

OUTLINE CODE OF CONSTRUCTION PRACTICE

Pembroke Dock Infrastructure

Outline CoCP
Pembroke Dock
Infrastructure
Final PAC Version
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REPORT

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1 INTRODUCTION

General

- 1.1 This Outline Code of Construction Practice (OCoCP) has been prepared by RPS on behalf of Milford Haven Port Authority (MHPA) (the Applicant) to accompany the outline planning application and associated Listed Building Consent and Conservation Area Consent applications submitted to the local planning authority, Pembrokeshire County Council (PCC), in relation to the proposed development at Pembroke Port, known as Pembroke Dock Infrastructure (PDI), which forms part of the Pembroke Dock Marine project.

Purpose of the OCoCP

- 1.2 This OCoCP sets out the strategy and principles for managing the potential environmental impact of constructing the PDI project and limiting disturbance from construction activities so far as reasonably practicable. It covers the environmental and public health and safety aspects of the construction phase of the project that may affect the interests of local residents, businesses, the general public and other sensitive receptors in the vicinity of the proposed construction site.
- 1.3 Further detail on the management and control measures that will be followed to implement the strategy and principles set out in the OCoCP will be provided, as necessary, in a Full CoCP or in other associated environmental control documentation such as a Construction Environmental Management Plan (CEMP), a Construction Traffic Management Plan (CTMP) and a Site Waste Management Plan (SWMP).

2 GENERAL ENVIRONMENTAL MANAGEMENT

Construction Principles

- 2.1 The PDI project will be constructed in an environmentally sensitive manner and in particular will:
1. Meet the requirements of all relevant legislation, codes of practice and standards as identified in any other associated environmental control documentation such as a CEMP, CTMP and SWMP; and
 2. Limit the adverse impacts on the local community and the environment identified in the Environmental Statement (ES) so far as reasonably practicable.
- 2.2 The Applicant will also:
1. Implement a public information and complaints system;
 2. Register the site on the considerate constructors scheme and ensure that a site code of considerate practice is followed; and
 3. Co-ordinate with any other neighbouring developments as far as reasonably practicable to minimise the effects of combined activities.

Environmental Principles

- 2.3 The Applicant is committed to ensuring that the PDI project is constructed in accordance with all applicable legislation and with current best practice, where feasible, for minimising the adverse effects of construction on the environment and the local community, and in accordance with best practice for health and safety, consistent with all appropriate requirements of Pembroke Port, where the construction activities have the potential to impact upon port-related operations.
- 2.4 During the tender selection process for appointing the main construction contractors, the Applicant will review the environmental performance of the tenderers. Companies tendering for the main construction contracts will have to provide evidence of an environmental management system, consistent with the principles of BS EN 14001, the 'Green Dragon' system or equivalent international standards, before being included on the tender lists. For the purposes of this OCoCP, all main contractors who will have direct responsibility to the Applicant for management of the construction process are referred to as the 'Contractor'.

Health and Safety Principles

- 2.5 The Applicant is committed to ensuring the health, safety and welfare of its employees and those who may be affected by the conduct of its undertakings. The Applicant will apply appropriate industry standards for health and safety and will seek continuous improvement in safety performance.
- 2.6 The Applicant will ensure that adequate arrangements are in place for the discharge of all duties under the Construction (Design and Management) Regulations 2015 and will appoint a Principal Designer and Principal Contractor for all elements of the work. The Applicant will

ensure a Construction Phase Plan (CCP) is prepared and reviewed regularly to record the arrangements for managing the significant Health and Safety risks associated with the construction phase of the project. The Principal Contractor will also be responsible for the health and safety of any visitors to the site and the general public.

- 2.7 A Health and Safety File (the H&S File) will be prepared, which will set out all relevant health and safety information to be taken into account during any subsequent projects. The file will contain information about the current project that is likely to be needed to ensure health and safety during subsequent work, such as maintenance, cleaning, refurbishment or demolition. The file will be compliant with the requirements of the regulations and will include a brief description of the works carried out, any hazards that have not been eliminated during the construction process, key structural principals, hazardous materials, information regarding the removal or dismantling of installed plant and equipment, health and safety information about equipment provided for cleaning and maintenance, the location nature, and markings of signification services and 'As -Built' drawings, structural design, Fire and Emergency Plans.

3 GENERAL REQUIREMENTS

- 3.1 The general management of the site is important in controlling environmental impacts from all construction activities. This chapter sets out the requirements for all major work associated with the project with respect to working hours, site layout and appearance, and security.

Working Hours

- 3.2 As set out in Chapter 2 of the ES, during the construction period, in general, working hours will be:
- Monday to Friday: 07:00 to 19:00;
 - Saturday: 07:00 to 13:00;
 - Sunday and public holidays: no working unless agreed in advance with PCC.
- 3.3 However, some works will be tidally restricted and will, therefore, need to take place outside of these hours. Works required outside of the above hours would be agreed in advance with PCC and appropriate measures would be taken to avoid exceeding agreed noise levels.
- 3.4 In the case of work required in response to an emergency, the local Environmental Health Officer for PCC will be advised as soon as is reasonably practicable of the reasons for and the duration of such works.

Site Layout and Appearance

- 3.5 Construction buildings, equipment and lighting will be sited so as to minimise visual intrusion insofar as is consistent with the safe and efficient operation of the work site, to limit effects on people and wildlife. If required via a condition of the planning permission, an external lighting plan will be agreed with PCC. Site lighting will be positioned and directed to minimise nuisance to neighbours and to minimise spillage into surrounding habitats that could cause disturbance to wildlife.
- 3.6 Except where their removal is necessitated by the project, existing buildings, structures, services or installations will be safeguarded from harm, disturbance or deterioration during the construction period. All necessary measures will be taken for the support and protection of buildings, structures, pipes, cables, sewers and other apparatus during the construction period.
- 3.7 The Contractor will clear all temporary laydown areas and accesses as work proceeds, when they are no longer required for the works.

Security

- 3.8 The site will be secured to protect the public and prevent unauthorised access. Access to the site will be limited to specified entry points and entries/exits will be monitored for security and health and safety reasons.
- 3.9 As far as reasonably practicable, the visual intrusion of the construction site on users of local amenities will be contained and limited. All boundary fences/screens will be maintained in a neat and tidy condition. No advertisement or fly posting will be permitted on any screen or

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fence and all graffiti etc. will be removed and made good as soon as reasonably practicable.
The type of screening or fencing used will be selected to suit the location and purpose.

- 3.10 All temporary screening and fencing will be removed after completion of the works.

4 RESPONSIBILITIES AND MANAGEMENT

Responsibilities

- 4.1 Construction activities will be the responsibility of the Applicants' Engineering Director. The Engineering Director, assisted by specialist Engineering Consultants and an internal support team, will ensure that construction is managed and monitored appropriately.
- 4.2 For a construction project of this size the Applicant will contract the Engineering services to appropriate consultants appointed through formal documented procedures and a Principal Designer will be appointed. The construction phase of the project will also be procured through formal documented procedures and a Principal Contractor will be appointed. The day-to-day responsibility for the management of all construction activities and construction interfaces will be the responsibility of the Principal Contractor employed by the Applicant. A consultant Resident Engineer appointed by the client, will ensure that construction is implemented in accordance with contractual requirements, the OCoCP and any supporting documents.
- 4.3 The OCoCP will be updated where appropriate as the design progresses and as new information becomes available. The provisions of the finalised CoCP will be incorporated into the contract documents for the Contractor and all sub-contractors. All site staff within the Contractor's team will have a responsibility to minimise the risks to the environment and safety from the activities on the site. The CM will be responsible for making site staff aware of these duties and the environmental requirements of the final CoCP.
- 4.4 Compliance with the OCoCP will not absolve the Applicant or Contractor from compliance with legislative requirements applicable at the time of the construction activities. Wherever the CoCP refers to legislation, standard or code it will be the Contractor's responsibility to ensure that the most recent version or any document that supersedes it is used.
- 4.5 In addition, during the works, port activities that will continue will be regulated by the Health and Safety Executive (HSE) and Natural Resources Wales (NRW) under the Health and Safety at Work Act 1974. Risk assessment is carried out by Milford Haven Port Authority (MHPA) under its compliance with the Port Marine Safety Code. In terms of emergency or crisis management, MHPA has effective spill response procedures to handle potential emergency scenarios.

Training and Competence

- 4.6 The Applicant will require the Contractor to employ an appropriately qualified workforce, which may include relevant employees holding a card from an appropriate competence scheme, such as the Construction Skill Certificate Scheme. The Contractor will be required to operate induction schemes for all personnel to ensure that they are aware of their individual responsibility to comply with the CoCP. The Contractor will be responsible for identifying the training needs of its personnel to ensure that they are appropriately qualified.

Construction Environmental Management Plan

- 4.7 The CoCP will form the basis of more detailed management plans and method statements, including a Construction Environmental Management Plan (CEMP). The CEMP will be prepared during the pre-construction period once a Principal Contractor has been appointed.

- The final CEMP would be agreed with PCC and is expected to be the subject of a planning condition.
- 4.8 The CEMP will set out the detailed requirements for the management of environmental impacts associated with the construction phase of the project. It will include specific measures that will be taken to comply with the requirements set out in the CoCP including the general site arrangements and the control measures for each of the potential environmental impacts, such as impacts on or due to noise, air quality, water resources, archaeology and cultural heritage, and ecology.
- 4.9 The CEMP will be updated as necessary as construction progresses and the Contractor will be required to adhere to the CEMP under the terms of its contract.

Site Waste Management Plan

- 4.10 A Site Waste Management Plan (SWMP) for the project, or phases thereof, will be developed at an appropriate time to be agreed with PCC and will be iteratively updated as necessary as construction progresses.
- 4.11 The purpose of the SWMP is to demonstrate that measures will be put in place to sustainably manage waste generated during construction to aim to meet Welsh Government targets for recycling construction and demolition waste. The SWMP will be used to record waste management performance throughout the construction period.

Surface Water Management Strategy

- 4.12 A Surface Water Management Strategy (SWMS) will be required to re-route the existing site drainage network through or around the infilled Timber Pond possibly to a new outfall to the Milford Haven Waterway. It would highlight potential contaminants and suspended sediment that could originate from the site which may affect the receiving watercourse and set out appropriate monitoring to be carried out during the construction phase and continue throughout the lifetime of the development, as necessary

Construction Traffic Management Plan

- 4.13 A Construction Traffic Management Plan (CTMP) will be provided to, and agreed with, PCC prior to the commencement of any construction works.
- 4.14 The CTMP will detail such matters as a travel plan for construction workers and the routing of vehicles. The Contractor will be required to comply with the provisions of the CTMP, which will be updated as necessary as construction progresses.

Method Statements

- 4.15 Prior to commencement of relevant site activities, as appropriate, the Contractor will be required to undertake risk assessments related to the activities that they are involved with and produce method statements for those activities. These should include measures to implement the CEMP in respect of particular tasks and locations.

- 4.16 Measures to prevent the spread of invasive plant species listed under Schedule 9 of the Wildlife and Countryside Act 1981 would be detailed in either a Biosecurity Method Statement (BMS) or Invasive and Non-Native Species (INNS) Management Plan, which would be produced prior to the commencement of works on site.

Local Community Liaison

- 4.17 The Applicant operates a policy of transparency with its communications. It acknowledges that during the construction phase there may be some impacts on the local community. The Applicant is committed to providing personnel who will engage with the local community to provide appropriate information and to be the first line of response to resolve issues of concern, should they arise.
- 4.18 The public will also be able to request information or make a complaint via the Applicant's local office (in person or by letter), by email or by telephone. All complaints will be logged in a register, together with a record of the responses and action taken.

Emergency Contacts and Procedures

- 4.19 Emergency procedures for the construction site will be developed and will be appropriate to the anticipated hazards and the site layout. The emergency plan will include emergency pollution control measures that will take into account Natural Resources (NRW) guidelines. The procedures will contain emergency phone numbers and the method for notifying NRW and PCC and any other relevant statutory authorities. Contact numbers for the key staff will also be included. The procedures will be displayed prominently at the site and all site staff will be required to follow them when appropriate.

5 MANAGEMENT OF ENVIRONMENTAL ISSUES

- 5.1 The project will be constructed in accordance with all applicable legislation and with current best practice, where feasible, for minimising the adverse effects of construction on the environment.
- 5.2 The final CEMP will set out more detailed measures to minimise and, where appropriate, mitigate, the potential environmental impacts of construction identified. In this regard the CEMP is anticipated to include measures relating to the following:
- Marine environment;
 - Shipping and navigation;
 - Noise and vibration;
 - Air quality;
 - Historic environment;
 - Transportation;
 - Ground conditions;
 - Hydrology and flood risk; and
 - Biodiversity.

Marine Environment

- 5.3 The construction mitigation measures considered as part of the project design to reduce the potential for marine environmental effects are considered to be standard industry practice for this type of development and include the following:
- Construction Environmental Management Plan (CEMP) including, as necessary, an Environmental Management Plan (EMP) and an Invasive and Non-Native Species (INNS) Management Plan;
 - Installation of a cofferdam at the entrance to Graving Dock;
 - Use of backhoe dredge to undertake dredging activities;
 - Piling activities undertaken in daylight hours only; and
 - Soft start procedure to be implemented prior to commencement of piling activity.

Shipping and Navigation

- 5.4 The construction mitigation measures considered as part of the project design to reduce the potential for effects are considered to be standard industry practice for this type of development and include the following:
- Promulgation of information including Notices to Mariners during the construction phase, advising on the location, nature and timing of the works;
 - Aids to navigation;

- Marine charting;
- Recommended advisory clearance distances for vessels undertaking construction activities;
- Consideration of the use of safety vessels/guard boats during construction activities;
- Compliance with International Maritime Organisation Conventions including COLREGs and SOLAS;
- Update to Navigation (Marine) Safety Management System; and
- Review of the Port Emergency Plan, Marine Operating Procedures 04 – Oil Pollution Rev.E and the Milford Haven Waterway Oil Pollution Contingency Plan Rev.1.2

Noise and Vibration

- 5.5 The construction mitigation measures considered as part of the project design to reduce the potential for noise and vibration effects are considered to be standard industry practice for this type of development.
- 5.6 Demolition and construction works would follow Best Practicable Means (BPM) outlined in Section 72 of the Control of Pollution Act 1974 (as amended) (HMSO 1974) to minimise noise and vibration effects. Appropriate details would be included within the CEMP and will be based upon the guidance contained in BS 5228-1:2009+A1:2014 and BS 5228-2:2009+A1:2014:
- **Communication:** Occupiers of residential and business properties that are likely to be affected by the works will be notified in advance of the works. The EPM and/or CM would act as the first point of contact on environmental matters for PCC, other external bodies and the general public. Information regarding the nature and duration of the works and named contact details for key members of staff will be displayed on a noticeboard near to the site.
 - **Equipment:** Quieter alternative methods, plant and equipment would be used, where reasonably practicable.
 - **Worksite:** Plant, equipment, site offices, storage areas and worksites would be positioned away from existing sensitive receptors, where reasonably practicable.
 - **Hoardings:** Site hoardings will be installed along the site boundary prior to any works commencing. Portable acoustic enclosures/screens will also be used, as required.
 - **Maintenance:** All vehicles, plant and equipment would be maintained and operated in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
 - **Piling:** The method for any piling activities would be agreed in consultation with PCC prior to work commencing and would be undertaken using the most appropriate technique, with minimal noise and vibration generation in mind.

Air Quality

5.7 The construction mitigation measures considered as part of the project design to reduce the potential for air quality effects are considered to be standard industry practice for this type of development and will be included, as necessary, in a Dust Management Plan (DMP) which can be incorporated in to the CEMP. Measures to be included should cover:

- Communication: As for noise and vibration above.
- Site Management: Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. Make the complaints log available to PCC if requested and record any exceptional incidents that cause dust and/or air emissions and the action taken to resolve the situation in the log book.
- Monitoring: Carry out regular site inspections to monitor compliance with the DMP, record inspection results and make an inspection log available to PCC if requested and increase the frequency of site inspections by the person accountable for air quality on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with PCC if necessary and agree baseline monitoring periods as necessary.
- Site Preparation and Maintenance: Plan site layout so that machinery and dust causing activities are located away from receptors, as far as reasonably possible and use screening intelligently where possible, such as, locating site offices between potentially dusty activities and receptors. Erect solid screens or barriers around the site boundary, avoid site run-off of water or mud, keep site fencing, barriers and scaffolding clean, remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site and, if they are to be re-used on-site, cover, seed, fence or water to prevent wind whipping.
- Vehicle/Machinery and Sustainable Travel: Ensure all vehicles switch off engines when stationary and avoid the use of diesel or petrol-powered generators by using mains electricity or battery powered equipment where practicable. Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas and produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.
- Construction Equipment: Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems and ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible. Use enclosed chutes, conveyors and covered skips, where practicable and minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

- Waste Management: Avoid bonfires and burning of waste materials and bag and remove any biological debris or damp down such material before demolition activities take place.

Historic Environment

5.8 The following construction mitigation measures will be implemented to reduce the potential for heritage impacts:

- A programme of historic building recording to be carried out ahead of any works to the building. The nature and extent of the recording would be appropriate to the significance of the building or structure that would be affected;
- A programme of archaeological work, initially as a watching brief during construction but with the potential to move to more detailed investigation if necessary;
- Digital recording of historic assets that could be used in a Virtual Reality (VR) or Augmented Reality (AR) experience.

Transportation

5.9 It is anticipated that a CTMP will be prepared and implemented prior to the commencement of any works on site. This will likely include the following measures:

- Details of a construction traffic routing strategy;
- Delivery hours restrictions;
- Wheel washing facilities;
- Dust reducing measures; and
- Any necessary road closures or diversions.

Ground Conditions

5.10 Measures to control potential construction effects relating to ground conditions would be consistent with current industry good practice for construction on brownfield sites. As a minimum, the contractor would ensure that his statutory obligations under environment, health and safety legislation are fulfilled. Measures are expected to include the following:

- Appropriate personal protective equipment (PPE) for construction workers and provision of guidance regarding high levels of personal hygiene;
- Site personnel advised to be vigilant for any unusual visual or odorous characteristics of soils and groundwater which could indicate the presence of previously unknown contamination;
- Any excavated previously unidentified contaminated soils should be placed within a suitably constructed bunded laydown area and covered to prevent migration of contaminants of concern via rainwater run-off;
- Maintenance of a 'clean/dirty area' regime, if contamination identified;
- Appropriate disposal of waste soil generated during construction and demolition;

- Imported soils for use would be certified 'clean' and suitable for use for the landscaping areas;
- Appropriate storage of potentially polluting materials and chemicals in accordance with the Control of Pollution (Oil Storage) Regulations;
- Any areas for the storage of bulk materials including oils, fuels and chemicals would be designated and managed according to current best practice and in compliance with prevailing legislation and NRW/Environment Agency guidance; and
- Leaks or spillages of potentially polluting substances to be contained, collected then removed from site in an appropriate manner, e.g. use of absorbent material, bunding or booms. An Emergency Action Plan would be formulated which all site personnel would be required to read and understand.

5.11 With specific reference to any unforeseen contamination, the following measures would be taken and included within a discovery strategy (which is expected to form part of the CEMP):

- Where significant unforeseen contamination is identified during the course of the demolition or construction work, work would stop and further investigation would be undertaken to establish the level of contamination;
- Stockpiling of any contaminated materials would be avoided where practicable. Where it is necessary, stockpiles would be located on areas of hardstanding or plastic sheeting to prevent contaminants infiltrating into the underlying ground;
- Where remediation is required, on-site treatment, including bioremediation, would be carried out wherever practicable;
- Demolition and excavation works would be carried out in such a way to enable effective segregation of clean materials for reuse on site wherever practicable. It is anticipated that 'clean' concrete and masonry could be crushed for reuse for backfilling and other purposes or would be sent off-site for recycling or recovery with disposal only as a final resort. Material would only be re-used on site in accordance with the Environmental Permitting Regulations or appropriate approved Code of Practice e.g. Contaminated Land: Application in Real Environments (CL:AIRE) or Waste Resource Action Plan (WRAP);
- For demolition activities, potential risks to human health would be reduced as much as is reasonably practicable prior to undertaking the works by undertaking the works in accordance with approved health and safety plan including comprehensive method statements and risk assessments for the proposed activities;
- Risks from accidents may be mitigated by the formulation of an Emergency Response Plan to minimise, contain and remediate contamination from the accidental release of contaminating substances;
- Mitigation measures for residual risk associated with identified contamination in the shallow soils would be required following construction. The hardstanding and buildings proposed across the majority of the site will break the pathways and further mitigation is not required. However, in areas of soft landscaping a cover system would be required, alternatively source removal of the contaminated Made Ground; The gas risk assessment concluded that the site should be classified as Characteristic Situation 2 and basic gas

protection measures will be required in all new buildings. The gas protection measures should also be designed to protect against VOCs, carbon monoxide and hydrogen sulphide. As the site is situated in a higher probability radon area, radon protection measures will also be required in all new buildings and extensions; and

- During the earthworks phase, mitigation will be required to minimise the risk associated with the potential mobilisation of asbestos fibres as a result of soil disturbance. An Asbestos in Soils Management Plan (expected as part of the CEMP) should be implemented, as necessary, to manage the risks and provide appropriate mitigation.

Hydrology and Flood Risk

i) Welsh Government and NRW mapping confirm that the site is within Zone A and Flood Zone 1 respectively. Extreme tide level outputs indicate the site is at very low risk of flooding from tidal sources. Furthermore, less vulnerable development is proposed within Zone A.

5.12 However, an appropriate surface water management strategy will be required to re-route the existing site drainage network through or around the infilled Timber Pond possibly to a new outfall to the Milford Haven Waterway. Construction phase design mitigation measures will be implemented to manage surface water flows as follows:

- Implementation of a Surface Water Management Strategy (SWMS) that would ensure that any increase in surface water run-off would be handled on-site and a run-off rate to the surrounding water environment (Milford Haven Waterway) is maintained at an agreed rate. It would highlight potential contaminants and suspended sediment that could originate from the site which may affect the receiving watercourse and set out appropriate monitoring to be carried out during the construction phase and continue throughout the lifetime of the development, as necessary;
- Temporary drainage mitigation techniques including run-off interceptor channels could be installed during construction of the formal drainage to ensure that discharges from the site are controlled in quality and volume. This may include the use of settling tanks and/or ponds to remove sediment, temporary interceptors and hydraulic brakes;
- Construction material and/or spoil within construction compounds will be positioned away from drainage systems or surface watercourses and no hazardous substances would be stored within close proximity of the drainage network;
- Implementation of a Flood Management Plan including measures to mitigate against water pollution and would include flood-warning measures.

Biodiversity

5.13 Measures to control potential construction effects relating to biodiversity would be consistent with current industry good practice for construction on brownfield sites. As a minimum, the contractor would ensure that his statutory obligations under environment, health and safety legislation are fulfilled. Measures are expected to include the following:

- Construction fencing would be installed around the perimeter of the construction area to protect adjacent retained habitats. Fencing would prevent access to contractors,

machinery and vehicles and the storage of vehicles, machinery, equipment and materials in areas outside of the fence line;

- Prior to the start of ecologically sensitive works, an Ecological Clerk of Works (ECoW) will deliver a toolbox talk to the site construction team, briefing them on all ecology and nature conservation requirements on site;
- Prior to the clearing of the woodland block and localised areas of dense scrub, comprehensive checks will be carried out to check for the establishment of any new badger setts. These pre-construction surveys will also assess the scrub to check for the continued absence of otter activity in these areas and their continued low suitability for such activity;
- In the event that a badger sett or an otter resting place/holt is found during pre-construction surveys procedures would be put in place to ensure species protection. These procedures would include the immediate halting of works in the area and a stand-off of 30 m from a badger sett and 100 m from an otter resting place;
- The ECoW will assess the status of the feature and prepare a method statement/mitigation strategy with consultation with Natural Resources Wales (NRW). The ECoW will define which site activities can only proceed after a licence has been issued by NRW to allow the lawful disturbance of legally protected species;
- Should a licence be required, this would be obtained prior to the commencement/re-commencement of works in the licensable area. The licence application would include a detailed method statement.;
- Badgers may continue to traverse the site including construction areas. To minimise the potential risk of harm a means of escape from any excavations left open overnight will be provided as necessary, such as the provision of a scaffold plank as a ramp (at no more than 45° angle), or the profiling of at least one wall of an excavation to provide a gentle slope (no more than 45°) that an individual could use to walk out of the excavation;
- Pre-construction surveys for invasive plant species would be undertaken prior to construction to inform a biosecurity method statement for construction. The method statement would include measures to be undertaken prior to and during site clearance, ground disturbance and construction. The method statement would cover all relevant site works and would define best practice biosecurity protocols, control measures and eradication methods.
- Measures to prevent the spread of invasive plant species listed under Schedule 9 of the Wildlife and Countryside Act 1981 would be detailed in the biosecurity method statement, which would be produced prior to the commencement of works on site;
- Water quality in the Pembroke Marine SAC and Milford Haven Waterway SSSI will be protected during construction through the implementation of relevant best practice measures to prevent and deal with spills and any other discharge that could enter the terrestrial or marine aquatic systems. Measures would include designating secure areas for refuelling and storing chemicals in line with appropriate regulations and guidelines. All such measures will be defined in the CEMP, which will be adhered to at all times;

- The SWMS would be developed and implemented to cover all drainage required during construction. This would reference all industry and regulatory pollution prevention guidelines. The SWMP would consider all construction related discharges to ensure negative effects on water quality are minimised during construction. This, taken together with the CEMP, would ensure that there were no adverse effects as a result of construction activities;
- In addition, during the works, port activities that will continue will be regulated by the Health and Safety Executive (HSE) and NRW under the Health and Safety at Work Act 1974. Risk assessment is carried out by Milford Haven Port Authority (MHPA) under its compliance with the Port Marine Safety Code. In terms of emergency or crisis management, MHPA has effective spill response procedures to handle potential emergency scenarios.

Marine

- 5.14 Measures to control potential construction effects to the marine environment shipping and navigation (in addition to those outlined above) will include the following:
- 5.15 Installation of a Cofferdam at the entrance to Graving Dock to restrict the migration of sediment plumes during dredging and therefore reducing potential for increases turbidity and release of contaminants into receiving waterbody;
- 5.16 Use of Backhoe Dredge to undertake dredging activities – this form of dredging is considered to have an action which reduces mobilisation of sediments within the area of influence;
- 5.17 Piling activities undertaken in daylight hours only – to provide suitable windows of opportunity for migratory fish species to pass Pembroke Port undisturbed on their migratory routes;
- 5.18 Soft start procedure to be implemented prior to commence of piling activity – to allow suitable time for fish and marine mammal species to avoid areas of increased noise levels from piling activities, thereby eliminating the risk of injury to these species;
- 5.19 Test sediment prior to disposal to ensure that sediments containing concentrations of contaminants above safe levels (i.e. exceeding AL2) are not disposed of in the wider MHW or at sea. In addition, MHPA will consult with the regulators to agree the most appropriate route for disposal of sediments where concentrations of contaminants exceed AL1;
- 5.20 Any sediment removal in the intertidal area will be undertaken in the dry (low tide) wherever possible;
- 5.21 Promulgation of information including Notices to Mariners during the construction phase, advising on the location, nature and timing of the works – to help ensure that other mariners and interested parties are aware of the presence of the works and the need to avoid the area during this period. Stakeholder engagement is already well established and managed by the MHPA;
- 5.22 Aids to Navigation – the PDI project will liaise with MHPA and/or THLS to ensure construction areas and new infrastructure are appropriately marked for navigational safety;

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- 5.23 Advisory clearance distances are likely to be recommended around vessels undertaking construction activities. The nature of the advisory clearance distances will be discussed and agreed with MHPA on a case-by-case basis;
- 5.24 The PDI project will consider the use of safety vessels/guard boats during construction activities to ensure other traffic does not encroach on the construction area;
- 5.25 Review Port Emergency Plan – in light of the changed use of the Port infrastructure during construction and operation.