Ports and Harbours Branch Aviation, Maritime, Freight & Canals

Victoria Quay, Edinburgh EH6 6QQ Redacted





Your ref: JE30615

Date: 19 October 2012

Sinclair Knight Merz OneSixtv 160 Dundee Street Edinburgh

Dear

EH11 1DQ

PROPOSED DEVELOPMENT AT PORT OF LEITH - HARBOUR REVISION ORDER, MARINE LICENCE AND PLANNING PERMISSION - EIA SCOPING REQUEST

1. Introduction

Thank you for your letter of 3 September 2012 indicating that proposed works at Port of Leith will be authorised by a Harbour Revision Order (HRO) under Section 16 of the Harbours Act 1964, Marine Licence under Part IV of The Marine (Scotland) Act 2010 and Planning Permission under the Town and Country Planning (Scotland) Act 1997 as amended. In this connection you have requested a screening opinion for proposed works at the harbour.

2. Harbours Act 1964

www.transportscotland.gov.uk

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

- whether that application relates to a project which falls within Annex I or Annex II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (as amended by Council Directives 97/11/EC and 2003/35/EC) ("the Directive") and
- if it relates to a project which falls within Annex II, whether taking into account (ii) the selection criteria, the project is a relevant project.

Ministers are also required to decide whether the project is likely to have a significant effect on a European site and if so whether an appropriate assessment is required in terms of regulation 48 of the Conservation (Natural Habitats & Etc) Regulations 1994.



The Scottish Ministers have considered the characteristics of the project (as described and shown on the draft submitted plans and drawings) and have concluded that:

- (i) the application falls within paragraph 8 of Annex I to Council Directive 85/337/EEC, due to the nature and scale of the proposed works at the harbour.
- (ii) that it is a relevant project in terms of Schedule 3 to the 1964 Act because it would be likely to have significant effects on the environment by virtue of its location.

Accordingly an Environmental Statement is required in terms of the 1964 Act.

3. Scoping

The applicants have requested a scoping opinion under the Harbours Act 1964 and the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011¹. This letter comprises the requested scoping opinion, and sets out the extent of the information (referred to in Annex IV to the Directive) which would be required to be supplied in the Environmental Statement. This scoping opinion is provided on behalf of Scotlish Ministers (Transport Scotland and Marine Scotland) and the City of Edinburgh Council².

Transport Scotland, on behalf of these organisations, has consulted with the relevant environmental bodies about the extent of the information the applicants should supply in the Environmental Statement³. Having carefully considered the views of the applicants, Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA), Historic Scotland and the City of Edinburgh Council, the Scottish Ministers and the City of Edinburgh Council have determined that the scope of the proposed Environmental Statement as indicated in the scoping report provided by the applicant is mostly sufficient, but will need to be clarified in certain areas. The applicants' attention is drawn to the specific issues raised in this letter (see Annexes A and B) and they are requested to act accordingly.

We also have some general comments, as follows:

- Our understanding is that the EIA will consider a "maximum potential impact" throughout and we welcome this approach.
- The ES must consider the feasibility and deliverability of mitigation measures, including
 the use of timing of construction activities to avoid adverse impacts on species. We
 suggest that a Schedule of Mitigation Measures be included in the ES, which collates all
 the mitigation measures proposed
- Table 9 illustrates your approach to the identification of significant effects on landscape/ townscape / seascape and the City of Edinburgh Council has commented on this (see Annex B). The ES should identify whether this approach has been used for the other environmental parameters being assessed. (Note that it is also helpful, when using this approach, to provide an accompanying definition of "magnitude".) Should you wish to

³ Marine Scotland will consult navigational consultees, the Maritime and Coastbuard Agency and the Northern Lighthouse Board as part of the marine licensing process.



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¹ We have assumed that the exclusion of the Marine Works (Environmental Impact Assessment) Regulations 2007 from this request was an oversight.

² For the avoidance of doubt, this scoping opinion therefore is provided in accordance with the requirements of the Harbours Act 1964, the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, and the Marine Works (Environmental Impact Assessment) Regulations 2007.

- use this same approach generally, I suggest that a "supplemental" to the scoping report be provided so that the relevant environmental organisations can provide their views.
- As you have indicated in discussions, the EIA will employ an iterative approach and we
 would therefore encourage you to discuss issues with the relevant organisations as and
 when they arise, particularly if you wish to change the scope of the ES. Please contact
 me if I can assist with this process in any way.

4. Conclusion

We trust that you will be able to address these matters before submitting your formal harbour revision order and applications for planning permission and the marine licence. It would of course be open to the environmental bodies to object to these applications for consent if they still have concerns when the applications are presented.

I hope this is helpful. Please do not hesitate to contact me if you wish to discuss any aspect of this letter or the application process. I would encourage you and the applicants to make early contact regarding preparation of the draft order and look forward to considering your draft order informally in due course.

Yours sincerely



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Ports and Harbours Branch



ANNEX A. Key Issues for Inclusion

A.1 This annex identifies information which is considered to be absent from the Scoping Report or only addressed in a limited way.

A2. Marine aggregate extraction/dredging: Middle Bank

- The process of marine aggregate dredging has the potential to cause significant impact to the marine environment and the ES must contain sufficient detail of the project to allow assessment of any impact. The Scoping Report gives little detail of where this aggregate dredging will take place, what type and quantity of material will be removed or any detail of timescale of activity. It also makes no reference to overburden and the potential to remove and dispose of such material. The extraction of marine aggregate has the potential to impact unacceptably on water quality, the coastal environment, commercial fisheries, marine ecosystems, navigational routes, wrecks and other archaeological remains and other uses of the sea. It is therefore important that aggregate dredging is only undertaken at locations and in ways that do not have unacceptable impacts. The aspects of the environment likely to be significantly affected by the proposed aggregate dredging must be included in the ES, including potential impacts on, in particular, population, fauna, flora, water, air, coastal processes, climatic factors, material assets, including the architectural and archaeological heritage, landscape and any inter-relationship between the above factors, including both direct and indirect effects. The ES should include a section on mitigation of any impacts and proposed monitoring. (No mitigation measures for effects of aggregate extraction on water and sediment quality are detailed in the Scoping Report.)
- Consideration should be given to any cumulative impacts and alternatives to aggregate dredging as the means of gaining the infill for the construction element of the project, including the cumulative impacts of aggregate dredging and dredging disposal in the Firth of Forth.
- Aggregate dredging will primarily impact benthic communities through direct removal. Secondary impacts will occur as a result of changes to seabed composition and the deposition of disturbed and rejected fine sediment. Consideration should therefore be given to any reduction in habitat and species diversity, abundance and biomass due to the removal of the seabed; any adverse effects on benthic and epibenthic organisms caused by increased suspended sediment concentrations caused by sediment plumes; any smothering effects on benthic organisms caused by the deposition of suspended sediment; adverse effects on the benthos and epibenthos caused by bedload transport of deposited sediments; and any potential changes in benthic community structure modification of seabed topography, substratum type and mobility as a result of aggregate extraction.
- Consideration will also need to be given to effects on oceanography (modelling required), benthic ecology, migratory fish, marine mammals, and seabirds.
- It is not clear if the potential impacts from aggregate extraction at Middle Bank on SPA qualifying species (in particular those associated with the Forth Islands SPA) would be considered within the proposed HRA. This needs to be clarified.
- You should approach SNH to discuss baseline data on bird use of the Middle Bank area.
- You may wish to review the following information relating to impacts on birds:

British Trust for Ornithology (2010) Review of potential impacts of marine aggregate extraction on seabirds and waterbirds (Ref 09/P130) available at http://www.cefas.defra.gov.uk/media/463186/mepf%2009%20p130%20%20bto%20final%20report.pdf



- You may also wish to review the following information relating to impacts resulting from underwater noise:
 - Centre for Environment, Fisheries and Aquaculture Science (Cefas) (2009) A Generic Investigation into Noise Profiles of Marine Aggregate Dredging in Relation to the Acoustic Sensitivity of the Marine Fauna in UK Waters
 - National Physical Laboratory (2011) Measurement of underwater noise arising from marine aggregate dredging operations (Ref 09/P108) available at http://www.cefas.defra.gov.uk/media/462859/mepf%20p108%20final%20report.p
- The implications of the aggregate dredging on navigation should be assessed.
- A Coastal Impact Study may be required.
- The Middle Bank site has previously been granted a licence for aggregate dredging. The previous licence was granted prior to designation of the Firth of Forth as a Special Protection Area, although it was a proposed SPA at that time. Details of the assement of impacts during the earlier licensing process should be drawn upon where appropriate. It is understood that data from the previous Environmental Assessment and Middle Bank monitoring programme will be used. Please note that the presence of Alexandrium spp. in the Firth of Forth was highlighted in the previous assessment for the extraction of aggregate in 1998.

A3. Commercial Fisheries

- The scoping report considers the potential for effect on fish and fish ecology, but does
 not explicitly state that an assessment will be undertaken of the potential for effect on
 commercial fisheries. We recommend that this is included in the ES. There are creel
 fisheries (shellfish) in the area, some in the vicinity of Inch Keith and along the coastline
 to the west. These should be considered. Local fisheries interests mainly non
 affiliated fishermen (Newhaven Harbour, Port Edgar) should be consulted.
- We request that a detailed method statement related to the (marine) construction activities be submitted as part of the consenting process in order to fully asses the impacts on fisheries in the locality.
- The details of plans to carry on the extraction of aggregate from the Middle Bank must be made available to all fishing interests in the area. The ES should detail any correspondence previously held with commercial fishing interests and how the concerns of fishermen are to be addressed.
- Should the EIA identify any adverse impacts of the works on migratory salmonids, these will need to be carefully considered in terms of their implications for freshwater fisheries.
- There are no aquaculture sites within the boundaries of the development. The closest aquaculture site is located ~34km east of the proposed development and is a land based shellfish site operated by The Firth of Forth Lobster Hatchery.

A4. Freshwater Fisheries

- The work has the potential to directly and indirectly impact diadromous fish of freshwater and / or marine fisheries interest and / or of conservation interest including Atlantic salmon, anadromous brown trout (sea trout), eel, sea lamprey and river lamprey which will migrate from the rivers into and through coastal areas. The possibility of impacts on these species and on any associated fisheries will need to be fully considered during the ES/EIA process.
- Possible impacts on the diadromous fish populations of rivers further afield (such as the Tay and Tweed Special Area of Conservation (SACs)) should also be considered in the



- ES as it is possible that fish belonging to these populations may enter the Firth of Forth during migration or at other times.
- The Firth of Forth has several salmon and sea trout rivers with associated in-river fisheries and the River Teith / part of the River Forth that enters at the head of the Firth is a SAC with salmon, sea and river lamprey included in the species interests. There are also other rivers along the Scottish east coast which are important for salmon and sea trout and several of these are SACs, including the Tay and the Tweed. It is possible that fish belonging to these populations may enter the Firth of Forth during migration or at other times. In the case of the SACs, an informed view will be required on whether there is likely to be any significant effect of the development. If there is the potential for a significant effect, then sufficient information will be required of the applicant to allow an Appropriate Assessment to be carried out.
- The Firth of Forth has a population of sparling which is of conservation interest. All the
 rivers in the area will have populations of eel which is currently in decline cross its range
 and a conservation priority.
- The scoping report correctly identifies in 5.6.3 5.6.5 the main issues and statutory needs as regards diadromous fish, including in relation to the River Teith SAC, and what will need considered in relation to possible impacts and possible mitigation. However, the possibility of impacts on populations belonging to rivers further afield than the Firth of Forth will also need consideration in the ES. The report notes (5.6.3) that a desk-based review will be undertaken of characteristic fish species found in and around Leith Docks, including spawning and nursery areas, and migratory routes. In addition to the very important issues in the Firth, the lower Water of Leith and existing harbour area contains freshwater and diadromous fish and, although it has no designated nature conservation area status, some consideration of possible impacts of the construction work and completed development on these fish will be needed. The factors needing consideration include disturbance, loss of habitat caused by infilling of a dock, and impacts of construction work and dredging on water quality, and any changes in arrangements and operational practice on fish migration.
- The Forth District Salmon Fisheries Board and Forth Fisheries Trust should be consulted and they may hold useful data. Marine Scotland Freshwater Laboratory also has some information on the fish populations of the lower Water of Leith (contact Ross Gardiner in Pitlochry).
- To assess the potential impacts of the development on diadromous fish in the Firth itself, the developer should include consideration of the following:
 - Use of the proposed development area by diadromous fish
 - o Which species use the area? Is this for feeding or migration?
 - o At what times of year is the area used?
 - In the case of salmon and sea trout what is the origin / destination of fish using the area?
 - Likely behaviour of diadromous fish in the area
 - What swimming depths do the fish utilise
 - o Is there a tendency to swim on or offshore
- If good quality local data and other information are not available, ideally these should be obtained. If this is not possible, the developer should make a convincing argument why this is the case and apply appropriate expert judgement based on published and other information.
- Potential impacts on diadromous fish during construction and from the completed structure will include such factors as physical disturbance, direct injury, underwater noise, increased turbidity and the presence of structures resulting in avoidance, displacement or barrier effects, and / or injury or mortality. Potential for impacts on



- diadromous fish fisheries during construction and from the completed development. How impacts can if necessary / should be mitigated, including choice of timing of operations.
- The ES should include the potential for cumulative impacts on diadromous fish with other work and consider the need for monitoring during and post construction.
- Reports that may assist the developers in identifying what pre-existing information is available and what supplementary site specific data may be required include:
 - Marine Scotland Science's recently completed review of migratory routes and behaviour for Atlantic salmon, sea trout and eels relevant to Scotland. It may contain information useful in the current case. It is online at: http://www.scotland.gov.uk/Resource/Doc/295194/0111162.pdf.
 - SNH recently commissioned a review of the potential impacts of EMF and noise on migratory fish and this is online at: www.snh.org.uk/pdfs/publications/commissioned reports/401.pdf.
 - O We would also draw the attention of the developers to Gill A. B., Bartlett M. and Thomsen F. (2012) Potential interactions between diadromous fishes of U.K. conservation importance and the electromagnetic fields and subsea noise from marine renewable energy. Journal of Fish Biology 81, 664–695. Only the noise elements of these papers may be relevant to this project.
- If the EIA demonstrates that there are significant impacts on a SAC or SPA, then it may
 be advised that an appropriate assessment will be required. Should this be the case the
 effects will then be assessed against the conservation objectives of the site. If an
 appropriate assessment is deemed necessary, then the applicant will be required to
 provide Marine Scotland with the relevant information to allow them to carry out an
 assessment.

A5. Non-Native Species

- Controls should be included in development planning and marine licensing for Marine Non-Native Species, in line with Water Framework Directive and Marine Strategy Framework Directive objectives and EU Biodiversity Strategy targets.
- We recommend that the ecological management plan within the CEMP should also include measures to minimise the risks of introducing marine non-native species that are attached to marine plant and specialised equipment transported to the area before the constructional phase of the project begins, and before any maintenance works commence during the operation of the new development.
- Guidance that may be drawn upon includes:-
 - Scottish Government Code of Practice on non-natives <u>www.scotland.gov.uk/Topics/Environment/Wildlife-</u> <u>Habitats/InvasiveSpecies/legislation/CodeofPracticeonNonNativeSpecies</u>
 - The alien invasive species and the oil and gas industry guidance produced by the Oil & Gas industry: www.ogp.org.uk/pubs/436.pdf
 - SNH web-based advice on Marine non-native species: www.snh.gov.uk/land-and-sea/marine-nonnatives/
 - Marine Non-Native guidance from the GreenBlue (recreation advice)
 www.thegreenblue.org.uk/clubs and training centres/antifoul and invasive species/best practice invasive species.aspx

A6. Corkscrew Injuries to Seals

• The ES and information to inform the appropriate assessment will need to include an assessment of effects on harbour seals as a result of corkscrew injuries.



- There is a need to analyse all relevant existing data on shipping movements related to the current operation of Leith Docks. This needs to include the types of ships (including propeller types) and how ships use the Forth Estuary, e.g. the percentage of ships entering or leaving the docks that "stand-off" in the Estuary, the duration of "stand-off", and anchoring versus GPS position maintenance. This will provide the basis for an analysis of how these patterns, numbers and types of ships will change once the development is operational. This analysis and assessment will be important in relation to a number of species (birds e.g. eider, common seals and cetaceans etc.) and will be expected to form part of the EIA and HRA, where relevant.
- The ES should include adequate baseline data on common seal haulouts and use within the Firth of Forth, to facilitate assessment of potential impacts of the development on current population trends in common seals.

Annex B. Detailed Comments on the Scoping Report

General issues

- The ES should refer to the Harbours Act 1964 rather than the Harbour Works (Environmental Impact Assessment) Regulations 1999 (as amended).
- The Scoping Report refers to Harbour Works and Town and Country Planning EIA
 Regulations throughout Sections one, two and three but no reference is made to the
 Marine Works (EIA) Regulations 2007 (as amended). As the streamlined process is
 intended to integrate the various EIA requirements, the ES should refer to all three,
 where appropriate.
- The application for Neart na Gaoithe is now in the public domain

1.4 Consenting process

 The ES should mention the responsibilities of CEC as Coast Protection Authority under the Coast Protection Act 1949.

2. Rationale, Policy and Legislative Context

2.2.3 Development Plan Policy

 The policies listed should be extended to include: Structure Plan Policy IMP 4 Planning Agreements and City Plan Policies Tra 3 Tram Contribution; Tra 11 Rail Freight; Des 3 Development Design; Des 4 Layout Design; Des 5 Design of External Spaces; Des 9 Waterside Development; Des 10 Tall Buildings; Env 4 Listed Buildings – Alterations and Extensions; and Imf 2 Waste Management Facilities.

2.2.4 Emerging Strategic Policies

 No reference is made to the Draft Marine Plan in Table 1b. Scotland's National Marine Plan: Pre-Consultation Draft can be found at http://www.scotland.gov.uk/Publications/2011/03/21114728/0 and consideration should be given to the requirements of the Plan as it develops.

2.2.11 Relevant Non-Statutory Advice & Supplementary Planning Guidance

 The list of relevant non-statutory advice and supplementary planning guidance should be extended to include "Developer Contributions and Affordable Housing Guidance May 2011" and "The Edinburgh Landscape Character Assessment".

3. The Environmental Impact Assessment Process

- The EIA should include an outline of the alternatives in accordance with the advice in PAN 58. This would relate to the choice of Port of Leith in relation to other ports and include an indication of the main reasons for the choice, taking into account the environmental effects. The same approach should also be taken in relation to the marine access, the choice of the outer berth and the marine aggregate extraction.
- It is suggested that review the "scoping area for assessment" outlined in the Scoping Report, as this does not adequately consider the movements/presence of many of the species to be included in the assessment, nor the area of downstream effects to be assessed.

3.3 The Environmental Impact Assessment Stages

• It is not clear in Table 2 where the impacts of noise and vibration on marine mammals and fish, and where the impacts on sediment processes, from both the port dredging



and the aggregate extraction activities will be included in the EIA. This should be made clear in the ES.

3.5 Cumulative Assessment

Cumulative assessment should include offshore activity as well as land-based. Such
activity includes the Forth Replacement Crossing, offshore wind farms, such as Inch
Cape Offshore Wind farm, Neart Na Gaoithe Offshore Wind Farm and the Seagreen
Phase 1, 2 and 3 (Round 3), proposals by Forth Ports and Waterfront Edinburgh Ltd for
works at Granton Harbour, and any associated meteorological masts or cable laying in
association with such projects and port development at other N-RIP sites (such as
Methil).

4. The Proposed Development

- The ES should set out pollution prevention measures during the periods of construction, operation and maintenance. The construction phase includes construction of access roads and any other site infrastructure.
- The ES should systematically identify all aspects of site work that might impact upon the environment, potential pollution risks associated with the proposals and identify the principles of preventative measures and mitigation. This will establish a robust environmental management process for the development. A Schedule of Mitigation should be produced as part of this process. This should cover all the environmental sensitivities, pollution prevention and mitigation measures identified to avoid or minimise environmental effects. Details of the specific issues that SEPA expect to be addressed are available on the Pollution Prevention and Environmental Management section of their website.

4.2.1 Marine Based Development

- Marine Scotland-Licensing Operations Team (MS-LOT) administers the licensing function under Part IV of the Marine (Scotland) Act 2010 on behalf of the Scottish Ministers. Under the Act the following are examples of 'licensable marine activity' included in the project description in Section 4.2:
 - o Construction of the outer berth,
 - o Dredging of the berth pocket,
 - o Construction involved in the enhancement of existing quay facilities, and
 - o Extraction of aggregate from the Middle Bank.
- This list does not appear to include any disposal of dredged spoil. The impacts associated with the disposal of dredged material should be considered in the ES.
- There is no mention in the Scoping Report of any material that will require to be disposed of (to land or sea). If this is required this must be fully detailed within the ES.
- The ES must detail all lighting and operational periods for all lighting associated with the outer tidal berth and the inner docks heavy load-out area and surroundings in relation to Imperial Dock.
- Where appropriate, the ES should detail information about the design and construction
 of the outer tidal berth: construction materials (particularly where the use of certain
 materials is key to mitigation); design and finishing treatments; lighting; screening; and
 access arrangements for the eastern side of the outer tidal berth. This will be key to
 mitigating impacts on birds using the existing manmade and natural habitats present.
- The "concept design" should be undertaken to a level of detail necessary to inform the environmental assessment and the feasibility/deliverability of the mitigation measures, particularly those included in the design.

- The footprint areas for the proposed dredging and new structures in the marine environment should be included in the site layout description in the ES. This will allow the RBMP classification to be updated on completion of the development.
- The site layout description should be supported by a statement detailing the development, as well as reasons for the choice of the preferred design. Opportunities to enhance marine habitats in line with Water Framework Directive and The Nature Conservation (Scotland) Act 2004 objectives and Scottish Planning Policy guidance should be explored.
- Marine site investigations are likely to require an Appropriate Assessment prior to being undertaken.

4.2.2. Land Based Development

- The City of Edinburgh Council would like to agree the level of detail to be included in the land based development, specifically whether the EIA will identify individual plots, build zones, maximum building heights, or whether this will be left to the detailed application
- The ground investigations may require an Appropriate Assessment prior to being undertaken.

Construction Environmental Management Plan

- The ES should set out the principles of the Construction Environmental Management Plan, detailing how the Schedule of Mitigation would be implemented. This document should form the basis of more detailed site specific Construction Environmental Management Plans which, along with detailed method statements, may be required by planning conditions or, in certain cases, through environmental regulation. This approach provides a useful link between the principles of development which need to be outlined at the early stages of the project and the method statements which are usually produced following award of contract (just before development commences).
- All details of best practice mitigation assumed (e.g. that for cetaceans during blasting operations) must be specifically detailed in the ES and not left to a subsequent detailed CEMP i.e. these are necessary for the impact assessment.
- The CEMP should set out construction timescales and how work periods will relate to mitigation for particular species/groups of species. This is important to provide clarity on mitigation for the ES but is most critical for the HRA.
- Best practice advice developed by The Highland Council (in conjunction with industry and other key agencies) on the Construction Environmental Management Process is available in the guidance note Construction Environmental Management Process for Large Scale Projects.

5. **Potential Environmental Effects**

5.2 Hydrogeology, Geology and Soils

- If any soils are going to be remediated on site, then a Mobile Plant Waste Management Licence will be required.
- In addition to the mitigation measures identified, it should be noted that areas around potentially polluting activities (e.g. designated fuel storage and refuelling areas etc) should be diverted away from the surface water drainage system. Arrangements will need to be made to connect these areas to the foul sewer. The Oil Storage Regulations 2006 will be relevant.



5.3. Hydrology and Flooding

5.3.3 Proposed EIA Methodology

- Modelling of the Water of Leith and harbour area will be required in order to determine the impact of the proposed infilling of Edinburgh Dock.
- The proposals to infill the Edinburgh Dock will reduce the overall water surface area of the dock. This will reduce the available storage volume within the dock area to store floodwater and balance flows. A previous modelling study suggests that infilling of part of the dock area might increase water levels upstream of the site in the areas of The Shore, Bernard Street, Sandport Place and Parliament Street.
- Consideration should also be given to any potential impacts on sediment transport in this lower reach. Any increase in deposition could have implications for long term maintenance of the channel and flood levels.

5.3.4 Baseline

- The main potential sources of flooding to the proposed development at Leith Docks are from fluvial flows from the Water of Leith which discharges into the docks area, tidal flooding from the Firth of Forth and pluvial flooding.
- The water levels in the dock area are controlled by Forth Ports using the shipping lock apparatus and this will also provide some protection to the site from tidal flooding. Previous studies suggest that the lowest parts of the existing Edinburgh Harbour site are approximately 4.3 mAOD. Ground levels are therefore generally above the estimated 'still water' 0.5% AEP (1:200) tide level (CFB estimate 3.97 mAOD).
- The water levels within the impounded dock are generally maintained at levels of between 2.6 mAOD and 2.8 mAOD by Forth Ports. The shipping lock, by-pass culvert and two locking culverts together comprise the flood control apparatus which is used to discharge inflows from the Water of Leith out of Leith Docks and into the Firth of Forth. It is understood that if the water level in the dock area rises above 3.047 mAOD, Forth Ports is liable for all consequential flood damage except at any time when the sea level outside the harbour has also risen above 3.047 mAOD.
- Previous modelling of water levels in the Water of Leith and the harbour area has suggested that a 0.5% AEP (1:200) fluvial event on the Water of Leith, including an allowance for climate change up to 2057, should be accommodated within the dock area if the flood control apparatus on the shipping lock functions effectively. However, if there is a complete failure of the apparatus then the flood level could exceed 5.27 mAOD. At this level floodwater would start to overtop the sealing dam and discharge into the Firth of Forth.

5.3.5 Potential Impacts

In addition to the potential impacts identified, we recommend that the following is also considered in the ES:

- Potential changes in localised runoff patterns caused by changes in elevation and drainage.
- Potential changes in localised flood storage caused by the infill of Edinburgh Dock the management of these changes is also important and should be considered in the ES.
- Impacts of development in relation to flooding issues within the surrounding area this should include the risk to existing properties and activities within the vicinity of the proposed development.
- Potential interactions between ecology and hydrology.
- Potential risk of flooding to the proposed development and potential mitigation measures
 this is an additional impact not recognised in the scoping report.



• Issue of sediment within the docks and the Water of Leith, whether sediment movement will change as a result of the development, and the implications for flood risk.

5.3.6 Mitigation

- The ES should clarify that the proposed land-based activities in the docks area are located above an acceptable risk of flooding.
- Forth Ports had previously considered the infilling of a small part of the dock area for land gain. At that time it considered that the loss of potential floodwater storage within the dock area could be overcome through the managed operation of the flood bypass culvert and simulated locking, both operated from the control room, and use of the locking culverts. If a similar approach is linked to the current proposals, the ES should demonstrate how this strategy might work and highlight the risk associated with such a strategy.
- The ES should set out clearly the measures intended to deal with flood risk, including those identified as a result of detailed fluvial flood modelling, should this be required.
- SEPA recommend that the proposed land based activities in the docks area are located above an acceptable risk of flooding. If there is a complete failure of the shipping lock apparatus then the flood level could exceed 5.27 mAOD. For this reason previous proposals for development at the dock site included the raising of general ground levels to 5.5 mAOD or above and property thresholds at 6.0 mAOD or above. The current proposals for development are different in nature but the risks of flooding should be mitigated where possible. In terms of land raising it was previously noted that ground levels could not be achieved in some parts of the site where levels will be dictated by existing building levels and roads (Scottish Government, Ocean Terminal and Ocean Drive).
- The risk of pluvial flooding can be reduced by incorporating appropriate drainage and ensuring that where possible finished ground levels slope away from buildings to shed surface water and reduce the risk of ponding.

5.4. Water and Sediment Quality

- There is potential for the pollution of coastal waters from silt, oil spills and chemicals during the construction and operational phases. Information should be provided in the ES on measures to reduce these risks.
- Information should be provided in the ES on measures to reduce these risks.
- SEPA produces a series of Pollution Prevention Guidelines, several of which maybe
 utilized in preparation of the ES and development of the proposals
 www.sepa.org.uk/about us/publications/guidance/ppgs.aspx. Useful guidance can also
 be found in CIRIA C584 entitled "Coastal and marine environmental site guide".
 Reference can be made to the appropriate checklists and good practice advice generally
 in this document.
- Although not legally required for discharges into coastal waters, we would encourage
 you to incorporate a SUDS scheme into the development to treat surface water runoff as
 best practice. This will help to protect water quality and prevent suspended sediment
 entering the water body.
- The buffer area described in 5.4.1 should be agreed in discussion with regulators and their advisers.

5.4.4 Bathing Waters

• It is proposed to scope out the EC designated bathing waters at Portobello West and Central from further consideration. The modelling studies will assess the potential impacts upon dispersion and water quality of the port and adjoining areas.



At this stage it is too early to scope out potential impacts to the bathing waters, as it has
not been demonstrated that the changes to the hydrodynamics will not impact upon the
dispersion characteristics of the Seafield wastewater treatment discharge. If the
modelling outputs demonstrate negligible effects upon the existing dispersion at
Seafield, then we will be happy for bathing waters to be scoped out. This should be
justified in the ES.

5.4.5 Potential Impacts

- Makes no reference to the disposal of dredged spoil, but does refer to capital and aggregate dredging. The ES must consider the impacts, and list details, of the disposal of any associated dredge spoil, including disposal location.
- Consideration should be given to any potential direct and indirect impacts from the expected maintenance dredging programme and any disposal of dredged material in Table 5.

5.4.6 Mitigation

 No mitigation measures for aggregate extraction are detailed. The ES must include a section on mitigation of potential impacts of aggregate extraction.

5.5 Oceanography

- The impact of aggregate extraction at Middle Bank must be included in this part of the assessment.
- A potential exists for changes in hydrodynamics to impact upon the dispersion of the Seafield discharge and bathing water quality at Portobello. The outputs of the modelling proposed in the scoping report should be used to consider this impact, with the results communicated in the ES. If the modelling outputs show that the dispersion of the Seafield discharge may be problematic, additional mitigation measures may be required.
- When submitting the modelling results it would be helpful to include details of the RPS North Sea Model to better understand the boundary conditions and their validity.
 Additional data sets for the study region might be found on the British Oceanographic Data Centre (BODC) website.
- The ES should assess the magnitude and spatial extent of any modified coastal processes and discuss the significance of these changes in terms of the surrounding water body. This should include any potential impact on coastal defences protecting the housing developments at the Western Harbour.
- SNH is content with the proposed approach and methodologies as set out in 5.5.2-5.5.6.

5.6 Marine Ecology

- The Marine Ecology section covers everything from small crustaceans to marine mammals. The ES should give each topic a separate section, as is common practice.
- We note that the development is located adjacent to the Firth of Forth SPA. Advice on designated sites and European Protected Species should be sought from SNH. For marine and transitional Special Areas of Conservation (SAC) and Special Protected Areas (SPA), these are Water Framework Directive (WFD) Protected Areas. Therefore, their objectives are also River Basin Management Plan objectives.

5.6.2. Marine Ecology Guidance

 Additional data sources should include the Joint Cetacean Protocol: www.jncc.defra.gov.uk/page-5657

5.6.3. Proposed EIA Methodology



- Subtidal and Intertidal Benthic Ecology Priority Marine Features should also be considered: www.snh.gov.uk/protecting-scotlands-nature/safeguarding-biodiversity/priority-marine-features/
- Subtidal benthic surveys will need to be undertaken on Middle Bank as well as at the port itself, and the results should be included in the ES.
- The intertidal surveying should include the area East of the Docks right down to the area adjoining Seafield, and particularly concentrate on the rock outcrops (these must be surveyed during very low tides). This is important in relation to potential sediment depositional changes and bird feeding areas.
- Fish and Shellfish Ecology Underwater noise modelling is necessary in relation to the River Teith SAC salmon and lamprey qualifying interests, and should include the operations at Middle Bank as well as those at the port (e.g. piling, possible blasting). Sediment release will also need to be assessed in relation to these migratory fish species.
- Marine Mammal Ecology Underwater noise modelling is necessary in relation to SAC seal and dolphin qualifying interests and EPS cetaceans, and should include the operations at Middle Bank as well as those at the port (e.g. piling, possible blasting).
 Sediment release should also be assessed in relation to marine mammals.
- It should be noted that all species of marine mammals are of conservation importance.
- In combination, or cumulative, impact assessment forms an important part of the EIA and HRA. Depending on the time scale for construction, there are a number of developments that will need to be considered for cumulative assessment of underwater noise and sediment release with respect to cetaceans, pinnipeds and fish. These include the Forth Replacement Crossing, Dunbar Harbour development, Dundee NRIP, the three offshore wind farms (Inch Cape, Neart na Gaoithe, Forth Round 3 site) and any current large scale dredging and disposal operations in the Forth.
- Opportunities to enhance marine habitats in line with Water Framework Directive and The Nature Conservation (Scotland) Act 2004 objectives and Scottish Planning Policy guidance should be explored. Examples may include coastal realignment, the incorporation of naturalistic features in the design of shoreline works, control of marine non-native species and planting with salt tolerant species. These could be used as examples of best practice and demonstration sites under SEPA's Habitat Enhancement Initiative (HEI).
- There is no reference to any TV or photographic surveys being conducted over the development area in 'Subtidal and Intertidal Ecology' including the aggregate extraction area. This should be considered as it would help inform future decisions regarding the development. Final survey design should be decided with Marine Scotland, SNH and any other relevant stakeholder/regulator.
- SNH would be happy to comment on the proposed underwater noise modelling when this is being developed. You may also wish to consult with Marine Scotland on this matter.

5.6.4. Baseline Description

- The following report may also be useful and is available from the SNH website: *Posford Haskoning (2002) Broad scale intertidal survey of the Firth of Forth. Scottish Natural Heritage Commissioned Report F01AA407.*
- Fish and shellfish ecology Fish that are on the Priority Marine Features list should also be considered.
- Priority Marine Features should also be considered: <u>www.snh.gov.uk/protectingscotlands-nature/safeguarding-biodiversity/priority-marine-features/</u>



- Table 6: the Marine (Scotland) Act 2010 effectively supersedes the Conservation of Seals Act 1970 in Scotland.
- Some specific errors were noticed and should be corrected for the ES:
 - o Polychaetes are a group of animals, not a species (Paragraph 1 (p.50))
 - More detail needed with the species names, not just "crabs" or "annelid worms". It is unclear if by "arthropods" the Scoping Report is referring to amphipods, isopods etc. (Paragraph 4 (p.50))
 - Mixed use of common and scientific names. Use both if possible (as has been done for fish) or just scientific names
 - o Use full species names for N. puber, N. norvegicus and others (pp. 52-53)

5.6.5. Potential Impacts

- The underwater noise modelling for all relevant fish species (and all cetaceans) will be necessary to determine the area of lethal and sub-lethal but significant impact and the resulting likely effects including direct mortality, permanent and temporary hearing effects, temporary disabling effects and increased likelihood of predation etc.
- Fish and Shellfish Ecology The potential impacts identified for marine mammals also all apply to migratory fish (River Teith SAC), tern prey species (Imperial Dock Lock, Leith SPA) and other SPA/SSSI bird prey species (fish, shellfish, etc.) and should therefore be fully assessed.
- Underwater vibration should be included alongside the potential impacts of underwater noise on fish and marine mammals. The ES must assess any potential impacts of both noise and vibration on these receptors.
- Marine Mammals When considering potential impacts on seals, the serious decline in harbour seal populations on the east coast of Scotland will need to be taken into account. This may have significant implications for the Habitats Regulations Assessment, particularly in relation to the issue of potential corkscrew injuries through increased shipping traffic (see Annex A). It should be noted that the Potential Biological Removal (PBR) is currently set at only two seals for the east of Scotland management unit (PBR is the maximum number of animals that can be taken from the population by all human activities (in addition to natural mortality) without affecting its sustainability. For more information please see

http://scotland.gov.uk/Topics/marine/Licensing/SealLicensing/PBR.

5.6.6. Mitigation

- The Statutory Nature Conservation Agencies guidance (available from SNH) on the risk of corkscrew death to seals is also relevant.
- No mitigation measures for marine ecology are presented in the scoping report. The ES will need to include mitigation measures, and these will need to be checked for compatability.
- SNH would be happy to offer advice on mitigation plans for seals as they develop.

5.7 Terrestrial Ecology

- Otter have been seen next to Ocean Terminal in the water (next to the old pier on several occasions, the most recent of which was 2011). Otter are capable of swimming downstream from the Water of Leith into the docks and of swimming around the coast outside the port (although not recorded there historically).
- SNH agree that the five SSSIs listed can be scoped out of the assessment due to lack of connectivity with the proposed development.



5.8 Ornithology

5.8.2. Proposed EIA Methodology

- There is no explicit reference to accessing WeBS low tide counts. We would expect to see these used to provide a wider Firth context for the importance of foraging sites.
- Using multiple years to cover a year on site for "through the tide surveys" here does not include coverage of June and July. Unfortunately this partially coincides with a spike in eider numbers when relatively large numbers of post-breeding moulting eider have been recorded congregating on the eastern side of the East Breakwater. Careful consideration should be made of the 2004/2005 site-specific data, the WeBS data from the same period for context and the most recent WeBS data available in order to address this gap.
- It is not explicitly stated which, if any, of these data sources will be used to assess use of the current Edinburgh Dock by SPA qualifying interests. Since this 4.9 ha dock is likely to be infilled, any potential impact on the qualifying interests must be assessed.

5.8.3 Baseline Description

- The brief baseline description of the non-breeding bird interest appears to underestimate the importance of the area for wintering waterbirds, citing a peak count of 454 birds within or adjacent to the port. WeBS data for the Leith Docks sector from 2005/06 to 2009/10 gives a mean autumn peak for eider of 903 and for all SPA species combined a mean peak of 1,935 for the autumn and 1,353 for the winter.
- The first paragraph under Table 8 summarises bird interest in the area and uses the phrase "The only species recorded in numbers greater than 25.." It should be emphasised that all qualifying interests need to be explicitly addressed.
- Table 8 contains a number of errors:
 - Firth of Forth SPA the qualifying species list omits knot and does not name any of
 the important assemblage components (great crested grebe, cormorant, scaup,
 eider, long-tailed duck, common scoter, velvet scoter, red-breasted merganser,
 ringed plover, grey plover, dunlin, curlew, wigeon, mallard and lapwing) except
 oystercatcher which has mistakenly been elevated to the status of a qualifying
 species in its own right.
 - Forth Islands SPA the qualifying species list does not name any of the important assemblage components (cormorant, fulmar, guillemot, herring gull, kittiwake, razorbill).
 - Firth of Forth SSSI the notified species list omits non-breeding lapwing, mallard and wigeon and passage sandwich tern.
 - Inchmickery SSSI none of the species listed are on the notified feature list (the tern species listed were on the original notified list but are no longer present). The updated list includes fulmar, herring gull, lesser black backed gull and shag.

5.8.4. Potential Impacts

- Permanent habitat loss small areas of intertidal habitat may also be lost.
- Habitat change should include the loss/degradation of subtidal habitats as a result of the construction of the outer tidal berth adversely affecting foraging / prey populations.
- Disturbance It should be noted that the area of highest importance to birds, i.e. the Eastern Breakwater, is currently subject to minimal disturbance hence its importance.
- Airborne noise will need to be assessed in relation to bird disturbance, in particular at the Eastern Breakwater and at the tern colony.

- Disturbance to seabirds from the Middle Bank operations will also need to be considered (the area has previously been identified as being used by large numbers of guillemots in late winter these are Forth Islands SPA qualifying species).
- Over-shadowing all SPA/SSSI bird species should be considered, not just wading birds. It would be helpful if details of building location and height within line of sight to the tern colony were provided and assessed for the potential to adversely affect use of and flight to and from Imperial Dock Lock by breeding common terns.
- Consideration should be given to mitigating loss or degradation to the existing roosting opportunities and specific microclimatic conditions of the existing east breakwater and adjacent beach area, taking into consideration the range of weather conditions, tide states, etc.

5.9 Landscape, Townscape, Seascape and Visual Amenity

- The outline assessment, as presented in the Scoping Report, appears rather light on middle distance views from within the city, e.g. Leith Walk. In addition, the initial list of view points is missing a view from the Firth of Forth which is important as that is the view experienced by the cruise ships and also from the new Lighthouse Park. The quality of the views must be good in order that the worse case scenario can be appreciated. The quality has to be agreed with CEC and SNH.
- Clear descriptions of the viewpoint locations, receptors and a rationale for the viewpoint inclusion should also be presented.
- We suggest that, once you have had an opportunity to review the comments, you also confirm your revised approach to the landscape, townscape, seascape and visual amenity assessment with City of Edinburgh Council, SNH and Fife Council. SNH in particular would welcome further information to fully validate the proposed viewpoint selection approach.
- A scheme for protecting the existing / proposed residential accommodation from excessive illumination and/or glare shall be required. The scheme should show that the design, installation and operation of the floodlighting system shall be such that no floodlighting bulb or floodlighting bulb reflecting surface shall be visible within any residential premises.
- In order to ensure the best possible balance and overall coverage for the viewpoint study, we recommend the use of draft zone of theoretical influence studies and wireline drawings.
- It may be helpful to break down this very large application site into its component parts, e.g. the Outer Berth, which is likely to be highly prominent from Granton but not from some other viewpoints.
- The large scale and extent of the application area for the combined Land Based Development and Outer Berth (circa 4 km in length, north west to south east), may give rise to presentational difficulties, particularly at closer in viewpoints. We recommend identifying appropriate viewpoint coverage to ensure analysis of the different elements of the scheme. For example, depending on the general location, viewpoints may usefully be selected on, and centrally framed on, the study of individual effects arising from outer berth land-based structures proposed in the north-west or land-based structures in the south-west.
- It will also be useful to differentiate the various key elements of the overall scheme by annotation and/or colouration on the individual montages and wirelines.
- The early findings of the landscape/ seascape/townscape assessment should be fully considered in relation to the siting, design and finish of the principal elements of the scheme. A summary of all relevant proposed design mitigation proposals should



- therefore be contained within the chapter and, if possible, these should also be summarised on cross-referenced and annotated layout plans. The design approach and mitigation should also be clearly set out and summarised.
- We recommend that a development of this size should be supported by a "design statement" in accordance with PAN 68.
- Table 9 identifies that an effect is only classified as significant if it is major or major moderate, which means that out of the 16 categories only 3 are significant. The City of Edinburgh Council would query this approach. For example, if there is a moderate change to the view that has a medium sensitivity, it could be significant as could a highly sensitive view which experienced a slight change. On this basis the 'moderate' should be considered potentially significant.

5.10 Archaeology and Cultural Heritage

5.10.5. Potential Impacts

- Listed Building Consent (LBC) is required to demolish the Imperial Dock Grain Elevator.
 CEC will administer this process and any application will be required to meet one of the four tests laid out in the Scottish Historic Environment Policy (SHEP) as well as the CEC's own policies on listed buildings.
- Listed building consent should be submitted in parallel with the PPP application.
 Planning needs to assess the principle of infilling the land as well as the development on
 that land. LBC & PPP should be accompanied by methodology and justification for the
 works.
- We note that the infilling of Edinburgh Dock is considered necessary in order to enable development. However, no reference is made to LBC being required to infill the Edinburgh Dock. There is no methodology as to how the Dock is to be infilled. LBC may be required for the works, as it would be 'altering' the listed structure. It should be noted that, as with the Grain Elevator, it is Scottish Ministers' policy that there is presumption against demolition or other works that adversely affect the special interest of a listed building or its setting. It is also unclear from the information within the scoping report what development in this area will mean for Edinburgh Dry Dock (HB 27611) and Edinburgh Dry Dock Pumping House (HB 27615). These are structures that are listed in their own right and would likely be subject to LBC depending on what is proposed at this site. In light of this it will be important for the environmental assessment to scrutinise the proposals in this area and provide an assessment of the level of impact accordingly.
- While noting that the other listed buildings and scheduled monuments within the application area are considered to be outwith the construction footprint of the development it would be beneficial to consider the long-term protection, condition and management of these heritage assets (such as the scheduled Martello Tower). It will be important to consider any potential impacts on these sites both during construction and operation of the development.
- Marine Scotland understand that a Designated Wreck, that of the HMS Campania, is located off the Port of Leith. Whilst designated wrecks are mentioned, no specific reference is made to the HMS Campania. Therefore, we recommend that the applicant seeks guidance from Historic Scotland with regards to marine archaeological heritage.
- With regard to impacts on setting of historic environment features, content that this be reported in the Landscape and Visual chapter of the ES. However, please note that "setting" is more than a landscape and visual issue. Please see the following guidance:
 - Historic Scotland's "Managing Change Guidance Note on Setting" (October 2010) http://www.historic-scotland.gov.uk/setting-2.pdf



 uidance within the Design Manual for Roads and Bridges, volume 11, Section 3, Part 2 (cultural heritage)

5.10.6. Mitigation

- In terms of mitigation, there is no discussion on the reversibility of the works. CEC will need details of how it is being infilled and whether there is future scope to reinstate the Dock. Could reversibility be part of the mitigation?
- The level of historic recording would need to be agreed for both the Dock and Grain Elevator.
- The role of the listed swing bridge within the new proposals is unclear. The ES should consider the following questions: Is this capable of being used as part of the access route? Is this to be retained within the proposals? Is there any mitigation required for it to function?
- There may be impact on the setting of other listed buildings/ structures as well as scheduled monuments within and outwith the construction footprint.
- The City Archaeologist will have to agree any proposed WSI for offshore marine archaeological mitigation and not just Historic Scotland as indicated.

5.13 Air Quality

- The most likely source of PM10 is the industrial operations within and surrounding the
 port. This should be fully assessed in the air quality impact assessment, as the most
 likely contributors are the cement batching, scrap metal and coal movement operations
 which are within the scoping boundary. CEC would want to know whether these
 operations will continue and this information should be included in the ES.
- Real time monitoring should be carried out to gain a better understanding of the source proportion and fugitive emission during the construction phase must also be assessed.
 CEC would recommend that standard dust control measures be complemented by using vessels to move construction material when possible to reduce the amount of heavy construction traffic on the road network.
- The impact of the new 'TIF' road should be considered as this may influence the route taken by construction vehicles. Road traffic movements during construction and operational phases must be discouraged due to the close proximity of the soon-to-be declared Air Quality Management Area and the availability and easy access to port/vessels services.
- CEC would request that further information (when available) is provided on what
 industrial operations will be taking place on the site. It is also considered that due to the
 intensification of use and development of a new outer harbour that any air quality impact
 assessment takes into account emissions from vessels. We would suggest that a 21st
 Century Port should have mitigation measures such as facilities for vessels to plug in to
 electricity when docked, which would mean vessels did not need to engine idle, reducing
 both emissions and noise.
- In terms of committed developments, the cumulative impacts should take into account all the consented developments in the surrounding area, for example the sizable consented residential development on Salamander Place (07/03238/FUL) and Edinburgh Harbour Developments around the Ocean Terminal shopping centre. The following streets should also be included in any assessments: Bath Street, Seafield Road, Western Harbour, and Pirniefield area.
- Following an odour assessment we would recommend that an Odour Management Plan is developed and incorporated into the agreed Construction Environmental Management Plan (CEMP).

5.14 Noise and Vibration

- The noise assessment must take into account what noise will be introduced detailing the
 worst case scenario (night time) and nearest most affected receptors during the
 construction and operational phases. The appropriate criterion for assessing noise can
 be found within the BS8233, WHO Guidelines for Community Noise, Chartered Institute
 of Building Services Engineers (CIBSE), PAN 1/2011 (Planning & Noise), Calculation of
 Road Traffic Noise and BS4142.
- Due to the proximity of scoping boundary to existing residential properties, construction noise has the potential to have an adverse impact on residential amenity. Piling noise and vibration may be significant and further information on this must be provided including reasoning why other methods cannot be used. The City of Edinburgh Council controls construction site noise through the Control of Pollution Act 1974. This is enforced by Environmental Health Officers so that no construction noise is permitted outwith the days/hours of Monday to Saturday 07:00-19:00. As the construction site will be operational for a significant period, the noise controls should be documented in the proposed CEMP with possible noise monitoring at the site boundary included.
- The port will see an intensification of port activities with the introduction of new types of noise from new noise generating developments in the port. Of particular concern is the development of the new outer berth which is in very close proximity to existing/consented residential properties. This must be scoped into the noise assessment for the operational phase; it should include the loading and unloading of vessels. The applicant should provide a comprehensive breakdown of what noise generating developments will be operating within the scoping boundary. It is in the interests of the operator to ensure that no noise nuisance is created as a result of this new development. Environmental Health Officers are duty bound to investigate any noise complaints and if noise nuisance is established then they shall serve an improvement notice which could impact the port operation.
- Due to its variable character industrial noise can be difficult to assess. BS 4142, A
 Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas
 promotes a method for assessing whether industrial noise is likely to give rise to
 complaints from people living nearby. Whilst a useful guide, BS 4142 should not be
 solely relied upon to accurately establish the impact of industrial development in terms
 of noise. Furthermore the Council would require further information on what predicted
 noise will be used for this assessment.
- In general any assessment should demonstrate that the development (including deliveries by sea and land) shall allow any nearby noise sensitive buildings (including consented undeveloped residential) to achieve a maximum internal (open window) level no greater than the following:
 - Daytime (07.00 23:00) in noise-sensitive apartments L(A)eq of 35dB;
 - o Night-time (23:00–07:00) in noise-sensitive living apartments L(A)eq of 30dB;
 - Night-time internal L(A)f max should not exceed 45dB; and
 - For any continuous, steady-state mechanical plant noise from the Biomass Plant (including deliveries) internal levels in noise –sensitive living apartments should not exceed NR25 (Open window) – Where the noise is tonal in character the internal noise levels should not exceed NR20 (open window).
- Traffic noise from the new TIF road must be assessed in accordance with the Calculation of Road Traffic Noise and the Design Model for Roads and Bridges (Vol 11) as well as demonstrating it will not impact on any nearby residential (including consented developments) properties taking into account the above mentioned noise levels.



It should be noted that the Council aim to replicate any noise monitoring that the applicant carries out.

5.15. Traffic and Transport

- The information to date does not include any details on the associated trip generation potential and trip distribution. We would generally advise that the assessment of environmental effects of road traffic should be undertaken in accordance with the guidance set out within the Institute of Environmental Assessment publication "Guidelines on the Environmental Assessment of Road Traffic (Guidance Note 1)", 1993.
- The ES should consider potential impacts to indentified trunk road receptors in terms of predicted noice levels from construction traffic and increases to road traffic attributed to the proposed development.
- It will be necessary to include a marine-based Transportation Assessment, both for construction and operation, as well as land-based transport. This information will need to be used in relation to the HRA, for common seal and the Tay and Eden SAC specifically (see Annex A). The scoping report details assessment of how shipping may be affected by the proposed development, but a wider baseline of current marine traffic and its operation versus that likely as a result of proposed changes due to this development is also required. All vessel anchoring within the whole of the Estuary must be included within this consideration, particularly temporary anchoring and manoeuvring on GPS/thrusters as well as fixed anchoring.

6.1.5. Habitat Regulations Appraisal Potential Impacts

- A stand alone 'Report to Inform Habitat Regulations Assessment' should accompany the Environmental Report, in order to allow the various competent authorities (Transport Scotland, Marine Scotland and City of Edinburgh Council) to undertake their respective Habitats Regulations Assessments (HRA).
- The Scoping Report requested guidance on other projects which should be included as part of the in-combination assessment. The Leith Docks OPA appropriate assessment included the list of projects given below as part of the in-combination assessments. These should be assessed as part of the in-combination test unless they are no longer to proceed.
 - Granton Waterfront Central;
 - Granton Harbour;
 - Western Harbour:
 - Port Edgar Marina Redevelopment;
 - Kincardine Bridge Crossing (complete);
 - o Forth Replacement Crossing:
 - Granton Burntisland Catamaran:
 - o Leith Kirkcaldy Hovercraft; and
 - Waterfront Promenade.

