Intended for

Viking Energy Wind Farm LLP

Date

July 2021

Project Number

1620009158

# VIKING ENERGY WIND FARM PLANNING MONITORING OFFICER AUDIT REPORT 008: 26<sup>TH</sup> MAY TO 23<sup>RD</sup> JUNE 2021



# VIKING ENERGY WIND FARM PLANNING MONITORING OFFICER AUDIT REPORT 008: 26TH MAY TO 23RD JUNE 2021

Ramboll 5th Floor 7 Castle Street Edinburgh EH2 3AH United Kingdom T +44 131 297 2650 www.ramboll.co.uk

### **CONTENTS**

I.	AUDIT DETAILS	1
1.1	Audit Details	1
1.2	Distribution	1
1.3	Terms of Reference	1
1.4	Role of the Planning Monitoring Officer	2
1.5	General Limitations and Reliance	3
2.	INTRODUCTION	4
2.1	Objectives of Audit	4
2.2	Scope of Audit	4
2.3	Site Personnel	4
3.	SITE SETTING, RECORDS AND OBSERVATIONS	5
3.1	Kergord	5
3.2	Sandwater Road	5
3.3	Mid Kame Ridge	6
3.4	North Compound and North Nesting	6
3.5	Main Compound and Nesting	7
3.6	Communication with SIC	7
3.7	Communication with Clerks of Work	8
3.8	Scope of next audit	9
4.	AUDIT FINDINGS AND REQUIRED ACTIONS	10

### 1. AUDIT DETAILS

### 1.1 Audit Details

Audit Number	PMO 008		
Location	Kergord		
	Sandwater Road		
	Mid Kame Ridge		
	North Compound and North Nesting		
	Main Construction Compound		
	Nesting		
Weather Conditions	Windy, mild, dry (12°C).		
Audit Date	22 <sup>nd</sup> June 2021		
Audit Period	26 <sup>th</sup> May to 23 <sup>rd</sup> June 2021		
Audit Owner	Ramboll UK Ltd		

1

### 1.2 Distribution

Position	Action
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  $24^{th}$  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/PFF

 $<sup>^{2}</sup>$  Shetland Islands Council Planning Reference No: 2019/079/PPF

 $<sup>^{3}</sup>$  Shetland Islands Council Planning Reference No: 2019/188/PPF

<sup>&</sup>lt;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 Audits 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.
  - A complaint was received by SIC relating to the generation of dust on the Kergord Access Track (KAT).
- 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, RJM Design Management Engineer and SIC Planning Enforcement Officer undertaken on 22<sup>nd</sup> June 2021 which included the following locations:
  - Kergord;
  - Sandwater Road;
  - Mid Kame Ridge;
  - North Compound and North Nesting;
  - Main Compound; and
  - Nesting.
- Discussions were held with the 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	
RJ McLeod	Design Management Engineer	
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.

### 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 new Sandwater track along the southern boundary of the central area of the development.

Activities in this area during the audit included progression of access tracks and peat restoration areas, rock extraction at borrow pits and formation of crane pad hardstanding areas.

### 3.1.2 Observations

Construction of Spur 14 had extended towards K48 at the time of the audit; the separation of the peat, soil and turves, ready for reinstatement, was observed to be good. The work is this area is shown in Photograph 1 of Appendix 1.

At Spur 4, construction had progressed to K62, with ongoing capping of the road. A number of unmapped gullies were observed along this track, silt traps had been installed to prevent any runoff entering watercourses. During the audit, dust suppression measures were noted, with a bowser used to wet the track.

Close to K57, a pond had formed in a depression adjacent to the newly formed track. The pond has been used as a water source for dust suppression. The work is this area is shown in Photograph 3 of Appendix 1.

The planned blasting noted in the previous audit had taken place at KBP02 to provide additional material for track and crane hardstanding construction. The peat restoration area in the vicinity of KBP02 had continued since the last audit. The track towards K51 had been extended past KBP02. The work is this area is shown in Photograph 4 of Appendix 1.

The refuelling at KBP02 was observed to be well maintained, it was double bunded and underlain with a heavy duty visqueen membrane, as shown in Photograph 5.

### 3.2 Sandwater Track

### 3.2.1 Site Setting and Activities

A new track has been constructed at Sandwater, located at the southern limit of the central site area, which provides access to the Kergord and Mid Kame Ridge wind farm areas for all construction traffic. The new track is located adjacent to the existing Sandwater Road (B7095), which remains operational for public traffic. The Sandwater Loch is located directly to the south of the site boundary. Sandwater Loch is designated as a Site of Special Scientific Interest (SSSI)<sup>5</sup>, notified for 'Open Water Transition Fen' and 'Mesotrophic Loch' habitats.

Activities in this area comprised the ongoing construction of the permanent bridge over the Burn of Pettawater and ongoing reinstatement of the southern verge of the new Sandwater track.

<sup>&</sup>lt;sup>5</sup> As notified under the Nature Conservation (Scotland) Act 2004

### 3.2.2 Observations

Construction of the permanent bridge over the Burn of Pettawater is ongoing with wing wall remedial coring. The track is open to construction traffic with ongoing monitoring of settlement plates. The peat reinstatement works are continuing.

### 3.3 Mid Kame Ridge

### 3.3.1 Site Setting and Activities

The Mid Kame Ridge (MKR) is accessed from the new Sandwater track and stretches northwards to Hamarigrind Scord. Track construction, reinstatement, crane pad hardstanding formation, the excavation of turbine bases, installation of cable ducts and preparation for concrete blinding was being undertaken during the audit.

### 3.3.2 Observations

During the audit the PMO observed the preparation of turbine base excavations for geotechnical testing and the installation of cable ducts. Concrete was being poured at K84 as part of the cable duct installation. The RJMs Design Management Engineer reported the cable duct installation preceeds concrete blinding. The work is this area is shown in Photograph 6 of Appendix 1.

At the northern end of Mid Kames Ridge the connection to the A970 had been completed at Hamarigrind Scord. The regrading of the side slopes of the cutting and capping of the track is ongoing. It was noted that dust was picked up by the wind without disturbance by vehicles. In addition, vehicles travelling below or at the site speed limit contributed to dust emissions. The dust was reduced on the capped sections of the track. The PMO noted ongoing dust suppression using mobile bowsers.

From the vantage point on MKR, the PMO observed short periods where gusts of wind or vehicle movements caused wind-blown dust blowing across the A970. It was noted by all parties present that some construction dust emissions are inevitable at this stage in the construction works, depending on the local weather conditions, even with regular 'damping down' using mobile water bowsers. The potential for increasing the focus of damping down around the Hamarigrind Scord and North Nesting junctions with the A970 was discussed. The PMO understands that SSE and SIC have engaged further on this issue since the audit.

The PMO notes that the Principal Contractor is seeking to manage the dust issues in accordance with the CEMP and in line with good practice guidance set out by the Institute of Air Quality Management (IAQM)<sup>6</sup>. This will be subject to ongoing monitoring with suppression implemented based on conditions.

### 3.4 North Compound and North Nesting

### 3.4.1 Site Setting and Activities

The North Compound and northern Nesting turbine arrays are located towards the northern limit of the site on the eastern side of the A970. Activities that have been undertaken in this area have included the ongoing construction of Spurs 42 and 46. At the North Compound batching plant 1 is in place and the plinth for batching plant 2 had been shuttered.

<sup>&</sup>lt;sup>6</sup> Holman et al, 2014, IAQM Guidance on the assessment of dust from demolition and construction V1.1. Institute of Air Quality Management, London Available: http://www.iaqm.co.uk/text/guidance/construction-dust-2014

### 3.4.2 Observations

VIKING ENERGY WIND FARM

Since the May audit, the first concrete batching plant had been installed and the works for a second unit had started. The water tanks for concrete production will be mains fed due to the proximity of a Scottish Water pipe, the connection to the mains water is being planned with Scottish Water. The work is this area is shown in Photograph 7 of Appendix 1.

The dust produced by vehicles travelling along Spur 42 was visible from MKR and was blown across the A970. Dust suppression measures were observed with a tractor towing a water bowser trailer regularly spraying water to dampen the access track. During the audit, it was suggested by SIC that the spraying should be conducted more regularly.

The ACoW advised that assessments of a historical Nissen Hut are complete in the North Nesting area. Further details are provided in Section 3.7.3.

### 3.5 Main Compound and Nesting

### 3.5.1 Site Setting and Activities

The Main Compound is located at the southern extent of the development 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. The Nesting arrays are also accessed from this area.

Activities in these areas included the ongoing formation of the upper laydown area in the Main Compound, progression of access tracks, peat restoration, excavation of turbine bases and rock extraction from borrow pit NBP05.

### 3.5.2 Observations

Blasting had been carried out at NBP05 for use on Spurs 34 and 39, it was noted that spent blasting wire had not been cleared from the area. The construction of tracks for Spurs 34 and 39 is continuing.

The ECoW reported a number of bird constraints in the Nesting area including Spurs 26 and 38. These are identified through continuous surveying by the ECoW and communicated to the Principal Contractor prior to works commencing.

Additionally, the GCoW reported that there is an ongoing watching brief on Spur 39 to determine the effect of the track on drainage.

The works at peat restoration areas P25 and P27 are ongoing.

### 3.6 Communication with SIC

As described in Section 2.2, SIC advised the PMO of three recent public complaints that had been received regarding the generation of dust in Kergord and North Nesting. One of the concerns noted the dust generation in dry conditions.

SSE confirmed that atmospheric conditions and traffic movements continue to be monitored and dust suppression measures are implemented as required. During the audit visit on 22<sup>nd</sup> June 2021, the PMO observed dust suppression measures in operation in Kergord, North Nesting, and South Nesting. The PMO understands that SSE have agreed with SIC to consider mobilising additional resources to manage dust emissions, particularly in areas close to public roads.

### 3.7 Communication with Clerks of Work

### 3.7.1 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 video call was held between the PMO and GCoW after the site visit, on 30<sup>th</sup> June 2021.

The GCoW described the monitoring work that had been undertaken since the last audit. This included continued monitoring of the general construction works, including peat restoration areas; providing advice to the Developer and Principal Contractor teams in relation to peat and soil storage and handling; review of Peat Risk Registers (PRR) and providing any additional comments as required; and undertaking design reviews. The last of the design reviews were completed in the reporting period.

There are ongoing watching briefs on Spur 15 and Spur 39 to observe the effect the track has on drainage.

### 3.7.2 ECoW

Condition 19 of the planning consent requires the appointment of an Ecological Clerk of Works to ensure protection of the natural heritage of the area. A video call was held between the PMO and ECoW after the site visit, on 02<sup>nd</sup> July 2021.

The ECoW advised that all vegetation pre-construction surveys have now been completed including the Groundwater Dependent Terrestrial Ecosystems (GWDTE). Additional checks are performed closer to the start of construction to identify any changes to vegetation.

The ECoW continues to survey the site for bird constraints, these are identified and communicated to the Principal Contractor prior to construction activities in an area. This allows for planning on how to manage constraints, for less sensitive species it can be possible to micro site the track away from the bird constraint. Where required by the constraint, works are stopped in a defined buffer zone; at present all four areas of the site include bird constraints that have that have required a short term reprogramming of works.

The bird constraints are updated daily and are expected to restrict works in specific areas for the next three to four weeks to the end of the nesting season. For the species with longer nesting seasons constraints are expected to be in place through to late August.

GIS mapping prepared by the ECoW is shared with the Principal Contractor and the Developer to provide a visualisation of the identified ecological constraints, as well as a project tracker (discussed daily through the breeding season) which provides details of the associated anticipated time constraints (e.g. associated with nesting birds) so that works can be scheduled appropriately. The maps and tracker are updated regularly.

### 3.7.3 ACoW

Condition 29 of the planning consent requires the appointment of an Archaeological Clerk of Works to ensure archaeological features are protected and recorded during the development. A video call was held between the PMO and ACoW prior to the site visit, on 17<sup>th</sup> June 2021.

An update on the archaeological watching briefs and monitoring that has been carried out since the previous PMO audit was provided, as summarised below:

- Daily monitoring checks are undertaken across the construction site by the ACoW.
- The area in the vicinity of the previously identified Nissen Hut in the north Nesting area (Spur 43) was excavated under a watching brief by the ACoW to define and evaluate this feature.

- A watching brief of excavations on Spur 40a was undertaken.
- A representative of the Shetland Amenity Trust visited the site on the 26<sup>th</sup> May 2021 to view the progress on site. The ACoW reported that there had been no concerns raised during the visit, the ACoW continues to update Shetland Amenity Trust every few weeks via email.
- Ongoing monitoring by the ACoW of the excavation works at NBP01.
- There is an upcoming watching brief between N138 and N141 on week commencing the 28<sup>th</sup>
   June 2021.
- There is an upcoming watching brief planned for Spur 38 however the date of the works has not yet been agreed.

### 3.8 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 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 formation of peat restoration areas.
- Update on the construction of borrow pits.
- 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).	Peat restoration areas appeared well managed with good segregation between peat and turf.  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.	No action required.	N/A	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	Nesting bird constraints identifed by the ECoW team were communicated to the Principal contractor and Developer to allow mitigation measures to be implemented and rescheduling of preparatory and construction work as required. Watching briefs have been undertaken by the AcoW where potential archaeolgical constraints were identifed. Excavations in the vicinity of a historical Nissen Hut are ongoing to define and evaluate the feature.	No action required.	N/A	Green
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	The project has recieved 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.	No action required.	N/A	Green
Noise, Dust, and Air Quality	Three complaints were recieved by SIC in relation to dust generation in Kergord. The Developer confirmed that dust suppression measures are implemented as required. The PMO observed tractors with water bowsers at various locations across the site including the Kergord and	No additional actions required other than continued monitoring of dust conditions and implementation of control measures as needed; and	N/A	Green

VIKING ENERGY WIND FARM

Issue	Auditor Comments	Required Action	Action Owner	Status
	Nesting, dampening down the access tracks to aid with the mitigation of dust generation.  A complaint was received by SIC regarding the apparent use of the access tracks by site vehicles outside the agreed working hours. No records of vehicle movements were reported outside of the permitted working times. The Developer agreed to liaise with other users of the access tracks in the Kergord area to align use to the agreed operational hours.  Evidence from the Principal Contractor was reviewed to confirm that appropriate communications have been issued to SIC confirming the blasting schedule during the audit period (in accordance with condition 13.	ongoing liaison as required with other construction operators.		
Resources, Waste and Transport.	No issues were identified	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 pre-construction surveys, nesting bird surveys, and micro-siting of access tracks to account for nesting bird constraints. The PMO reviewed examples of project communications confirming 'work arounds' for some bird constraints, involving temporary micrositing/use of pilot roads to progress construction whilst taking account of bird constraints. In each case, the proposals were approved by the SSE environmental advisor and project ECOW, in accordance with condition 16.	No action required.	N/A	Green

PLANNING MONITORING OFFICER AUDIT REPORT 008: 26th May TO 23rd June 2021 VIKING ENERGY WIND FARM

# APPENDIX 1 SITE LOCATION PLAN AND PHOTOLOG

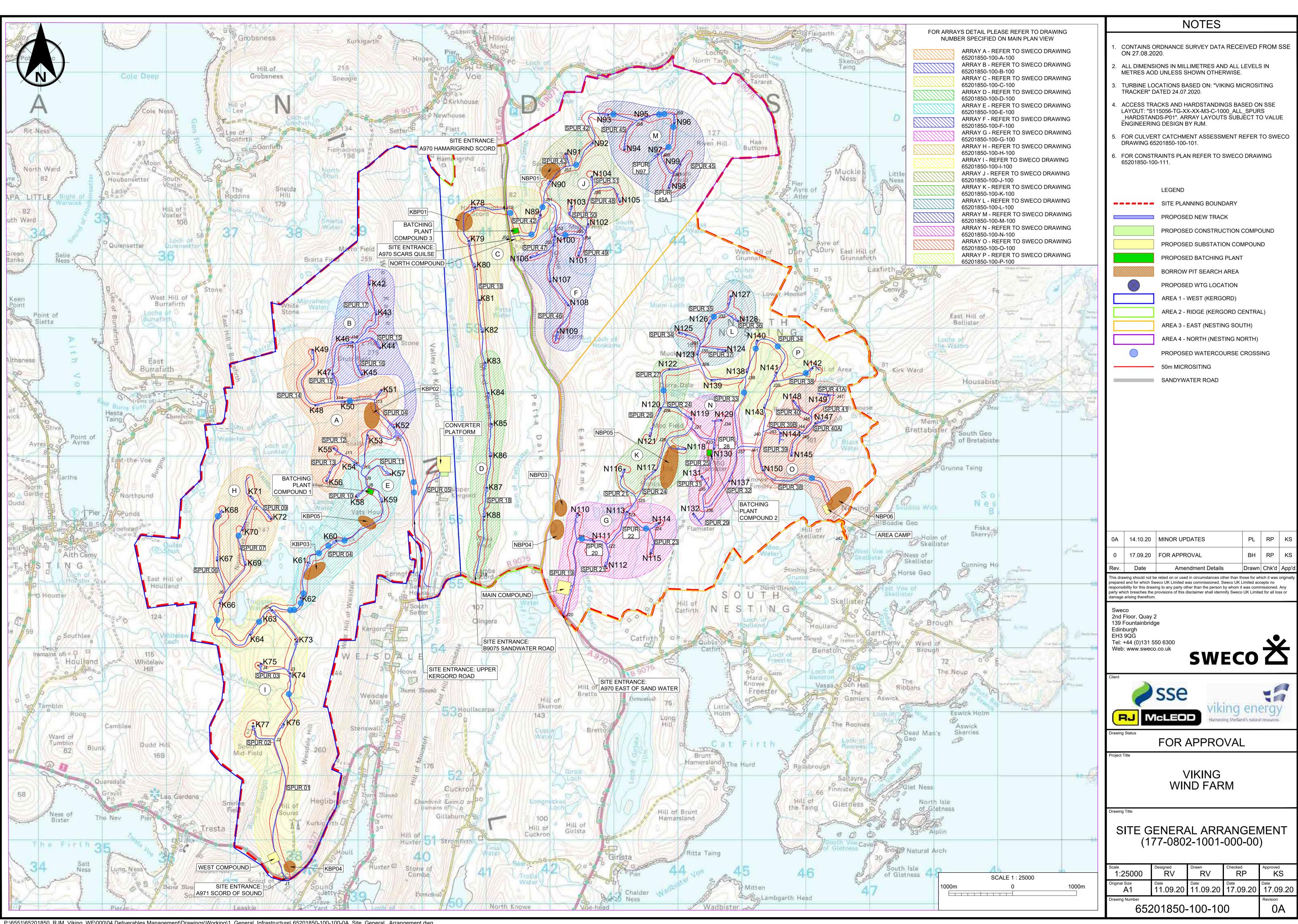






Photo 1. Looking south from Spur 14 between K50 and K48, the segregation of peat and turves ready for reinstatement was observed to be good.



**Photo 2.** View at KBP03 of temporary peat storage. Whilst on Spur 4 dust suppression using a water bowser towed by a tractor was observed.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	22 <sup>nd</sup> June 2021





**Photo 3.** View from K57 of the peat reinstatement to the edge of the road and a water bowser used for dust suppression.



Photo 4. View of KBP02 and the adjacent peat restoration areas. Blasting had taken place at KBP02 since the previous audit exposing rock better suited to road capping.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	22 <sup>nd</sup> June 2021





View of materials storage at KBP02, the area around the containers was free from staining. The storage is double bunded and underlain with a heavy duty visqueen membrane.



**Photo 6.** View of the base of K84 being built up with aggregate before cable duct installation.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	22 <sup>nd</sup> June 2021





Photo 7. The first batching plant installed at the North Compound, the water will be sourced from Scottish Water pipelines.



**Photo 8.** In South Nesting construction had extended to N147.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	22 <sup>nd</sup> June 2021