Appendix 4.1 Outline Construction Environmental Management Plan (oCEMP)

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Appendix 4.1 Outline Construction Environmental Management Plan (oCEMP)

Introduction

Purpose of the Document

This Outline Construction Environmental Management Plan (CEMP) refers to the construction of the Proposed Development by The Applicant and will detail the best practice methods for managing the environmental impacts, including mitigation and monitoring, during construction of the Proposed Development.

The Outline CEMP will be updated and finalised post consent (thereby becoming a CEMP) in line with any relevant planning conditions and in agreement with Shetland Islands Council (SIC), NatureScot and Scottish Environment Protection Agency (SEPA). Once complete and agreed post-consent, the document will become a CEMP and will no longer be referred to as 'Outline'.

The final CEMP will form part of the induction which is mandatory for all employees, contractors and visitors attending the Site during construction of the Proposed Development. All employees and contractors shall familiarise themselves with the content of the CEMP.

This document sets out the minimum standards to be adopted when constructing the Proposed Development. It also provides associated Outline Management Plans listed below, which form part of the Outline CEMP. Similarly, to the overall CEMP, these Outline Management Plans will be further development and updated post-consent, in agreement with SIC and relevant consultees.

- Outline Construction Methodology;
- Outline Ecology Management Plan;
- Archaeology Management Plan
- Outline Noise and Vibration Management Plan (oNVMP);
- Outline Pollution Prevention Plan;
- Outline Ground and Surface Water Monitoring Plan;
- Site Waste Management Plan;
- Outline Drainage Strategy;
- Outline Peat Management Plan; and
- Outline Dust and Air Pollution Management Plan;

Aims and Objectives

The purpose of this oCEMP is to provide an overview of potential environmental impacts of the Proposed Development, during its construction phase, and describe the management and mitigation measures that will be implemented to minimise those impacts and to protect the environment and sensitive receptors, both on- and off-site. As noted above, the measures set out in this Outline CEMP will be revised and updated as required and included in the final CEMP.

This document has been produced to ensure individuals working on the Proposed Development Site know their responsibilities and to ensure the measures to prevent, reduce or mitigate potentially adverse environmental impacts identified in the Environmental Impact Assessment Report (EIA Report carried out.

The objectives of this Outline CEMP (oCEMP) are to provide:

- An overview of the potential construction-phase environmental impact of the Proposed Development;
- Guidance on compliance with relevant environmental legislation;
- A means of implementing appropriate mitigation measures to avoid or minimise potential adverse environmental effects (refer to **Chapter 13** of the EIA Report);
- A working environmental management tool to follow during the construction phase of the Proposed Development;
- Definition of roles and responsibilities of the construction team;
- A guide for the interaction with relevant statutory authorities and other relevant stakeholders, including the community during the construction phase of the Proposed Development; and
- A basis for monitoring, reporting and maintaining compliance with regulatory requirements for the Proposed Development.

This oCEMP is a live document and will remain as such throughout the construction phase of the Proposed Development. The management strategies and control measures detailed within this document and the associated Outline Management Plans will be reviewed and updated, where necessary, to reflect conditions requested by SIC, changes introduced by the Applicant's construction team, site specific outcomes, non-conformances and recommendations arising out of inspections, meetings and audits.

Roles and Responsibilities

As the Proposed Development is at the application stage, the oCEMP has been developed to provide advisory guidance and describes good construction practices. This is a live document and will ultimately be provided to the contractors appointed to construct the Proposed Development, forming part of the documentation required to ensure compliance with planning requirements, environmental and other legislative requirements and environmental commitments made in the EIA Report.

The oCEMP takes account of and refers to information contained within the EIA Report.

The oCEMP will form part of the specification and contract for the works that the Applicant will impose on their contractors as contractual obligations.

It is expected that the contractor selected to construct the Proposed Development will further develop this oCEMP with respect to the following:

- task-specific method statements;
- detailed Sustainable Drainage System (SuDS) design;
- requirements for authorisations or licences from SEPA in relation to watercourse crossings and if applicable, water abstraction;
- Site Waste Management Plan; and
- additional Management Plans as may be required by planning conditions.

The implementation of the oCEMP (including procedures, record keeping, monitoring and auditing) will be overseen by an Environmental Clerk of Works (ECoW) who will be appointed by the Applicant to ensure compliance with this document and current legislation.

It is envisaged that environmental management meetings will be held between the ECoW, the Contractor and the Applicant to report on environmental mitigation measures and performance and identify actions for improvement where necessary.

Project Status

As the Proposed Development has not yet been consented, no detailed design nor intrusive ground investigation works have been completed. Therefore, some of the information provided in the oCEMP is necessarily general in nature. Task-specific method statements incorporating the requirements of the oCEMP will be developed by the selected contractors post-contract award, and prior to works starting on-site.

Document Control

As noted, the oCEMP (and the CEMP, when it is progresses beyond 'Outline') will remain a "live" document and will be subject to periodic review and updating. The document is intended for use by the Applicant and their contractors specifically involved in the construction of the Proposed Development. When this document is amended, the document control table will be updated (**Table 1**) and it will be issued to all personnel specified on the distribution list below (**Table 2**).

Table 1 - Document Control Table

Status	Date Issued	Prepared by	Summary of Alterations
Version 1.0	July 2023	ITPEnergised	oCEMP

Table 2 - Distribution List (To be confirmed in full CEMP at pre-construction stage)

Organisation	Contact Name	Email	Telephone Number
Applicant			
Principal Contractor			
Ecological Clerk of Works (ECoW)			
Archaeological Clerk of Works (ACoW)			
Shetland Islands Council (SIC)			
Scottish Environment Protection Agency (SEPA)			
NatureScot			
Historic Environment Scotland (HES)			

Outline Construction Methodology

Introduction

This outline Construction Methodology has been prepared to provide the methods to be used in the construction of the Proposed Development. It includes details of the scope of works, structure, design strategy, programme and construction methods where available. This will be updated by the Principal Contractor prior to work commencing.

Project Details

The construction of the Proposed Development will include:

- establishment of the construction compounds which will contain a storage area for wind farm components and temporary Site facilities;
- construction of Site tracks, including construction of drainage, and excavation of cable trenches;
- construction of wind turbine foundations, and hardstanding areas;
- construction of Site substation, switchgears and control rooms;
- cable laying;
- Installation of Battery Storage units;
- CCTV camera poles and fencing;
- erection of wind turbine;
- connection of power, earthing and communication cables;
- commissioning of the Site equipment; and
- Site reinstatement and restoration of temporary works areas.

Working Hours

The proposed normal construction working hours are anticipated to be prescribed as part of the planning conditions to consent, however as a guide the following times are suggested for audible activities:

- Monday to Friday: 07:00 to 19:00 inclusive; and
- Saturday: 9:00 to 13:00 inclusive.

Some construction activities will be required to take place throughout the different seasons of the year and some construction activities which are highly dependent on the weather conditions require flexible working hours in order to be completed safely and efficiently. The following activities are particularly relevant:

- ground works, road and hardstanding construction (weather dependant);
- wind turbine base concrete pours (time dependant);
- wind turbine deliveries require to be undertaken when the public road network is not busy and to suit the availability of escort vehicles (time dependant); and
- Wind turbine erection (time and weather dependent).

These operations will not generate particularly excessive noise at any noise sensitive locations. Blasting is not anticipated on-site, however if it is required then restrictions will be put in place ensuring no blasting is outwith the hours of 10:00 to 12:00 and 14:00 to 16:00 Monday to Friday, and 10:00 to 12:00 on Saturdays. There will be no blasting on Bank Holidays.

Should any work need to be undertaken outside of the agreed hours, dispensation will be obtained from SIC prior to the commencement of such works.

Programme

The construction programme will consist of the following principal operations, listed sequentially wherever possible. The Proposed Development will likely be phased so that certain activities will take place concurrently:

- construction of the temporary Site compounds and establishment of temporary Site facilities;
- construction of access tracks, including construction of watercourse crossings, and excavation of cable trenches;
- construction of wind turbine foundations, crane pad hardstanding areas and substation;
- installation of underground cabling;
- installation of battery storage containers;
- construction of Site substation, switchgears and control rooms;
- erection of wind turbines;
- connection of on-site electrical power and signal cables;
- commissioning of Site equipment; and
- Site reinstatement and restoration of temporary works area; and
- habitat restoration, enhancement and management works

Construction is provisionally expected to commence in 2025 and last for 12 months. A detailed construction programme will be produced prior to commencement of works.

Principal Contractor

The Principal Contractor is responsible for co-coordinating the activities of all other parties/contractors working on the Site to maintain safe working practices, including:

- management and programme control of all design and construction interfaces, including those with the related contractors;
- assuming the role of Principal Contractor under the Construction Design and Management (CDM) Regulations 2015;
- meeting the requirements of all relevant planning conditions;
- providing security and maintenance for the full development Site including but not limited to the Site compound during the contract;
- providing appropriate welfare and Site accommodation for all contractors working on Site;
- management of all construction related traffic entering and leaving the Site; and
- liaison with, in conjunction with the Applicant, all relevant stakeholders and third parties including SIC, NatureScot, SEPA, HES, Scottish Water, relevant landowners, the Local Roads Authority and the Health and Safety Executive (HSE).

Site Compounds

The Principal Contractor will establish the construction compounds. The main construction compound at the Site entrance will house a temporary portable cabin structure to be used as the

main Site office and welfare facility, including toilets, clothes drying and kitchen, with the provision for sealed waste storage and removal. The area will also be used for the storage and assembly of turbine components, parking for vehicles, containerised storage for tools and small parts, and oil and fuel storage. The construction compound at the area beside the existing borrow pit will be for additional Site offices, storage areas and parking.

Typically, granular fill material and a compacted capping layer will be laid over geotextile to form the construction compound area and to provide a suitable platform for heavy plant.

It is anticipated that potable water will be brought to Site for use as drinking water (by bowser). A high-level storage tank will be installed on-site. A suitably sized generator with integral bunded fuel tank will be located within the compound to provide temporary power during the construction period.

Welfare facilities will consist of a mess room, drying room/changing room and toilets provided by the Principal Contractor. Food and drink may only be consumed in the mess room to avoid risk of contamination and to minimise encouragement of rodents. Toilets will be served from the temporary water supply. The waste will be managed by use of sealed storage and removal from Site, or by use of a septic tank and soakaway. Any septic tank discharge to the environment will be authorised by SEPA prior to use, in accordance with the requirements of the Controlled Activities Regulations *(CAR).*

All materials, plant and equipment shall be stored within the Site boundaries within designated construction compound and laydown areas. Storage of liquids (e.g. fuel oil) and spillage mitigation measures are described fully in the Pollution Prevention Guidance.

All areas of the Site including accommodation areas shall be kept clean and tidy with a regime of good housekeeping established to facilitate mobility of personnel and plant/equipment around the Site and minimise potential hazards and vermin.

A Site Waste Management Plan (SWMP) will be produced by the Principal Contractor prior to works commencing on Site. The SWMP aims to minimise waste from imported materials and waste created on Site during the construction and excavation processes. The SWMP will minimise the quantities of imported materials through good design and best practice, minimise waste and optimise any waste arisings.

For the duration of the construction period an area will be set aside within the construction compounds to accommodate road vehicles for the construction work force and Site visitors. Parking will not be permitted in any other areas, on or off-site. Segregated areas and signage will be erected within the construction compounds to protect the work force from moving vehicles. At the end of the working day all construction diggers, generators, dumpers and cranes will be parked in a safe and secure area with appropriate security equipment fitted to the plant to minimise vandalism and unwanted attention from members of the public.

Site Works

Access Tracks

The design of the access tracks has been developed to minimise track length, reduce environmental impact, shorten construction time, and minimise road-stone requirement. Subject to confirmation via a planning condition, an allowance has been made for new access tracks to be routed within a micro-siting allowance of up to 50 m, to allow for potentially unsuitable ground conditions or unforeseen environmental constraints identified by pre-construction surveys.

The access tracks shall have a typical width of 5 m, with additional local widening on bends, and at junctions. A construction thickness of approximately 250 mm to 500 mm of compacted crushed aggregate will be applied. This will depend on the construction method and ground conditions established once Ground Investigation is carried out.

Access tracks will be set out at between 500 m and 1000 m to suit site layout, prior to removal of vegetation and topsoil using GPS surveying equipment. The vegetation and topsoil will then be stripped to formation level ensuring that all turves are stored vegetated side up.

The access tracks shall be constructed on the subsoil or on underlying bedrock. Dependant on ground conditions a geogrid may be utilised to provide structural stability and a geotextile membrane installed to limit the migration of fines. The geogrid/geotextile shall be laid directly on the subsoil.

All of the upper topsoil layer, together with turves will be stored separately from the rest of the subsoil in piles adjacent to, or near the access tracks for later reinstatement (for information on appropriate management of peat, refer to EIA Report **Appendix 11.2**). All soil will be stored in accordance with NatureScot guidance - Good Practice during Wind Farm Construction 4th Edition (2019), General principles for reinstatement of soils.

The access track and running surface will then be constructed by tipping and compacting crushed stone to a thickness which allows the required bearing strength to be achieved. This thickness will depend on the underlying ground conditions. The capping layer of stone will comprise finer material to provide a smooth-running surface.

The methodology of construction of the new and upgraded access tracks will be determined following ground investigations and agreed with SEPA.

Edge protection will be installed alongside the access tracks.

Following construction, the appropriate topsoil and vegetation shall be used to reinstate the track shoulders and wind turbine foundation areas. Excess soil, peat and turves will be re-used at suitable pre-determined locations on the site in consultation with the ECoW; avoiding double handling where possible.

The access track cross section is shown on **Figure 4.7** of the EIA Report.

Aggregates will be imported from local quarries with all material being UKAS certified to be free of contamination.

Sufficient signage will be installed on-site to clearly define the boundary of the works and to advise of any hazardous areas accessible to the public. Secure and appropriate boundaries shall be established to ensure that entry to specific hazardous areas of the Site by unauthorised persons is prevented.

Wind Turbine Foundations

Wind turbine foundation is expected to comprise gravity base. The anticipated construction methodology is described below.

Prior to any excavations the Principal Contractor will ensure that a suitable Sustainable Drainage System (SuDS) is installed to prevent silt pollution to surrounding area. Once complete, the Principal Contractor will strip and set aside existing vegetation, strip and stockpile topsoil from the affected area. They will then excavate subsoil and stockpile in accordance with best practice guidance, locating away from drainage paths and buffer zones to minimise the possibility of silt pollution.

Once excavation has been completed to foundation formation level, a layer of compacted crushed stone will be laid to provide a firm working surface. The binding concrete will be placed on this to provide a level work surface for the fabrication of reinforcement cages.

Next the steel reinforcement will be lifted into place and the cages will be established. Following completion of the cages the Principal Contractor will place concrete shutters and then commence first phase concrete pours. Once the concrete has cured to the specified strength the shutters will be stripped and set aside for reuse. Electrical ducting will be included within the foundation to ensure cabling is not impeded.

The second phase reinforcement with wind turbine anchor ring will then be installed. Followed by the placing of concrete shutters second phase concrete phase pour. Once the concrete has cured to the specified strength, the shutters will be stripped and set aside for reuse.

The Principal Contractor will then backfill around the foundation from stockpiled materials ensuring materials are replaced in layers encountered during initial excavation. Topsoil will be placed to depths encountered during initial excavation. Turves will then be replaced where possible. Alternatively, the Contractor will reseed the area with an approved seed mix.

All earthworks, the storage and movement of materials and reinstatement will be undertaken in accordance with the Peat Management Plan (refer to EIA Report **Appendix 11.2**).

Wind Turbine Works

Wind turbine components will be transported to Site in accordance with the CTMP and Route Survey Review.

Wind turbine component deliveries will be co-ordinated by the wind turbine supplier. Specialist haulage vehicles of varying length, dependent upon the component, will be used. The police will be in attendance to escort abnormal loads.

Delivery of wind turbine components will generally be timed to avoid transportation during peak times, Monday to Friday to avoid school and commuter traffic on the local roads.

Some wind turbine components may be pre-delivered and offloaded at the crane hardstandings or temporary laydown areas. Remaining wind turbine components will be delivered as just-in-time, to be lifted directly from haulage vehicles. This will be dependent on the final wind turbine supplier's method statements.

Adverse weather may delay lifting operations. If this is the case and components cannot be lifted just-in-time suitable provision will be made for offloading on hardstandings, or laydown areas.

Wind turbine components will be lifted by adequately sized cranes (a large main crane and smaller tail crane) positioned and fixed as per the wind turbine suppliers method statements.

Upon completion of the erection, all anchor bolts will be tightened and the internal fit out of the wind turbine completed. The wind turbines will then be connected to the Site's electrical cable network. Wind turbine testing and commissioning will be undertaken by specialist qualified and experienced engineers.

Adequate temporary lighting will be available for use after dark or in poor lighting conditions.

Upon completion of the erection of the wind turbines, the relevant records will be made available in hard copy, for review and incorporation into the Proposed Development's quality plan.

Maintenance

During construction, the access track network will be subject to regular heavy plant movements and as a result will likely deteriorate, develop potholes or ruts. Any areas which fail, suffer deterioration or rutting during construction will be restored as part of the ongoing maintenance obligation of the Principal Contractor.

Reinstatement

Reinstatement and restoration of the Site will be undertaken as soon as practicable following the completion of each element. Following completion of construction works and when most of the heavy plant has left Site, the contractor shall undertake final restoration works. Further detail is provided in the Peat Management Plan (**Appendix 11.2**).

Environmental Training

Inductions

All project personnel and sub-contractors will receive an Environmental Induction. No personnel, including sub-contractors, will be permitted to undertake any work on-site without undertaking a Site induction. The Site induction will evolve to reflect changes in the CEMP as the project develops. Environmental topics covered in the induction shall include, but will not be limited to:

- Water Resources;
- Pollution Prevention;
- Emergency Response Procedures;
- Waste Management and Housekeeping;
- Management Structure;
- Duties and Responsibilities;
- Relevant Procedures;
- Ecologically and Ornithological Sensitive Areas and Times;
- Incident and Non-Conformance Reporting;
- Consents and Licenses and compliance;
- Legislation; and
- Environmental Good Practice.

Toolbox Talks

Toolbox Talks (TBTs) on specialised topics shall supplement the induction course. TBTs shall be used to highlight issues of concern and to disseminate any new information or responsibilities. They will also be used as a means of providing basic environmental training to crews on a specialised topic, e.g., water management. The TBTs also offer Site personnel the opportunity to provide feedback. TBTs would be appropriate when, for example:

- there is a change to existing legislation, which requires an operational change;
- Site inspections or audits have identified corrective actions which require rolling out;
- work is being undertaken in particularly sensitive areas; and
- there are significant changes in environmental conditions, e.g. heavy rainfall.

Records of all TBTs undertaken, including attendance, will be maintained.

Outline Ecology Management Plan

General Best Practice

The Applicant will appoint a suitably qualified ECoW prior to the commencement of any construction activities take place. The ECoW will be present and oversee all construction activities as well providing toolbox talks to all Site personnel with regards to priority species and habitats, as well as undertaking monitoring works and briefings to relevant staff and contractors as appropriate.

Not more than eight months prior to construction, the ECoW will undertake a series of preconstruction ecological surveys to update the baseline information contained within the EIA Report. The aim of these surveys will be to provide up to date information in order to finalise required mitigation proposals, in addition to completing a final check prior to construction for protected species. The CEMP will be updated with the latest survey results and management requirements.

Plant and personnel will be constrained to a prescribed working corridor through the use of temporary barriers, thereby minimising damage to habitats and potential direct mortality and disturbance to species.

The construction compound, storage Sites and access tracks will avoid, as far as practicable and within micrositing allowances, areas identified as being of ecological value by the ECoW.

Any required culverts will be designed to be adequately sized and orientated in the correct direction for wildlife in accordance with good practice.

Any trenches dug during construction and decommissioning operations will be covered at the end of each day. Alternatively, mammal ramps will be positioned in such a way that trapped mammals may be allowed to escape.

All exposed pipes and trenches will be checked each morning prior to starting construction activities. If trapped animals are found, the ECoW or specialist animal handler will be contacted to remove any distressed animals.

Regular ecological toolbox talks will be given to all Site personnel on the potential presence of protected species and any measures that need to be undertaken should such species be discovers during construction activities.

As part of the environmental tool box talks given to Site construction staff, the importance of adhering to speed restrictions and watching out for wildlife and grazing farm stock will be highlighted.

Breeding Birds

Further to or incorporated into the update surveys above, protection of breeding bird nests from damage and/or destruction during the breeding season will need to be ensured. Wherever possible, all vegetation clearance will occur outside the breeding season (i.e., between October - February, inclusive), to ensure that no active nests are damaged or destroyed by the proposed works. This would include any areas of shrub clearance and vegetation removal for access tracks, compounds or turbine bases due to the populations of ground nesting birds on and around the Site.

Unnecessary disturbance to habitats will be avoided by minimising the extent of ground clearance and other construction practices as far as practicable.

Where vegetation clearance and/or ground disturbance has to take place between March and August inclusive, any areas for tracks, material laydown, turbine bases and other infrastructure will be kept short and largely devoid of vegetation during the breeding season until construction is complete. This will be achieved by regular ploughing, mechanical cutting or strimming during the breeding season. It is recommended that the areas are initially ploughed in early to mid-March, and again in May if they have not been developed by that point. Between these times, the cleared areas will be visited by an ECoW, to check whether they have been colonised by nesting birds, with advice

given on any restrictions these pose and whether further measures are needed to keep the vegetation under control and deter birds from nesting. These measures will be required for each breeding season during the construction phase.

Due to the proximity of lochans identified as breeding Sites for red throated diver, construction activities done within 1 km of potential breeding lochans between April and August In the event that works within 1 km of lochans during April to August is unavoidable, survey works will be undertaken in advance by the ECoW, to identify breeding status on the lochans and inform the specific location and timing of works to avoid or minimise disturbance. If a breeding attempt is present on the lochan the ECoW will undertake a watching brief for all significant construction events and stop works if evidence of disturbance is identified. The list of events requiring a watching brief will be agreed with NatureScot in advance of works commencing.

The ECoW will undertake construction phase surveys of birds within the Proposed Development and will record information of breeding success as far as is possible (avoiding disturbance, and following relevant NatureScot survey guidance (SNH, 2017)). The data will be used with pre-construction baseline survey data and future data obtained during monitoring work to provide population information across each phase of the development.

Habitats

The ECoW will develop a Species Protection Plan (SPP) which will form part of the CEMP. This will be implemented by the Principal Contractor to ensure those areas of habitat that have been temporarily lost during construction are successfully reinstated after construction has finished.

In order to facilitate restoration, disturbed ground will be restored as soon as practically possible using materials removed during the construction of access tracks, excavation of cable trenches and wind turbine foundations. To achieve this, any excavated soil will be stored in such a manner that is suitable to facilitate retention of the seed bank. This will aid Site restoration and help conserve the pre-construction floristic interest at the Site.

A Habitat Management Plan (HMP) will be prepared. The HMP will be implemented during the construction and operation phases and will focus on the enhancement and restoration of degraded bog habitats within reasonable distance of Proposed Development infrastructure. The habitats suitable for restoration will be focussed on wet and dry modified bog, and specific areas will be identified through a combination of field survey and aerial imagery as consisting of heavily eroded and degrading blanket bog habitat partly as a result of fire damage, and historical management practices.

The HMP will be prepared in consultation with NatureScot, SEPA and THC, with the detailed plan, including ongoing post-construction monitoring, to be agreed prior to commencement of construction.

Otter

Dependant on pre-construction survey results, a Species Protection Plan (SPP) to minimise adverse impacts on otter will form part of the CEMP.

No obstacles/obstructions will be placed either in drainage ditches or bankside that may impede the safe passage of otters throughout the Site or obstruct access to any potential resting Sites.

Working in the vicinity of identified otter habitat will be avoided during the hours of darkness and within two hours after sunrise and two hours before sunset. This can be reduced to one hour between November and February due to limited daylight.

Any exposed pipe systems will be capped when not being worked and provide exit ramps for any exposed trenches or excavations (to prevent otters entering and becoming trapped).

All staff will be informed of the potential for otters on Site and 10 mph speed controls within the Proposed Development Site to limit the risk of road traffic accident mortality will be implemented.

Discovery of a non-breeding resting place

Should a non-breeding resting place be identified during construction all construction work will cease immediately and a 30 m exclusion area will be applied. This 30m exclusion area will be demarcated by the Contractor and no construction personnel well enter this exclusion area except when accompanied by the ECoW.

Construction activities in the vicinity of the non-breeding resting will be undertaken to avoid periods of diurnal peak otter activity (dusk and dawn). Where it is not possible to strictly comply with this requirement, construction activities will permit at least one night of undisturbed passage for every two day/nights of construction work, subject to the discretion of Principal Contractor.

The exclusion area will remain in place for the duration of the construction period. The Contractor will ensure that all construction activities are undertaken out with this area. This may not be possible at all newly identified locations and in this circumstance an otter development licence will be sought from NatureScot to permit the disturbance of this resting place. Works will not recommence at this location until a licence has been granted and the ECoW is satisfied that any conditions have been met.

The Site of the Proposed Development is such that, at this time, that the destruction of any newly identified resting place is considered unlikely to be required. However, should this be the case, NatureScot will be consulted, and a development licence sought for the destruction of an otter resting place.

Discovery of a Breeding Resting Place

Should a breeding resting place be identified during construction all construction work will cease immediately and a minimum 200 m exclusion area will be demarked and enforced by the Contractor. This 200 m exclusion area will be demarcated by the Contractor and no construction personnel well enter this exclusion area except when accompanied by the ECoW.

The Contractor will begin immediate dialogue with NatureScot to, where necessary, allow activities to make safe the construction works. In addition, this dialogue will seek to determine if any construction works are possible within the 200m exclusion zone and the requirement for a licence for such works.

As natal holts are often utilised for a period of three months (Liles, 2003 and Kruuk, 2006) this exclusion zone will be maintained for a period of 3 months from implementation as a minimum.

After three months the young are mobile and move with their mother within the mother's territory (Chanin, 2003b and Kruuk, 2006), The ECoW will determine when the holt is no longer in use for breeding (when young are mobile) and in consultation with NatureScot, the exclusion zone will be contracted back to 30m.

The 30m exclusion area will remain in place for the duration of the construction period. The Contractor will ensure that all construction activities will be undertaken out with this area. This may not be possible all newly identified locations and in this circumstance an otter development licence will be sought from NatureScot to permit the disturbance of this resting place. Works will not recommence at this location until a licence has been granted and the Applicant's ECoW is satisfied that any conditions have been met.

Outline Archaeology Management Plan

A Detailed Archaeology Management Plan including the following mitigation measures will be implemented:

- An archaeological contractor will be appointed, who will act as an Archaeological Clerk of Works (ACoW) to advise on and oversee relevant aspects of the construction phase archaeological mitigation work.
- A Written Scheme of Investigation (WSI) to be submitted to the planning authority for approval prior to any construction works (including enabling works) commencing on-site. The scope of the works outlined in the WSI will be implemented during the construction phase.
- No component of the Proposed Development would be relocated to a position where it would intersect with any of the heritage assets without consultation and approval by the ACoW. Any heritage asset identified as potentially being affected by micro-siting would be marked out for avoidance, where possible or other mitigation, to be agreed with HES, implemented to reduce and offset the impact.
- Other heritage assets within 50 m of the proposed working areas, including all areas to be used by construction vehicles, will be fenced off where appropriate, under supervision from the ACoW, prior to construction. This fencing will be maintained throughout the construction period to ensure the preservation of these assets.
- Archaeological works, such as a watching brief and paleoenvironmental sampling, will be implemented where intensive works will cause substantial peat disturbance. The exact scope and method of the archaeological works will be outlined in the WSI and agreed with SIC prior to construction work being undertaken.
- Written guidelines would be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to heritage assets. The guidelines would set out arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts, etc.) should be discovered in areas not subject to archaeological monitoring. The guidelines would make clear the responsibilities placed upon those who disturb artefacts or human remains.

Outline Noise and Vibration Management Plan

An NVMP will detail the mitigation measures that will be implemented by the Principal Contractor to minimise noise impacts arising from activities relating to the construction of the Proposed Development.

All noise during construction will be managed under the UK Statutory Instruments and guidance that limit noise emissions of construction plant, including:

- guidance set out in BS 5228-1:2009+A1:2014 which covers noise control on construction sites;
- the powers that exist for local authorities under Section 60 of the Control of Pollution Act 1974 to control environmental noise on construction sites; and
- the adoption of Best Practicable Means (as defined in Section 72 of the Control of Pollution Act 1974).

All sub-contractors of the Principal Contractor will be formally required through contract to comply with the noise mitigation measures outlined below.

The following mitigation measures will be implemented by the Principal Contractor and sub-contractors to minimise noise impacts on noise-sensitive receptors:

- Where it is reasonable and feasible, the quietest construction methods will be used. The Principal Contractor will aim to reduce all noise emissions, regardless of the threshold limits.
- The Principal Contractor will monitor construction activities at regular intervals to ensure that appropriate Personal Protective Equipment (PPE) is being used by staff during activities identified by Risk Assessments.
- Site inspections shall be undertaken to ensure that plant is being operated with any specified acoustic covers in place. Any excessively noisy plant will be removed from the Proposed Development Site for repair or maintenance.
- Local hoarding, screens or barriers will be erected as necessary to shield particularly noisy activities, where assessments deem this to be required or appropriate.
- Plant and equipment:
    - All equipment will be switched off when not in use (including during breaks and down times of more than 30 minutes).
    - The Principal Contractor will ensure that, where possible, noisy plant will not be used simultaneously and/or close together to avoid cumulative noise impacts.
    - Any compressors brought onto Site will be silenced, or sound reduced models fitted with acoustics enclosures.
    - All pneumatic tools will be fitted with silencers or mufflers.
    - All plant items will be properly maintained and operated according to manufacturers' recommendations in such a manner as to avoid causing excessive noise.
    - All plant will be sited, where practicable, so that the noise impact at nearby noise-sensitive receptors is minimised.
    - If required, fixed plant will include a noise mitigation scheme to ensure that noise limits are achieved. Where practicable, and required, noise from fixed plant and equipment will be contained within suitable acoustic enclosures or behind acoustic screens.
    - Fixed and mobile plant used within the Site during the construction period shall not incorporate bleeping type warning devices that are audible outside the Site boundary, unless required for health and safety reasons and no other practical alternative is available.
- Traffic and deliveries:
    - Where possible, loading and unloading will be undertaken away from residences (this is reflected in the Site design including location of the construction compound).
    - The majority of deliveries will be programmed to arrive during normal working hours only.
    - Care will be taken to minimise noise when unloading vehicles.

- Construction traffic will be prohibited from unnecessary idling within the Site or at the Site access points.
- Night-time deliveries will be minimal and will only be undertaken with special consideration.

Noise Complaints

The Principal Contractor's Site Environmental Representative (likely to be the Site Manager) will be the first point of contact for any queries and/or grievances regarding the construction of the Proposed Development. They will be responsible for recording all queries and/or issues raised, for responding in an appropriate and timely manner, and for monitoring any actions that require to be implemented.

The Principal Contractor's Site Environmental Representative will be responsible for recording all complaints raised regarding noise, for liaison with the Principal Contractor and construction staff, and for ensuring that appropriate action is undertaken. The Principal Contractor's Site Environmental Representative will also be responsible for responding to the complaint and explaining the actions undertaken to address the complaint. A record of all complaints made, and the actions taken will be maintained and will be available to the SIC Environmental Health Officer upon request.

Should a noise complaint be made to SIC relating to noise emission from construction of the Proposed Development, and the THC Environmental Health Officer determines that the complaint merits investigation, the Principal Contractor will, within 28 days and at their own expense, employ an independent noise consultant to measure the level of noise emission from the Proposed Development at the property to which the complaint relates. The Principal Contractor shall obtain approval of the employment of the independent noise consultant by SIC prior to the noise measurements being undertaken.

The Contractor will provide SIC with the independent noise consultant's assessment and conclusions (including all calculations, recordings and raw data) within three months of SIC's confirmation of approval of the independent noise consultant.

Outline Pollution Prevention Plan

Introduction

This outline Pollution Prevention Plan details the controls which, in conjunction with the mitigation measures outlined throughout the CEMP, aims to avoid pollution incidence. It also provides details of the measures to be implemented should a pollution event occur.

Legislation

The legislation and guidance relevant to the outline PPP includes but is not limited to:

- Control of Pollution Act 1974;
- Environmental Protection Act 1990;
- The Environment Act 1995;
- Control of Substances Hazardous to Health Regulation 2002;
- Clean Neighbourhoods and Environment Act 2005;
- Environmental Liability (Scotland) Regulations 2009;
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011;

- The Water Environment (Controlled Activities) (Scotland) Regulations – A Practical Guide; and
- Guidance for Pollution Prevention 21: Pollution incident response planning (NetRegs, 2017).

Contacts

The following contacts within **Table 3** should be contacted in the case of an emergency by any member of staff:

Table 3 - Emergency Contacts

Contact	Office hours	Out of hours	Address
Scottish Fire and Rescue Service (SFRS)	01595 692318	999	Sea Road, Lerwick, Shetland, ZE1 0RJ
Police Scotland	999	999	Market Street, Lerwick, Shetland, ZE1 0JN
Scottish Ambulance Service (SAS)	999	999	Gilbert Bain Hospital, South Rd, Lerwick, Shetland, ZE1 0TB

The following staff in *Table 4* should be contacted following any pollution incidence by the Site operations staff:

Table 4 - Pollution Incidence Contacts (To be confirmed in full CEMP at pre-construction stage)

Contact	Office hours	Out of hours	Address
Principal Contractor Emergency Response			
Applicant's ECoW			

The following should only be contacted by the Applicant's ECoW or the Principal Contractor's Site Manager as required following a pollution incidence.

Table 5 - Internal Contacts for a Pollution Incidence (Those marked 'TBC' are to be confirmed in full CEMP at pre-construction stage)

Contact	Office hours	Out of hours	Address
SEPA	N/A	0800 80 70 60	Charlotte House, Commercial Road, Lerwick, ZE1 0LQ
NatureScot	01463 667600	N/A	Stewart Building, Alexandra Wharf, Lerwick, ZE1 0LL
Scottish Water	105	105	N/A
Waste Management Contractor	TBC	TBC	TBC
Specialist Clean Up	TBC	TBC	TBC
Other	TBC	TBC	TBC

Potential Pollutants

This section of the Outline PPP provides details of the chemicals, products and/or wastes which will be used/created during the construction of the Proposed Development which could potentially cause a pollution incidence. Table 6 will be continually updated throughout the construction period when potential pollutants are identified.

Table 6 – Site Chemical, Product and Waste Inventory (To be confirmed in full CEMP at pre-construction stage)

Chemical/ Product/ Waste	State	Maximum volume on site	Location	Containment	Risk
Diesel	Liquid	TBC	Within vehicles Site compound (TBC)	TBC	Flammable
Engine oil	Liquid	TBC	Within vehicles Site compound (TBC)	TBC	Flammable
Hydraulic oil	Liquid	TBC	Within vehicles Site compound (TBC)	TBC	Flammable
Cement	Powder	TBC	TBC	TBC	Irritant
	Liquid	TBC	TBC	TBC	Irritant
Black water	Liquid	TBC	TBC	TBC	Toxic
Paint	Liquid	TBC	TBC	TBC	Toxic
Cleaning fluid	Liquid	TBC	TBC	TBC	Irritant
Other	TBC	TBC	TBC	TBC	TBC

Pollution Prevention

Following the pre-construction surveys, the Principal Contractor, in consultation with the Applicant's ECoW, will identify the sensitive locations within the Proposed Development Site on a site plan. Sensitive locations will include watercourses, areas of groundwater dependent terrestrial ecosystems (if identified) and areas of sensitive habitat.

Following the detailed design and prior to construction, a site drainage plan will be included within the PPP, which will draw from information already prepared as part of the EIA process, supplemented by detailed pre-construction ground investigation works. The drainage plan will detail:

- all watercourses, springs, boreholes or wells located within or adjacent to the Development Site and the direction of flow;
- site access for emergency vehicles;
- locations of soakaways receiving outflow;
- locations of fire hydrants and spill kits;
- locations for storage of materials; and
- locations of inspection points, oil separators, and locations suitable for portable storage tanks and/or drain blocking.

Pollution Response

Procedure

Following any pollution incident, the following will be undertaken:

- construction work will halt immediately at the location of the incidence;
- where safe to do so, the source of the incident will be moved away from the receptor/turned off;
- staff will deploy spill-kits as appropriate;
- the Section Agent at the location of the incident will contact the Principal Contractor Site Manager and inform them of the incident who will in-turn inform the Health and Safety Advisor;
- the Health and Safety Advisor and Site Manager will proceed to the location of the incident to assess the health, safety and environmental risk;
- the Principal Contractor's Health and Safety Advisor and Site Manager will request additional resources/equipment as required to mitigate the impact of the incident; and
- the Site Manager will record the incidence and report to the Applicant's ECoW.

Equipment

The Principal Contractor will hold the following equipment on Site to address a pollution incident:

- absorbents;
- drain mats/covers;
- pipe blockers;
- booms;
- plant nappies;
- drainage trays; and
- pumps.

Training

Prior to commencing on Site all staff will undergo PPP training. This training will cover, but is not limited to:

- legal responsibilities of all staff;
- prevention of a pollution incident;
- response to a pollution incident; and
- location and correct use of response equipment and of Personal Protection Equipment (PPE).

Details of the staff trained in the pollution incident response will be included within *Table 7*.

Table 7 - Staff Trained in Pollution Incidence Response (To be confirmed in full CEMP at pre-construction stage)

Staff	Training	Date	Date of Training Update
TBC	TBC	TBC	TBC

Testing

Prior to construction commencing the Principal Contractor will undertake testing of the PPP and will amend and update the PPP as required.

Outline Water Quality Monitoring and Management Plan

Introduction

Construction of the Proposed Development will require activities to be undertaken near surface watercourses and/or peat deposits. Internal tracks are proposed to cross several watercourses. This will be done by the installation of bridges, culverts or pipes. Surface water will be routed to drainage channels and runoff discharged back into greenfield areas.

This outline Water Quality Monitoring and Management Plan (WQMP) outlines the key issues pertaining to the construction of the Proposed Development and the mitigation measures proposed to reduce potential effects.

Key Issues

Runoff

Surface water runoff containing silt and other sediments, particularly during and after rainfall events, has the potential to enter the watercourses and field drains on and adjacent to the Site. Silt and sediment laden surface water runoff is predicted to arise from excavations, exposed ground and any temporary stockpiles. This has the potential to temporarily impact on the water quality and hydrological and ecological function of the receiving watercourse at and downstream of the works in the absence of any mitigation.

Construction of permanent access tracks and hardstanding, and construction-phase movement of vehicles and plant, have the potential to result in soil compaction. This can lead to reduced permeability, increasing the potential for surface water runoff. Reduced permeability could also reduce the flood storage capacity within the Site and could potentially lead to localised flooding incidents.

Pollutants

Spills and leaks may mobilise oils, fuels and cement, which have the potential to be carried in surface water. These pollutants could be carried into watercourses, impacting on ecological habitats and freshwater quality. Untreated foul sewage from welfare facilities during construction has the potential to discharge directly into surrounding watercourses unless appropriately managed.

Mitigation and Monitoring

Good Practice

The Principal Contractor will abide by the Guidance for Pollution Prevention (GPPs) and Pollution Prevention Guidance (PPGs) (SEPA and wider UK equivalents, various dates) where still relevant, including:

- GPP 2: Above ground oil storage tanks;
- GPP 3: Use and design of oil separators in surface water drainage systems;
- GPP 4: Treatment and disposal of wastewater where there is no connection to the public foul sewer;
- GPP5: Works and maintenance in or near water;
- PPG6: Working at construction and demolition sites; and
- GPP13: Vehicle washing and cleaning.

The Principal Contractor will abide by all CAR requirements (including the requirement to implement construction specific SuDS where required) and follow the guidance provided in Good Practice during Wind Farms Construction 4th Edition (NatureScot, 2019).

Monitoring

Pre-construction Monitoring

A programme of pre-construction surface water monitoring will be implemented, covering a period suitable to gather baseline data across more than one season (i.e. typically at least six months). Baseline monitoring will involve observations of Site conditions, and sampling at specified sample locations on the main watercourses on-site, including locations upstream and downstream of proposed construction works.

Indicatively, the monitoring programme will include testing samples for the following parameters, to be confirmed in a detailed WQMP and agreed with SIC and relevant consultees prior to commencement of the programme:

- pH;
- alkalinity;
- electrical conductivity;
- dissolved oxygen;
- total suspended solids;
- nitrate;
- phosphate;
- sulphate;
- dissolved organic carbon (DOC);
- total organic carbon (TOC);
- turbidity;
- aluminium;
- iron;

- manganese; and
- total petroleum hydrocarbons (THP).

Water quality sampling locations will be confirmed in the detailed WQMP to be agreed with THC; however Table 8 below provides an indication of potential locations.

Table 8 - Water Quality Monitoring Locations (to be confirmed and agreed post consent)

Location	X Coordinate	Y Coordinate	Watercourse

Construction Monitoring

Water quality monitoring will be undertaken by the Principal Contractor. The Principal Contractor will appoint a member of staff who is appropriately trained in water quality monitoring.

Regular (e.g. daily/weekly) inspections of watercourses close to construction activities will be undertaken by the Principal Contractor to identify:

- pollution risks that are unacceptably high;
- spillages or leakages;
- non-compliance with this CEMP;
- monitoring of over-pumping arrangements if required; and
- incidences of pollution.

The Principal Contractor will be responsible for recording the results of the regular inspections, recommending appropriate actions, and monitoring the implementation and outcome of such actions.

The Principal Contractor will take monthly water samples at locations to be agreed post-consent. These samples will be analysed for a similar suite of parameters as listed above.

The Principal Contractor will be responsible for reporting to the Applicant if there are unacceptable alterations to the baseline. The Principal Contractor will be responsible for determining the cause of the alteration and implementing appropriate mitigation or changes to practice to reduce/remove this change, if caused by construction activities.

Details of operational water quality monitoring will be provided within the Operational Environmental Management Plan (OEMP).

Drainage and Runoff

Operational Drainage Design

A framework for provision of suitable drainage for the development is provided in EIA Report Chapter 11. The detailed design of the development will incorporate this outline framework and will provide specific, detailed drainage arrangements. The detailed design of the drainage systems will be agreed with SIC and SEPA prior to construction.

Construction Drainage

All works associated with earth movement or similar processes will be carried out in accordance with the BSI Code of Practice for Earth Works BS6031:2009.

Due to the location of the Site, there is a high likelihood of rainfall throughout the year. Site management will check the local weather forecast daily and ensure all staff are aware, in order to maintain pollution control and runoff in periods of rainfall.

If working platforms are required, they will be formed in such a way that surface water drains away from watercourses.

Temporary drainage systems will be used to alleviate localised flood risk and prevent the obstruction of surface runoff pathways. Where required, temporary attenuation ponds will be provided to reduce silted run-off from the access tracks entering watercourses. If flocculants are considered necessary to aid settlement of fine suspended solids such as clay particles, the chemicals used must first be approved by SEPA.

The requirement for dewatering will be minimised in all locations by the timely and efficient excavation of the foundation void and subsequent concrete pouring and backfilling.

Access tracks will be kept to the shortest length possible, and tracks will be designed to spread the load of plant and vehicles to minimise soil compaction and therefore potentially reduce surface water runoff.

To avoid unnecessary compaction and disturbance to Site soils, working areas and corridors will be established and demarcated, with construction operatives appropriately inducted and trained to avoid work outside the designated work areas.

Pollution Prevention

Spill kits will be kept in all vehicles, and soakage pads and oil booms maintained in all work areas. This will enable the rapid and effective response to accidental spillages. All construction staff will be trained in equipment use.

All vehicle maintenance, fuelling and washing will be undertaken on appropriate impermeable surfaces away from watercourses in order to minimise the risk of leaks to soil and surface waters. All construction and plant vehicles will be regularly maintained.

The Principal Contractor will develop a specific method statement to address the transport, transfer, handling and pouring of liquid concrete at foundations.

All operations involving concrete transfer between vehicles, or into vehicles will take place at least 50 m from watercourses or water bodies to ensure cement, unset concrete and grout to not enter the water environment.

Concrete wash out will be within the construction compound. The Principal Contractor will ensure that this area is regularly cleaned, and the waste disposed. Concrete and wash out liquid will not be discharged into drains or watercourses on-site or at compounds. Drainage will be collected and treated or removed to an appropriate treatment point or licensed disposal site.

Storage of Fuel/Chemicals

Stationary oil storage tanks will be located above the 0.5% Annual Exceedance Probability (AEP) (1 in 200 year return period) flood level. Plant and material will be stored in safe areas above the 0.5% AEP (1 in 200 year return period) where practicable, and temporary construction works will aim to be resistant to flood impacts in order to prevent movement or damage during potential flooding events.

To mitigate potential pollution from chemical contaminated runoff, all fuels and chemicals will be stored in accordance with best practice procedures. This will include a designated fuelling site at a safe distance from watercourses, and in appropriate impermeable bunded containers or areas.

These containers/areas will be designed to capture any leakages, from a tank or associated equipment.

Untreated Foul Drainage

The welfare facilities will connect to a septic tank or self-contained storage tanks. The tanks will be emptied and maintained on a regular basis by a suitably licensed contractor.

Outline Waste Management Plan

It is not anticipated there will be significant quantities of waste from the proposed construction activities.

A Site Waste Management Plan will be kept on-site, detailing how waste is managed.

Fully enclosed skips and other smaller containers will be used for all wastes on-site. Separate skips, as detailed below, will be held on-site to allow segregation of waste materials for recycling or recovery.

- general mixed non-hazardous;
- wood;
- metal;
- hazardous (special) – depending on the types of special waste generated, separate containers
- may be used;
- plastics; and
- inert construction waste.

All the legal documents to ensure the Duty of Care for waste will be kept on-site during the construction of the extension.

All waste leaving the Site will be accompanied with a Waste Transfer Note (WTN) (for non-hazardous) or Special Waste Consignment Note (SWCN). These will be checked by the Site Manager to ensure that the following information is detailed:

- producer of the waste;
- Site name & location;
- date;
- description of the waste (i.e. contents and volume);
- EWC code;
- signature of the waste carrier; and
- name of disposal site.

Once complete, the WTN / SWCN will be signed by the Contractor and a copy retained by the Site Manager.

SEPA will be notified a minimum of 72 hours prior to the transfer of Hazardous/Special waste. The Contractor will confirm whether the waste carrier will undertake the appropriate notification.

Regular waste audits will be undertaken by the Contractor to check for the following:

- containers are adequately signed;
- containers are being filled fully prior to uplift;

- there is no cross contamination of materials (e.g. hazardous and non-hazardous or wood and metal etc.);
- food and hazardous wastes are contained in covered containers;
- containers are fit for purpose – i.e. adequately sized and structurally sound; and
- waste documentation is being retained, e.g. WTNs

Outline Drainage Strategy

The outline Drainage Strategy (DS) is intended to demonstrate the likely measures that will be implemented across the Proposed Development Site to remove both surface and foul water from Site whilst protecting hydrological, and related resources. A detailed DS will be submitted to SIC, in consultation with SEPA and NatureScot as part of the CEMP prior to the commencement of construction.

Detailed proposals for such measures will be documented prior to construction and will provide the same or greater provision in terms of protecting the water environment as those described in this document. The measures are proportionate to the risk and, where greater risk is highlighted at specific locations prior to construction, specific measures would be agreed at that time.

Peat Management Plan

An outline Peat Management Plan is provided in EIA Report **Appendix 11.2**.

This will be updated to a construction-phase PMP prior to construction commencing, to include additional information gained from detailed intrusive ground investigation works. Details of the updated PMP will be referenced within the CEMP.

Dust and Air Pollution Management

The following mitigation measures will be implemented throughout the construction period:

- The construction site layout will be designed to locate machinery and dust causing activities away from receptors where possible;
- The Principal Contractor will review the daily weather reports and communicate with the Section Engineers so that works can be planned to minimise effects on sensitive receptors; and
- The Principal Contractor will maintain a water bowser on-site to suppress dust along the access tracks as required. If there is a risk of fugitive dust arising from the Site works, water spray systems may be set-up to dampen down the material. The Principal Contractor will ensure an adequate water supply on the Site for effective dust/ particulate matter suppression/ mitigation, using non-potable water where possible and appropriate.

Transportation and Storage of Materials

The following mitigation measures will be implemented to limit emissions and dust creation from the transportation and storage of materials and from the movement of vehicles associated with the development:

- If any material is tracked out of the Site, the Principal Contractor will use a water-assisted dust sweeper(s) on the access tracks and local roads, to remove it;
- All vehicles entering and leaving the Site will be monitored to ensure they are covered to prevent escape of materials during transport;
- A suitable wheel washing system will be implemented, to minimise potential for mud and dust deposition on public roads from construction vehicles.;

- The Principal Contractor will ensure fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery;
- For smaller supplies of fine powder, materials bags will be sealed after use and stored appropriately to prevent dust;
- Stockpiles will be covered, seeded or fenced where practicable to prevent wind whipping;
- Materials will be removed that have potential to produce dust from Site as soon as possible, unless being re-used on-site;
- The Principal Contractor will ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case it will ensure that appropriate control measures are in place; and
- The number of handling operations for materials will be kept to the minimum practicable.

Construction Plant

The following mitigation measures will be implemented to limit plant emissions and dust creation:

- All staff will operate plant and vehicles in accordance with the manufacturer's instructions. If possible, filters will be provided on plant anticipated to generate excess emissions. In addition, dust extractors, filters or collectors may be used;
- Cutting, grinding or sawing equipment will be fitted with, or used in conjunction with, suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems;
- All plant and vehicles will be turned off when not in use and will not be left idling. The movement of vehicles around the Site will be minimised where possible;
- Where possible, construction plant will be located away from the Site boundary and from sensitive receptors;
- The Principal Contractor will use enclosed chutes and conveyors, loading shovels, hoppers and other loading or handling equipment and will use fine water sprays on such equipment wherever appropriate; and
- Where reasonable and practical, the Principal Contractor will avoid the use of diesel or petrol-powered plant and will power plant with mains or battery powered generators.

Earthworks

- Stripping of topsoil will occur as close as reasonably practicable to the period of excavation or other earthworks activities to avoid risks associated with run-off or dust generation;
- Drop heights from excavators to vehicles involved in the transport of excavated material will be kept to the minimum practicable to control dust generation associated with the fall of materials.;
- All deposited materials will be compacted, with the exception of peat and topsoil, as soon as possible after deposition; and
- Soiling, seeding, planting or sealing of completed earthworks will be undertaken as soon as reasonably practicable following completion of the earthworks.

Air Quality Complaints

All dust and air quality complaints will be recorded, causes identified, appropriate measures taken to reduce the emissions in a timely manner and the results recorded by the Principal Contractor's Site Environmental Representative. The complaints log will be made available to the THC Environmental Health Officer, if required.

Conclusion

The purpose of this CEMP is to ensure that all construction activities carried out at the Proposed Development are in a manner which minimises impact on the environment. This document has been produced to remind individuals working on the Site of their responsibilities and to ensure that measures to prevent, reduce or mitigate potentially adverse environmental impacts identified in the EIA and this CEMP are carried out.

The CEMP has been developed to advise of good construction practices and ensure they are adopted and maintained throughout the construction of the Proposed Development. As part of this, a framework for mitigating unexpected impacts during construction has been developed and is detailed within this CEMP.

The CEMP has been prepared to provide assurance to third parties that their requirements and expectations with respect to environmental performance are met, whilst providing a mechanism for ensuring compliance with current environmental legislation and statutory consents.

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