

Intended for  
**Viking Energy Wind Farm LLP**

Date  
**February 2023**

Project Number  
**1620009158**

# **VIKING ENERGY WIND FARM PLANNING MONITORING OFFICER AUDIT REPORT 028: 18<sup>TH</sup> JANUARY TO 19<sup>TH</sup> FEBRUARY 2023**

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PLANNING MONITORING OFFICER AUDIT REPORT  
028: 18TH JANUARY TO 19TH FEBRUARY 2023**

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## 1. AUDIT DETAILS

### 1.1 Audit Details

<b>Audit Number</b>	PMO 028
<b>Location</b>	Kergord Mid Kame Ridge Main Construction Compound Nesting North Nesting North Compound Substation
<b>Weather Conditions</b>	Mostly dry with showers and cold wind gusts (5°C).
<b>Audit Date</b>	16 <sup>th</sup> February 2023
<b>Audit Period</b>	18 <sup>th</sup> January to 19 <sup>th</sup> February 2023
<b>Audit Owner</b>	Ramboll UK Ltd

### 1.2 Distribution

<b>Position</b>	<b>Action</b>
Ramboll Project Director Planning Monitoring Officer	For information
SSE Renewables Development Manager	For information
SSE Renewables Consents Manager	For information
SSE Renewables Environmental Advisor	For information
RJ McLeod Design Management Engineer	For Information
Shetland Islands Council Planning Enforcement Officer	For information
Shetland Islands Council Natural Heritage Officer	For information

### 1.3 Terms of Reference

This audit has been completed with reference to the following key documents:

- Application under Section 36C of the Electricity Act 1989 to vary the consent granted under Section 36 of that Act on 4 April 2012 to construct and operate the Viking Wind Farm located in Shetland Islands Council Planning Authority Area and for a direction under Section 57 of the Town and Country Planning (Scotland) Act 1997 for planning permission to be deemed to be granted in respect of the proposed development (i.e. the 'Variation Application').

The Viking Wind Farm project will comprise the construction of 103 wind turbines with a turbine tip height of 155 m; development of a temporary construction compound; construction of associated access tracks; development of a substation; development of a convertor station; erection of permanent Met Masts; and the excavation of borrow pits.

The project was consented as detailed above, receiving Section 36C Consent and deemed planning permission on 24<sup>th</sup> May 2019.



Separate planning consents are in place for the following specific aspects of the development:

- Construction of the Kergord Access Track<sup>1</sup> (consented on 29<sup>th</sup> April 2019).
- Re-alignment of Sandwater Road<sup>2</sup> between the Burn of Weisdale and the junction with the A970 to facilitate construction access for the Viking Wind Farm (consented on 26<sup>th</sup> May 2020).
- Formation of temporary construction compounds at two locations; Sandwater (Main)<sup>3</sup>, consented on 22<sup>nd</sup> June 2020; and North (South of Voe)<sup>4</sup> consented on 9<sup>th</sup> September 2020.

#### 1.4 Role of the Planning Monitoring Officer

Condition No. 3 of the Variation Application states that:

"No development shall commence unless and until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent (a Planning Monitoring Officer ("PMO")). The terms of the appointment shall:

- Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent;
- Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

In order to discharge the above requirements, the PMO undertakes site-based audits at monthly intervals to monitor the compliance with the conditions of the consent. The primary documents used for compliance monitoring are the Construction Environmental Management Plan (CEMP); and the Pollution Prevention Plan (PPP). Additional documents will be referenced as required for specific detail.

The following traffic light system is used to indicate action status:

	Green – activities appear to be compliant with the CEMP, PPP and other applicable environmental management procedures and plans and there are no other issues.
	Amber – in general activities are compliant with the CEMP, PPP and other applicable environmental management procedures and plans but there are minor actions required.
	Red – activities may not be compliant with the CEMP, PPP and other applicable environmental management procedures and there are critical actions.

<sup>1</sup> Shetland Islands Council Planning Reference No: 2018/096/PPF

<sup>2</sup> Shetland Islands Council Planning Reference No: 2019/079/PPF

<sup>3</sup> Shetland Islands Council Planning Reference No: 2019/188/PPF

<sup>4</sup> Shetland Islands Council Planning Reference No: 2019/210/PPF

## **1.5 General Limitations and Reliance**

This report has been prepared by Ramboll UK Limited ("Ramboll") exclusively for the intended use by Viking Energy Wind Farm LLP (the "client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or in respect of any matters outside the agreed scope of the services or the purpose for which the report and the associated agreed scope were intended or any other services provided by Ramboll.

In preparation of the report and performance of any other services, Ramboll has relied upon site observations, publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are intended to form a record for the purpose of documenting compliance with Condition No. 3 of the Variation Application.

Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

## 2. INTRODUCTION

### 2.1 Objectives of Audit

The purpose of the PMO Audit is to monitor the provision of appropriate environmental management at active work sites of the project, via desk-based review of relevant documentation and site visits to be undertaken on a monthly basis to ensure compliance with the conditions of the planning consent and associated environmental management plans.

### 2.2 Scope of Audit

The scope of the audit was as follows:

- Liaison with SIC regarding public concerns or complaints received during the audit period (if any).
- Review of documents provided by the Client and Principal Contractor prior to and following the audit visit. Specific references are included in the relevant sections of the report.
- A site visit attended by the PMO, SSE Renewables, RJM Environmental Clerk of Works and SIC Planning Enforcement Officer undertaken on 16<sup>th</sup> of February 2023 which included the following locations:
  - Kergord;
  - Mid Kame Ridge;
  - Main Compound;
  - Nesting;
  - North Compound;
  - North Nesting; and
  - Substation.
- Discussions were held with the SSER Geotechnical Clerk of Works (GCoW), Environmental Clerk of Works (ECoW) and Archaeological Clerk of Works (ACoW).

A selection of photographs taken during the audit are included in Appendix 1.

### 2.3 Site Personnel

The following site personnel were interviewed as part of this audit:

Company	Position
SSE Renewables	Site Environmental Manager
RJ McLeod	Environmental Clerk of Works
Tony Gee and Partners	Geotechnical Clerk of Works
MBEC	Environmental Clerk of Works
Headland Archaeology	Archaeological Clerk of Works

### 3. SITE SETTING, RECORDS AND OBSERVATIONS

Observations made during the audit are described in this section. Corresponding photographs are included in Appendix 1, alongside a plan of the site indicating the location of each photograph. The turbine numbers used in the site plan have been updated to the operational numbering. The turbine numbering system previously shown is being phased out in line with onset of turbine erections.

#### 3.1 Kergord

##### 3.1.1 Site Setting and Activities

Access to the Kergord Arrays is taken via the Kergord Access Track (KAT), which was accessed from the Sandwater track along the southern boundary of the central area of the development.

Activities in this area during the audit included progression and backfilling of cable trenches, peat restoration areas, capping turbine hardstands, plate load tests (PLT), rock extraction at borrow pits, reinstatement works, the setting up of the Vestas satellite compound and turbine component deliveries.

##### 3.1.2 Observations

Final earthworks associated with turbine hardstands have been completed in Arrays A, E and H, with PLT completed in Arrays B and I.

KBP05 has been cleared and Vestas were in the process of setting up their compounds. The welfare unit, portable fuel tank and generator have been installed with both the fuel tank and generator banded. However, the welfare unit and waste skips were not yet operational.

During the visit, rock was being taken out of KBP02 following final blasting (Photo 1). This is part of the reprofiling process of the borrow pit face in preparation for reinstatement. The reinstatement of this section of KBP02 has been expedited in keeping with mitigation commitments made to SEPA.

Following notes in the PMO027 report, the drainage mitigation around Maa Water has been closely monitored. The outlet of peat pipes downslope of the track and hardstanding have been infilled and additional mitigation installed should they spring again. It is being closely monitored to assess the impact of infilling. The water pump with reactor (further information provided in PMO025 report) was still in place and will be turned on when heavy rainfall is anticipated. The settlement ponds will require re-siting as they are currently located on the route of the planned cable trenches. The new ponds and mitigation measures will be implemented on the upslope side of the track to allow the cable trenches to be formed. On the day of visit, the settlement pond was in situ and water pump turned off (Photo 2).

Following observations raised by the SSER ECoW, the frequency of silt fence maintenance by Droswell Burn has increased. Silt fences nearest to the road have also been replaced with a larger arc fence to increase coverage (Photo 3).

Turbine 005 (previously K73) was observed due to a comment from the GCoW regarding a peat slump covering an area of blanket bog. Further information is provided in Section 3.8.1.

#### 3.2 Mid Kame Ridge and Sandwater Track

##### 3.2.1 Site Setting and Activities

The Mid Kame Ridge (MKR) is accessed from the Sandwater track and stretches northwards to Hamarigrind Scord.

Activities in this area during the audit included reinstatement works, preparation of crane hardstandings for turbine component delivery, completion of cable trench construction, backfilling of completed cable trenches and configuration of trenches to accommodate crossing the track..

### 3.2.2 Observations

All turbine hardstanding on MKR have been layered and capped with the majority of the roads also completed (Photo 4). PLT has been completed on Arrays C and D.

On the day of the visit, the track was being excavated to install the cable trench linking the cross country cabling from the eastern arrays to the cross country route to the substation (Photo 5).

Reinstatement and seeding on MKR are noted to be holding and in good condition.

Work on the cross-country cable route has been delayed to Spring 2023. The halted sections of the cross-country cable route are in good condition.

## 3.3 North Compound

### 3.3.1 Site Setting and Activities

The North Compound is located towards the northern limit of the site on the eastern side of the A970. Lower parts of the North Compound are being used as satellite compound for Vestas.

### 3.3.2 Observations

Top parts of the North Compound were being cleared out on the day of visit. The concrete batching plants were no longer in place at the North Compound. Vestas were setting up a satellite compound in the lower parts of the North Compound (Photo 6).

## 3.4 North Nesting

### 3.4.1 Site Setting and Activities

The northern Nesting turbine arrays are located towards the northern limit of the site on the eastern side of the A970.

Activities in this area during the audit included progression and backfilling of the cable trench, ongoing peatland restoration, rock extraction from borrow pit NBP01, capping of turbine hardstands and delivery of turbine components.

### 3.4.2 Observations

Final earthworks associated with turbine hardstands have been completed in Array J, with PLT completed in Array M. On the day of visit, cable trenches around turbine 048 (previously N90) were being prepared for backfilling (Photo 7) with Array F being prepared for cabling. Turbine components delivery was in progress in the area (example Photo 8) with elements being delivered to turbine 047 (previously N89) during the visit.

Following reports of peat slumps at spur 52 (PMO025 and PMO026), the embankment has been reprofiled to improve stability and re-dressed with peat (Photo 9). Cable trenches near turbine 052 (previously N94) have also been excavated with turbine hardstand completed and capped.

P17 and turbine 055 (previously N97) were observed due to comments from the SSER GCoW and ECoW regarding peat movements. Further information is provided in Sections 3.8.1 and 3.8.2.

### **3.5 Main Compound**

#### **3.5.1 Site Setting and Activities**

The Main Compound is located at the southern extent of the site, accessed from the A970. The lower level comprises car parking and site offices and welfare facilities. The upper level is in use for material and equipment laydown.

#### **3.5.2 Observations**

Vestas have set up site offices and welfare facilities across the car park, opposite the original offices and welfare facilities (Photo 10).

The car parking, original site offices and welfare facilities are functioning well. All materials (including materials on the upper level) were stored according to regulations. No evidence of leaks or staining was observed in the vicinity of the store. All waste skips were labelled.

### **3.6 Nesting**

#### **3.6.1 Site Setting and Activities**

The Nesting arrays are accessed from the A970.

Activities in this area during the audit included progression of cable trench excavations and backfilling, preparation for cabling, rock extraction at borrow pit, formation of turbine base foundations and reinstatement works .

#### **3.6.2 Observations**

Final earthworks associated with turbine hardstands have been completed in Arrays G and O.

On the day of visit, cable trenches around turbine 073 (previously N114) were being prepared for backfilling. As per design, reinforcement measures were being installed to protect cables where the cable trenches may be impacted by crane positions (Photo 11).

Hydroseeding of the peat along cuttings adjacent to the access tracks were holding well with growth observed (Photo 12).

### **3.7 Substation**

#### **3.7.1 Site Setting and Activities**

The Substation occupies the northern third of the HVDC Converter Station Platform located in the Kergord Valley, between Mid Kame Ridge and Kergord. Access to the Substation is taken via the KAT. Only the substation area is subject to the PMO audit.

Activities in this area included construction of the interior of buildings, watercourse diversion, cabling, backfilling of cable arrays, the reprofiling of the areas north and south of the northern water course and the ongoing offsite removal of excess construction materials and materials.

#### **3.7.2 Observations**

A new fence has been constructed marking the operational area of the substation (Photo 13).

Work relating to the restoration of the northern watercourse is progressing well (Photo 14) with some additional reprofiling ongoing on the southern side. The ongoing reprofiling requires interaction with the HVDC site as they have responsibility for completing the design and reinstatement of the diverted northern watercourse. Backfilling of the incoming cable arrays from the wind farm has been completed and is in good condition (Photo 15). Reseeding of this area is

currently being resourced. A natural field gully was intercepted during the cable array works and diverted into the northern watercourse. The adoption of this diversion is under discussion with the HVDC site

The fuel storage at the substation was noted to be in good order, with spill kit and fire extinguisher provided (Photo 16). The waste skips were clearly labelled for segregated waste management.

### **3.8 Communication with SSER Clerks of Work**

#### **3.8.1 GCoW**

Condition 39 of the planning consent requires the appointment of a Geotechnical Clerk of Works (GCoW) to minimise the risk of peat failure arising from the development. A discussion was held between the PMO and GCoW before the site visit on 9<sup>th</sup> of February 2023.

The GCoW described the ongoing monitoring work across the site. This has included monitoring of the general construction works including cable routes, monitoring peat restoration areas and providing advice on peat handling.

As noted in Section 3.1.2, the GCoW mentioned a movement of peat occurred at turbine 005 following reinstatement works (Photo 17). It was agreed by all parties that the risk of further movement is low and stability of undisturbed ground has not been compromised. This will continue to be monitored and will be reinstated in keeping with the surrounding environment and topography once turbine delivery has been completed.

As noted in Section 3.4.2, the GCoW raised movements of peat at turbine 055 and P17 with concern regarding stability, surface run off and erosion. Additional silt fences and turf bund has been installed at turbine 055 (Photo 18) to minimise surface run off. Regarding P17, both Principal Contractor and SSE Site Environmental Manager note that observations are part of the settling process and will be addressed in phase 2 of peat restoration.

As reported in PMO025-PMO027, the GCoW is continuing to monitor the crack at the edge of the hardstanding surface at turbine 073.

#### **3.8.2 ECoW**

Condition 19 of the planning consent requires the appointment of an Ecological Clerk of Works (ECoW) to ensure protection of the natural heritage of the area. A discussion was held between the PMO and ECoW before the site visit, on the 13<sup>th</sup> February 2023.

The ECoW continues to work with the Principal Contractor to identify and implement mitigation measures throughout different stages of construction. The measures aim to ensure the project maintains compliance with relevant licences. The ECoW is monitoring the progress of these measures on an ongoing basis.

The ECoW is having ongoing communication with the Principal Contractor including details of open cable trenches and maintenance of silt fences. Discussions with the contractor are with a view to minimising the risks associated with heavy rainfall.

The ECoW raised a movement of peat at turbine 055 and P17, noting movement spreading into areas of blanket bog and potential erosion. The concerns are shared by GCoW with response included in Section 3.7.2. As noted above, observations in P17 are part of the settling process.

### 3.8.3 ACoW

Condition 29 of the planning consent requires the appointment of an Archaeological Clerk of Works (ACoW) to ensure archaeological features are protected and recorded during the development. The ACoW communicated the ongoing works to the PMO on the 9<sup>th</sup> February 2023.

The ACoW described the ongoing and completed monitoring works across the site. As there is a delay on cross-country cabling works ongoing works was confined to Spur 6.

Following the day of visit, ACoW site provision has been suspended until May when the cross country works recommence. All other watching brief areas have been completed. An ACoW resource will remain dedicated to the project, based remotely, for the period until May and will be on call should issues arise.

### 3.9 Communication with SIC

During the audit, the SIC Planning Enforcement Officer observed work in NBP01 and NBP05. SIC has enquired as to the status of the borrow pit reinstatement plans. PMO notes that generic reinstatement plans have been submitted and approved under Condition 8. Detailed plans are to be submitted to SSE and signed off by SSER GCoW and EcoW. RJM notes that the detailed plans are in draft and will be submitted in due course.

A communication was received via email, enquiring about the level of trace metals in Burn of Lunklet. The email requested information on mitigation measures and confirmation regarding impact on trout population. Following the query, an official public response has been provided by a spokesperson of Viking Energy Wind Farm. Short-term and interim mitigation measures have been implemented as per the SEPA accepted mitigation plan with long-term reinstatement works at KBP02 and wider area progressing. Additional mitigation measures are also being implemented as opportunities arise in conjunction with ongoing dialogue with SEPA.

### 3.10 Scope of next audit

The scope of the next PMO audit will be dependent on the specific activities undertaken at the development site in the preceding days and weeks. This is likely to include:

- Update on progress of construction works at Kergord, Mid Kame Ridge, Sandwater Road, North Compound and North Nesting, Main Compound and Nesting.
- Consideration of any comments received by the SIC or the Developer in relation to the works, including visits to view specific areas of concern.
- Update on the cable track areas, site wide reinstatement works and cable trench backfilling.
- Update on the construction of the VEWf Substation and undertake PMO audit of the substation area.
- Update on Vestas satellite compounds, delivery schedule and turbine erection.
- Updates from the ACoW, EcoW and GCoW teams.



## 4. AUDIT FINDINGS AND REQUIRED ACTIONS

Issue	Auditor Comments	Required Action	Action Owner	Status
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	<p>Peat restoration areas are managed through the project Habitat Management Plan and by a dedicated HMPO which balances the geotechnical and ecological objectives of the restoration.</p> <p>Potential risks relating to storage of peat are recorded on the PRRs and communicated to the Principal Contractor to allow mitigation / monitoring to be undertaken. The PMO will request evidence in future audits to confirm compliance with requirements for GCoW and ECoW approval of proposed peat restoration areas.</p> <p>The project COSHH stores are typically used for the storage of maintenance oils and greases. The stores were all locked and the assessment for each substance was readily available in each store. The stores were bunded and no leaks or staining was observed around the stores.</p>	No action required	Principal Contractor	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	<p>Ecological constraints identified by the ECoW team are communicated to the Principal Contractor and Developer to allow mitigation measures to be implemented and rescheduling of preparatory and construction work as required. These are also marked out by poles on the site and included on ecological sensitive plans issued to the Principal Contractor.</p> <p>Watching briefs have been undertaken by the ACoW where potential archaeological constraints are identified. Where there are known archaeological features the track is micro-sited to avoid the feature.</p>	No action required.	N/A	Green

## VIKING ENERGY WIND FARM

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	<p>The project has received authorisation to abstract water from eight locations from SEPA. The authorisation allows the water to be used for dust suppression. The PMO has reviewed documents confirming that the appropriate registration is in place with SEPA under The Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended.</p> <p>The project continues to improve the pollution prevention measures with additional measures installed in high risk areas. PMO observed effective measures in place including but not limited to cut off drains, settlement ponds, silt controls, track side ditches and water pump reactor.</p>	No action required.	N/A	Green
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	Silty water has been observed being discharged for a short time into watercourses during period of heavy rainfall. This was not a long and uncontrolled continuous discharge. The levels of sediment in the water have not exceeded the permitted levels. Further mitigation has been put in place in the areas of concern.	<p>No action required.</p> <p>Field testing for suspended solids determines whether further action and/or external reporting is required.</p>	N/A	Green
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	The SSE Renewables Environmental Manager notified the PMO that there have been some exceedances of Environmental Quality Standards of some trace metals in water quality sampling in the Burn of Lunklet.	Investigation into the source of the trace metals is ongoing. Short-term mitigation measures have been implemented as per the SEPA accepted mitigation plan with long-term mitigation strategy progressing.	VEWF	Amber

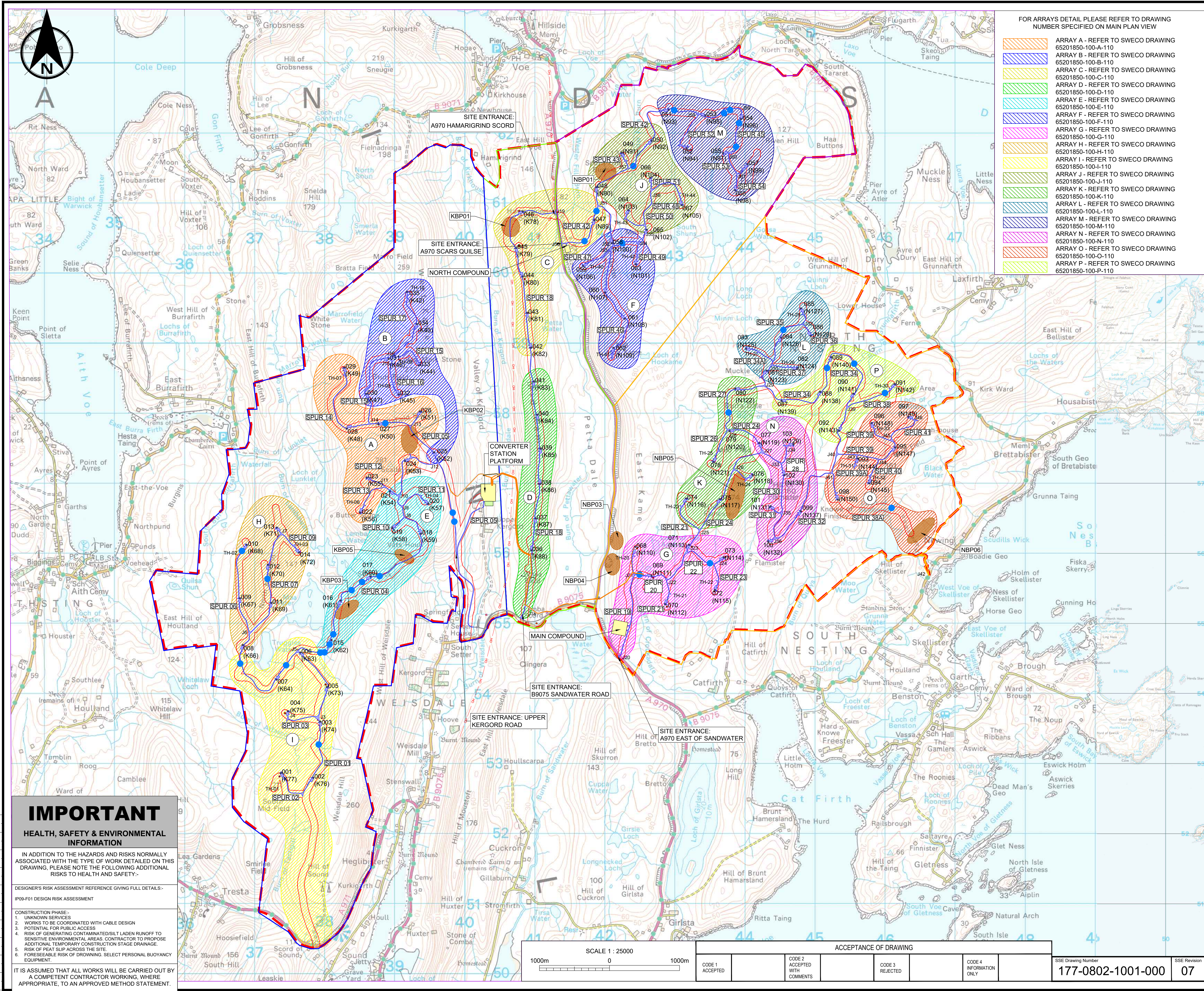
## VIKING ENERGY WIND FARM

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Waste (e.g. use of spill kits and littering)	During the audit the PMO observed spill kits to be well stocked and readily available in areas where liquids are stored. However, the PMO also observed an incident where spill kit was not used while refuelling and the fuel pump being dropped on the road after refuelling. Fortunately in this incident, there was no spill and no pollution. Litter has also been observed by the PMO during the audit. Once spotted, they were picked up by the Principal Contractor's ECoW.	Additional training and toolbox talk on the importance of using spill kit and against the habit of littering.	Principal Contractor	Amber
Resources, Waste and Transport.	The project manages wastes through a Site Waste Management Plan, the plan identifies the contractors transferring the waste and the disposal sites. Documents are retained in line with regulatory requirements.	No action required.	N/A	Green
Pre-Planning Works (e.g. site set-up and general management, access tracks, community liaison).	Evidence of pre-planning works observed and reported during the audit included archaeological watching brief, community liaison. Potential constraints are identified and suitable mitigation measures implemented to prevent negative impacts.	No action required.	N/A	Green

## **APPENDIX 1**

### **SITE LOCATION PLAN, PEAT RESTORATION PLAN AND PHOTOLOG**





### NOTES

- CONTAINS ORDNANCE SURVEY DATA RECEIVED FROM SSE ON 27.08.2020.
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
- TURBINE LOCATIONS BASED ON: "VIKING MICROSITING TRACKER" DATED 24.07.2020.
- ACCESS TRACKS AND HARDSTANDINGS BASED ON SSE LAYOUT: "S115056-TG-XX-XX-M3-C-1000\_ALL\_SPURS\_HARDSTANDS-P01". ARRAY LAYOUTS SUBJECT TO VALUE ENGINEERING DESIGN BY RJM.
- FOR CULVERT CATCHMENT ASSESSMENT REFER TO SWECO DRAWING 65201850-100-101.

#### LEGEND

- SITE PLANNING BOUNDARY
- PROPOSED NEW TRACK
- PROPOSED CONSTRUCTION COMPOUND
- PROPOSED COMPOUND
- PROPOSED BATCHING PLANT
- BORROW PIT SEARCH AREA
- PROPOSED WTG LOCATION
- AREA 1 - WEST (KERGORD)
- AREA 2 - RIDGE (KERGORD CENTRAL)
- AREA 3 - EAST (NESTING SOUTH)
- AREA 4 - NORTH (NESTING NORTH)
- PROPOSED WATERCOURSE CROSSING
- 50m MICROSITING
- SANDWATER ROAD
- CROSS COUNTRY CABLE ROUTES
- ARRAY GROUPS

05	16.01.23	FOR CONSTRUCTION SSE REV07	AF	RE	RY
04	27.01.22	FOR CONSTRUCTION SSE REV06	BH	RP	CM
03	07.07.21	FOR CONSTRUCTION SSE REV05	BH	RP	KS
02	08.06.21	FOR CONSTRUCTION SSE REV04	BH	RP	KS
01	23.02.21	FOR CONSTRUCTION SSE REV03	BH	RP	KS
Rev.	Date	Amendment Details	Drawn	Chk'd	App'd
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Project Title					
VIKING WIND FARM					
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SITE GENERAL ARRANGEMENT					
Scale	Designed	Drawn	Checked	Approved	
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Original Size	Date	Date	Date	Date	
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Drawing Number					Revision
65201850-100-100					05

## IMPORTANT

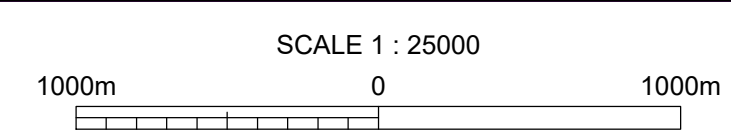
### HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING ADDITIONAL RISKS TO HEALTH AND SAFETY:-

DESIGNER'S RISK ASSESSMENT REFERENCE GIVING FULL DETAILS:-  
IP09-F01 DESIGN RISK ASSESSMENT

- CONSTRUCTION PHASE:-
- UNKNOWN SERVICES
  - WORKS TO BE COORDINATED WITH CABLE DESIGN
  - POTENTIAL FOR PUBLIC ACCESS
  - RISK OF GENERATING CONTAMINATED/SILT LADEN RUNOFF TO SENSITIVE ENVIRONMENTAL AREAS. CONTRACTOR TO PROPOSE ADDITIONAL TEMPORARY CONSTRUCTION STAGE DRAINAGE.
  - RISK OF PEAT SLIP ACROSS THE SITE.
  - FORESEEABLE RISK OF DROWNING. SELECT PERSONAL BUOYANCY EQUIPMENT.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

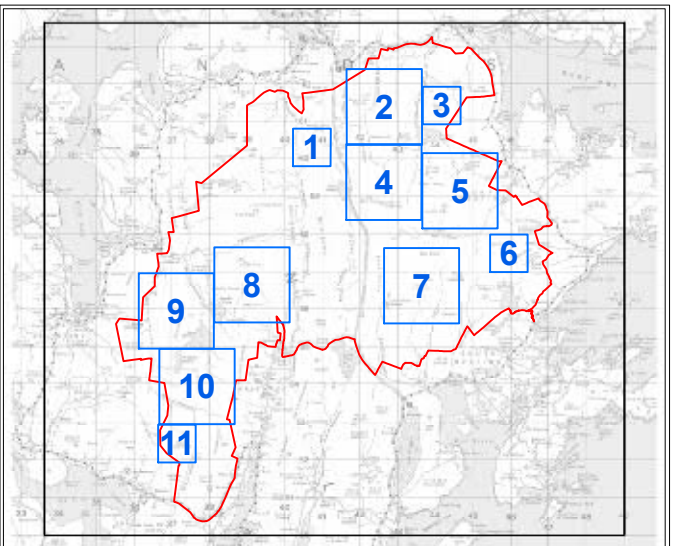
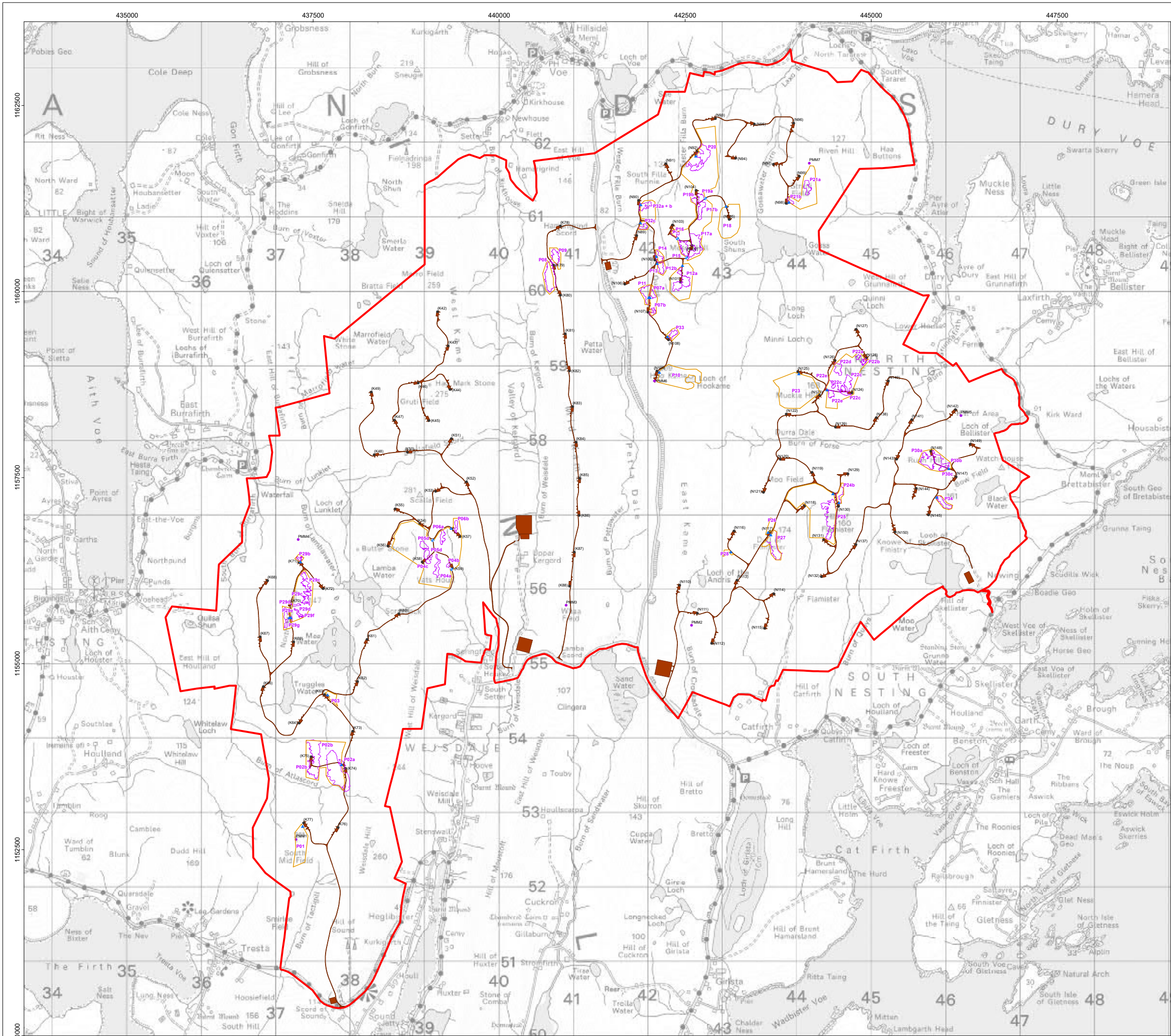


ACCEPTANCE OF DRAWING			
CODE 1 ACCEPTED	CODE 2 ACCEPTED WITH COMMENTS	CODE 3 REJECTED	CODE 4 INFORMATION ONLY

SSE Drawing Number  
177-0802-1001-000

SSE Revision  
07



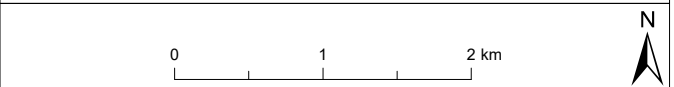


### Legend

- Site Boundary
- Turbine
- Permanent Met Mast
- Indicative Cattle Grid Location
- Indicative Gate Location
- Fencing
- HMP Phase 1 - Areas of Peat Deposition and Profiling
- Microsited Site Layout

Note 1: Phase 1 areas beyond the fence line are to allow cable laying and access.

Note 2: Areas within the fence line not noted as HMP Phase 1 will be subject to Phase 2 Technique considerations.



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Project Name

## VIKING ENERGY WIND FARM

### Drawing Title

## PEAT RESTORATION

Rev	Date	Remarks	Drwn	Chkd
R0	23/02/2021	First Issue	TD	EM
R1	12/01/2022	Revised HMP	AM	DM
R2	04/02/2022	Fencing boundary changes, gates and cattle grids added	AM	DM

Drawing Number  
LN000046-VIK-ENV-SK-0040-01

Scale	Plot Size	Datum	Projection
1:18,000	A0	OSGB36	BNG

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**Photo 1.** View of KBP02



**Photo 2.** Mitigation by Maa Water with settlement pond, water pump and silt fences

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023



**Photo 3.** View of silt fences by Droswell Burn



**Photo 4.** View towards turbine 042 (previously K82) showing capped road and turbine hardstand

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023





**Photo 5.** Track excavation near turbine 036 (previously K88)



**Photo 6.** View of Vestas North Compound

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023



**Photo 7.** Preparation for backfilling of cable trenches near turbine 048 (previously N90)



**Photo 8.** Delivered turbine components at turbine 054 (previously N96)

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023



**Photo 9.** View of Spur 52 (Photo courtesy of RJM)



**Photo 10.** Vestas offices and welfare facilities at main compound

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023





**Photo 11.** Concrete Protection detail for cables that pass through assist crane hardstands at turbine 073 (previously N114)



**Photo 12.** Growth from hydroseeding between turbine 069 and 071 (previously N111 and N113)

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023



**Photo 13.** New fence at substation



**Photo 14.** View upstream to the restoration of the Northern Watercourse

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023





**Photo 15.** View of completed backfilled area of incoming arrays from the wind farm



**Photo 16.** Spill mat and fire extinguisher at substation

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023



**Photo 17.** Peat slump at turbine 005 (previously K73)



**Photo 18.** View of turf bund and silt fences for peat movement by turbine 055 (previously N97)

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 15 <sup>th</sup> February 2023