



# Peterhead Smith Quay Extension

Screening Request Report

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# Contents

1.	Introduction	5
2.	Location	5
2.1.	Site Location, Context and Access	5
3.	The Proposed Works	7
3.1.	Activity Description	7
3.1.1.	Construction	7
3.1.2.	Other construction considerations	11
3.1.1.	Operation	12
3.1.2.	Decommissioning	12
3.2.	Programme	12
4.	Licencing requirements	12
4.1.	Consideration of EIA Screening Requirements	12
4.1.1.	The Town and Country Planning and Marine Works	13
4.1.2.	The Harbours Act 1964	14
4.2.	EIA Screening Request Structure	14
4.3.	Additional Licensing Requirements	16
5.	Known Sensitivities	17
5.1.	Protected Sites	17
5.2.	Biodiversity - Terrestrial	23
5.2.1.	Habitat	23
5.2.2.	Terrestrial Ornithology	23
5.3.	Biodiversity - Marine	23
5.3.1.	Habitat	23
5.3.2.	Fish and Marine Mammals	24
5.3.1.	Marine Ornithology	25
5.4.	Socioeconomic activities	25
6.	Potential and Likely Significant Environmental Effects	25
6.1.	Designated sites	25
6.2.	Protected Species	26
6.3.	Biodiversity - Terrestrial	26

# NIRÁS

6.3.1.	Habitat	.26
6.3.2.	Terrestrial Ornithology	.26
6.4.	Biodiversity - Marine	.26
6.4.1.	Habitat	.26
6.4.2.	Fish and Marine Mammals	.27
6.4.3.	Marine Ornithology	.27
6.5.	Socioeconomic activities	.27
7. 8	Embedded Mitigation Measures	28
0.		20
9.	References	.32
Appendi	ix 1 – Port Extension General Arrangement	.33



## 1. Introduction

Peterhead Port Authority (PPA) proposes an 80 m extension to the western end of the existing 120 m long Smith Quay, the Port is used by many industries, such as the pelagic fishing sector, renewable energy, oil and gas decommissioning, subsea construction and maintenance industry, and ship repair facilities. The proposed extension will provide vital additional berthing capacity and deck space with adjacent laydown area for this busy port. A number of alternatives were considered including the construction of a new quay and extensions to other facilities however these were deemed to be unviable.

This Screening Request report seeks an opinion from the Marine Directorate and Transport Scotland to determine whether an EIA will be required to support the Marine Licence, and Harbours Revision Order applications for the proposed works. At this juncture, the necessity of planning permission remains unclear. It is currently assumed that existing Permitted Development Rights for the port will cover the proposed activities as we assume it falls under Schedule 2 development. This will be confirmed after receipt of the Screening Opinion. Nevertheless, the relevant criteria for the assessment are presented since the Aberdeenshire Council will act as a consultee for the screening opinion.

This request adheres to the Environmental Impact Assessment (EIA) regulations governing land and marine works, specifically:

- The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) Marine Directorate will determine the Marine licence application;
- The Harbours Act 1964 ("the 1964 Act") Transport Scotland will determine the grant of a Harbour Revision Order to empower PPA to undertake the proposed works; and
- The Town and Country Planning (Scotland) (Environmental Impact Assessment) Regulations 2017 if required, the application for Planning Permission will be determined by Aberdeenshire Council.

## 2. Location

## 2.1. Site Location, Context and Access

Smith Quay is a 120 m long suspended deck quay with a separate berthing dolphin at its western end and reclamation behind the quay (Figure 2.1). It is a westward extension of the existing outer harbour quays at Peterhead.

The quay came into service in October 2010 and has a width of 40 m, an adjacent working area of 16,000 m<sup>2</sup>, and a water depth of 10 m below chart datum (CD). By October 2010, 100,000 m<sup>3</sup> of rock and soft materials were dredged and suitable material was combined with imported material to construct 9,000 m<sup>2</sup> of reclamation behind the quay (Peterhead Port Authority, 2024). An additional 32,000 m<sup>2</sup> of reclaimed land was added to the west of Smith Quay in 2018 coming from the harbour deepening project.

The structure, which incorporates a heavy lift area, is of a novel construction. Steel box girders span from a bankseat on a rock mound to 1.4 m diameter piles at the quay front. The piles are socketed into the granite rock that underlies Peterhead. The deck consists of prestressed bridge beams with in-situ concrete infill. The concrete deck acts with the steel box girders to form a composite structure. Other than by sea, Smith Quay is accessible via road (Merchant's Quay) and access to the quay is secured by a fence with no public access.





Figure 2.1 Smith Quay location and form.

Smith Quay offers terminal and quayside services related to the offshore industry. The facility is well-suited for the subsea sector, as it can accommodate the latest generation of larger vessels. Its expansive working area ensures ample capacity for component assembly and manufacturing. At its western end, the facility offers heavy lifts of up to 500 tonnes at the designated heavy lift pad. Additionally, the quay's design permits the skidding ashore of modules weighing up to 2,500 tonnes, making it well-prepared for future involvement in the offshore oil and gas decommissioning market. Furthermore, the berths are equipped with a high-capacity electrical connection point, allowing vessels to connect to a 350 Kva supply and switch off their main engines while in port which also reduces carbon dioxide emissions (Peterhead Port Authority, 2024). Overall, the quay is used by many industries, such as subsea, renewable energy, oil and gas decommissioning, and the important pelagic fishing sector.



## 3. The Proposed Works

PPA proposes an 80 m heavy lift extension to the western end of the existing 120 m long Smith Quay (Figure 3.2) including: new berthing/mooring dolphin, new or repurposed dolphin walkway, deck furniture, services, dredging, reclamation, revetment and hardstanding etc. A plan of the area in which the works are proposed to be sited is provided in Appendix 1.



Figure 3.1 Proposed extension of Smith Quay

## 3.1. Activity Description

This section outlines the activities associated with construction, operation and decommissioning of the proposed extension. This information helps to inform the likely pressures arising from the extension and their spatial extent helps to inform the search radius for likely sensitive features and sites.

## 3.1.1. Construction

Additional drawings to support the description of works are presented below and also provided in Appendix 1 – Port Extension General Arrangement. Following an initial wave study, the anticipated form of construction is an open-piled structure of similar form to the existing quay. Construction considerations include dredging to allow access for vessels, piling for the quay foundations, construction of the rock revetment, reclamation and others. These are described in more detail below. The entire footprint of the development is less than 1 ha.



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#### Figure 3.2 Proposed extension details

### Dredging and seabed preparation

An examination of options for dredged soft and hard material would be conducted through a Best Practicable Environmental Option (BPEO), with the likelihood of disposal at sea at an appropriately licenced site and partial reuse of material in reclamation. Marine sediments will be assessed for contaminants as part of the marine licence requirements for "Dredging and Sea Disposal" (see Section 4.1) and this information will further inform any assessment of environmental impact. If the dredged depth is less than a meter, the sediments can be assessed from a grab sample; if deeper than a meter then the assessment requires the use of deeper cores. The depth of the dredge or seabed preparation cannot be confirmed until additional site investigations are undertaken.

Dredging operations will be undertaken by a large backhoe dredger. Preparation of the seabed *may* be required utilising drilling and blasting techniques, to enable the rock to be excavated. The contractor is hopeful this won't be required and will be confirmed once additional site investigations are undertaken. Excavation depths range from 0.5 m to 1.0 m and so blast depths could range from 2.0 m to 3.5 m to allow suitable and sufficient charges to be used accordingly and achieve the required cut profile. Blast holes for bulk blasting would be drilled on a 1 m grid pattern. Blasts are typically initiated using a Non-Electric system with each hole being fired on an individual delay to minimise the MIC (Maximum Instantaneous Charge) and control vibration. Drilling and blasting works would be completed from a mobile barge/platform; the platform would be operational 24 hrs/day with blasting operations scheduled only for daytime working hours. Prior to the main works commencing, a test blast would be carried out in the work area to demonstrate contract vibration limits are not being exceeded. Following successful test blasting, the barge/pontoons would reposition in the most suitable



location of the work area to begin production drilling. Where possible, the test blast would be the first production blast only utilising conservative charges.

#### Piling

The proposed deck will be supported by steel tubular piles. Driven steel tubes will be installed into the water column using percussive piling techniques and will be driven to a set in the underlying bedrock from marine plant or temporary construction bund, these will then be cleaned out using rotary boring techniques and a rock socket installed beneath the steel pile toe using DTHH/Rotary piling methods from a Jack Up barge or temporary construction bund, reinforcement installed and then concreted up, rock sockets will be in the order of 10-12 m in length.

Limited sheet piling along the western edge of the proposed reclamation area will also be required, these will be installed by crane mounted, vibratory and percussive hammers.

#### Rock revetment

The existing rock armour revetment will be stripped, sorted and set aside using large, long reach, land based plant. Only when sheet pile wall and rotary bored piles are completed will works commence in forming the new revetment slope. The stone will be carefully positioned using a long reach excavator working from land. Commencing at or near low tide, construction activities will initiate by pushing out core material working from land, advancing progressively. The site engineer will designate a temporary stockpile area for rock core materials during the construction phase. Using an excavator, the placement of the rock core material with a fines content less than 5% will commence by placing material at a 3V/4H slope. Upon completion of the rock core, a geotextile layer will be carefully installed on the landward side. This layer serves to safeguard the core and prevent the infiltration of fines, ensuring the stability and longevity of the structure. When placing geotextile along the line of revetment wall, operators will ensure that the geotextile is in continuous contact with the rock core and the geotextile is not stretched or bridged over any hollows or humps which may damage or stress the geotextile. Once the core is formed and the geotextile material placed, the excavator will position itself at the top of the core material to excavate the revetment toe. For level and position control during excavation works we propose to use Prolec PCX-3D GPS computer system fitted to the excavator. This system enables; 3D Real-time multi view machine guidance; 3D progress map of the works and accurate daily print outs of the completed works that can be submitted to the Project Manager for progress reporting.

As the core progresses, it will be continually armoured to protect it in the temporary state until all rock layers have been placed. Working from the rock core, excavators will begin to protect the revetment by suitably sized armouring commencing at the toe and proceeding upwards towards the crest in sections. Rock armour under layer will be placed into newly formed trench from an excavating plant located on the newly constructed bund. Primary rock armour material will then be placed on top of the under layer rock which now forms the revetment face and acts as protection against current and wave action. The primary armour will be placed up to approximately the crest of rock level. Rock armour will be placed in such a way that achieves a dense / fully interlocked armour slope. Effective interlocking of armour will be achieved within each layer. During placement, excavators will constantly check the profile and slope with the GPS system and carry out remedial actions as required.

#### Reclamation

This section considers the placement of arisings. Behind the new quay the ground will need to be built up to enable direct access onto the back of the quay. Once the existing rock armour has been stripped and set aside, imported aggregate will be utilized to build up the ground over an area of approximately 1750 m<sup>2</sup>. There is a possibility of using some of the dredge arisings here.



Material below the water line will be subject to hydraulic compaction. Above this, material will continue to be placed into the infill area, to achieve a fill level constant with the surrounding area, approximately +5 mCD across the reclamation area. These upper layers will be compacted in layers as follows:

- Class 6A will be placed underwater without compaction
- Class 1C will be placed and compacted in layers in accordance with SHW Series 600.

#### Bankseat construction

Ground will be levelled and prepared including concrete blinding layer, then formwork will be installed to accommodate the pouring phases (i.e. Stage 1 – Lower Level, Stage 2 –Upper Level) in accordance with the temporary works design. The placement of shutters will be carried out by the attendance crane in accordance with the lift plan.

Prior to the placement of concrete, shutters will be checked by the engineer of line and level. A pre-pour check of rebar cover, cleanliness type and quantity will be completed. Concrete will be delivered to site in concrete wagons and discharged via pump / concrete skip. Concrete will be levelled / compacted by vibrating poker. Spray on surface retarders will be used to prepare any construction joint followed by high pressure washing post initial curing which will generally be within 24 hours of concrete placement.

#### Deck construction

Steel girder beams will be fabricated in a factory and delivered to site by road and stored within the site laydown area. Quality checks carried out at the factory and upon delivery will ensure compliance with dimensional tolerances. The girders will then be transported to the works area by means of tractor and trailer in reach of the crawler crane. A temporary works platform will be installed to provide a safe access route and platform for operatives when installing the girder beams onto steel rocker plates on the front piles and to the rear bankseat with bearings installed. Precast Prestressed Beams will then be lifted and placed transversely from girder to girder, typically 500 mm thick, then steel reinforcement for the deck will be tied in-situ with the crawler crane servicing the steel fixing gang. Formwork will be erected as required which will form the concrete reinforcement topping for the new deck.

Prior to concrete being poured, site engineer will check shuttering, reinforcement spacing and cleanliness of the soffits. Concrete will be discharged from a concrete pump within marked bays to ensure loading of the concrete is evenly distributed on to the soffit. Concrete will be compacted using a high frequency concrete poker and finished as required.

### Dolphin construction (including walkway)

Piles will be installed as per the piling installation methodology above, working from jack-up barge and a floating plant. Once piles are installed with rebar protruding into dolphin pile cap, precast sacrificial formwork will be installed and fixed into position by welding soffits to the pile and temporary works steel. Prefabricated reinforcement cage will then be lifted into position, checked with all bolt boxes etc installed for the required quay furniture, this will then be poured in multiple lifts dependant on final temporary works design requirements

#### Plant and equipment

The onshore plant and machinery required for these works is expected to include:

- Long reach excavator with rock breaker
- Hydraulic excavator
- Telehandler
- Mobile elevated works platform



- Wheeled dumper
- Concrete wagon
- Concrete pump
- 20t HGV lorries
- Tipper lorries
- Delivery vehicles
- Mobile Crane
- Vibro and impact pile hammer / Drill rig
- Storage area, welfare and office facilities

Vessel(s) and marine equipment required:

- Spud leg barge
- Tug
- Jack-up barge
- Workboat
- Small safety boat
- Backhoe Dredger

### 3.1.2. Other construction considerations

Taking into consideration the footprint of the proposed works, the land and seabed use change area is less than 1 ha. The proposed works are compatible with existing and approved land uses within the port. The land and shoreline in the immediate vicinity are composed of hard, engineered structures. The land use is therefore not considered sensitive in this respect.

The extension is also considered insignificant enough in size to change the hydrodynamic patterns within the harbour and thereby is unlikely to affect other features such as beaches and marinas.

There are no other anticipated permitted developments within the proposed works area that could generate cumulative effects.

A Construction Environmental Management Plan (CEMP), inclusive of standard construction mitigation measures, best practices in construction management, and strict adherence to all relevant regulations, will be implemented to minimise environmental impacts. Throughout the construction phase, there is an expectation of waste, and its handling will align with a CEMP and best practices. Marine pollution prevention and contingency planning measures will be following PPA's existing Oil Spill Contingency Plan (OSCP). Any unsuitable or contaminated materials encountered during the construction process will be extracted and subject to offsite disposal in accordance with all regulatory requirements, including through obtaining appropriate Scottish Environment Protection Agency (SEPA) licenses if required. Materials suitable for reuse will be retained during construction.

Considering the nature of the proposed development, it is not expected that there will be significant impacts on human health. The risks to human health, including construction-related noise and air quality effects during construction, will be mitigated through measures detailed in a CEMP. As per PPA's requirement, all key Contractors need to follow the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) and assess and manage the risks that arise from the use of hazardous substances. This will include any arrangements to deal with accidents, incidents or emergencies.



It is worth noting that the site is not close to an Air Quality Management Area identified by Aberdeenshire Council under the Local Air Quality Management regime. The site for the Proposed Works is also situated in a geographical area not prone to natural disasters. Therefore, it is believed that during the construction phase, there will be no risks causing significant adverse effects on the environment due to major accidents or disasters.

### 3.1.1. Operation

The planned operation of the site involves the same vessel movements and site operations allowed under the current Harbour Revision Order, including the passage of vessels over 1,350 tonnes. No deviation from this is expected. These existing operations are described in Section 2.1.

Other operational activities on the site are likely to be maintenance activities.

#### 3.1.2. Decommissioning

The extended quay is expected to remain operational for 50 years without any current decommissioning plans. The structures are conventionally built, with no anticipated obstacles for potential decommissioning or demolition in the future. If decommissioning or demolition is considered later on, it will require a separate proposal and a Marine Licence application.

### 3.2. Programme

It is anticipated that the construction may commence in 2026 and the duration for the completion of the works is approximately 12-18 months.

## 4. Licencing requirements

## 4.1. Consideration of EIA Screening Requirements

For all works below Mean High Water Springs (MHWS) a marine licence application will be submitted to the Marine Directorate against the following legislation:

- The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- The Marine (Scotland) Act 2010 (Marine Licences); and
- The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013.

A harbour revision order ("HRO") is sought under the 1964 Harbours Act on behalf of PPA for the Smith Quay extension and a screening opinion is requested under paragraph 3 of schedule 3 of the 1964 Harbours Act. Where Scottish Ministers are notified of a proposed HRO which authorises a project, they are required in terms of paragraph 4 of Part 1 of Schedule 3 to the 1964 Act to decide:

- (i) whether that application relates to a project which falls within Annex I or Annex II to Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, and
- (ii) if it relates to a project which falls within Annex II, whether taking into account the selection criteria, the project is a relevant project.

The necessity of planning permission for works above MHWS remains unclear and will be informed by the screening opinion outcome. Planning permission, if required by Aberdeenshire Council, will adhere to the following legislation:

• The Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006; and



• The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

Each of these licensing regimes will require an EIA if the development will create any project categorised under the Directive 2011/92/EU. The required information is provided below to request a formal EIA Screening Opinion.

#### 4.1.1. The Town and Country Planning and Marine Works

Developments listed under Schedule 1 are subject to mandatory EIAs, while for those listed under Schedule 2 such requirement is subject to the discretion of the consenting authority.

The proposed activity does not meet the criteria for Schedule 1 developments and the total footprint is calculated to be below the threshold of 1 ha for the *construction of harbours and port installations, including fishing harbours* in Schedule 2 (Section 10(g)) of the EIA Regulations. However, confirmation is sought that a formal EIA is not required.

A Schedule 2 project is only considered an EIA project if it is likely to significantly impact the environment due to factors like its size, characteristics, or location. The Scottish Government Planning Circular 1 2017: Environmental Impact Assessment Regulations states that the key question in EIA screening is: "Would this particular development be likely to have significant effects on the environment?".

Schedule 3 provides criteria to assist with determining whether a Schedule 2 development constitutes an EIA Development. These screening criteria and the factors that were outlined under Schedule 3 were taken into consideration and are presented in the table below.

Screening criteria	Factors
Characteristics of development	<ul> <li>Size and design of the works</li> <li>Cumulation with other existing works and/or approved works</li> <li>Use of natural resources, in particular land, soil, water and biodiversity</li> <li>Production of waste</li> </ul>
	<ul> <li>Pollution and nuisances</li> <li>Risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge</li> <li>Risks to human health (for example due to water contamination or air pollution)</li> </ul>
Location of development	<ul> <li>Existing and approved land use;</li> <li>Relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;</li> <li>Absorption capacity of the natural environment, paying particular attention to the following areas:</li> </ul>

Table 4.1 Screening criteria



Screening criteria	Factors
	<ul> <li>(i) wetlands, riparian areas, river mouths;</li> <li>(ii) coastal zones and the marine environment;</li> <li>(iii) mountain and forest areas;</li> <li>(iv) nature reserves and parks;</li> <li>(v) European sites and other areas classified or protected under national legislation;</li> <li>(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in retained EU law and relevant to the project, or in which it is considered that there is such a failure;</li> <li>(vii) densely populated areas;</li> <li>(viii) landscapes and sites of historical, cultural or archaeological significance.</li> </ul>
Types and characteristics of the potential impact	<ul> <li>Magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);</li> <li>Nature of the impact;</li> <li>Transboundary nature of the impact;</li> <li>Intensity and complexity of the impact;</li> <li>Probability of the impact;</li> <li>Expected onset, duration, frequency and reversibility of the impact;</li> <li>Cumulation of the impact with the impact of other existing and/or approved development;</li> <li>Possibility of effectively reducing the impact.</li> </ul>

## 4.1.2. The Harbours Act 1964

Similarly, The EIA Directive 2011/92/EU categorises works projects under Annex I and Annex II. Annex I lists projects for which an EIA is mandatory, while Annex II lists projects which will require an EIA only if their effects on the environment are likely to be significant. The total footprint for the proposed activity is expected to be below the threshold of 1 Ha thus, confirmation is sought that a formal EIA is not required and that the proposed project falls within paragraph 10(e) of Annex II; *Construction of roads, harbours and port installations, including fishing harbours (projects not included in Annex I)*.

## 4.2. EIA Screening Request Structure

Table 4.2 presents the structure of the information provided in this report in correspondence to the instructions provided by The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> https://www.legislation.gov.uk/ssi/2017/115/regulation/10



Screening Opinion Request Information	Report Section Reference(s)
A description of the location of the proposed works, including a plan sufficient to identify the area in which the works are proposed to be	Section 2 Location
sited	Appendix 1 – Port Extension Gene- ral Arrangement
A description of the proposed works, including, in particular:	Section 3 The Proposed Works
i) a list of all of the regulated activities which are proposed	Section 3 The Proposed Works
ii) a description of the physical characteristics of the proposed works and, where relevant, works to be decommissioned	Section 3 The Proposed Works
iii) a description of the location of the proposed works, with partic- ular regard to the environmental sensitivity of geographical areas likely to be affected.	Section 5 Known Sensitivities
A description of the aspects of the environment likely to be significantly affected by the proposed works.	Section 5 Known Sensitivities
A description of any likely significant effects, to the extent of the infor- mation available on such effects, of the proposed works on the environ- ment resulting from either, or both, of the following:	Section 6 Potential and Likely Sig- nificant Environmental Effects
i) the expected residues and emissions and the production of waste, where relevant	
ii) the use of natural resources, in particular soil, land, water and biodi- versity.	
A description of any features of the proposed works or proposed measures envisaged to avoid or prevent significant adverse effects on the environment.	Section 7 Embedded Mitigation Measures

Table 4.2 Screening Request Schedule of Information (Marine Works EIA Regulations)

Table 4.3 presents the structure of the information provided in this report in correspondence to the requested information stated at The Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>2</sup> for developments where an application for planning permission has been or is proposed to be submitted.

<sup>&</sup>lt;sup>2</sup> <u>https://www.legislation.gov.uk/uksi/2017/571/regulation/6</u>



Screening Opinion Request Information	Report Section Reference(s)
A plan sufficient to identify the land	Appendix 1 – Port Extension Ge- neral Arrangement
	Section 2 Location
A description of the development, including in particular:	Section 3 The Proposed Works
(i) a description of the physical characteristics of the development and, where relevant, of demolition works	Section 3 The Proposed Works
<ul> <li>(ii) a description of the location of the development, with particu- lar regard to the environmental sensitivity of geographical ar- eas likely to be affected</li> </ul>	Section 5 Known Sensitivities
A description of the aspects of the environment likely to be significantly affected by the development	Section 5 Known Sensitivities
To the extent the information is available, a description of any likely sig- nificant effects of the proposed development on the environment re- sulting from:	Section 6 Potential and Likely Sig- nificant Environmental Effects
(i) the expected residues and emissions and the production of waste, where relevant; and	
(ii) the use of natural resources, in particular soil, land, water and biodiversity	
Such other information or representations as the person making the re- quest may wish to provide or make, including any features of the pro- posed development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the envi- ronment.	Section 7 Embedded Mitigation Measures

Table 4.3 Screening Request Schedule of Information (Town and Country Planning EIA Regulations)

## 4.3. Additional Licensing Requirements

Additional licences and applications that may be required include the following:

- European Protected Species Licence and Protection Plan
- Basking Shark Licence
- Habitat Regulation Appraisal
- Dredging and Sea Disposal licence this will require the assessment of marine sediments for contaminants



## 5. Known Sensitivities

## 5.1. Protected Sites

The proposed project site does not overlap with any designated sites. However, there are several protected sites present within the local area. All protected sites within 15 km of the Peterhead site boundary were identified. This range is considered to represent a very conservative distance to encompass remote effects from pressures for a project of this scale but is used purely as a pragmatic measure to highlight potentially relevant sites and not as a formal screening. These sites and their nearest distance to the project site are listed in Table 5.1 and shown in Figure 5.1 and Figure 5.2.

A high-level evaluation of the potential for impacts to occur to these sites or associated features is made in Table 5.1. This considers the potential for connection between proposed works and each site or feature, only ruling out impacts where it is clear that no such connection exists.

The site classifications considered were as follows:

- Seal Haul Out Sites (SHOS) (Scottish Government, 2023)
- Geological Conservation Review sites (GCR) (Scottish National Heritage, 2022)
- Special Protection Areas (SPAs) (NatureScot, 2023)
- Special Areas of Conservation (SACs) (NatureScot, 2023)
- UK Ramsar sites (RAMSAR) (JNCC, 2019)
- Sites of Special Scientific Interest (SSSIs) (NatureScot, 2024)
- Local nature conservation sites (LNCS) (Aberdeenshire) (Aberdeen Council, 2016)
- Marine Protected Areas (MPA) (NatureScot, 2023)

From this assessment, it can be determined that there are no designated sites that directly overlap with the Project site.

While 15 km might be sufficient to capture likely remote effects from pressures, it doesn't address wide-ranging or migratory species that might move within the area of impact. Within the Peterhead Bay area, species protected under site designations which might move into the local impact area include seals and cetaceans.

The closest seal haul out site to Peterhead Bay is just over 23 km to the south at the entrance to the Ythan Estuary. This could be within their connectivity range based on their behaviour and the sighting of seals within Peterhead Bay. Seal haul-out sites are designated under section 117 of Marine (Scotland) Act 2010. Seal haul-outs are locations on land where seals come ashore to rest, moult or breed, but they may range further afield for foraging.

NatureScot have also advised that harbour porpoise, protected under the Moray Firth SAC, may venture as far as Peterhead, over 160 km away.

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Site	Designation	Distance Direction	Designated/qualifying features	Evaluation	
Rattray Head to Peterhead		0.8 km north	Variety of coastal habitats including sand dunes.	No connec- tion expected	

Table 5.1 Designated sites that fall within 15 km of the Peterhead project site listed in order of distance.



Site	Designation	Distance Direction	Designated/qualifying features	Evaluation
	Local Nature Conservation Site (LNCS)		Good diversity of plant species including several species that are rare in NE Scotland.	No connec- tion expected
			Adjacent fields are im- portant for roosting and feeding geese, waders and wildfowl.	No connec- tion expected
Buchan Ness to Collieston Coast	Special Protection Area (SPA)	1.9 km south	Black-legged Kittiwake ( <i>Rissa tridactyla</i> ) (30,452 pairs, 6.2% of the GB popu- lation), breeding.	Yes, potential for birds to forage
			Common guillemot ( <i>Uria aalge</i> ) (8,640 pairs, 1.2% of GB population), breeding.	Yes, potential for birds to forage
			Herring gull ( <i>Larus argenta- tus</i> ) (4,292 pairs, 2.7% of the GB population), breed- ing.	Yes, potential for birds to forage
			European shag ( <i>Pha-lacrocorax aristotelis</i> ) (1,045 pairs, 2.7% of the GB population), breeding.	Yes, potential for birds to forage
			Northern fulmar ( <i>Fulmarus glacialis</i> ) (1,765 pairs, 0.3% of the GB population), breeding.	Yes, potential for birds to forage
Southern Trench	Marine Protected Area (MPA)	3.0 km east/north east	Minke whale (Balaenoptera acutorostrata).	Yes (remote noise effects or mobile an- imals ap- proaching area of influ- ence)
			Burrowed mud.	No connec- tion expected
			Fronts.	No connec- tion expected



Site	Designation	Distance Direction	Designated/qualifying features	Evaluation
			Shelf deeps.	No connec- tion expected
			Quaternary of Scotland.	No connec- tion expected
			Submarine mass move- ment.	No connec- tion expected
Skelmuir Hill, Stir- ling Hill, Dudwick	LNCS	3.2 km south west (terrestrial)	Preglacial Buchan Gravels Formation, which is rich in flints, blankets the ridge of Stirling Hill, Hill of Dudwick and Skelmiur Hill. Den of Boddam glacial meltwater channel.	No connec- tion expected
Buchan Ness to Collieston	Special Area of Conservation (SAC)	3.9 km south	Annex I habitats - (1230) vegetated sea cliffs of the Atlantic and Baltic Coasts.	No connec- tion expected
Bullers of Buchan	Geological Conservation Review (GCR) site	3.9 km south	Important geomorphologi- cal site for granite coastal features.	No connec- tion expected
Bullers of Buchan Coast	Sites of special scientific interest (SSSI)	3.9 km south	Guillemot ( <i>Uria aalge</i> ) (breeding).	Yes, potential for birds to forage
			Kittiwake ( <i>Rissa tridactyla</i> ) (breeding).	Yes, potential for birds to forage
			Coastal geomorphology of Scotland.	No connec- tion expected
			Maritime cliff.	No connec- tion expected
Hill of Longhaven	SSSI/GCR	5.8 km south west (terrestrial)	Quaternary of Scotland.	No connec- tion expected
Rora Moss	SSSI/LNCS	9.3 km north west (terrestrial)	Raised bog.	No connec- tion expected



Site	Designation	Distance Direction	Designated/qualifying features	Evaluation
Cruden Bay	LNCS	10.1 km south	Sheltered sandy bay with rocky coastline to the north and south. Golf course co- vers much of site but patches of base rich dune grassland support a good diversity of plants. White colon moth found here at its northern limit.	No connec- tion expected
Ythan Estuary, Sands of Forvie and Meikle Loch	SPA	11.2 km south	Common tern ( <i>Sterna hi- rundo</i> ), breeding.	No connec- tion expected
			Little tern ( <i>Sternula albif-</i> <i>rons</i> ), breeding.	No connec- tion expected
			Sandwich tern ( <i>Sterna</i> sandvicensis), breeding.	No connec- tion expected
			Eider ( <i>Somateria mollis-sima</i> ), non-breeding.	No connec- tion expected
			Lapwing ( <i>Vanellus vanel-lus</i> ), non-breeding.	No connec- tion expected
			Pink-footed goose ( <i>Anser</i> <i>brachyrhynchus</i> ), non- breeding.	No connec- tion expected
			Redshank ( <i>Tringa totanus</i> ), non-breeding.	No connec- tion expected
			Waterfowl assemblage, non-breeding.	No connec- tion expected
Moss of Cruden	GCR/SSSI	11.2 km south west (terrestrial)	Quaternary of Scotland.	No connec- tion expected
Strathbeg to Rattray	LNCS	11.3 km north	Loch of Strathbeg is one of the largest coastal freshwa- ter lochs in the UK. Swamp, reedbed, fen, marsh and wet woodland surrounds with coastal sand dune on seaward side. Fields are im- portant for resident and migrant birds.	No connec- tion expected



Site	Designation	Distance Direction	Designated/qualifying features	Evaluation
Loch of Strathbeg	SSSI/GCR/RAM- SAR/SPA	11.5 km north	Coastal Geomorphology of Scotland.	No connec- tion expected
			Eutrophic loch.	No connec- tion expected
			Fen meadow.	No connec- tion expected
			Sandwich Tern.	No connec- tion expected
			Whooper swan (Cygnus cygnus).	No connec- tion expected
			Svalbard barnacle goose (Branta leucopsis).	No connec- tion expected
			Pink-footed goose (Anser brachyrhynchus).	No connec- tion expected
			Greylag goose (Anser an- ser).	No connec- tion expected
			Regularly supporting in ex- cess of 20,000 individual waterfowl including Teal (Anas crecca), greylag goose, pink-footed goose, whooper swan, goldeneye (Bucephala clangula), and Svalbard barnacle goose.	No connec- tion expected
Collieston to Whin- nyfold Coast	SSSI/GCR	12.8 km south west	Geological: Dalradian Su- pergroup.	No connec- tion expected
			Maritime cliff.	No connec- tion expected
			Fulmar (breeding).	No connec- tion expected
			Guillemot (breeding).	No connec- tion expected
			Kittiwake (breeding).	No connec- tion expected



Site	Designation	Distance Direction	Designated/qualifying features	Evaluation
			Razorbill (breeding).	No connec- tion expected
			Seabird colony (breeding).	No connec- tion expected
			Sea wormwood.	No connec- tion expected
Kirkhill	SSSI/GCR	13.6 km north west (terrestrial)	Quaternary of Scotland.	No connec- tion expected
Lochlundie Moss	LNCS	13.8 km south west (terrestrial)	One of the largest remain- ing lowland raised peat bogs in north east Scot- land. which supports a typi- cal array of peatland spe- cies. Locally important spe- cies includes the lesser twayblade (Neottia cor- data).	No connec- tion expected

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Figure 5.1 Designated sites within 15 km of the project site.

## 5.2. Biodiversity - Terrestrial

## 5.2.1. Habitat

The proposed extension is in the port of Peterhead, with the project footprint extending from an existing port into the port waters. The adjacent terrestrial habitats consist of arable land, bare field, mesic and dry grassland (Marine Scotland, 2024). The grassland runs parallel to South Road and is not connected to other habitats further inland.

## 5.2.2. Terrestrial Ornithology

Most of the designated birds within 5 km are coastal seabirds, which are known to nest on cliff faces approximately 1.9 km to the south, though there are species such as European shag which are known to live further inland. Other Scottish Biodiversity List species are likely to occur in the area, although there is no habitat within proximity to the construction site which is of particular nesting or feeding importance to terrestrial birds.

## 5.3. Biodiversity - Marine

## 5.3.1. Habitat

The proposed extension is in Peterhead Bay, a natural inlet protected from the open sea by two breakwaters. The seabed consists of fine sand/silt with gravel and cobble deposits over clay mud and bedrock. Sand and



detritus also enter the harbour through the breakwaters. The inner harbour seabed consists of sand/silt over clay and rocks (Peterhead Port Authority, 2022).

An Annex 1 Reef Habitat is located 0.8 km from the construction site, the marine feature is not part of a protected area and data on the reef is limited. The reef is not expected to be impacted by the construction works.



Figure 5.2 Annex 1 Reef areas in relation to the project site.

### 5.3.2. Fish and Marine Mammals

The Southern Trench MPA is 3 km to the northeast and continues further along the coast along the northwest towards Buckie. The Trench takes its name from the 58 km long, 9 km wide, 250 m deep trench that runs parallel to the coast. The MPA attracts minke whale, shoals of herring (*Clupea harengus*), mackerel (*Scomber scombrus*) and cod (*Gadus morhua*). The trench serves as a nursery ground for juvenile fish, and the seabed is covered by thick, soft mud which is inhabited by Norway lobster, crabs, sea pens, tube anemones and squat lobsters (Marine Scotland, 2020).

The marine habitats beginning approximately 2 km to the east of the construction area consist of offshore circalittoral coarse sediments (Marine Scotland, 2024), a habitat type that may cover large areas of offshore continental shelf. These habitats are fairly diverse and characteristically contain infaunal polychaete, sea cucumber (such as *Neopentadactyla*), bivalve species and occasionally northern horse mussel (*Modiolus modiolus*) larvae and juveniles (European Environment Agency , 2012), (JNCC, 2022).

Cetaceans, which are European Protected Species, have also been shown to use the coast surrounding Peterhead, including:



- Minke whale (Balaenoptera acutorostrata) a protected feature of the Southern Trench SPA,
- Orca (Orcinus orca) though recorded in more frequency in North and West Scotland (Bleach J., 2006),
- Pilot whales (Globicephala spp.) (Barnes, 2008)
- Bottlenose dolphin (Tursiops truncates) known to use the coasts along the Peterhead area, with numbers of at least 200 recorded in the Moray Firth SAC further northwest.

While mostly associated with the Western Hebrides, basking shark (*Cetorhinus maximus*) are also occasionally recorded to make use of the area (Marine Scotland, 2020). Basking sharks are protected under Schedule 5 of the Nature Conservation (Scotland) Act 2004, are listed as a Priority Marine Feature for Scotland and will require a 'basking shark licence' from NatureScot.

### 5.3.1. Marine Ornithology

Several species of sea bird are known to inhabit the Buchan Ness to Collieston Coast SPA and Bullers of Buchan Coast SSSI, such as black-legged kittiwake, common guillemot, herring gull, European shag and Northern fulmar and other seabird colony species. The SPA regularly supports more than 20,000 individual seabirds, and the protected area extends 2km off the coast (Heritage, 2009).

## 5.4. Socioeconomic activities

Smith Quay is located within Peterhead Port, which is an operating port, providing deepwater berthing facilities for a range of industries including oil and gas, renewables, fishing, and leisure. Significant fishing activity is observed near the planned project area, covering scallop, crab, lobster, and line fisheries. There are no visitor attractions or amenities located within the site boundary. On the other side of Peterhead Bay is located the Peterhead Bay Marina, Peterhead Sailing Club, and the Peterhead Bay Marina Holiday Park.

The closest domestic dwelling to the site of works is approximately 180 m to the northeast, while the town of Peterhead is located north of the Smith Quay. The part of the town closest to the site is also a conservation area of Peterhead of special architectural and historic interest (Peterhead Central (CA427)) (Historic Environement Scotland, 2024). Peterhead Old Parish Church (LB39671) is the only Category A Listed Building located within Peterhead Central and at a distance of 350m from the site. Outside of Peterhead Central there are two category B Listed Building located 0.4 km northwest of Smith Quay; 1 ST. Peter Street (LB39816) and 3, 5 ST. Peter Street (LB39817).

## 6. Potential and Likely Significant Environmental Effects

## 6.1. Designated sites

A Habitats Regulations Appraisal (HRA) is a requirement under the provisions of the Habitats Regulations, where any proposal (including permitted development) may have a likely significant effect (LSE) on a 'European Site.' The 'European Sites' in the UK consist of Special Protection Areas and Special Areas of Conservation. In this context, 'significant' means any effect on the features for which the site has been designated, which could undermine the site's conservation objectives, and which cannot be excluded based on objective information. Should HRA screening stage conclude that there is potential for LSE then an Appropriate Assessment (AA) will be undertaken.

Taking into account the distance to Buchan Ness to Collieston Coast SPA (1.9 km south) and the Southern Trench MPA (3 km east), as well as mobile species listed under other designated sites, it is assumed that HRA



screening will not rule out LSE and that AA will therefore be required in relation to these protected sites, as well as any other for which LSE cannot be excluded beyond reasonable scientific doubt.

## 6.2. Protected Species

The Conservation (Natural Habitats, &c.) Regulations 1994, The Conservation of Offshore Marine Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 cover licensing for marine European Protected Species (EPS). Where an activity is likely to cause disturbance or injury to an EPS, an EPS licence is required to legally undertake the activity. Where there is the possibility for disturbance to any individual EPS to occur, an EPS risk assessment must be carried out and the need for an EPS Licence determined. The licensing of marine EPS in Scotland is shared between several regulators depending on the purpose and location of the activity in question. For activities taking place within 12 nautical miles (nm) of the coast (the Scottish territorial sea), EPS are protected under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). For port and harbour developments, Marine Directorate – Licensing Operations Team (MD-LOT) (on behalf of the Scottish Ministers) is the licensing authority.

Cetaceans are known to occur along the Peterhead coast, including bottlenose dolphin and minke whale, orca and pilot whales. All species of cetacean occurring in UK waters are listed in Annex IV of the Habitats Directive (European Commission Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna) and therefore considered to be EPS.

A risk assessment for cetacean impacts will be undertaken (including a quantitative underwater noise assessment), and a Protection Plan will be produced. The results of the risk assessment will assist in determining the necessity for an EPS Licence. The need for an EPS Licence will be formally determined by MD-LOT as the licencing authority with advice from NatureScot.

## 6.3. Biodiversity - Terrestrial

### 6.3.1. Habitat

The proposed works will be carried out within the marine environment or from the existing quay. Given the nature of the works and the existing (industrialised) environment, no significant impacts are anticipated on any terrestrial habitat features.

### 6.3.2. Terrestrial Ornithology

Protected sites supporting species of ornithological significance are present within 1.9 km of the proposed quay extension. Given the industrialised nature of the works location it is expected that the proposed works do not present a risk of disturbing nesting birds or damaging their nests. The grassland habitats in the vicinity of the development site are not of high biodiversity value but may be of use for foraging birds, therefore disturbance is possible.

### 6.4. Biodiversity - Marine

#### 6.4.1. Habitat

Habitats, including any protected or priority marine features, are potentially sensitive to a range of pressures including direct damage, habitat loss/change under any extended footprint, suspended sediment mobilisation and smothering and release of contaminants.



If sufficient information is not available in existing data sources to inform the impact assessment, notably in relation to the potential occurrence of reef habitat and/or priority marine features, then a localised benthic habitat survey would be planned around the immediate vicinity of works. Based on initial review of available information, and the age of some data sets, it is assumed likely that such a survey would be required, but very unlikely that sensitive habitat (notably reef) would be present immediately adjacent to the current Smith Quay.

The proposed extension is considered insignificant enough in size to change the hydrodynamic patterns within the harbour and thereby is unlikely to affect soft sediment features such as the adjacent soft shoreline. Peterhead Bay in general is exposed to wave and tide action, despite the presence of the outer breakwaters. Therefore, there is unlikely to be any accumulation of silty sediments under those conditions from dredging activities that might affect adjacent habitats.

#### 6.4.2. Fish and Marine Mammals

Marine mammals and fish are potentially sensitive to a range of pressures including direct damage, disturbance due to noise and vibrations, and release of contaminants.

Marine mammals are highly sensitive to noise which can result in permanent or temporary threshold shifts in hearing, masking of vocalisations, temporary displacement or physical injury if exposed to sufficiently high sound pressure levels.

The risk of impacts from pollution events associated with the proposed development is low and will be limited to negligible levels through implementation of embedded mitigation in the form of a Construction Environmental Management Plan. Fish may be subject to temporary disturbance from underwater noise but this is considered very unlikely to be significant in the context of the location which is not, for example, adjacent to a freshwater inlet important for migratory fish or a restricted breeding or spawning area based on review of Scottish NMPI open data sets.

There is potential for significant impact to occur for marine mammals, particularly disturbance by underwater noise. Further assessment is required to confirm this and elaborate details but, should it prove necessary, a range of additional mitigation could be applied in order to avoid significant impact. This includes use of marine mammal observers and techniques such as soft start to noisy activities such as piling and blasting.

### 6.4.3. Marine Ornithology

Species of ornithological significance are present within 1.9 km of the proposed quay extension. The proposed works may disturb foraging birds though noise impacts (although the habitats within the proposed development area are not important for feeding and roosting).

### 6.5. Socioeconomic activities

There are no likely significant negative impacts on socioeconomic activities. The only impacts on the port, fisheries and renewable energy sectors are expected to be positive. The operation of the extended quay is expected to have a positive, material impact on wider traffic and access as the only alternative facilities accommodating larger vessels and assembling capacities are relatively distant. If more distant facilities were used, an increase in fuel usage and greenhouse gas (GHG) emissions would be expected due to the increased transit length by the quay users. The extension is considered insignificant enough in size to change the hydrodynamic patterns within the harbour and thereby is unlikely to affect Peterhead Bay Marina and Peterhead Sailing Club, located on the other side of the bay.



# 7. Embedded Mitigation Measures

The following measures will be planned into the works and implemented to ensure that environmental impacts are minimised, notwithstanding any additional mitigation which may be identified following further consideration of impacts in support of consent applications.

- Preparation of a CEMP.
- As far as reasonably possible all waste and debris will be removed from site and, in particular, loss of materials into the marine environmental will be avoided.
- Disturbance of seabed outside the proposed footprint has been minimised where possible.
- Adoption by the Contractor of PPA's existing Marine Pollution Management Plan.

## 8. Summary and conclusion

This Screening Request report seeks an opinion from the Marine Directorate and Transport Scotland to determine whether an EIA will be required to support the Marine Licence, and Harbours Revision Order applications for the proposed works.

Peterhead Port Authority (PPA) proposes an 80 m extension to the western end of the existing 120 m long Smith Quay in order to provide vital additional berthing capacity and deck space to this busy port. This will provide many socio-economic benefits especially to the renewable energy, oil and gas decommissioning, and subsea construction and maintenance industry that need more space for marshalling of vessel equipment and cargo.

Table 8.1 provides a summary of the potential effects on environmental receptors resulting from the proposed works. Requirements for further investigations and mitigation are outlined.

An environmental assessment will be completed in support of Marine Licence and Works Licence applications which will confirm these initial assessments and identify any further measures which may be required. It is planned that the following additional activities will be undertaken in support of the environmental assessment:

- Marine mammal risk assessment to determine any requirement for EPS licencing. This will be supported by an underwater noise study, including modelling if sufficient existing information is not available.
- Benthic survey to characterise the intertidal and subtidal fauna in the vicinity of the proposed development.
- A Report to Inform Habitat Regulations Appraisal, including HRA Screening.

Throughout the construction phase, a Construction Environmental Management Plan (CEMP) will be implemented. This plan will define optimal practices to prevent notable impacts on air quality, noise levels, the water environment, human health, and biodiversity.

It is respectfully submitted that the Proposed Works do not constitute an 'EIA Development' according to the EIA Regulations and consequently a formal Environmental Impact Assessment (EIA) is not considered to be necessary. A screening opinion and comment on the proposed approach to permitting are now sought to allow the project to meet Marine Directorate, Transport Scotland and statutory consultees' requirements.



Table 8.1 Summary of potential effects					
Receptor	Pressures/impact path- ways	Potential Effect(s)	Expected im- pact signifi- cance	Proposed mitigation	
Table 8.1 Summary of         Receptor         Air and climate         Land and Water	Air Quality	Dust emissions could be created temporarily by works, including plant movements, but will be minimised by embedded mitigation. Alt- hough there are residential properties in close proximity to the works, with considered mitigation measures, the residual effects on air quality are not anticipated to be signifi- cant.	Not significant	Embedded Mitigation: good indus- try practice along with dust and emissions management measures will be put into practise to reduce impact during works.	
	Noise and Vibration	The works will generate airborne noise and vibration which will be minimised by adher- ence to a CEMP.	Not significant	Embedded Mitigation: good indus- try practice.	
	Climate Change	Potential reduction of transit time and fuel use from not utilising alternative facilities which are more distant, will cancel out addi- tional movements and potentially lead to an overall reduction in GHG emissions.	Not significant (neutral or posi- tive)	No mitigation anticipated	
Land and Water	Release of contaminants and production of waste	Potential release of unplanned emissions from the proposed quay extension, or plant, into the adjacent onshore or marine environ- ments.	Not significant	Embedded Mitigation: good indus- try practice. Any contaminated ma- terials encountered during the works would be extracted and sub- ject to offsite disposal in accord- ance with all regulatory require- ments.	



Receptor	Pressures/impact path- ways	Potential Effect(s)	Expected im- pact signifi- cance	Proposed mitigation
	Footprint area change	The proposed development is compatible with existing and approved land uses on site. Net loss of seabed is less than 1 ha.	Not significant	No mitigation anticipated
Biodiversity	Summary of key issues,	please see Section 5 for further detail.		
	Noise and vibration, physical presence/dis- turbance	Disturbance of sensitive receptors (e.g. ma- rine mammals). An underwater noise study, including model- ling is required for EPS licensing.	Potential for sig- nificant effect before mitiga- tion	Embedded mitigation: good prac- tice to be defined by a CEMP. Additional mitigation to be devel- oped if required (e.g. for marine mammals).
	Habitat loss	Net loss of seabed is less than 1 ha. A benthic survey is required to identify the presence of any sensitive benthic habitats im- mediately adjacent to, or within potential range for impact.	Not significant	No mitigation anticipated.
	Light emissions	Light pollution could potentially affect recep- tors such as birds, bats or seals. Impacts will be minimised through good practice such as lighting working areas only and using di- rected lighting.	Not significant	Embedded mitigation: good indus- try practice.
Population, hu- man health and material assets	Human Health	Although there are residential properties in close proximity to the works, with considered best practice in construction activities, the re- sidual effects on human health are not	Not significant	No mitigation required.



Receptor	Pressures/impact path- ways	Potential Effect(s)	Expected im- pact signifi- cance	Proposed mitigation	
		anticipated to be significant as a result of air quality, water quality, noise and vibration, or due to a major accident or incident.		Embedded mitigation: good indus- try practice.	
	Traffic, Transport and Material Assets	The operation of the extended quay is ex- pected to have a positive, material impact on wider traffic and access as the only alterna- tive facilities accommodating larger vessels and assembling capacities are relatively dis- tant.	Not significant (neutral or posi- tive)	No mitigation anticipated	
	Socio-economics, Tour- ism and Recreation	Positive socioeconomic benefits by extending the quay and its availability to its users. No likely impacts on other socio-economic activities in the area, such as the sailing club or holiday park.	Not significant (neutral or posi- tive)	No mitigation anticipated	
Cultural heritage and landscape	Cultural heritage	There are no planned activities impacting heritage assets located in the town.	Not significant	No mitigation anticipated	
	Landscape and Visual	Minimal impact on the landscape, seascape, or visual aspects during construction. due to the small-scale and limited geographical ex- tent.	Not significant	No mitigation anticipated	



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# Appendix 1 – Port Extension General Arrangement



#### NOTES

- 1. ALL LEVELS TO CHART DATUM.
- ALL LEVELS TO GHART DATUM.
   ALL DIMENSIONS TO BE IN METERS UNLESS NOTED OTHERWISE.
- 3. SMITH QUAY EXTENSION IS INDICATIVE.

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