Intended for
Viking Energy Wind Farm LLP

Date
May 2023

Project Number
1620009158

VIKING ENERGY WIND FARM
PLANNING MONITORING OFFICER AUDIT REPORT 031: 17TH APRIL TO 21ST MAY 2023

RAMBOLL

VIKING ENERGY WIND FARM
PLANNING MONITORING OFFICER AUDIT REPORT
031: 17TH APRIL TO 21ST MAY 2023

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1. AUDIT DETAILS

1.1 Audit Details

Audit Number	PMO 031
Location	Kergord Main Construction Compound Nesting North Nesting North Compound
Weather Conditions	Overcast, dry (7°C). Moderate breeze
Audit Date	17th May 2023
Audit Period	17th April – 21st May 2023
Audit Owner	Ramboll UK Ltd

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
SSE Renewables Vestas Package Manager	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 24th May 2019.

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

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

[1] Shetland Islands Council Planning Reference No: 2018/096/PFF
[2] Shetland Islands Council Planning Reference No: 2019/079/PPF
[3] Shetland Islands Council Planning Reference No: 2019/188/PPF
[4] 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 Environmental Advisor, SIC Planning Enforcement Officer and RJ McLeod (RJM) Environmental Clerk of Works (ECoW) as undertaken on the 17th of May 2023. The site visit included the observation of the following locations:
  - Kergord;
  - Sandwater Road;
  - Mid Kames Ridge;
  - North Nesting; and
  - Nesting;
- Discussions were held with the SSER Geotechnical Clerk of Works (GCoW), Environmental Clerk of Works (ECoW), Archaeological Clerk of Works (ACoW) and Vestas' Package Manager.

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	Environmental Clerk of Works
Tony Gee and Partners	Geotechnical Clerk of Works
MBEC	Environmental Clerk of Works
Headland Archaeology	Archaeological Clerk of Works
SSE	Vestas Package Manager

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 observed in this area during the audit included progression and backfilling of cable trenches, and track maintenance by the Weisdale bridge. Telescopic mobile cranes were present on site for turbine assembly.

3.1.2 Observations

During the visit, KPBP02 was observed (photo 1). Planned capping works have been completed in the northwest section as per the mitigation plan agreed with SEPA. The plans for the reinstatement of the rest of the borrow pit are under review. An access track runs in the middle of the capped area. This track will be reinstated last, as it allows access to T024, and will also allow the reinstatement of the main body of the pit. The reprofiling appeared to be matching the local natural topography, this was observed from T027. During profiling of the reinstated pits, operators blend profiling contours into the profile of the surrounding natural areas. The peat will be seeded following completion of the peat capping. SSE have requested that the thickness of the capping layer of peat in the northwest section of the pit be increased so as to maximise the anaerobic capabilities of the capping layer.

Cable laying is still ongoing across Kergord. During the visit, open trenches were observed. Some of the cable bedding material base was noted to have eroded, this will be replaced before backfilling with peat.

Turbine components were present at a number of base areas. At T025, netting acting as a deterrent to nesting birds was observed to be covering a hub section. In addition, the holes of a support frame were blocked with plastic wrapping (photo 2). A number of cranes were observed from a distance across the Kergord area. Trucks were observed to create some dust however this appeared limited on the day of the audit visit. RJ McLeod have indicated that more site personnel have been trained to drive the tractor and water bowser used of dust suppression, which will help with dust management over the drier periods. Sprinklers were observed to be working along the new Sandwater Road section during the audit.

The site visit included the location of a silty water incident which occurred on the 16th May near the Droswall Burn. During improvement works, the digger accidentally went through the bund of the settlement pond and released the residual contents of the settlement pond. These were minimal as the majority of its contents had been pumped out, but the thicker sediment remained in its base and was released, some of which reached the burn. Actions were taken immediately, and a silt fence was put in place (photo 3). The volume of silty water observed to have been released into the burn was not significant, but was clearly visible in the burn. Turbidity of the affected burn water was tested and was confirmed to be below the permitted levels. At the time of the visit, a machine was completing the reinstatement of the area. The pond was complete, with stones placed on the outer edge (photo 4).

Some of the silt fences at the Droswall Burn were observed to be full, however in good working order (photo 5). The silt fences are part of the improvement works at the Drowswall Burn. At present, these fences are temporary but are being monitored to assess the effectiveness of the system. A decision will be made later on whether these fences will be required longer term.

It was explained by RJM ECoW that following the installation of the permanent drainage, not all the temporary drainage (i.e silt fences) are required. They remain in-situ given that silt fence removal is not currently a high priority. The temporary drainage is programmed to be removed in the upcoming months, following completion of the cabling works. In the area of the Droswall Burn, the silt fences remain in operation and RJM should continue monitoring and maintenance when required.

At the Weisdale Burn, no silty water incidents have been reported since the last audit visit. The cambering of the track has been worked on and drainage has been improved with baffles placed along the track and board grips redone, to encourage surface water runoff into the drains. A machine was observed to be working on the drainage channel during the site visit. It was mentioned that a machine is always present in this area, solely dedicated to the maintenance of the track and drains.

West of the Weisdale Burn, an established nest of birds is present, with the nesting pair reported to be sitting on eggs. Signs have been put up to clearly indicate the area (photo 6). RJM ECoW confirmed that every morning messages are sent to all construction teams to give information on sensitive areas with potential bird nesting/bird activity.

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 include cross country cable trench preparation works from Pettawater bridge to the A970, erecting sections 1 and 2 of the turbine tower along MKR, and cable trench preparation works from T036 to the substation.

3.2.2 Observations

MKR was not visited during the audit. The cross country road was however observed from a distance, and no work was taking place during the visit. It is understood that cable trench preparation works are on-going, with the majority of the peat stripping complete.

Cable trench preparation works on Sandwater Road were being progressed during the audit (photo 7). Drainage between Mid Kames Ridge and Pettawater had already been upgraded in preparation for the works, including new culverts, an extension to the drainage ponds, surface water pumps and preferential rock drainage pathways.

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. RJ Macleod has demobilised the concrete batching plant, reinstated the drainage management and concrete washout pits and has handed over the North Compound to Vestas for use as a satellite compound.

3.3.2 Observations

The north compound was briefly visited during this PMO audit. The compound appeared generally tidy and in good order, with the presence of welfare facilities, containers, skips, equipment, and Ad Blue IBCs (photo 8). No Vestas staff were noted to be present at the compound during the visit.

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 trenches, delivery of turbine components and turbine erection.

3.4.2 Observations

In this area, seven turbines were fully erected at the time of the audit, with most of the ancillary work now completed (photo 9). Reinstatement and drainage maintenance works are ongoing, with a number of diggers across the site observed to be undertaking peat reinstatement during the audit. A number of cabling trenches were observed to be open and still requiring backfilling (photo 10). Capping of the roads has been complete, though it is acknowledged that a final topping up layer may be completed prior to handover to the SSE operational team.

Birds are currently nesting on the edge of the lochan located south of T058. A screen is present along the track south of T058, to avoid visual disturbance from the on-going works that are taken place here (photo 11). At T058 and T063 located closest to the ponds, all works associated with turbine erection were undertaken ahead of the bird nesting to minimise disturbance, as the lochan is known to be a prime nesting ground. The screen has been efficient in minimising disturbance to birds, which were observed on the lochan during the visit. The screen will stay in place until all works are completed in North Nesting.

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.

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 backfilling, cabling, rock extraction and reprofiling work at borrow pit NBP05.

3.6.2 Observations

In this area, turbines are being erected, with a number having partially completed towers. At T69, two cranes and turbine components were observed to be present, though no work was on-going during the audit visit. The cable trench to T069 was open with cables laid out (photo 12).

The ECoW had noted a silty water event in the area of T070 following the reprofiling of the area surrounding the blade fingers in April. At the time of the April audit, a machine was working on the reprofiling and stabilising works. Since then, the area has been fully reinstated with drains put in. During the May audit, the area was observed to be in good condition (photo 13). The silt fences that were observed during the last audit were still in place and appeared full, however RJM ECoW indicated that all ground disturbing works are completed in this area and therefore it is very unlikely that silty water would occur, therefore the silt fences in this area are redundant. They will be carefully removed as part of the snagging phase. It was indicated that no further incident of dirty water has been reported.

Metal frames supporting turbine equipment present at T075 were noted to have protection against bird nesting, in the form of plastic wrapping of holes (Photo 14). This was noted to be present at most of the locations observed during the audit, within Nesting and other areas visited.

Rock excavation was ongoing at NBP05 at the time of the audit, with diggers observed to be extracting rock (photo 15). Peat capping works were observed to have started (photo 16). Borrow pit restoration plans for NBP05 have been issued to SSE and review by their ECoW is ongoing. Reinstatement works will continue once reinstatement plans have been approved.

Reinstatement works were observed at T103. It was pointed out that silt fence will be removed across the windfarm where works have been completed, however this is currently not a priority.

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.

3.7.2 Observations

The substation was not observed during this PMO audit.

3.8 Off site activity/ turbine component delivery convoys

Turbine component delivery was observed in the distance during the PMO audit. It is understood that no correspondence from the public regarding abnormal load convoys have been received, indicating that the management plan and communications protocols are working effectively.

3.9 Communication with SSER Clerks of Work

3.9.1 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 17th of May 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.

No specific areas of concern were highlighted by the GCoW during the audit period.

3.9.2 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 10th May 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 and washing out cable dust in particular; however, this is becoming less of an issue now that the cable trenches are being backfilled. Discussions about dust mitigation with the Design Engineer and Vestas are on-going, as the weather is improving on Shetland and activities onsite have started to generate dust.

Bird surveys are on-going as species are setting up their breeding territories. This information is being communicated to the project team. The ECoW indicated that the placement of mitigation measures on metal support frames and turbine equipment stored at ground level by Vestas to prevent bird nesting are on-going, consisting in nets and plastic wrapping of holes. Additional crops guards have also been placed across the windfarm in critical places as bird deterrents.

A potential nest in one of Vestas metal support frames at T045 was reported to the ECoW. The potential nest was assessed by the ECoW and assumed as a fully built and active nest. The area was isolated and cordoned off. The affected structure is tucked away and the presence of the nest does not affect work progress. This is however a reminder that Vestas require to keep putting mitigations measures in place, particularly on critical pieces of equipment.

Borrow pit reinstatement is on-going and being closely monitored by the ECoW, and discussions are on going on restoration plans and progress.

At the time of the discussion held on the 10th May 2023, no incident of silty water had been noted by the ECoW since the last audit period. The incident that occurred on the 16th May was immediately reported and the ECoW made fully aware.

3.9.3 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 11th May 2023.

The ACoW described the ongoing and completed monitoring works across the site. No monitoring was observed as part of the audit, however SSE noted that the ACoW was on the cross country route (MKR to Substation) at the time of the audit.

3.10 Communication with Vestas' Package Manager

A Teams call was held with the SSE Package Manager for the Vestas works on the 15th of May. As of the 15th of May, 19 turbines have been fully erected (including blades).

A bird nest has been identified on a transport frame at T045. The ECoW assessed the nest and has put in place mitigation and cordoned off the area. The frame is located in a corner of the base and therefore does not affect work progress.

Vestas continue to use netting and plastic wrap around turbine components stored at ground level until they are lifted into position. This was observed during the audit. There is good communication between SSE, Vestas, contractors and the ECoW, and great awareness by all of the bird nesting issue and mitigation measures required.

Refuelling is still being conducted by RJ Macleod under their RAMS, however Vestas' contractors should be undertaking this themselves under their own RAMS in the coming weeks. It is understood that the RAMS are currently being reviewed. The observation of refuelling operation by Vestas' contractors should form part of the next PMO audit.

A spill incident occurred at T063 on the 22nd of March, where 25L of fuel was noted to be lost. The spill was from a third party refuelling truck (not part of Vestas / sub-contractor fleet), and occurred whilst refuelling. The spill procedures were followed and successfully mitigated the spread of the spill. No fuel reached watercourses and the spill area has since been cleaned up. The vehicle has since been repaired and an investigation report from the third party will be made available in due course. The investigation report was provided to the PMO on the 16th May 2023 and confirmed that the necessary actions were promptly taken to contain the spill.

A spill incident occurred on the 13th May 2023 between T007 and T008, as a crane was being relocated. A hydraulic pipe for the rear outrigger for the crane burst, and hydraulic oil was lost to ground. The volume lost was reported to be a maximum of 10L. As the crane was being escorted from the front and the back, the rear escort driver noticed the burst pipe immediately. The driver then contacted the crane operator via radio telling the operator to stop, and both escort drivers used their mobile spill kits carried in all vehicles at all times to begin absorbing any hydraulic oil released from the pipe. Items used to stop/absorb the spill consisted of absorbing mats, 2 meter absorbing 'socks' and granules. Following this, a mechanic replaced the split pipe. Once the crane was moved, contaminated stone and absorbing granules were scrapped up. The area was checked again in daylight hours so a more thorough examination of the ground could be carried out, with additional absorbing granules placed and then removed along with additional soils. The incident report was provided on the 25th May 2023 and confirmed that all measures had been taken to contain the spill and successfully remediate the area. No surface water receptors were affected by the spill.

3.11 Communication with SIC

The PMO asked SIC if there had been any observations or complaints from members of the public regarding activities on site or as a result of the turbine component deliveries. SIC confirmed it had received two complaints, one relating to dust and another relating to the silty water incident on the 16th May 2023.

RJM ECoW indicated that the silty water incident on the 16th May, although minor, would have been visual to members of the public. RJM contacted SEPA the following day, although it was agreed with SEPA that it was a non-reportable incident.

3.12 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.
- Observation of refuelling operation by Vestas.
- Update on the cable track areas, site wide reinstatement works and cable trench backfilling, and the cross-country cable route construction.
- Update on dust mitigation measures.
- Update of bird nesting.
- Update on Vestas satellite compounds, delivery schedule and turbine erection.
- Update on borrow pit detailed reinstatement and restoration plans.
- 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 are managed through the project Habitat Management Plan and by a dedicated HMPO which balances the geotechnical and ecological objectives of the restoration. 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. 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.	No action required	Principal Contractor	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	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. 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.	No action required.	N/A	Green

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	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. The project continues to improve the pollution prevention measures with additional measures installed in high risk areas (e.g. downsteam of KBP02). 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.	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.	No action required. Field testing for suspended solids determines whether further action and/or external reporting is required.	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.	Short-term mitigation measures are in the process of being implemented as per the SEPA accepted mitigation plan with long-term mitigation strategy progressing.	VEWF	Green
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.	No action required No action required	Principal Contractor SSE	Green

Issue	Auditor Comments	Required Action	Action Owner	Status
	SSE have carried out their own audits on spill kits and refuelling processes when Vestas contractors have been conducting the lifts.			
Noise, Dust, and Air Quality	Complaints regarding dust had been received by SIC during the audit period. The weather had been particularly dry during this time.	Continued monitoring of dust conditions and implementation of control measures as needed; and ongoing liaison as required with other construction operators.	N/A	Green
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, nesting bird surveys, 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

FOR ARRAYS DETAIL PLEASE REFER TO DRAWING NUMBER SPECIFIED ON MAIN PLAN VIEW

- ARRAY A - REFER TO SWECO DRAWING 65201850-100-A-110
- ARRAY B - REFER TO SWECO DRAWING 65201850-100-B-110
- ARRAY C - REFER TO SWECO DRAWING 65201850-100-C-110
- ARRAY D - REFER TO SWECO DRAWING 65201850-100-D-110
- ARRAY E - REFER TO SWECO DRAWING 65201850-100-E-110
- ARRAY F - REFER TO SWECO DRAWING 65201850-100-F-110
- ARRAY G - REFER TO SWECO DRAWING 65201850-100-G-110
- ARRAY H - REFER TO SWECO DRAWING 65201850-100-H-110
- ARRAY I - REFER TO SWECO DRAWING 65201850-100-I-110
- ARRAY J - REFER TO SWECO DRAWING 65201850-100-J-110
- ARRAY K - REFER TO SWECO DRAWING 65201850-100-K-110
- ARRAY L - REFER TO SWECO DRAWING 65201850-100-L-110
- ARRAY M - REFER TO SWECO DRAWING 65201850-100-M-110
- ARRAY N - REFER TO SWECO DRAWING 65201850-100-N-110
- ARRAY O - REFER TO SWECO DRAWING 65201850-100-O-110
- ARRAY P - REFER TO SWECO DRAWING 65201850-100-P-110

NOTES

1. CONTAINS ORDNANCE SURVEY DATA RECEIVED FROM SSE ON 27.08.2020.
2. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
3. TURBINE LOCATIONS BASED ON: "VIKING MICROSITING TRACKER" DATED 24.07.2020.
4. 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.
5. 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
- (A) ARRAY GROUPS

Rev.	Date	Amendment Details	Drawn	Chk'd	App'd
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

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Web: www.sweco.co.uk

SWECO

Client: SSE Renewables; RJ McLEOD; viking energy — Harnessing Shetland's natural resources

Drawing Status: FOR CONSTRUCTION

Project Title: VIKING WIND FARM

Drawing Title: SITE GENERAL ARRANGEMENT

Scale	Designed	Drawn	Checked	Approved
1:25000	RV	RV	RP	KS
Original Size: A1	Date: 11.09.20	Date: 11.09.20	Date: 17.09.20	Date: 17.09.20

Drawing Number: 65201850-100-100 — Revision: 05

SSE Drawing Number: 177-0802-1001-000 — SSE Revision: 07

SCALE 1 : 25000

1000m 0 1000m

ACCEPTANCE OF DRAWING

CODE 1 ACCEPTED		CODE 2 ACCEPTED WITH COMMENTS		CODE 3 REJECTED		CODE 4 INFORMATION ONLY	

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:-

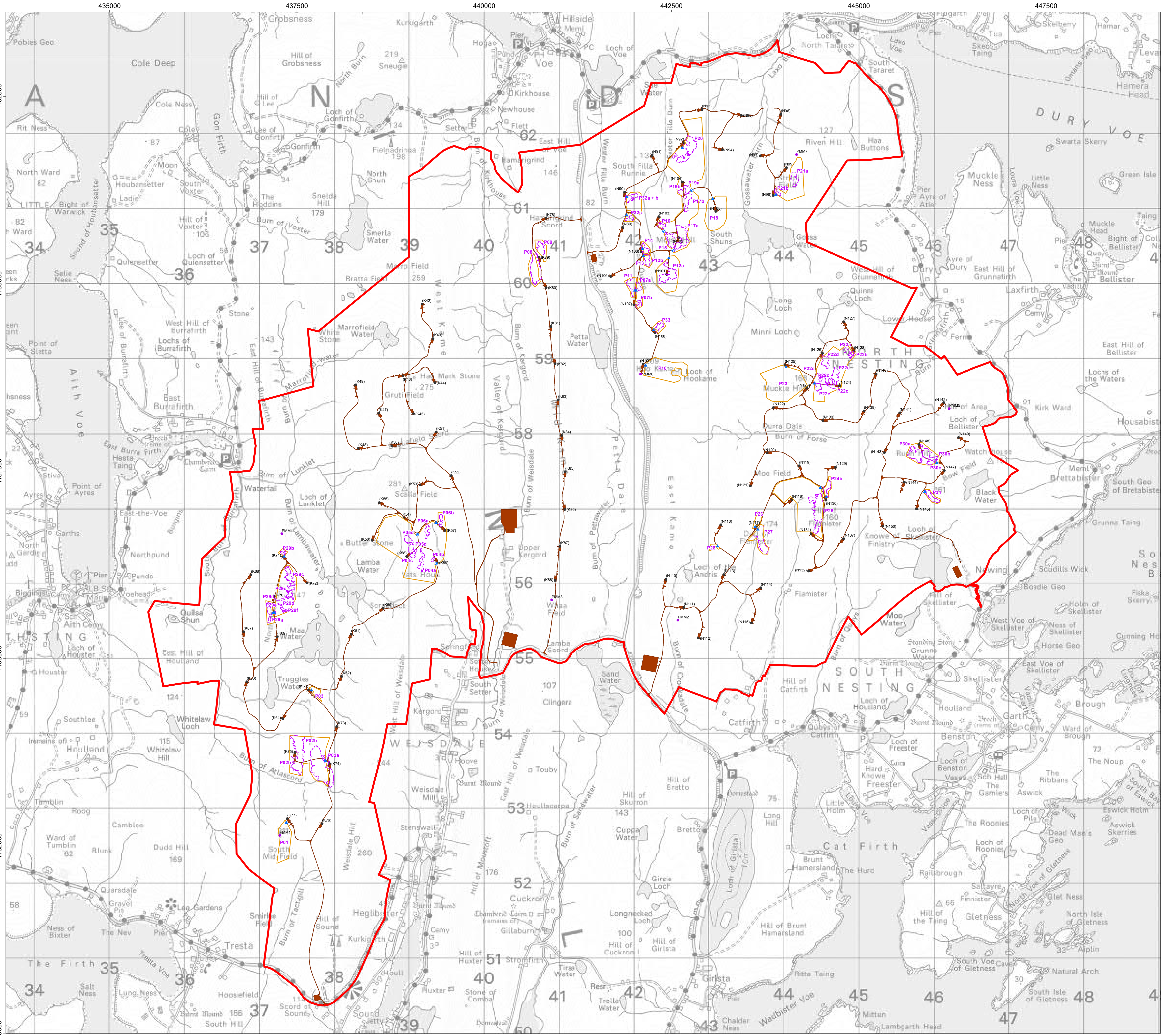
DESIGNER'S RISK ASSESSMENT REFERENCE GIVING FULL DETAILS:-

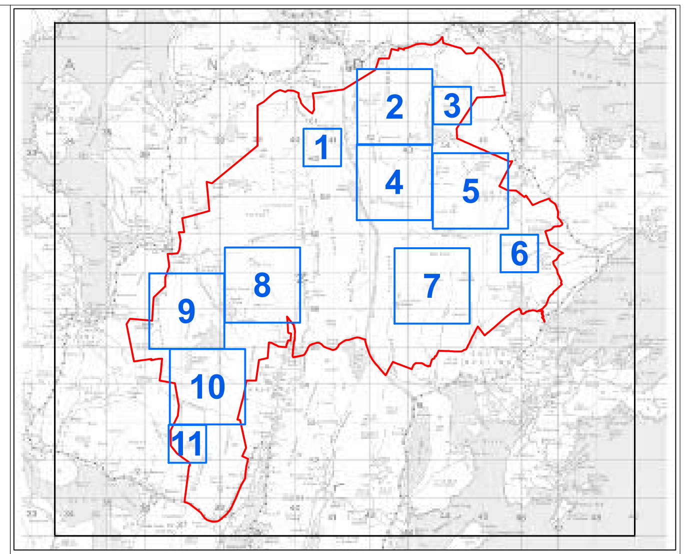
IP09-F01 DESIGN RISK ASSESSMENT

CONSTRUCTION PHASE:-
1. UNKNOWN SERVICES
2. WORKS TO BE COORDINATED WITH CABLE DESIGN
3. POTENTIAL FOR PUBLIC ACCESS
4. RISK OF GENERATING CONTAMINATED/SILT LADEN RUNOFF TO SENSITIVE ENVIRONMENTAL AREAS. CONTRACTOR TO PROPOSE ADDITIONAL TEMPORARY CONSTRUCTION STAGE DRAINAGE.
5. RISK OF PEAT SLIP ACROSS THE SITE
6. 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.

\\...\04 Deliverables Management\Drawings\Working\1_General_Infrastructure\ (working) 65201850-100-100_Site_General_Arrangement.dwg





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.

0 1 2 km

N

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

sse Renewables viking energy

File ref: E:\PORTFOLIO\01_Onshore_Wind\01_Development\Viking\Drawings\02_Environmental\Sketches\0040_PeatRestorationAreas\LN000046-VIK-ENV-SK-0040-01-PeatRestorAreas-R02-A0.mxd

Photo 1. View of KBP02

Photo 2. Netting placed over hub section and plastic wrapping covering holes of support frame as bird deterrents at T025

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	17th May 2023

Photo 3. Site of silty water incident at the Droswell Burn

Photo 4. Completed pond at the Droswell Burn

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023

Photo 5. Silt fences at the Droswell Burn

Photo 6. Warning signs where nesting birds are present near Weisdale Burn

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023

Photo 7. Cable trench on Sandwater Road looking East

Photo 8. Vestas North compound

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023

Photo 9. General view of North Nesting, looking towards T058

Photo 10. Cable trench requiring backfilling north of T047

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023

Photo 11. Screen at T058 to limit visual disturbance to nesting birds

Photo 12. Cabling trench and cranes at T069

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023

Photo 13. T070 reinstatement

Photo 14. Plastic wrapping covering supporting frame hole at T075 as bird deterrents

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	17th May 2023

Photo 15. Rock excavation at NPB05

Photo 16. Reinstatement works at NBP05

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 17th May 2023