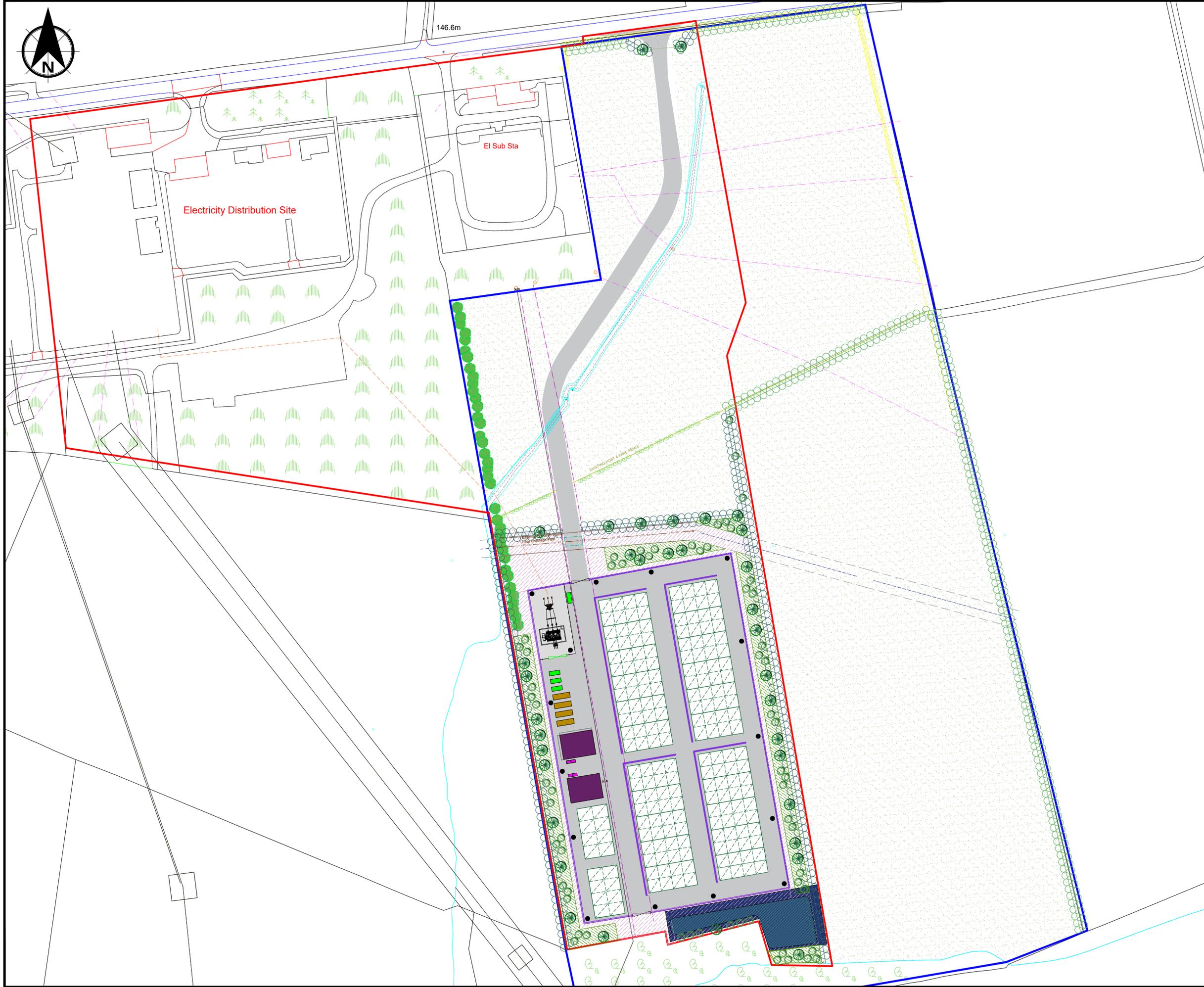
The Site area is currently being used for grazing and published information does not show any evidence of peat being present. During the field survey, no peat was encountered and there is no evidence of peatlands present in the surrounding agricultural land. No peat or peaty soils will be affected as a result of the Proposed Development.

## Appendix A – Drawings

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15627-023-R10 – Parameters Plan

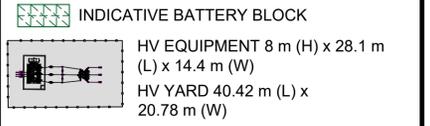
15627-013-R0 - The Peat Probe Locations



**LEGEND**

- APPLICATION SITE BOUNDARY
- LAND WITHIN THE CONTROL OF THE APPLICANT
- - - INDICATIVE GRID CABLE ROUTE 0.32 km
- NOISE ATTENUATION / SECURITY FENCING AT 4.5m HIGH
- EXISTING OVERHEAD LINE (33 kV)
- EXISTING OVERHEAD LINE (33 kV) TO BE DIVERTED
- UNDERGROUNDING OF 33 kV CABLE
- EXISTING DITCH
- EXISTING INDICATIVE DITCH ALIGNMENT
- HV YARD INTERNAL SECURITY FENCING AT 3.4m HIGH
- POST & WIRE FENCING
- EXISTING SCOTTISH WATER FOUL DRAINAGE PIPE
- EXTENDED EXISTING SCOTTISH WATER FOUL DRAINAGE PIPE
- EXISTING SCOTTISH WATER FOUL DRAINAGE PIPE 5m BUFFER
- PROPOSED REINFORCEMENT OF SURFACING TO PROTECT PIPE
- COMMS HOUSE 5.63 m (H) x 14.20 m (L) x 18.80 m (W)
- AUX TRANSFORMER 2.50 (H) x 2.60 m (L) x 1.60m (W)
- STORES 2.60 m (H) x 6.10 m (L) x 2.40 m (W)
- OFFICES 3.60 m (H) x 9.80 m (L) x 3.1 m (W)
- POROUS CRUSHED AGGREGATE HARD SURFACING
- 4.5 m HIGH GATE (CLOSE BOARDED)
- 3.4 m PALISADE GATE
- CCTV / LIGHTING POLE (6m High)
- PROPOSED SuDS ATTENUATION FEATURE (DETENTION BASIN / SOAKAWAY)
- PROPOSED CULVERT - DETAILS TO BE PROVIDED BY WAY OF A CONDITION
- EXISTING TREES - TO BE RETAINED
- EXISTING SCRUB VEGETATION - TO BE RETAINED
- EXISTING HEDGEROW - RETAINED
- EXISTING AGRICULTURAL LANDUSE - RETAINED / REINSTATED
- PROPOSED NATIVE TREE (SELECT STANDARD)
- PROPOSED NATIVE TREE (FEATHER)
- PROPOSED NATIVE WOODLAND EDGE MIX
- PROPOSED NATIVE MIXED HEDGEROW
- PROPOSED NATIVE WILDFLOWER MEADOW
- PROPOSED WET WILDFLOWER MIX (SuDS AREA)

**BATTERY CONTAINER AND HV YARD KEY:**



10	23/10/23	FOR INFORMATION	TS	RL	RL
Rev.	Date	Amendment Details	Dr'n	Chk'd	App'd

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Drawing Status: FOR INFORMATION

Project Title: COYLTON BESS

Drawing Title: PROPOSED SITE LAYOUT PLAN - PARAMETERS

Scale	1:1000	Designed	ST	Drawn	TS	Checked	RL	Approved	RL	
Original Size	A1	Date	18/10/23	Date	24/10/23	Date	24/10/23	Date	24/10/23	
Drawing Number	15627 - 023								Revision	10

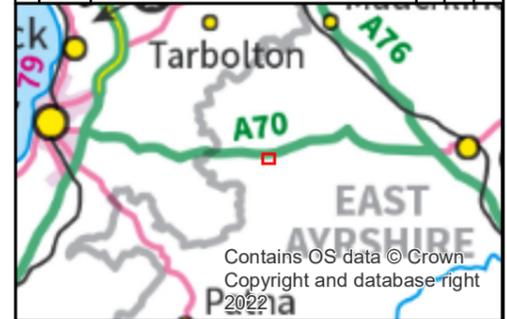


**NOTES**

- Coylton Site Boundary
- Existing Study Peat Probe Locations
- New Peat Probing Area
- New Peat Probing Locations

**NOTE: Peat Depth at all Survey Locations is 0 m**

Rev	Date	Amendment Details	Drw'n	Chk'd	App'd
02	19/10/23	Client Comments - Updated Background Mapping	JCM	RL	RL
01	19/10/23	Client Comments - Updated RLB and Background Mapping	JCM	RL	RL
00	23/02/23	First Issue	JCM	HM	RL



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Client	Statkraft				
Drawing Status	FOR INFORMATION				
Project Title	Coylton GPP				
Drawing Title	Peat Probe Locations				

Scale	Designed	Drawn	Checked	Approved
	JCM	JCM	RL	RL
Original Size	Date	Date	Date	Date
A3	19/10/2023	19/10/2023	19/10/2023	19/10/2023
Drawing Number	Revision			
15627-013				2

## Appendix B – Site Photographs



Taken in the North Western part of the Site (Facing North)



Taken in the North Western part of the Site (Facing East)



Taken in the North Western part of the Site (Facing South)



Taken in the North Western part of the Site (Facing West)



Evidence of made ground underlying soil in the North Western part of the Site



Evidence of mole hills found in South Western part of the Site, indicating poorly drained soil



Taken in the South Western part of the Site (Facing North)



Taken in the Southern-most part of the Site (Facing East)



Taken in the Southern-most part of the Site (Facing North)



Taken in the Southern part of the Site (Facing North)



Taken in the Southern part of the Site (Facing West)



Taken in the North Eastern part of the Site



Taken in the North Eastern part of the Site (Facing East along the A70)



Taken in the North Eastern part of the Site (Facing West along the A70)