

Port of Dundee Quayside Redevelopment

Marine Licences Supporting Statement

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1.0 Introduction

- 1.1. This Marine Licence Supporting Statement has been prepared by Fairhurst on behalf of the Port of Dundee Limited, in relation to two marine licence applications at the Port of Dundee. An application is being submitted for the construction of a new quay, associated revetment and infill, and quay strengthening works; a parallel application is being submitted for capital dredging including the widening and deepening of an existing dredge pocket and the creation of a new dredge pocket in front of the new quay.
- 1.2 As part of the applications, Fairhurst have prepared this Supporting Statement, which covers the following:
- The Site and Surroundings;
 - Proposed Development;
 - Marine Policy; and
 - Technical Issues.
- 1.3 This Supporting Statement sets out all of the relevant material planning considerations that should be taken into account by the Marine Scotland, in the determination of the marine licence applications. Fairhurst consider that all material considerations have been addressed within the Supporting Statement and all additional information required for determining the applications has been provided within the submitted drawings and other application documents.

2.0 Site and Surroundings

- 2.1 The application site is located along the northern banks of the River Tay, within the Port of Dundee, which is operated by the Port of Dundee Limited who are also the statutory Harbour Authority.
- 2.2 The Port of Dundee comprises of 1,600m of quayside and currently has 6 working berths. It provides services for the North Sea oil and gas industry, construction industry, paper pulp and forest products along with a wide range of general and bulk cargoes. £10 million is being invested into various redevelopments within the port, including a new quayside to support the decommissioning of offshore oil and gas equipment and the assembly of offshore wind farm infrastructure, which the Port of Dundee has a strong presence in, due to its strategic location.
- 2.3 The application site and existing layout are shown on Drawing Number 134380/8001. It can be seen from this drawing that the application site comprises an existing old quay, which is not currently used by the Port; the Prince Charles Wharf quay; and a revetment between the two quays. There are also 2 existing operational berths associated with the use of Prince Charles Wharf as shown on Drawing Number 13380/8001.
- 2.4 The Firth of Tay and Eden Estuary SAC covers the River Tay in the location of the proposed dredging and construction works. In addition, the Outer Firth of Forth and St Andrews Bay Complex proposed Special Protection Area (pSPA) extends partway across the front of the existing site frontage. The Firth of Tay and Eden Estuary SPA and Ramsar sites also lie 2.9km to the east. A drawing prepared by BSG Ecology that accompanies this submission shows these designations in relation to the application site.

3.0 Proposed Development

- 3.1 The extent of the proposed redevelopment is shown on Drawing Number 134380/8002, a copy of which accompanies this submission. The works will involve:
- The widening of the existing dredged berth associated with the Prince Charles Wharf Extension from 200m x 40m to 200m x 60m. The depth of the berth will increase to -10.0mCD;
 - Slab thickening / strengthening to the existing Prince Charles Wharf, to increase quayside capacity;
 - The creation of a new suspended quay on land to the west of Prince Charles Wharf; and
 - The creation of a new 170m x 30m berth pocket to the south of the proposed suspended quay. Dredging works will be to a depth of -9.0mCD.
- 3.2 These works are primarily being undertaken in order to facilitate the use of the Port for wind turbine assembly as well as decommissioning works for the offshore oil and gas industry, although the proposed quayside will be capable of handling any vessel required for uses associated with Port operations.

Construction method statement

- 3.3 In order to create the new quay it is proposed that the old quay (shown on Existing Site Plan 134380/8001) will be either partially or completely demolished. The rock armour to the front of the existing revetment will then be removed and temporarily stored on land.
- 3.4 Caledon East Wharf is to be partially demolished to create space for the area required to construct the new revetment and wharf. The demolition works will be a controlled procedure undertaken using a specialist plant such as long reach excavators operating from a temporary working platform, on the landside or on the existing wharf. The plant will be complete with concrete crushing or rock breaker attachments with attendance for cutting embedded steel reinforcement from the broken sections. Concrete elements may be permitted to fall into the Tay and retrieved using long reach excavators to avoid placing other large temporary bunds into the Tay.

- 3.5 Sections of the existing concrete deck which may enter the water are inert and the steel piles will be cut at bed level or pulled to remove. All structures above bed level will be removed and any remaining material will be capped off by placing the new granular rock fill to form the new alignment of the revetment. Demolition arisings will be loaded onto articulated dump trucks and hauled to a nearby stockpile location within the Port site boundary for secondary processing to re-usable engineered fill within the works.
- 3.6 The revetment will then be realigned including the placement of additional infill material where required, to create the profile of the new revetment which will run under the proposed new suspended quay, as illustrated on the Proposed Masterplan (Drawing 134380/8002). The revetment will therefore largely sit underneath the suspended quay, although to the west of the new quay the alignment of the revetment will curve northwards to tie into the existing retaining wall which will be retained as the river front. The infill will then be supplemented around the edges of the existing slopes by the placement of rock armour, where necessary to provide stability. The rear of the quay will be fully backfilled to ground level.
- 3.7 The proposed new quay will generally be a suspended open quayfront with revetment below, which will act to dissipate wave action and facilitate marine operations. The quay piles will be driven in position by vibro hammer and finally by impact piling, although impact driving will be limited to no more than 4 hours in any 24 hour period. There will also be associated drainage works and utility and lighting installations to complete the quay for operations.
- 3.8 The proposal to strengthen the existing Prince Charles Wharf consists of the strengthening and repairs to existing steel piles through the installation of steel plating. Reinforced concrete slabbing / decking is also proposed, including drilling and dowelling into existing slabs forming the existing quay / wharf and localised concrete patch repairs.
- 3.9 Further details are illustrated on the following drawings:
- 130143/5004 Rev F – New Quayside General Arrangement
 - 130143/5003 Rev E – Combi Wall General Arrangement
 - 130143/5005 Rev E – New Quayside Combi Wall Sections

- 130143/5001 Rev E – Prince Charles Wharf Pile Repairs
- 130143/5002 Rev C – Prince Charles Wharf Deck Strengthening

3.10 The construction works are anticipated to commence in August 2020.

Dredging method statement

3.11 The proposed capital dredging will take place over a potential programme of up to 50 days, up to a maximum of 75,000 cubic metres / 90,000 wet tonnes, with the timing and duration of the dredging within the overall programme to be confirmed.

4.0 Marine Policy

- 4.1 Scottish Parliament legislate in relation to activities affecting the marine environment in Scotland's inshore waters, except for reserved matters. These are governed by the Marine (Scotland) Act 2010, an Act of the Scottish Parliament. All of the procedural requirements of this Act are contained within the Scottish National Marine Plan.

National and Regional Marine Planning

- 4.1 There is a tiered approach to developing marine planning in Scotland, which involves consideration of the following elements:
- UK Marine Policy Statement (MPS)
 - Scottish National Marine Plan (NMP)
 - Regional Marine Plans (RMPs) – Currently, there is no RMP in place for the Forth.

UK Marine Policy Statement (MPS)

- 4.2 The UK Administrations share a common vision of having clean, healthy, safe, productive and biologically diverse oceans and seas. There are a number of UK high-level marine objectives in the MPS, which set out the broad outcomes for the marine area in Scotland and reflect the principles of sustainable development.

Scottish National Marine Plan (NMP)

- 4.3 This sets out the strategic policies for the sustainable development of Scotland's marine resources. The plan covers both Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles). The NMP must be taken into account during the marine licensing process and provides guidance over what specific aspects of a proposed development / use has to be considered, in order to reach a balanced view on whether an individual project should be consented.

5.0 Technical Considerations

- 5.1 The Scottish Government has a commitment to sustainable development and supports the five guiding principles that underpinned the UK's 2005 sustainable development strategy. The NMP reflects this by stating *'achieving a sustainable economy, promoting good governance and using sound science responsibly are essential to the creation and maintenance of a strong, healthy and just society capable of living within environmental limits'*. Aligned with this is the MPS' view that *'properly planned developments in the marine area can provide environmental and social benefits, as well as drive economic development'*.
- 5.2 Accordingly, Fairhurst have considered the acceptability of the proposed development in relation to the following matters:
- Biodiversity;
 - Noise;
 - Water Quality;
 - Marine Heritage;
 - Flood Risk;
 - Landscape / Seascape; and
 - Perceived Benefits.

Biodiversity

- 5.3 A primary consideration for any marine development is that it needs to be sensitive to any potential impacts on sites of particular significance, including those protected under environmental legislation. As identified earlier in section 2, the site lies within and adjacent to a number of sites designated as requiring protection under European environmental legislation including the Firth of Tay and Eden Estuary SAC and the Outer Firth of Forth and St Andrews Bay Complex proposed Special Protection Area (pSPA).
- 5.4 The MPS recommends that the halting or if possible, reversal of biodiversity loss should be an aim for developments within the marine environment. The MPS also advises that noise, dust and vibration resulting from any proposed activity can have

adverse effects on biodiversity as well as people, and these impacts should be considered and managed appropriately

- 5.5 With the above in mind, a formal Environmental Impact Assessment (EIA) Screening Request was submitted to Dundee City Council and Marine Scotland on 28 October 2019 to cover the entire project both above and below Mean High Water Springs (MHWS). This was accompanied by a Habitat Regulations Assessment (HRA) Screening Report, and a report detailing the Best Practicable Environmental Option (BPEO) for sediment disposal. These documents were also accompanied by a schedule of robust mitigation measures that have been developed to address any potential effects that may arise from the development. Copies of all of these documents accompany this submission. It was confirmed by Marine Scotland and statutory consultees that the proposal is not considered to constitute EIA development and will not have a significant adverse effect upon the marine environment.
- 5.6 As part of the HRA Screening process, due consideration was given to the following, including whether these activities would have any cumulative impact with any other plans and projects:
- marine noise resulting from piling work, which may result in the disturbance of wintering birds, migratory fish, harbour seal and bottlenose dolphin; and
 - the dredging and disposal of dredged material, which may result in changes in water quality that could have an adverse effect on migratory fish, harbour seal, bottlenose dolphin and also on habitats used by wintering birds.
- 5.7 Following the Screening process, the HRA Screening Report was updated to include sufficient information to enable an Appropriate Assessment (AA) to be undertaken, informed by wintering bird surveys that were undertaken from October through to January. The HRA is appended to the applications, and demonstrates that there will not be any adverse impacts on any designated sites within the vicinity of the proposed development, subject to the appropriate mitigation measures being in place where they are deemed necessary. A table listing the full set of proposed mitigation measures is submitted with the applications.
- 5.8 In addition to the statutory designations and in response to Scottish Natural Heritage (SNH's) EIA Screening Response, it has also been recognised that the proposed

development could affect European Protected Species (EPS) not specifically covered by the designations. An Ecological Assessment has therefore also been undertaken based on a site survey and assessment of any habitats present to determine their suitability to support protected species. The assessment recommends a number of pre-works checks to ensure there are no impacts on species in the area, including otter; breeding and nesting birds. It also identified that no impacts are anticipated on other protected species, such as bats and hedgehogs.

- 5.9 To conclude biodiversity matters, it is considered that with the proposed mitigation measures in place, there will not be any adverse impacts on any designated sites, designated species or protected species within the vicinity of the proposed development.

Noise

- 5.10 In respect of dredging noise, there is already existing vessel traffic including ongoing maintenance dredging associated with the Port of Dundee. Dredging is only proposed for a limited period of time and for a fixed volume of dredged material. The proposed capital dredging will take place over a potential programme of up to 50 days, up to a maximum of 75,000 cubic metres.
- 5.11 As far as construction is concerned, the Port has permitted development rights; consequently the noise-related impacts have been considered against a baseline where there are already noise sources contributing to an elevated baseline noise level. Construction works will have restricted working hours in line with Dundee City Council's permitted working hours for construction sites, as set out in the attached table of mitigation. Impact piling will be limited to only 4 hours within a 24 hour period, and was not found to have any significant impact during the EIA Screening process.
- 5.12 In this context, it is not considered that the proposals would result in the creation of unacceptable levels of noise in this location.
- 5.13 This is supported by the HRA which confirms that, with appropriate mitigation in place, there will be no adverse impacts on ecological receptors as a result of dredging or construction noise.

Water Quality

- 5.14 In respect of dredging, the MPS states that development should not cause deterioration in the status of any water. There are already relatively high background levels of sediment within the estuarine environment and dredging is already an activity undertaken at the Port. The dredging required for the proposal will only be for a limited period of time and for a fixed volume of dredged material.
- 5.30 The site that will be used for the disposal of dredge spoil has been used by the Port of Dundee since 1994 and is not used by any other parties and is close to the application site. Such an arrangement will minimise the travel distance for dredging vessel transport and the potential for any unacceptable levels of sediment disturbance.
- 5.31 Statutory consultees raised no concerns regarding water quality impacts on species, habitats or waterbodies during the EIA Screening process, given that a range of mitigation and pollution prevention measures are proposed (see attached table of mitigation measures).
- 5.32 Furthermore, a Water Framework Directive Assessment and BPEO have been undertaken which takes into account all relevant information required to assess the impacts of the proposed development on the River Tay. A copy of this is attached to this application. Given the nature and scale of the proposed works, this concludes that with appropriate pollution prevention and mitigation measures in place, there will not be any adverse impacts on water quality.

Marine Heritage

- 5.33 As a result of the EIA Screening process, Historic Environment Scotland (HES) advised that a large area within the application site boundary was the site of a World War II seaplane base. Although no upstanding structures of the seaplane base remain, concerns were raised that it may have been a possibility that undesignated below ground remains of wrecks of seaplanes, and other unrelated vessels in the general vicinity exist.

- 5.34 A review of records has established that these areas were subject to marine geophysical surveys and geotechnical investigations in 2002, which showed no sign of wrecks in or in the vicinity of the proposed dredge pockets. Records also confirmed that outwith existing dredged areas, the material present consists of sands and stiff glacial deposits. Consequently, wrecks/seaplanes are not likely to be capable of being submerged by these materials and would be more likely to rest on their surface. If such assets were on these surfaces, then these would have shown up in the Port's survey work.
- 5.35 As a result of the above, HES have confirmed that *"it is unlikely that marine archaeology will survive undisturbed in the areas of proposed dredging for the redevelopment proposals...there are no significant marine heritage remains in the areas and the historical dredging areas indicate that any minor finds remaining are highly unlikely to be in situ and undisturbed"*.

Flood Risk

- 5.36 Flood Risk has also been considered in accordance with the MPS, which states *'development will need to be safe over its planned lifetime and not cause or exacerbate flood and coastal erosion risk elsewhere'*. The proposal has been designed accordingly to take into account climate change including extreme storm events; it is imperative that the Port remains operational despite such events should they occur in future. The site is in a tidal environment, such that no displacement of water would occur which would increase flood risk elsewhere. As a result, no significant impacts on flood risk are anticipated. Therefore, it is considered that the proposed development is compliant with the MPS in this regard.

Landscape/Seascape

- 5.37 A further requirement of the MPS is that consideration should be given to the effects of a proposal on the landscape/seascape. Any such visual effects will vary on a case by case basis, depending upon the nature of the proposal, its location and its setting. Given that the proposal will by and large be improving existing port quayside and berth facilities within the context of an operational port, it is not considered that there will be any material change to the surrounding landscape/seascape.

Perceived Benefits

5.38 In terms of benefits, the proposals will improve the facilities on offer at the Port of Dundee. The application site is proposed to be used for the assembly of offshore wind turbines and for the decommissioning of redundant offshore oil and gas infrastructure. The proposed wider and deeper berths, quay strengthening and new suspended quay, will therefore significantly enhance the services that the Port can offer in respect of the decommissioning of traditional offshore oil and gas infrastructure, and the assembly of more sustainable forms of development such as offshore wind farm equipment.

Summary

5.39 In summary, having assessed the proposal against the aims and objectives set out in the MPS and NMP, it is not considered that the proposal would have any major effect on seascape, water quality or any sites of particular significance, including those protected under environmental legislation. It would also not result in flooding or unacceptable levels of noise. Furthermore, there are no plans or projects that when considered alongside the proposals that would contribute to or exacerbate any potential effects. As such, the proposal is considered to be in accordance with the MPS and NMP and delivers a sustainable form development, which brings significant investment and economic benefits to the Port and surrounding area.

6.0 Conclusion

- 6.1 Fairhurst have been appointed on behalf of Port of Dundee Limited to produce a Marine Licence Supporting Statement to accompany two marine licence applications at the Port of Dundee. An application is being submitted for the construction of a new quay, associated revetment and infill, and quay strengthening works; a parallel application is being submitted for dredging including the widening and deepening of an existing dredge pocket and the creation of a new dredge pocket in front of the new quay.
- 6.2 This Marine Licence Supporting Statement has identified a number of supporting factors and benefits to be derived from granting marine licences for the proposals. This Statement also explains that, with appropriate mitigation, the proposed development will not result in any adverse impacts on the marine environment.
- 6.3 As such, Fairhurst considers that the principle of development is acceptable and the development is in accordance with policies of the MPS and the NMP.

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