**Admiralty Pier, St Kilda**

**Contract 1 – Minor Works**

**Marine Scotland Licence Application**

**Question 5 (i) – Potential impact**

The works have the potential to create limited pollution of sea water locally to the works due to wash out of cement from concrete and from release of contaminated water. The contract specification has the following provision in relation to the avoidance of pollution:

**Avoidance of pollution**

St Kilda is a World Heritage Site and a Site of Special Scientific Interest amongst other designations. The Contractor shall take all measures necessary to ensure that no waste or contaminated materials are dumped on the island or discharged to the sea. These measures shall be in accordance with the Special Requirements for Prevention of Pollution to Watercourses by Civil Engineering Works issued by the Scottish Environmental Protection Agency and the National Trust for Scotland’s Environmental Management Policy (see Appendix A). All surplus materials arising from the Works shall become the property of the Contractor and shall be removed from the Island.

Prior to the commencement of the Works the Contractor shall prepare a Method Statement detailing the proposals for avoiding pollution and submit it to the Engineer for approval. The Method Statement shall incorporate a Site Waste Management Plan in compliance with the Trust’s Environmental Management Policy.

The works also have a potential to introduce Invasive Non-Native Species (INNS) to St Kilda. The Contract Specification has the following provision to prevent the introduction of INNS:

**Bio-security**

St Kilda is one of only 35 global sites listed as a dual World Heritage Site, recognised for both natural and cultural heritage. It is significant for its vast colonies of seabirds, some of the largest in Europe. The St Kilda archipelago has only two native mammal species, wild sheep and a unique St Kilda mouse. The seabirds and mice are vulnerable to introduced mammal species like rats, mink. Other Invasive non-native species (INNS) would also threaten the unique eco-system, it is therefore vitally important that every measure possible is taken to prevent the introduction of animals, plants or pathogens that may cause harm to this unique and delicate environment.

The Contractor shall consider how his working methods can achieve this objective and shall present a Bio-security Management Plan (BMP) which demonstrates how all works will ensure the protection of the islands’ eco-systems from INNS. The BMP shall follow the Outline Guidelines at Appendix B.

**APPENDIX A**

**ENVIRONMENTAL MANAGEMENT POLICY**

**Waste Management**

The site is located within the St Kilda World Heritage Site (designated for both cultural heritage and natural heritage significance) and St Kilda is afforded a number of other statutory designations including: Site of Special Scientific Interest; Special Area of Conservation; Special Protection Area; National Nature Reserve.

Although the site is isolated it is an increasingly popular tourist destination for various day trips from Skye and the Western Isles as well as passing yachts. There are seasonal NTS staff on site as well as volunteer works parties and researchers.

The seas around St Kilda are a marine World Heritage Site, therefore we expect all contractors to not only meet statutory standards but demonstrate a high level of environmental responsibility.

Waste management on St Kilda is overseen by QinetiQ and all contractors must comply with their systems of waste management and disposal.

All Contractors shall develop, implement and maintain a **Site Waste Management Plan** throughout the duration of the project. The following is for guidance and is non-exhaustive:

Waste Storage, Handling and Segregation

Store wastes in areas away from surface / foul drains and watercourses

Segregate all construction wastes, at a minimum, into hazardous and non-hazardous waste streams

Segregate construction wastes into dry recyclables

Cover waste containers if there is a risk that wastes may be blown out or the wastes contained therein are water sensitive e.g., plasterboard wastes

Store waste oils in 110% bunding

Use waste signage i.e., labels that specify waste contents

There will be no bonfires and burning of waste materials on site.

Off-site Disposal of Site Waste Streams

Ensure SEPA are given at least 72 hours pre-notification of a shipment of special waste from site

Only use licensed waste carriers to transport wastes from site and obtain documentation to demonstrate registration

Obtain full copies of the Waste Management Licences or Exemptions for the disposal locations of site waste streams.

Contact the HS&S Advisor immediately in the event that site wastes are not taken to a licensed waste disposal / recycling facility.

**Water Management**

Abstraction, Impounding & Dewatering

Obtain a CAR authorisation from SEPA for the abstraction of more than 10m3 of water / day from any controlled water

Obtain a CAR Authorisation from SEPA prior to any impounding works commencing

Comply with the relevant General Binding Rules of CAR (e.g. GBR 15 for dewatering excavations, GBR 2 for abstraction of less than 10m3.)

Ensure that a pump head rose is used to reduce the risk of harm to aquatic life

Ensure conformance to requirements of obtained licences /authorisations.

Discharges to Surface Water or Groundwater

Consult with the SEPA as to the need for a CAR Authorisation for the discharge of effluent to surface waters prior to the discharge proceeding or comply with the relevant GBRs

Ensure that the GT Permit-to-Pump system is used for all effluent pumping activities (refer to HS&S-BPG-W05-101)

Obtain permission to discharge silt laden waters to land from the landowner and consult with the SEPA prior to discharge

Ensure conformance to requirements of obtained permits / authorisations.

Plant and equipment entering or working alongside watercourses should be well maintained, clean and free from oil leaks

Prevent liquid / solid debris falling into a watercourse or onto an embankment or into the sea during construction activities.

Washing Activities

Conduct all washing and cleaning operations (including the washing of vehicles and / or plant) in a designated area, which should be isolated from the surface water drainage systems and within hardstanding areas.

Ensure no detergent contaminated wash down effluent is allowed to enter controlled waters unless permitted by the SEPA

Direct detergent contaminated wash down effluent via the foul sewer (after having gained permission from the Water Company / Scottish Water) or ensure that it is contained for off-site disposal.

Establish an impermeable concrete / mortar washout area at least 10m away from drains; surface waters.

Works in Tidal Waters

Consult with Marine Scotland and SEPA before any construction works commence in, near, under or over tidal waters to ensure that all appropriate consents are obtained.

Ensure conformance to requirements of any obtained consent /approval.

**Nuisance Management**

The environmental control measures defined below apply to all personnel including staff, subcontractors,

suppliers and third parties; and all activities and operations associated with the project. These environmental control measures are in addition to the project specific control measures defined within the specification.

Noise and Vibration Controls

Limit operation times to agreed working hours

Comply with Section 61 Agreements (agreement with Local Authority to

limit noise), if applicable or the principles of COPA if s.61 not required

Notify and consult with all potentially affected parties that may be adversely affected from construction site noise either via verbal face to face communications or letter drops (HS&S-FRM-C03-06)

Provide the local authority with advance notice of any works scheduled to take place outside agreed working hours

Assess (e.g., via structural surveys) any and all structures that may be adversely impacted by vibration from vehicles or site activities

Select inherently quiet plant, where appropriate

Ensure all major compressors are ‘sound reduced’ models fitted with properly lined and sealed acoustic covers, where appropriate, that are kept closed whenever the machines are in use

Ensure all ancillary pneumatic percussive tools are fitted with mufflers or silencers of the type recommended by the manufacturers

Position ancillary plant (e.g., crushers, screeners, generators, compressors, pumps) to reduce noise disturbance, i.e. furthest from receptors or behind noise barriers

Ensure subcontractors properly maintain and operate all plant according to manufacturer’s recommendations so as to avoid causing excessive noise

Place vibrating equipment or plant on a base separate to that on which any sensitive structure is located to reduce vibration impacts

Programme deliveries to arrive during daytime hours only

Take care when unloading vehicles to minimise noise

Do not leave plant engines unnecessarily idling

Regularly monitor both on and off site to ensure minimal noise and

vibration impacts upon local neighbours and wildlife.

Dust & Odour Controls

Cover all vehicles carrying loose materials

Dampen down haul roads, as necessary, to reduce dust emissions

Conduct all cutting and grinding operations in a manner to reduce the risk of dust migration e.g., wet cutting techniques

Adopt dust suppression techniques (e.g., water suppression) to reduce dust emissions from all crushing and screening activities

Regularly monitor both on and off site to ensure minimal dust and odour impacts upon local neighbours and wildlife.

Visual Impact & Light Controls

Choose and assemble site lighting to reduce light nuisance impacts to local neighbours and wildlife

Position lighting properly and direct light downwards to minimise impacts of light pollution on neighbours and wildlife

Switch off site lighting or minimise its use during periods of site inactivity

Keep site boundaries clean and tidy at all times

**Hazardous Materials Management**

The environmental control measures defined below apply to all personnel including staff, subcontractors, suppliers and third parties; and all activities and operations associated with the project.

Hazardous Materials Storage

Develop a Spill Response Plan (HS&S-FRM-E04-01)

Store hazardous materials more than 10m from a watercourse or surface water and / or foul water drainage gullies

Undertake COSHH assessment for hazardous materials (HS&S-FRM-H02-01)

Segregate COSHH raw material stores and COSHH waste stores

Develop a Hazardous Materials & COSHH Register documenting materials stored and handling requirements (HS&S-FRM-H02-02)

Store hazardous material containers on secondary containment systems that will contain 110% of the contents of the largest container or 25% of the total, whichever is greater

Protect hazardous material containers to minimise the ingress of rainwater and secure them against accidental damage

Maintain and inspect hazardous material bunds and spill kits

Monitor hazardous material storage areas for leaks and signs of spillage

Provide site spill kits with instructions in areas of high risk (refer to HS&SBPG-

E04-101)

Undertake spill response exercises / drills at a frequency as defined within the Spill Response Plan

Train staff in the use of spill kits and the correct disposal of used material.

Refuelling

Undertake all plant refuelling on hardstanding or within defined areas that utilise drip trays / plant nappies

Provide secure valves and nozzles on fuel storage tanks / bowsers

Conduct refuelling activities at least 10m away from watercourses or surface / foul water drainage gullies

Locate spill kits in all appropriate locations, with instructions for use

**APPENDIX B**

**Bio-security Management Plan – outline guidelines**

St Kilda is one of only 35 global sites listed as a dual World Heritage Site, recognised for both natural and cultural heritage. It is a SSSI and is subject to a number of other conservation designations. It is significant for its vast colonies of seabirds, some of the largest in Europe. The St Kilda archipelago has only two native mammal species, wild sheep and a unique St Kilda mouse. The seabirds and mice are vulnerable to introduced mammal species like rats, mink. Other Invasive non-native species (INNS) would also threaten the unique eco-system, it is therefore vitally important that every measure possible is taken to prevent the introduction of animals, plants or pathogens that may cause harm to this unique and delicate environment.

All contractors are required to present a bio-security management plan (BMP) which demonstrates how all works will ensure the protection of the islands’ eco-system from INNS.

This should include:

**Scope of the Works**

A BMP should apply to:

· Off-site fabrication sites

· Off-site storage areas

· Export ports

· Transport vessels/aircraft

· Island landing port

· Storage on site

· Construction work on site

· All project specific construction staff and project related visitors

**Roles and responsibilities**

**Risk Assessment**

**Mitigation**

**Management of the Work and Biosecurity Actions**

**Monitoring**

**Containment measures & quarantine**

**Response and eradication plan**