PH101761 - CABLE ID 30, 77, 7(126), 74

# CLYDE REGION SHORE END CABLE MAINTENANCE CAMPAIGN 2 CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)



		Applies to		
PH101761 CABLE ID	Clyde Region Shore	Distribution	Transmission	
30, 77, 7(126), 155	, G		✓	
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#### List of Terms and Abbreviations

Term Definition

ACoW Archaeological Clerk of Works

CAR Controlled Activities Regulations

CEMP Construction Environmental Management Plan COSHH Control of Substances Hazardous to Health

ECoW Ecological Clerk of Works EPS European Protected Species

GEMP General Environmental Protection Measures

GPP Guidance for Pollution Prevention
HRA Habitats Regulation Appraisal
MCA Marine Consultation Zone
MHWS Mean High Water Springs
MLWS Mean Low Water Springs
MPA Marine Protected Area

NMP Scotland's National Marine Plan

NNR Natural Nature Reserve

OOS Out of Service

PPG Pollution Prevention Guidance SAC Special Area of Conservation SAP Senior Authorised Person

SEPA Scottish Environment Protection Agency SHEPD Scottish Hydro Electric Power Distribution plc

SSSI Site of Special Scientific Interest SWMP Site Waste Management Plan

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#### 1 Overview

#### 1.1 Introduction

This Construction Environmental Management Plan (CEMP) has been prepared by Scottish Hydro Electric Power Distribution plc (SHEPD).

During routine inspections by SHEPD, essential maintenance works were identified to ensure a secure, safe supply of electricity to the islands and to ensure the safety of the public when using the beaches where cable landfall occurs. An appointed Contractor shall carry out these works on behalf of SHEPD.



Figure 1 – Overview of Clyde Region Maintenance Works Locations

The following sites have been identified for remedial work:

- Bute Cumbrae Centre OOS Cable (Westhaven Shore End)
- Bute Cumbrae North (Kerrylamont Bay Shore End)
- Carradale Arran North 1 OOS Cable (Balliekine Shore End)
- Davaar, Cambeltown OOS Cable (Whole Cable)

This plan details project specific construction and environmental management measures in respect of works associated with maintenance work on the exposed electricity cable at the shoreline locations.

#### 1.1.1 Scotland's National Marine Plan (NMP)

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Scotland's National Marine Plan is a framework introduced in Scotland through the Marine (Scotland) Act 2010. This framework aims to promote sustainable development and use of marine areas, while enabling emerging maritime industries and provisioning existing users.

The proposed works consider NMP Cable 2 and Cable 3 policies.1

Cable 2 – In terms of submarine cable development and activities; where burial cannot be achieved to protect and stabilise the cable, cables can be protected through other recognised methods (cable armouring, rock bags, mattresses etc.)

Cable 3 - A risk-based approach has been adopted when considering the removal of out of service cables, where considerations to keep the cable in-situ versus removal to minimise the impact on marine historic and natural environments as well as other marine users.

#### 1.1.2 CEMP Overview

This CEMP provides information and guidance on the following topics:

- Waste Management
- Ecology
- Air Quality
- Water Quality Protection and Pollution Prevention
- Noise Management
- Soil Management
- Archaeology and Cultural Heritage
- Emergency Procedures

This document also provides further detail and protection measures, and include:

- Otter Protection Measures
- Breeding Bird Protection Measures

Site specific environmental issues and required mitigation measures are provided in Section 4 Environmental Management as well as CEMP Requirements and SHEPD standard mitigation requirements are found in Table 7.

These Tables must be reviewed and completed by the Contractor Site Manager and checked periodically by the Ecological Clerks of Work (ECoW). Table 7 will be signed off by the SHEPD Project Manager at the end of the project.

The following appendices provide further detail and control measures, and include:

Appendix A: SSEN General Environmental Management Plans (GEMPs)

Appendix B: Otter Species Protection Plan
Appendix C: Bird Species Protection Plan

Appendix D: Proposed Access Route

This CEMP is a live document that will be reviewed at regular intervals by the contractor onsite team and the appointed ECoW to reflect the progress of works, any changes in environmental requirements and to account for any emerging best practice or updates (from either statutory bodies or client/contractor best practice).

114. Submarine Cables - Scotland's National Marine Plan - gov.scot





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#### 1.2 Project Description

#### 1.2.1 Overview

The proposed project includes remedial works on the Please refer to the Table 1 for the marine license/working corridor of the proposed works (for any works from below MHWS).

**Table 1 – Working Corridor Coordinates** 

Landfall	Remedial Location	NW Corridor	NE Corridor	SW Corridor	SE Corridor
Westhaven, Great Cumbrae (SSEN ID 30)	55°44.823'N, 3°56.977'W	55°44.817'N, 4°57.017'W	55°44.837'N, 4°56.975'W	55°44.797'N, 4°56.999'W	55°44.820'N, 4°56.955'W
Kerrylamont Bay, Bute (SSEN ID 77)	55°46.621'N, 5°0.339'W	55°46.644'N, 5°0.361'W	55°46.637'N, 5°0.097'W	55°46.600'N, 5°0.320'W	55°46.587'N, 5°0.076'W
Balliekine, Arran (SSEN ID 155)	55°35.827'N, 5°22.871'W	55°35.848'N, 5°22.949'W	55°35.840'N, 5°22.898'W	55°35.818'N, 5°22.932'W	55°35.816'N, 5°22.850'W
Davaar, Campbelltown (SSEN ID 7(126)	55°25.400'N, 5°33.074'W	55°25.453'N, 5°33.129'W	55°25.335'N, 5°32.958'W	55°25.092'N, 5°33.547'W	55°25.084'N, 5°33.143'W

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Please refer to Figure 2 below for the working corridor for the Bute – Cumbrae Centre OOS Cable (Westhaven Shore End).

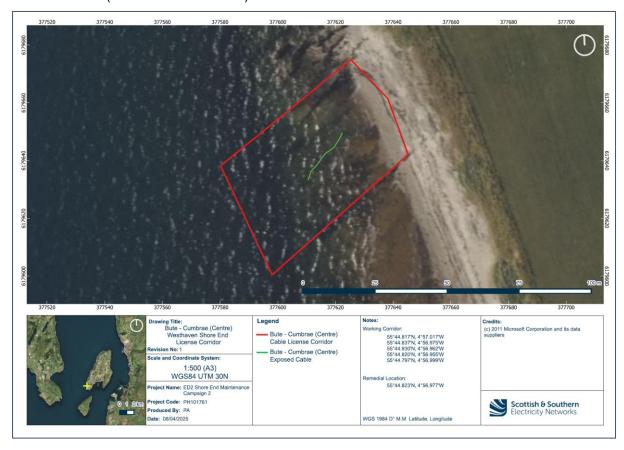


Figure 2 – Bute – Cumbrae Centre OOS Cable (Westhaven Shore End) Location Map and License Corridor

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Please refer to Figure 3 below for the working corridor for the Bute – Cumbrae North (Kerrylamont Shore End). The shore end for this cable experiences a high tidal recession, the working corridor has been expanded to ensure the cable can be properly identified.



Figure 3 - Bute - Cumbrae North Cable (Kerrylamont Shore End) Location Map and License Corridor

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Please refer to Figure 4 below for the working corridor for the Carradale-Arran North 1 OOS Cable (Balliekine Shore End).



Figure 4 – Carradale – Arran North 1 OOS Cable (Balliekine Shore End)

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Please refer to Figure 5 Figure 4 below for the working corridor for the Davaar, Cambeltown OOS Cable (Whole Cable). **Due to the mobile nature of this OOS cable within this tidal area, we have extended the marine license corridor to properly identify the cable.** 

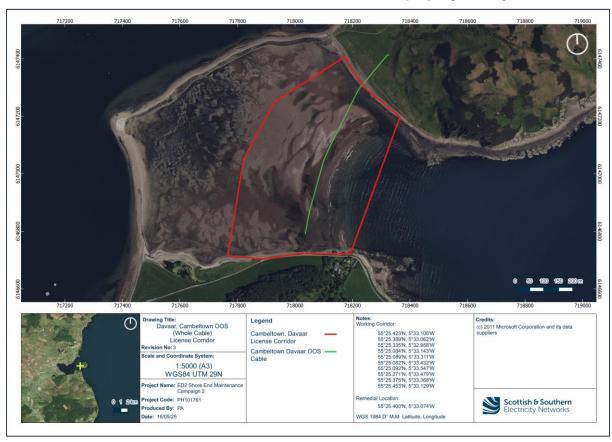


Figure 5 – Davaar, Campbeltown OOS Cable (Whole Cable)

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#### 1.2.2 Harbour Areas

#### **Clyde Port Designated Harbour Area**

The following works are within the Clyde Port harbour area:

- Bute Cumbrae North (Kerrylamont Bay Shore End)
- Bute Cumbrae Centre OOS Cable (Westhaven Shore End)

This harbour area is managed by the Peel Ports group as the Statutory Harbour Authority (SHA) under the Harbour Acts 1964. Refer to Figure 6 below for the locations of these proposed works.



Figure 6 – Proposed Works within Clyde Port Harbour Area

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#### **Cambeltown Harbour Area**

The following proposed works are adjacent to the Cambeltown Harbour Area:

• Davaar, Cambeltown OOS Cable (Whole Cable)

This is managed by the Argyll and Bute Council as the Statutory Harbour Authority (SHA) under the Harbour Acts 1964. Refer to Figure 7 below for the locations of these proposed works.



Figure 7 - Proposed Works Adjacent to Cambeltown Harbour Area

Additional to a marine license, if the proposed works are within Harbour Limits the Statutory Harbour Authority will be engaged, and an application will be submitted to attain a Harbour Works License where required.

#### 1.2.3 Project Methodology

For cables requiring remedial work the following methods may be applied:

- Reburial of exposed sections of electricity cable from mean low water springs (MLWS) to mean high water springs (MHWS).
- Where burial is not feasible; manual placement of iron shells (split pipe) along exposed sections of cable for protection and stabilisation.
- Removal of old concrete bags previously used for protection.
- For cables identified as a risk removal of out of service (OOS) subsea electricity cable from MLWS shore end.

The proposed works at all site locations will commence as soon as feasible, tide/weather permitting. Access will be taken using existing access tracks where possible and the excavator will be tracked to minimise ground pressure, please see Appendix D for pictures of site access.

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The proposed works align with the key objectives of the NMP in safeguarding marine submarine cables while considering other users of the sea. There are minimal impacts on the marine environment and other users of the sea.

The proposed works will have negligible impact the local onshore and offshore environments of the area, and a minimal impact on the visual quality from the areas from remedial work on exposed infrastructure. No marine noise or disturbance on the marine environment will be produced from the proposed works. The small scale of the proposed works and limited environmental and visual impact on the marine environment from reburial of exposed cable, installation of split pipe and removal of OOS cables in the intertidal zone.

Table 2 - Planned Works at Each Location

Cable Route	Landfall	Cable Removal?	Split Pipe Installation	Concrete Bag Removal	Cable Burial
Bute – Cumbrae Centre OOS (SSEN ID 30)	Westhaven, Great Cumbrae	Yes – Up to 50 m	No	No	Where appropriate
Bute – Cumbrae North (SSEN ID 77)	Kerrylamont Bay, Bute	No	Yes – allow for a maximum of 35m	No	Where possible
Balliekine, Arran OOS (SSEN ID 155)	Balliekine, Arran	Yes – Up to 50 m	No	No	Where appropriate
Davaar, Campbelltown OOS (SSEN ID 7 (126)	Whole cable	Yes – Whole Cable (est. 650m)	No	No	Where appropriate

#### 1.2.4 Reburial of Exposed Sections of Cable

- 1. Mobilisation of 3 tonne excavator (indicative), mobile welfare unit and equipment close to project location.
- Where the cable is exposed, 0these areas require burial where possible from MLWS to MHWS.
- 3. Burial will be achieved by using an excavator to create a trench alongside the existing cable route.
- 4. The existing cable will then be secured within the trench.
- 5. The trench will then be backfilled with 'won' material, to ensure minimal disruption to ecological habitats. Please also refer to Figure 8 for cross section of proposed burial.

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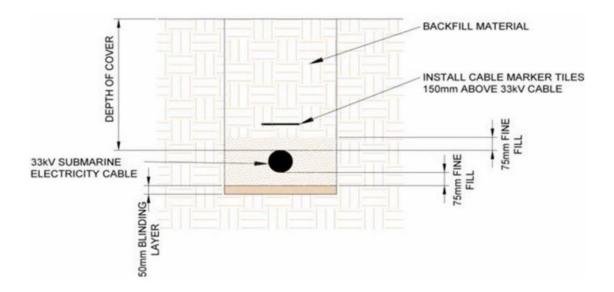


Figure 8 - Technical Drawing of Backfilled Material

#### 1.2.5 Installation of Split Pipe

- 1. Placement of split pipe/iron shells.
- 2. Mobilisation of 3 tonne excavator (indicative), mobile welfare unit (suitable for a max. of 8 personnel) and equipment close to the project location.
- 3. The iron half shells will be delivered by HIAB lorries close to the project location.
- 4. Iron shells will then be transferred from the HIAB lorry into a tracked excavator for transport to the cable.
- 5. Where necessary, loose stones from low water or shore end will be cleared from around the cable using a small excavator or manually by hand.
- 6. Individual iron half shells will be manually placed around the exposed cable. To ensure that they sufficiently cover the cable the two half shells will be fused together.
- 7. The half shell will then be secured to each other and held in place by clamps.
- 8. Removal of any excess shells and equipment from the project locations.
- 9. The shells will stay in place until further maintenance work is required.

#### 1.2.6 Removal of OOS Cable

- 1. Prior to commencement of operations correct cable will be confirmed by SSEN SAP.
- 2. Mobilisation of 3 tonne excavator, welfare unit and cable cutting equipment close to project location. Access to site will be achieved through existing tracks and entrances with the plant machinery (following granted land consent).
- 3. Disconnected subsea cable to be cut within the marine channel at low water. Cable to be removed from MLWS up to the shore end, lengths will vary and will be confirmed in Table 2 and method statement for each site.
- 4. The cables will then be cut in 10m lengths, with handheld cutting tool, earthed and capped, with cold shrink cap at low water. The cut cables will then be removed from low water and shore environment.

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- 6. An excavator will then assist to pull the disconnected cable from the beach.
- 7. Cut cable into sections and recycle (through a licenced recycling merchant).
- 8. Reinstatement of working area using sand from local environment.

#### 1.3 Construction Programme

The timing of works is dependent upon an appropriate tide, ideally this would be during the lowest astronomical tide to reduce risk. Works are targeted for Summer/Autumn 2025.

#### 1.4 Onsite Roles and Responsibilities

Table 3 shows the SHEPD Project management roles and named personnel accountable for and relevant to the implementation of the CEMP.

Table 3 - Management Roles and Personnel

Role	Responsibility	Contact Details
Project Manager (SHEPD)	<ul> <li>Oversee the project to ensure that the CEMP is completed; and,</li> <li>Ensure the Construction Manager(s), Site Manager(s), Project Environmental Manager/ECoW(s) and Consultant Archaeologists are aware of the requirements of the CEMP and that these requirements are carried out in line with requirements.</li> </ul>	Kevin Wilson  Scottish and Southern Electricity Networks Inveralmond House 200 Dunkeld Road Perth PH1 3AQ  [Redacted] T: +44 1738 341968 M: [Redacted]
Contracts Supervisor (SHEPD)	<ul> <li>Oversee the onsite construction works to ensure that the CEMP is completed; and,</li> <li>Ensure the Construction Manager(s), Site Manager(s), Project Environmental Manager/ECoW(s) and Consultant Archaeologists are aware of the requirements of the CEMP and that these requirements are carried out in line with requirements.</li> </ul>	Contracts Supervisor Gavin Mallett [Redacted] M: [Redacted]
Contractor Project Manager (On-site or delegate to Site Supervisor)	<ul> <li>Ensure the implementation of the CEMP;</li> <li>Ensure that the workforce is made aware of environmental risks relating to the project;</li> <li>Ensure that environmental incidents are reported to the company Helpline and to the Client in line with reporting timescales and requirements;</li> <li>Ensure that environmental issues are included in site management meetings;</li> <li>Ensure that site environmental controls are regularly monitored and recorded;</li> </ul>	TBC upon awarding of contract.



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	<ul> <li>Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment;</li> </ul>	
	<ul> <li>Co-ordinate and manage the identified environmental issues on the project; and,</li> </ul>	
	<ul> <li>Undertake regular environmental monitoring.</li> </ul>	
Project	<ul> <li>Ensure the implementation of the CEMP;</li> </ul>	Ecologist/ECoW
Environmental Manager and	<ul> <li>Ensure that the workforce is made aware of environmental risks relating to the Project;</li> </ul>	TBC upon awarding of contract.
ECoW (On-site as required)	<ul> <li>Ensure that environmental incidents are reported to the company Helpline and to the Client in line with reporting timescales and requirements;</li> </ul>	Project Environmental Manager Lorna Wilkie
	<ul> <li>Co-ordinate and manage the identified environmental issues on the Project;</li> </ul>	[Redacted]
	<ul> <li>Ensure that environmental issues are included in site management meetings;</li> </ul>	
	<ul> <li>Ensure that site environmental controls are regularly monitored and recorded;</li> </ul>	
	<ul> <li>Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment, and where necessary updates/amendments to the CEMP are completed;</li> </ul>	
	<ul> <li>Undertake regular environmental monitoring and inspections, and record the results;</li> </ul>	
	<ul> <li>Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment, and where necessary updates/amendments to the CEMP are completed;</li> </ul>	
	<ul> <li>Provide additional technical support to the Project as required by the Project Manager/Site Supervisor/Contractor Project Manager; and,</li> </ul>	
	<ul> <li>Investigate any significant environmental incidents that occur on the Project.</li> </ul>	

# **2** General Arrangements



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#### 2.1 Hours of Work

Most of the construction activities will be undertaken from Monday to Friday between 07:00 and 19:00, dependant on daylight and tide. If works are to be undertaken out with of these timings and/or across the weekend, the Local Planning Authority will be notified, and permissions will be confirmed prior to commencement of work. Weekend working hours will be adhered to within each regional area.

#### 2.2 Management of Works

Table 4 - Management Roles

Role	Name and Contact Details
SSEN Project Manager	Kevin Wilson Tel: 01738 453723, [Redacted]
	[Redacted]
SSEN Project Environmental Manager	Lorna Wilkie [Redacted]
SHE (Safety Health	Paul Webster
Environment)	[Redacted]
Site Supervisor	Gavin Mallett [Redacted]
Contractor Project Manager	TBC on awarding of contract
ECoW	TBC

#### 2.3 Training and Awareness

As part of site induction for all personnel, a copy of the CEMP will be provided to and discussed with all onsite staff. This will include discussing the elements outlined in the CEMP including sensitive receptors on site and measures in place to mitigate impacts on these receptors.

The ECoW will develop and deliver environmental toolbox talks relevant to elements of the CEMP such as otters, nesting birds and seals and when working in areas with sensitive receptors e.g. near landfall, or, where there is potential to impact sensitive receptors on site. Training records of all personnel on site should be reviewed and copies held centrally. This is particularly important for those operating excavators, other heavy machinery and with environmental certification to deal with incidents on site.





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#### 2.4 Communication, Monitoring and Reporting

Table 5 describes the mechanisms for the communication of environmental risk and the frequency at which they shall be completed.

**Table 5 - Communication and Frequency** 

Meeting/Briefing	Frequency
Progress Reporting	Daily
HSEQ and Progress Meeting	Weekly
Daily Site Team Briefing	Daily
Risk Assessment/Method Statement Briefings	Each job task
Environmental Toolbox Talks including good environmental practice	Prior to commencement of works
Site Induction	On first attendance at site

Suitable monitoring of the CEMP implementation is required. This is an identified activity of the ECoW. Monitoring of the CEMP implementation will be undertaken during all site visits by the ECoW. A suitable monitoring procedure must be defined, and agreed by, the ECoW and SHEPD Project Environmental Manager in advance of works commencing.

# 3 Site Management

#### 3.1 Site Layout and Housekeeping

Mobile welfare units will be available to site personnel and will not require any ground preparation. Material laydown areas shall be limited to short durations and be in the immediate vicinity of the works, i.e. iron shells delivered to site prior to work commencing. The site will be always maintained in a tidy and well-managed state.

#### 3.1.1 Welfare Facility

Welfare facilities on site will be sufficient to adequately accommodate all site personnel.

#### 3.1.2 COSHH Assessment

All substances identified as hazardous will be Control of Substances Hazardous to Health (COSHH) assessed and appropriate COSHH sheets for each individual material type retained on site and accessible to all works personnel. The use of non-assessed substances is prohibited. All operatives are required to comply with the controls specified within COSHH assessments. All COSHH items will be stored in a secure, ventilated store, separate from non COSHH items. All COSHH waste items will be discarded within a defined COSHH waste storage receptacle until being removed from site by a suitably licenced contractor (suitable for the removal of hazardous wastes).

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COSHH assessments cover all range of materials and are not limited to construction associated items and will additionally be provided for any domestic cleaning materials used on site (e.g. bleach).

#### 3.2 Site Traffic

Traffic during construction will be minimal and restricted to a small number of works vehicles and machinery. Access will be taken using existing access tracks where possible. All traffic shall be escorted in by approved site personnel. Please refer to Appendix D for an indicative access route, the final access route will be added to the CEMP once the access route has been finalised.

#### 3.3 Plant and Equipment

Construction vehicles and plant shall be regularly maintained. Emergency maintenance to construction plant will be carried out on site, where practicable, in a designated area and on an impermeable surface in order to contain any environmental risk posed by vehicle and plant maintenance.

A lockable bunded fuel bowser constructed in accordance with SEPA Guidelines – Guidance 2, will be used for refuelling on site.

Where relevant, refuelling shall take place at a dedicated refuelling area. Where this is impracticable, a nominated Fuel Marshal shall be responsible for overseeing refuelling activities and to ensure that refuelling of mobile plant does not take place within 30m of a water environment. The refuelling bowser shall be equipped with a spill kit and personnel will be trained in its use as part of the site induction training.

All construction vehicles and mobile plant operators shall have easy access to spill kits during vehicle and mobile plant operation through a combination of vehicle spill kits and larger capacity fixed location spill kits. Plant nappies/drip trays shall be utilised for stationary plant and regular inspection arrangements shall be in place. Where plant is left stationary in excess of one hour, plant nappies will be required. No idling is permitted on plant and vehicles on site, to reduce unnecessary emissions from being released to the atmosphere.

#### 3.4 Contractor's Plant

The appointed Contractor will provide a list of plant proposed to be used to undertake the works. The Contractor Project Manager must be provided with this list prior to works commencing. It will be the responsibility of the SSEN Project Manager to approve all as appropriate.

#### 3.5 Lighting

Lighting will be directional and positioned to minimise light spill outside the site compound/works area. Particular care should be taken to avoid light spill on known sensitive receptors (such as the shore). No artificial lighting should directly illuminate otter foraging/commuting habitat and/or be left on overnight in proximity to such features unless authorised by the appointed ECoW. It is not anticipated that artificial lighting will be required due to adequate daylight hours to complete the tasks.

#### 3.6 Air Quality Control Measures

Emissions to the atmosphere in terms of gaseous and particulate pollutants from vehicles and plant used on the site, will be controlled and limited as far as reasonably practicable.

The following control measures will be implemented to minimise the risks to air quality on and off site:





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- Vehicles, plant and equipment will be regularly serviced and inspected, and any defects e.g. leaks or dark smoke, reported and removed from use or rectified immediately.
- Records of plant and equipment maintenance/inspections will be available on site for inspection.
- Engines will be turned off when not in use.

#### 3.7 Waste Management

Waste is defined as "any substance or object which the holder discards, intends to discard or is required to discard". This includes materials that other people want, or for which they can find a beneficial use i.e. material that is to be recovered / recycled. In any construction project, there may be a variety of different wastes, from office and canteen waste to construction materials, waste oils, asbestos and clinical waste that will require management.

The appointed contractor will be required to compile a site waste management plan (SWMP) in accordance with the principles below:

- Waste minimisation.
- Allocate a member of staff to be responsible for the SWMP.
- Record types and quantities of waste that will be produced during the project.
- Decide how waste arising will be managed in line with the waste hierarchy.
- Plan for efficient materials and waste handling and set key performance indicators (KPIs) for reduction targets.
- Measure quantities and types of waste produced and compare against targets.
- · Monitor the implementation of the SWMP and update as necessary; and
- Compile a waste budget.

Waste management and practical actions that can be undertaken on site should follow the principles of the waste hierarchy as illustrated in Figure 9 9 below:

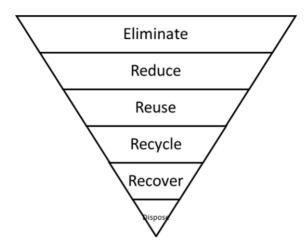


Figure 9 - Diagram of Waste Hierarchy

Further guidance on waste management can be found in TG-NET-ENV-516 Waste Management GEMP in Appendix A – SSEN General Environmental Management Plan

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# 4 Environmental Management

#### 4.1 Introduction

Table 6 - Description of Site-Specific Designations

Designation	Description of Sensitivities			
Special Area of Conservation (SAC)	Areas considered to be important for certain habitats and non-bird species of interest in a European context. One of the main mechanisms by which the EC Habitats and Species Directive 1992 will be implemented.			
Special Protection Area (SPA)	A Special Protection Area (SPA) is a designation under the European Union Directive on the Conservation of Wild Birds, safeguarding the habitats of migratory birds and certain threatened species.			
Sites of Special Scientific Interest (SSSIs)	Sites of Special Scientific Interest (SSSIs) are those areas of land and water that best represent natural heritage in terms of their:  • flora – i.e. plants • fauna – i.e. animals • geology – i.e. rocks • geomorphology – i.e. landforms • a mixture of these natural features			
Marine Protected Area (MPA)	There are 36 Nature Conservation Protected Areas (MPAs) designated under the Marine (Scotland) Act 2010 and give protection to a wide variety of maritime habitats, species and geology.			
Marine Consultation Area (MCA)	Marine Consultation Areas are non- statutory areas identified by NatureScot as deserving distinction in respect of the quality and sensitivity of the marine environment within them. Their selection encourages coastal communities and management bodies to be aware of marine conservation issues in the area.			
RAMSAR	A Ramsar Site is a wetland site designated of international importance under the Ramsar Convention. The Convention on Wetlands, known as the Ramsar Convention, is an intergovernmental environmental treaty established in 1971 by UNESCO, and coming into force in 1975.			
Natural Nature Reserve (NNR)	National Nature Reserves (NNRs) are areas of land set aside for nature. As in other countries, the accolade is given to Scotland's best wildlife sites, to promote their conservation and enjoyment. Most reserves contain nationally or internationally important habitats and species, so the wildlife is managed very carefully. Visitor facilities are designed and managed to ensure that people can enjoy NNRs without harming or disturbing the wildlife that lives there.			



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#### 4.2 Environmental Mapping

#### 4.2.1 Bute – Cumbrae OOS Cable (Westhaven Shore End) Environmental Mapping

Please refer to figure 10 below for a map of environmental sensitivities and CANMORE archaeological features for the proposed works for the Bute – Cumbrae Centre OOS Cable (Westhaven Shore End).

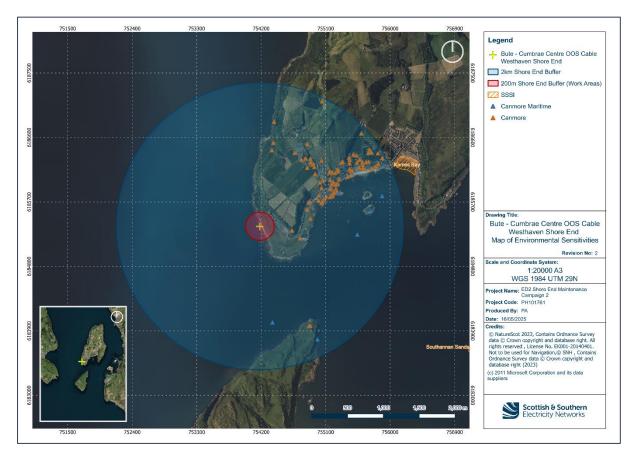


Figure 10 - Map of Environmental Sensitivities for Bute - Cumbrae Centre OOS Cable (Westhaven Shore End)

The proposed works on the Bute – Cumbrae OOS Cable (Westhaven Shore End) are unlikely to impact any designated sites as no designated sites were identified within the search area.

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#### 4.2.2 Bute – Cumbrae North (Kerrylamont Bay Shore End)



Please refer to Figure 11

Figure 1Figure 10 below for a map of environmental sensitivities and CANMORE archaeological features for the proposed works for the Bute – Cumbrae North (Kerrylamont Bay Shore End).

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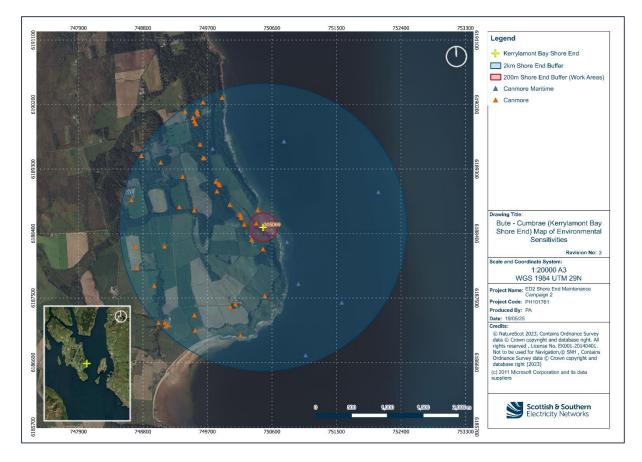


Figure 11 - Map of Environmental Sensitivities for Bute - Cumbrae North (Kerrylamont Bay Shore End)

The proposed works on Bute – Cumbrae North (Kerrylamont Bay Shore End) are unlikely to impact any designated sites as no designated sites were identified within the search area.

#### 4.2.3 Carradale – Arran North 1 OOS Cable (Balliekine Shore End)

Please refer to Figure 12 below for a map of environmental sensitivities and CANMORE archaeological features for the proposd works for the Carradale – Arran North 1 OOS Cable (Balliekine Shore End).

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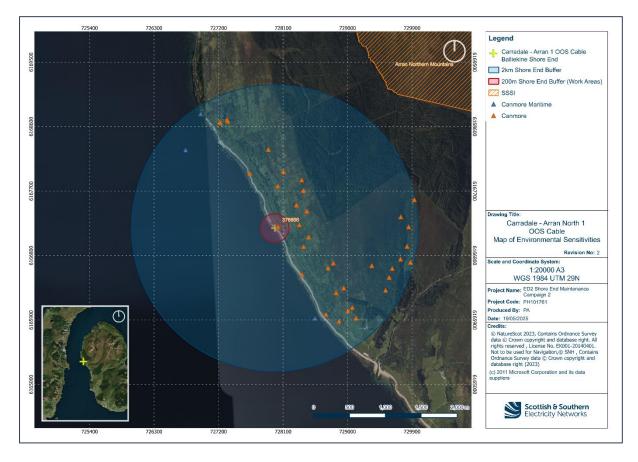


Figure 12 – Map of Environmental Sensitivities for Carradale – Arran North 1 OOS Cable (Balliekine Shore End)

The proposed works on Carradale – Arran North 1 OOS Cable (Balliekine Shore End) are unlikely to impact any designated sites as no designated sites were identified within the search area.

#### 4.2.4 Davaar, Campbeltown

Please refer to Figure 13 below for a map of environmental sensitivities and CANMORE archaeological features for the proposed works on the Davaar, Cambeltown OOS Cable (Whole Cable).

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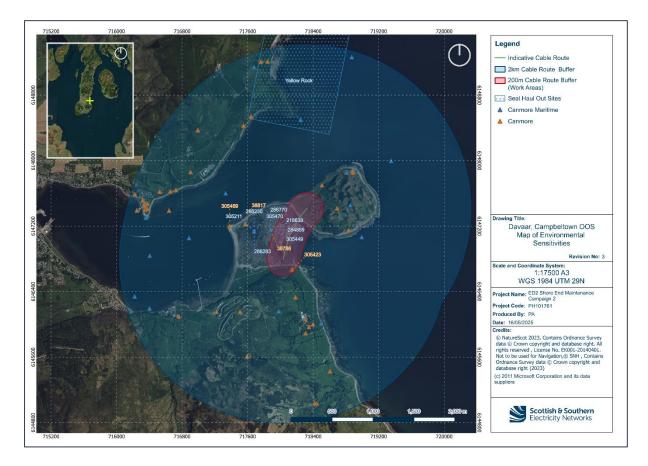


Figure 13 - Map of Environmental Sensitivities for Davaar, Cambeltown OOS Cable (Whole Cable)

There is the potential for seals to be present in coastal areas in the vicinity of the proposed works. The Yellow Rock seal out is located 850m away from the area of works on the Davaar, Cambeltown OOS Cable (Whole Cable) and therefore the potential for disturbance is considered low. An ECoW site walkover will be conducted prior to any work commencing at these sites, which would include survey of the beach areas to identify any hauled-out seals in the vicinity of the landfall points. The NatureScot guidance for responsible behaviour around seals and other marine wildlife will be adhered to during works.<sup>2</sup>

The proposed works on the Davaar, Cambeltown OOS Cable (Whole Cable) are unlikely to impact any designated sites as no designated sites were found within the search area.

#### 4.2.5 Ecological Constraints

Preconstruction surveys will be undertaken by the Client's ecologist to identify ecological sensitivities within the works area buffer (200m) of the shore end and the proposed route of access. The information recorded will be passed to the Contractor.

Prior to commencement of the works, a preconstruction check for any ecological sensitivities will be undertaken by the ECoW.

Works may take place during the breeding bird season. The Client's ecologist will carry out a preliminary survey for breeding birds/breeding bird potential. The information recorded will be passed to the Contractor. No works shall begin in any area that has not had a nesting bird

<sup>&</sup>lt;sup>2</sup> Scottish Marine Wildlife Watching Code | NatureScot





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check carried out by the ECoW no more than 48 hours prior to works commencing. General mitigation measures can be found in Appendix C – Bird Species Protection Plan.

There is potential for otters to be present at any point along the cable route, especially landfall. A pre-construction survey for otters will be carried out by the Client's ecologist, and appropriate licencing put in place if required. The information recorded will be passed to the Contractor. Should otter be found during works, work will be progressed in accordance with SSE's Otter Species Protection Plan, please refer to Appendix B – Otter Species Protection Plan.

The proposed works will be carried out under a construction method statement to minimise the risk of impacting designated features, due to the small scale of the works it is likely that there will be no significant effect to existing sensitivities.

Where any unexpected species are located by any personnel on site, all works within that area must cease immediately. Site management and the ECoW must be informed immediately. No further work may take place within that area until confirmation has been given by the ECoW and site management.

#### 4.3 Breeding Bird Protection Plan

Construction works have the potential to negatively impact on breeding birds as a result of either direct destruction of nests or disturbance which may result in breeding failure. In addition, some particularly sensitive species are liable to disturbance out with the breeding season.

Please refer to Appendix C – Bird Protection Plan. This plan highlights the responsibilities and procedures that must be followed if there is a potential for breeding birds to be affected. It highlights the responsibilities of SSEN and its appointed contractors the legislative protection of birds and measures required to minimise the impact of birds and reduce the risk of criminal offences from being committed.

#### 4.4 Otter Protection Plan

Otter is a European Protected Species (EPS) and is afforded a high level of protection in Scotland.

Please refer to Appendix B – Otter Species Protection Plan. The Plan contains two parts and details the procedures that must be followed where there is potential for otter to be present (Part 1), and where a Project Licence for otter has been issued by NatureScot to cover the project (Part 2).

#### 4.5 Archaeological Constraints

For the proposed works on Bute – Cumbrae North (Kerrylamont Bay Shore End) a Canmore event listing (Canmore ID 376608) has been identified within the works search area (200m). The event was from a previous archaeological watching brief as part of the installation works (900m of trenching) for this cable in 2019, no archaeologically significant features were identified.

For the proposed works on Carradale – Arran North 1 OOS Cable (Balliekine Shore End) a Canmore event listing (Canmore ID 376666) has been identified within the works search area (200m). The event was from previous archaeological watching brief as part of installation works (700m of trenching) for this cable in 2022, no archaeologically significant features were identified.

For the proposed works on Davaar, Campbeltown OOS Cable the following Canmore records have been identified within the works search area has been identified within or adjacent to the works search area (200m):





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 Davaar House (ID 305423) a visible house - Works will occur below MHWS which will avoid this visible archaeological/heritage site. Access to the site will follow the existing line to the only connected shore end on (on Davaar island) and will avoid this feature.

The following maritime sites have been identified as adjacent to the works search area (200m):

- Pride: The Doirlinn, Kildalloig Bay, Cambeltown Loch, Firth of Clyde (ID 286283 (Maritime)) a maritime Sloop (19<sup>th</sup> Century)
- Espiegle: The Doirlinn, Island Davaar, Campbeltown Loch, Firth of Clyde (ID 286230 (Maritime)) a maritime Craft (19<sup>th</sup> Century)
- Amiable: The Doirlinn, Kildalloig Bay, Cambeltown Loch, Firth of Clyde (ID 305470 (Maritime)) a maritime Ship (19th Century)
- William and Leigh: The Doirlinn, Kildalloig, Cambeltown Loch, Firth of Clyde (ID 305211 (Maritime)) a maritime Ketch (20<sup>th</sup> Century)
- Fairy: Cambeltown Loch, Firth of Clyde (ID 284859 (Maritime)) a maritime Craft (19<sup>th</sup> Century)
- Pearl: Cambeltown Loch, Firth of Clyde (ID 286770 (Maritime)) a maritime Smack (19th Century)
- Diana: Island, Davaar, Cambeltown Loch, Firth of Clyde (ID 218638 (Maritime)) a maritime Sloop (19<sup>th</sup> Century)
- May: Cambeltown Loch, Firth of Clyde (ID 305449 (Maritime)) a maritime Schooner (19th Century).

The proposed works will occur at low tide where some maritime features may be visible, these will be avoided and an exclusion zone of 15m shall be applied over the duration of the proposed works. Any visible maritime wrecks or features of archaeological significance shall be reported to Historic Environment Scotland and the UK Hydrographic Office (UKHO) if identified during works.

#### 4.5.1 Archaeological and Cultural Heritage Management Plan

If required by the Local Authority, an Archaeological Clerk of Works (ACoW) will be present onsite to provide the archaeological watching brief for construction activities. Any unexpected encounter with archaeological remains shall be immediately reported to SSEN.

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#### 4.6 CEMP Requirements

Table 7- CEMP Requirements

Environmental Features	CEMP Requirement	Stage Required	Responsibility	Date Completed and Reviewed	Comments or Ongoing Actions
All	Pre-construction surveys and an ECoW pre-construction walkover will take place, to ensure that all environmental mitigation will be put in place throughout the construction period. The ECoW will monitor compliance throughout the construction period.	Pre- Construction Construction	Appointed Contractor ECoW SSEN		
Terrestrial Ecology	<ul> <li>All site personnel will attend a Tool Box Talk, as part of their site induction. The toolbox talk will include:</li> <li>an outline of roles and responsibilities relating to any marine / terrestrial ecology within or adjacent to site;</li> <li>a description of any key ecological features present, including photographs to help contractors recognise these;</li> <li>any specific mitigation measures that need to be implemented on site, including any required protection zones around any discovered sensitive habitat; and</li> <li>the procedure to follow if unexpected wildlife is encountered during the works.</li> </ul>	Pre- Construction	Appointed Contractor ECoW SSEN		
Terrestrial Ecology	Understanding and adherence to the proposed measures within the CEMP and method statement and the attached GEMPS (Appendix A) for standard best practice methods when working in sensitive habitats.	Pre- Construction Construction	Appointed Contractor ECoW		

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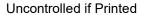


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			SSEN	
Otters	A pre-construction otter survey will be undertaken a maximum of 10 weeks prior to planned works. If required, this CEMP will be updated to reflect any results from the pre-construction survey. If an otter licence is required, this will be applied for immediately after the survey. During works the ECoW will carry out pre-works checks for otter and will put in place mitigation in accordance with the Otter Species Protection Plan.	Construction	Appointed Contractor ECoW SSEN	
Seals	There is the potential for both harbour seal and grey seal to be present, a designated seal haul out has been identified within the 2km search area for the Davaar, Cambeltown OOS (Whole Cable).  A pre-construction walkover will be undertaken by the ECoW and daily checks of the beach areas for hauled out seals will be performed in the vicinity of the landfall points (prior to the commencement of works that day).  Any appointed contractors' personnel will be aware of the NatureScot advice and responsible behaviour around seals <sup>3</sup> Pre-construction checks will be required due to works being planned for summer and may coincide with seal pupping seasons (June/July for harbour seal and September-December for grey seal).	Pre-Construction Construction	Appointed Contractor ECoW SSEN	
Birds	The proposed work areas are not within or adjacent to any designated areas with bird features.  A pre-works walkover shall take place no more than 48 hours in advance of works commencing. Should any protected	Pre- Construction	Appointed Contractor ECoW	

<sup>&</sup>lt;sup>3</sup> Scottish Marine Wildlife Watching Code | NatureScot

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	species be found within the disturbance distance of the work NatureScot must be informed and the works may then need a licence.  If works take place during bird breeding season, checks will be required to determine the presence of breeding birds within the area and any required mitigation. A pre-works walkover by the ECoW will be required to ensure that there are no breeding birds present. The walkover should take place no more than 48 hours in advance of works commencing. If required, all mitigation will be adhered to outlined in Appendix C – Bird Species Protection Plan.		SSEN	
Habitats Regulations Appraisal	Desktop studies have shown that a Habitats Regulations Appraisal (HRA) is not required	N/A	N/A	
Cultural Heritage	<ul> <li>No significant archaeological features were identified from previous event listings on:         <ul> <li>Carradale – Arran North 1 OOS Cable (Balliekine Shore End) (Canmore ID 376666)</li> <li>Bute – Cumbrae North (Kerrylamont Bay Shore End) (Canmore ID 376608)</li> </ul> </li> <li>The following archaeological features have been identified within and adjacent to the work areas for the Davaar, Cambeltown OOS Cable (Whole Cable):         <ul> <li>Davaar House (Canmore ID 305423) – House, visible and will be avoided in access/during works as works will primarily occur in the intertidal area.</li> <li>Pride: The Doirlinn, Kildalloig Bay, Cambeltown Loch, Firth of Clyde (ID 286283 (Maritime))</li> </ul> </li> </ul>	Pre- Construction	Appointed Contractor ECoW	



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Loch, Firth of (  Amiable: The Loch, Firth of (  William and Cambeltown (Maritime))  Fairy: Cambel (Maritime))  Pearl: Cambel (Maritime))  Diana: Island, Clyde (ID 2186  May: Cambelt (Maritime))  Works will occur at low be visible, these will be shall be applied over thaccess to site.  An Archaeological Cleiprovide archaeological proposed works.	Doirlinn, Island Davaar, Clyde (ID 286230 (Maritim-Doirlinn, Kildalloig Bay, Clyde (ID 305470 (Maritim-Leigh: The Doirlinn Loch, Firth of Clyde town Loch, Firth of Clyde town Loch, Firth of Clyde Davaar, Cambeltown Loch, Firth of Clyde Davaar, Cambeltown Loch, Firth of Clyde tide where some maritime avoided and an exclusion he duration of the propose of the Works (ACoW) may I watching brief during the Any unexpected ends along the pre-existing of the salong the pre-existing of the control of the proposed and the pre-existing of the pre-exis	cambeltown e  Kildalloig, (ID 305211  (ID 284859  (ID 286770  och, Firth of  (ID 305449  features may a zone of 15m and works and be present to e duration of counters of		



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#### 5 **Water Quality Protection and Pollution Prevention**

#### 5.1 Water Pollution Prevention

#### 5.1.1 **Drainage Management Strategy**

During works there is the potential risk of polluting water environments from the following:

Spillage of oils or other pollutants from machinery and vehicles.

#### 5.1.2 Watercourse Pollution Prevention

The pollution prevention of groundwater is to be prevented by adherence to the Scottish Environment Protection Agency (SEPA) Guidance Pollution Prevention (GPP) series4 (with note of the former Pollution Prevention Guideline (PPG) series). Please also refer to Appendix A for TG-NET-ENV-512 GEMP Working in or Near Watercourses.

Training will be provided to on-site personnel via toolbox talks highlighting the risks of the polluting water environments during construction and highlighting sensitive locations.

Water quality monitoring by means of visual inspection will be undertaken, as a minimum, on a daily basis (and more frequently during periods of poor weather) of any areas considered at high risk during work activities. Temporary works areas will be sited at least 50m from the water environment including waterbodies where possible to reduce the potential for transmission of sediment laden run-off or accidental spillages.

#### Watercourse Crossing 5.1.3

Site investigations have indicated that there are no watercourses that would need to be crossed during operations. If at any time access to site needs to be altered and the need to cross a watercourse arises, this will be undertaken in line with SEPA's General Binding Rule 9 (1), specifically the following requirement: Following the operation of the machinery, any damage caused by the operation to the bed and banks of the surface water must be repaired, including re-establishing vegetation on any areas of bare earth on the banks resulting from the operation, either by covering the area with grass turfs or lining them with a biodegradable geotextile and seeding Please also refer to Appendix A - TG-NET-ENV-515 **GEMP Watercourse Crossings** 

#### 5.1.4 Water/Ground Contamination (From Spillage)

Potential pollution of the water environment and groundwater is to be prevented during works by adhering to the following measures:

- All fuel storage containers must be labelled showing contents and maximum capacity.
- Plant nappies must be used during refuelling operations.
- All works within 30m of a water environment must be carried out following SEPA GPP guidance and following a site specific environmental briefing.
- Machine operators must carry out daily inspections of plant, including hydraulic lines. This will be recorded on a mobile plant and lifting equipment inspection check sheet.
- Spill kits must be readily available at all sites and with all items of mobile / static plant.
- All sites must be kept tidy and clean. Materials and plant must be securely stored to avoid trespass and vandalism.

<sup>&</sup>lt;sup>4</sup> Guidance for Pollution Prevention (GPP) documents | NetRegs | Environmental guidance for your business in Northern Ireland & Scotland





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- All oil storage tanks, drums etc. must be placed on level ground with 110% bund containment and inspected daily (where applicable).
- During maintenance work on plant, appropriate containers and drip trays must be used to mitigate unavoidable spillage. Similar measures must also be used when refuelling.
- Any contamination of ground must be removed immediately, in such a manner that
  does not have the potential to cause further pollution to the surrounding environment.
  Contaminated soil is to be treated as Hazardous (Special) Waste and will be
  appropriately disposed of by a licensed waste contractor. All welfare facilities must
  have an appropriate system for the treatment or removal of foul waste and provision
  made for the regular removal of waste products. Please also refer to Appendix A –
  TG NET-ENV-512 Working in or Near Water.

#### 5.1.5 Fuel Storage

No refuelling is to take place within 30m of the water environment to prevent any potential spillages from polluting the water environment.

Fuel storage will be at the main compound situated on impermeable ground.

Refuelling of plant and machinery if required, will only take place within a defined area within site compounds.

Clearly defined areas for storage of oil and refuelling will be identified as part of the compound establishment process. Spill kits will be located and maintained at all oil storage and refuelling locations and in all site vehicles and plant.

#### 5.1.6 Pollution Control

The primary method of pollution control is to seek to stop the action which is causing pollution immediately.

- Take immediate remedial action block spill; place booms and absorbent materials to help soak up spill;
- Ensure all plant is double bunded/double skinned/ appropriate drip trays in place to contain leakages; and
- Have control measures in place and have fully stocked spill kits easily accessible.

Works will be achieved in accordance with Appendix A - TG-NET-ENV-510 - Oil Storage and Refuelling.

#### 5.2 Working In or Near Surface Waters

Construction activities in or near water have the potential to cause serious pollution or impact on the bed and banks of a watercourse and on the quality and quantity of the water. Most pollution incidents are avoidable. With careful planning the risk of site work causing pollution can be reduced. Many measures needed to prevent pollution are not expensive, especially if they are included at the planning stage of any activity. Major causes of environmental harm associated with working in or near watercourses include:

- Silt e.g. disturbance of riverbed or bank, dewatering and pumping of excavations, runoff from exposed ground, plant washing, roads and river crossings;
- Cement and concrete which is very alkaline and corrosive and can cause serious pollution.
- Chemicals and solvents oil storage, refuelling, trade materials etc.





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- Bridge cleaning debris e.g. dust, debris & wastewater; · herbicides e.g. aerial application.
- Waste materials (including special waste) e.g. oily wastes, spent acids and solvents.

Most activities with the potential for affecting watercourses or groundwater will require an authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR).

The appointed contractor is required to comply with the following when conducting all activity:

- Identify all activities that will be undertaken in or near watercourses (including all identifiable drainage paths),
- Plan all works in accordance with best practice.
- Avoid works within 10m of a watercourse unless no other practical options exist and leave a vegetated buffer strip.
- Where works are undertaken within 10m of any watercourse or drain, ensure specific pollution prevention controls are in place.
- Communicate risks associated with working in or near watercourses to all personnel and include control measures in the site-specific construction method statements.
- Seek to avoid or minimise watercourse engineering works wherever possible.
- Ensure all necessary consents under the CAR are in place.
- Ask the Project Environmental Manager for advice in planning works in and near watercourses.
- Vehicles must not work within the water unless no other reasonable options exist.
- All construction machinery operating in-stream must be mechanically sound to avoid leaks of oils, hydraulic fluid, etc.
- Machinery must be steam cleaned and checked prior to commencement of in-stream works.
- All reasonable steps shall be taken to prevent the transport of sediments or other matter disturbed by the works.
- Keep site tidy and do not store materials close to watercourses or surface water features.
- Check if there are any timing restrictions to works because of protected species (e.g. spawning salmonids, otter, water vole, etc.) or landowner commitments.
- Ensure all required pre-construction surveys have been completed before starting works (these will include, where appropriate, freshwater pearl mussel, otter, water vole, etc.).
- Any temporary dams used must be designed to accommodate periods of high watercourse discharge, and dried out sections of bed must be check for stranded fish.
- Where pumps are used, back up pumps must be available. Pumps must be fitted with screens to prevent fish mortalities and ingress of debris, and the outfall to pumps be designed to prevent erosion of the receiving waters (i.e. by dissipating the flow);.
- Care must be taken to avoid pollution of watercourses with sediment and to ensure that any desilting works would not interfere with the bank sides.
- Vegetation removal must be minimised wherever possible.
- Where stock has access to the works fencing may be necessary in order to allow the regeneration of native riparian and aquatic marginal vegetation.
- Ensure construction works minimise disturbance to the current run-off regimes.

#### 5.2.1 Surface Water Controls

Locate and plan high-risk activities/areas away from watercourses and drainage paths. Areas of high risk include:

Fuel and chemical storage.

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#### Uncontrolled if Printed



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- Refuelling areas.
- Material stockpiles.
- Vehicle and equipment washing areas.
- Site compounds / parking areas.

Measures to minimise the volume of contaminated run-off being created include:

- Divert clean surface water away from areas using cut-off drains, catch pits and bunds (where necessary these can be lined).
- Do not allow water to drain down the length of a haul road. Roads should have adequate cambers to shed water quickly and if necessary, cut-off drains installed across the road.
- Minimise erosion of exposed soils and working areas.
- Minimise the area of exposed working area through phased construction.
- Reinstate exposed soil as soon as practical.
- · Roughen exposed surface.
- Prevent water from leaving site prior to treatment.
- Ensure adequate buffer zones are identified between working areas and surface waters.
- Diversion drains should be used to catch sediment laden run-off and direct it to treatment facilities (where necessary these can be lined).
- Catch dirty run-off and treat through silt fences, silt traps, bunds, settlement tanks / lagoons, straw bales and geotextile etc. (see CIRIA C648<sup>5</sup>).
- Maintain all protective measures (e.g. change bales once sediment laden etc).
- Depending on the level of contamination, silty water can be pumped over land to filter through vegetation and infiltrate into the ground provided it is carried out in line with the CAR regulations. An appropriate buffer distance must be agreed with the Client to allow sufficient distance for the vegetation to filter the silty water prior to reaching a watercourse.

#### 6 Noise and Vibration

#### 6.1 General Principles

There is limited potential for noise impacts. Noise from maintenance works will be minimised using Best Practicable Means, as defined under Section 72, Part III of the Control of Pollution Act (CoPA) 1974. BS 5228 provides guidance on controlling noise from work sites in Clause 8, which will be followed where appropriate and practicable. Measures will be adopted on both Sites to reduce noise of equipment and the work including those listed below.

## 7 Soil Management

Any activities related to soil removal, storage and reinstatement will be carried out in accordance with Appendix A - TG-NET-ENV-511 GEMP - Soil Management

Any unexpected, contaminated land will be managed according to Appendix A - TG-NET - ENV-517 GEMP - Contaminated Land



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#### 8 Peat Management

No areas of peat have been identified on site. If peat is found during site activities, any stripping, storage or reinstatement of peat will be managed according to the Appendix A - TG-NET-ENV-513 GEMP - Working in Sensitive Habitats.

### 9 Environmental Emergency Response Plan

#### 9.1 Incident Reporting

In the event of a pollution event or environmental incident on site an Incident Report Form will be submitted to the SSEN Project Manager and SHE representative as specified in Table 8. If pollution enters a surface water drainage channel SEPA must be informed. Should pollution enter surface water or foul water drainage channels Scottish Water and Local Authority must also be informed. Should an environmental incident or pollution event take place at the shore end location of the works that discharges to the littoral and tidal area, or to sea, this will be reported to SSEN immediately, and SEPA will subsequently be contacted for direction.

#### 9.2 Environmental Emergency Contacts

Table 8 - Environmental Emergency Contact Details

Contact	Contact Details
Contractor Project Manager (TBC)	TBC upon awarding of contract
SSEN Project Environmental Manager	Lorna Wilkie
	[Redacted]
SHE (Safety Health	Paul Webster
Environment) Manager	[Redacted]
SSEN 30 Minute Reporting Line	0800 096 621
SEPA Emergency Environmental	0800 80 70 60
Event Contact Number	
SEPA Flood Line	0345 988 1188
Scottish Water	0345 988 1188
NatureScot	Great Glen House
	Leachkin Road
	Inverness

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	IV3 8NW T: 01463 725 000
Argyll and Bute Council	Argyll and Bute Council, Kilmory,
	Lochgilphead,
	Argyll,
	PA31 8RT
	T: 01546 605522

#### 10 Reinstatement

The appointed contractor shall reinstate all working areas as a result of the works or access across land to the reasonable satisfaction of the landowner/occupier and SSEN.

#### 11 Bad Weather

It is important to consider the implications of poor weather conditions and associated environmental risks. Bad weather, particularly heavy rain, can cause significant environmental impacts during construction (for example, on sensitive habitats and increased risk of sediment laden run-off into surface waters).

SSEN and appointed contractor will show compliance with the following:

- Identify an action plan before construction starts with a protocol of measures to implement in times of bad weather. This should include heavy rain, high winds, snow and frost; The weather forecast should be checked on a daily basis and thought should be given to possible sudden changes.
- Ground conditions should be checked regularly, and assessment made as to whether they are suitable for the proposed site activities;
- Check whether plant is causing unacceptably high damage on site because of poor ground conditions (in consultation with the ECOW).
- Consider whether plant could be at risk if used in areas which are too wet; Plan for high run-off in advance and Identify protection measures (silt traps, straw bales and booms etc).
- Check for any materials stored close to watercourses during construction activities
  which could be washed into the water in times of storm. During times of excessive
  rainfall and ground saturation, stripping and reinstatement works should not be
  undertaken.

# 12 Biosecurity

When working/crossing farmland or working near livestock, all personnel to ensure that boots/wheels of vehicles have been brushed with the biosecurity product (DEFRA approved disinfectant FAM-30) that will be available to all personnel on each site. Onshore activities will

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also be managed in accordance with Appendix A - TG-NET-ENV-521 GEMP - Biosecurity (On Land).

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# Appendix A SSEN General Environmental Management Plans (GEMP)

Please refer to the following GEMPs which will be attached alongside this document.

TG-NET-ENV-512 - Working in or Near Water

TG-NET-ENV-516 - Waste Management

TG-NET-ENV-515 - Watercourse Crossings

TG-NET-ENV-510 - Oil Storage and Refuelling

TG-NET-ENV-513 – Working in Sensitive Habitats

TG-NET-ENV-517 - Contaminated Land

TG-NET-ENV-511 - Soil Management

TG-NET-ENV-521 - Biosecurity(On Land)

# **Appendix B** Otter Species Protection Plan

Please refer to the following for SSEN's Otter Species Protection Plan which will be attached alongside this document.

TG-NET-ENV-503 Otter Species Protection Plan

# **Appendix C** Bird Species Protection Plan

Please refer to the following for SSEN's Bird Species Protection Plan which will be attached alongside this document.

TG-NET-ENV-505 Bird Species Protection Plan



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# **Appendix D** Proposed Access Route

The following figures highlight the proposed site access. This access route is indicative and will require consents from existing land owners prior to the commencement of works.

Please refer to Figure 14 below for the proposed access route for the Bute – Cumbrae Centre OOS Cable (West Haven Shore End).



Figure 14 – Indicative Access Route for Bute – Cumbrae Centre OOS Cable (Westhaven Shore End)

Access from main road through gate onto rough track across grassland and small drainage ditch crossing which should be large enough for an excavator. Access to exposed cable on a sandy beach with layers of gravel/shingle in the foreshore. Total distance to access beach is approximately 250m.

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Please refer to Figure 15 below for the proposed access route for the Bute – Cumbrae North Cable (Kerrylamont Shore End).



Figure 15 - Indicative Access Route for Bute - Cumbrae North 1 (Kerrylamont Bay Shore End)

Potential access to site through pasture (grazing livestock). Accessible through gate from main road and another gate down to small mixed woodland – with gaps to access grassland prior to the beach. Beach is sandy with shingles and boulders. (approx. 500m)

Please refer to Figure 16 below for the proposed access route for the Carradale – Arran North 1 OOS Cable (Balliekine Shore End).

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Figure 16 - Indicative Access Route for Carradale - Arran North OOS Cable (Balliekine Shore End)

Site access from the main road (yellow dot) through a gap in vegetation this is relatively flat and can fit a small excavator.

Please refer to Figure 17 below for the proposed access route for the Davaar, Campbeltown OOS Cable (Whole Cable).

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Figure 17 - Indicative Access Route for Davaar, Campbeltown OOS Cable (Whole Cable)

The indicative access will be from the main road from the mainland. An existing gravel track large enough for a small excavator will be taken to access the shore end on Davaar Island.

# Appendix E Site Images

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