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APPENDIX 11-D OTTER SURVEY NOVEMBER 2014





Aberdeen Harbour

Otter Survey

December 2014

Waterman Energy, Environment & Design Limited

Third Floor, South Suite, 8 Nelson Mandela Place, Glasgow, G2 1BT

www.watermangroup.com

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Aberdeen Harbour

Otter Survey

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This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS OHSAS 18001:2007)

Issue	Date	Prepared by	Checked by	Approved by
Second	August 2015	Eleanor Sorfleet Consultant Ecologist	Dawn Phythian Senior Ecologist	Niall Machin Associate Director
Third	October 2015	Drew Oliver Senior Ecologist	Niall Machin Associate Director	Niall Machin Associate Director

Comments

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1. Executive Summary

- 1.1. Waterman Energy, Environment & Design Ltd was commissioned by Aberdeen Harbour Board to carry out an otter survey of land at Nigg Bay, Aberdeen.
- 1.2. The Site includes Nigg Bay and extends from the northern shore of the bay in the north to the northern edge of the Altens Industrial Estate in the south. The Site includes the pebble beach within Nigg Bay, with rocky headlands to the north (Girdle Ness) and south (Greg Ness). The Nigg Bay golf course is partially included within the Site boundary.
- 1.3. Immediately adjacent to the west of the site is Loirston Country Park, which continues north of Altens Industrial Estate. Greyhope Road follows the coastline to the north of the Site, this road joins with Coast Road to the south. Aberdeenshire Coastal Path runs around Greg Ness and extends out of the southern boundary of the Site.
- 1.4. The re-development proposals for the Site comprise the creation of a new deep water harbour with associated terrestrial infrastructure. The proposals are one of 14 National Developments as set out in the National Planning Framework 3 (June 2014). The proposed development involves constructing a harbour on the north side of Nigg bay. The southern section of the bay would be largely undeveloped. However, a breakwater would be constructed from in the south part of the bay at Greg Ness.
- 1.5. A Preliminary Ecological Appraisal was undertaken in June 2014, a National Vegetation Classification (NVC) survey in July 2014 and a Terrestrial Breeding Bird Survey in August 2014.
- 1.6. The otter survey was conducted on the 21st November 2014 and included two vantage point surveys and a walkover survey searching for signs of otter.
- 1.7. From the evidence gathered it was established that otters use the Girdle Ness and Greg Ness headlands to feed, with spraints and feeding signs identified within these two areas. No specific resting places were identified during the survey.
- 1.8. The proposed development will reduce the availability of foraging habitat within a single existing otter territory using the mouth of the Dee and associated coastline and may lead to the loss of this territory. Mitigation measures will likely be required to protect otter interests within the survey area.
- 1.9. During the survey a pod of approximately four dolphins was observed from the Aberdeenshire Coastal Path at Long Slough from the southern section of the Site boundary. Records of other marine mammals were identified in the desk study. A marine mammal survey is underway to assess the potential effects upon these species.

2. Introduction

- 2.1. Waterman Energy, Environment & Design Ltd (Waterman EED) was commissioned by Aberdeen Harbour Board to carry out an otter survey of land at Nigg Bay, Aberdeen (hereafter referred to as the 'the Site'). In addition to the area within the red line boundary, Figure 1, a 200m buffer outside of the Site was also included within the survey.

Site Description

- 2.2. The Site (see Figure 1) is approximately 130 hectares (ha) in area and is centred on Ordnance Survey Grid Reference NJ 96563 04696.
- 2.3. The Site incorporates Nigg Bay and extends from the northern shore of the bay in the north to the northern edge of the Altens Industrial Estate in the south
- 2.4. The Site includes approximately 370m of pebble beach within Nigg Bay, with rocky headlands to the north (Girdle Ness) and south (Greg Ness). A flat area of pasture extends into the southern headlands. An area of publicly accessible land known as Walker Park is present in the north-east of the Site. The Nigg Bay Golf Course is in the north of Site. Loirston Country Park extends out to the west of the Site, wrapping around the northern section of Altens Industrial Estate. Greyhope Road follows the coast line to the north of the Site and joins with Coast Road to the south. Aberdeenshire Coastal Path runs around Girdle Ness within the Site boundary.

The Proposed Works

- 2.5. The Site is subject to redevelopment proposals comprising a new deep water harbour with associated terrestrial infrastructure. The proposals are one of 14 National Developments as set out in the National Planning Framework 3 (June 2014).
- 2.6. Aberdeen Harbour Board have proposed the design and construction of a new harbour facility at Nigg Bay, immediately South of the existing harbour. The purpose of the new facility is to complement and expand the capabilities of the existing harbour, accommodate larger vessels, retain existing custom, and attract increased numbers of vessels and vessel types to Aberdeen.
- 2.7. The new harbour development shall include but is not limited to:
- Dredging the existing bay to accommodate vessels up to 9m draft with additional dredge depth of 10.5m to the east quay and entrance channel;
 - Construction of new North and South breakwaters to form the harbour;
 - Provision of approximately 1500m of new quays and associated support infrastructure. The quay will be constructed with solid quay wall construction and suspended decks over open revetment;
 - Construction of areas for development by others to facilitate the provision of fuel, bulk commodities and potable water;
 - Land reclamation principally through using materials recovered from dredging operations and local sources, where possible;
 - Provision of ancillary accommodation for the facility;
 - Off-site highway works to the extent necessary to access the facility and to satisfy statutory obligations;
 - Diversions and enabling works necessary to permit the development.

Report Purpose

- 2.8. This report sets out the findings of the otter survey as well as dolphin observations made whilst on Site. The purpose of this report is to:
- Identify any issues, highlighted through the survey and species records that could constrain the development proposals planned at the Site;
 - Make recommendations for further ecology survey and assessment work, if required, to enable works to be carried out without adversely affecting the ecology of the Site;
 - Assess the consequences of works in relation to relevant legislation; and
 - Identify any mitigation and enhancement opportunities, where appropriate within the emerging scheme design.
- 2.9. This report does not repeat information gathered in previous studies or the Preliminary Ecological Appraisal (PEA) and should be read alongside these documents, listed below.

Previous Reports

- 2.10. A Preliminary Ecological Appraisal¹ (PEA) was issued by Waterman EED in June 2014. The PEA comprised a site survey undertaken in April 2014 to identify and map habitats on Site and identify any potential for the presence of protected or notable species. This initial report also included ecological records obtained from the local record centre.
- 2.11. A National Vegetation Classification (NVC) survey² was undertaken by Waterman EED in July 2014. The purpose of the NVC report was to provide a description of the vegetation types within the Site.
- 2.12. Terrestrial Breeding Bird Surveys³ were also conducted in 2014 by EnviroCentre Ltd., on behalf of Waterman EED. The survey aimed to identify species breeding within the Site, identifying species protected under European or national legislation, and assess the suitability of the Site as a potential breeding area for protected species.
- 2.13. Marine bird and mammal surveys have also been undertaken by Fugro-EMU.

¹ Report Ref: EED14221-100_R_1_2_2_WE

² Report Ref: EED14221.3.1.4

³ Report Ref. 6191, project number 365481j

3. Relevant Legislation

Legislation

- 3.1. Specific habitats and species of relevance to the Site receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act 1981 (as amended) (WCA)⁴;
 - The Protection of Wild Mammals (Scotland) Act 2002⁵
 - Nature Conservation (Scotland) Act 2004 (as amended)⁶, setting out the Scottish Biodiversity List (originally 2005, updated 2010, SBL)
 - Nature Conservation: Implementation in Scotland of the Habitats and Birds Directives: Scottish Executive Circular 6/1995 as amended (June 2000) and The Conservation of Habitats and Species Regulations 2010 (as amended) (the “Habitats Regulations”)⁷
 - The Wildlife and Natural Environment (Scotland) Act 2011 (WANE)⁸
- 3.2. Where relevant, this report takes account of the legislative protection afforded to otter *Lutra lutra* which is set out below.

Otter

- 3.3. The following provides a summary of the offences in the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) in relation to wild otters:
- It is an offence to deliberately or recklessly:
 - capture, injure or kill an otter;
 - harass an otter or group of otters;
 - disturb an otter in a holt or any other structure or place it uses for shelter or protection;
 - disturb an otter while it is rearing or otherwise caring for its young;
 - obstruct access to a holt or other structure or place otters use for shelter or protection or to otherwise deny the animal use of that place;
 - disturb an otter in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species; and
 - disturb an otter in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.
 - It is also an offence to:
 - damage or destroy a breeding site or resting place of such an animal (note that this does not need to be deliberate or reckless to constitute an offence); and
 - keep, transport, sell or exchange or offer for sale or exchange any wild otter or any part or derivative of one (if obtained after 10 June 1994).

⁴ HMSO (1981) ‘Wildlife and Countryside Act 1981 (as amended)’

⁵ HMSO (1996) ‘The Wild Mammals (Protection) Act’

⁶ Scottish Government (2004) ‘Nature Conservation (Scotland) Act 2004 (as amended)’

⁷ HMSO (2010) ‘The Conservation of Habitats and Species Regulations 2010 (as amended)’

⁸ Scottish Government (2011) ‘The Wildlife and Natural Environment (Scotland) Act 2011’

Planning Policy

National Policy

- 3.4. The Scottish Government's Planning Policies are set out in several documents, including the National Planning Framework and the Scottish Planning Policy (SPP).
- 3.5. The Scottish Planning Policy (Consolidated 20104) provides a statement of the Scottish Government's policy on nationally important land use planning matters.
- 3.6. The Key statement in 'Valuing the Natural Environment NPF Context' is 'The natural environment forms the foundation of the spatial strategy set out in NPF3. The environment is a valued national asset offering a wide range of opportunities for enjoyment, recreation and sustainable economic activity. Planning plays an important role in protecting, enhancing and promoting access to our key environmental resources, whilst supporting their sustainable use.'
- 3.7. Principal policies are:
- 194. The planning system should:
 - facilitate positive change while maintaining and enhancing distinctive landscape character;
 - conserve and enhance protected sites and species, taking account of the need to maintain healthy ecosystems and work with the natural processes which provide important services to communities;
 - promote protection and improvement of the water environment, including rivers, lochs, estuaries, wetlands, coastal waters and groundwater, in a sustainable and coordinated way;
 - seek to protect soils from damage such as erosion or compaction;
 - protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, together with other native or long-established woods, hedgerows and individual trees with high nature conservation or landscape value;
 - seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats; and
 - support opportunities for enjoying and learning about the natural environment.
 - 195. Planning authorities, and all public bodies, have a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity. This duty must be reflected in development plans and development management decisions. They also have a duty under the Water Environment and Water Services (Scotland) Act 2003 to protect and improve Scotland's water environment. The Scottish Government expects public bodies to apply the Principles for Sustainable Land Use, as set out in the Land Use Strategy, when taking significant decisions affecting the use of land.'

Local Policy

- 3.8. Aberdeen City Council adopted its first Local Development Plan⁹ on 29 February 2012. The Aberdeen Local Development Plan (ALDP) (2012) replaced the Aberdeen Local Plan (2008) and was the first Development Plan of its kind in Scotland. The Local Development Plan is a vital public document which shapes the future of Aberdeen, and influences significant public and private investment in homes, businesses, shops, infrastructure and facilities.

⁹ Aberdeen City Council (2012) 'Aberdeen Local Development Plan'

- 3.9. Aberdeen City Council have written an environmental report¹⁰ (“the report”) for the Aberdeen Local Development Plan (ALDP) under the Environmental Assessment (Scotland) Act 2005, as part of its Strategic Environmental Assessment (SEA). The reason for undertaking SEA is to address all the effects that a plan, programme or strategy will have on the environment. The overall aim of the process being to protect the environment.
- 3.10. The following mitigation measures for biodiversity, flora and fauna have been recommended within the report:
- All of the Natural Environment and Open Space policies provide protection to biodiversity and developments that may have significant impacts on biodiversity are required to strictly comply with these policies.
 - Where policies that support development have a negative effect on biodiversity they will be over ridden by the natural environment and open space policies.
 - Those proposals with significant impacts on biodiversity have been removed from the plan and are only alternatives.
 - Where the assessment has identified a natural heritage designation, these areas of sites have been identified as green space network to provide protection.
 - In view of the potential significant impacts on biodiversity, developers will be required to undertake EIA prior to commencing some developments. EIA would address issues such as creation of wildlife corridors, habitat management and green space network. Where green field land is allocated, consideration will be given to improving housing densities. An “appropriate assessment” will be carried out where development projects are likely to cause a significant impact on the River Dee SAC and its qualifying species.
 - A Habitats Regulation Assessment has been undertaken to ensure that the risk to the conservation status of the River Dee SAC has been minimised, and policies are included in the plan to ensure that development does not affect the River Dee’s status. A Habitats Regulation Assessment will be required for developments in close proximity to the River Dee.
 - New developments should compensate for any biodiversity loss and advocating high quality green infrastructure within master planning and working with the grain of nature should also ensure that biodiversity is considered and incorporated in developments.
 - Developments in close proximity to designated sites should have an appropriate buffer zone to ensure that they do not abut these important wildlife habitats

UK Post-2010 Biodiversity Framework

- 3.11. The Environment Departments of all four governments in the UK work together through the Four Countries Biodiversity Group. Together, they have agreed, and Ministers have signed, a framework of priorities for UK-level work for the Convention of Biological Diversity. Published on 17 July 2012, the ‘UK Post-2010 Biodiversity Framework’¹¹ covers the period from 2011 to 2020. This now supersedes the UK Biodiversity Action Plan (BAP)¹². However, many of the tools developed under the UK BAP remain of use, for example, background information about the lists of priority habitats and species. The lists of priority species and habitats agreed under UK BAP still apply for the basis of much biodiversity work within the countries.

¹⁰ Aberdeen City Council (2012) ‘SEA Environmental Report’

¹¹ JNCC and DEFRA (on behalf of the Four Countries’ Biodiversity Group). 2012 UK Post-Biodiversity Framework. July 2012. Available on-line from <http://jncc.defra.gov.uk/page-6189>

¹² HMSO (1994) The UK Biodiversity Action Plan.

- 3.12. Although the UK Post-2010 Biodiversity Framework does not confer any statutory legal protection, in practice, many of the species listed already receive statutory legal protection under UK and/or European legislation. In addition, all of the priority UK BAP habitats and species found in Scotland are now listed on the Scottish Biodiversity List which was published in 2005 and updated in 2010 to satisfy the requirement under Section 2(4) of The Nature Conservation (Scotland) Act 2004 (as amended). For the purpose of this report, habitats and species listed on the Scottish Biodiversity List are referred to as having superseded the UK BAP. The Nature Conservation (Scotland) Act 2004 (as amended) places a duty on every public body to further the conservation of biodiversity by having particular regard to those species and habitats listed on the Scottish Biodiversity List. Otter is listed in the Scottish Biodiversity List, with the action of ‘avoid negative impact’.

Local Biodiversity Action Plan

- 3.13. Local authorities in the UK have produced individual Local Biodiversity Action Plans (LBAPs). These action plans work at a local level to conserve and enhance national priorities identified in the UK BAP. The Site is covered by the Scottish Biodiversity List (SBL) and North East Scotland Local Biodiversity Action Plan (LBAP), however, the LBAP is under review and the document is currently unavailable, as a result it has not been consulted for this report.

4. Methodology

4.1. This section summarises the methodology used for undertaking the otter survey.

Desk Study

- 4.2. A full ecological data search was undertaken on 8th May 2014, during which all records of protected species, Scottish Biodiversity List species and other notable fauna or flora within 2km of the Site were requested from the North East Scotland Biological Records Centre (NESBReC), as part of the Preliminary Ecological Appraisal.
- 4.3. Following consultation with Aberdeen City Council (October 2015) the need for a more comprehensive desk study was identified. This was undertaken through NESBReC and through consultation with local rangers and local wildlife groups.
- 4.4. Given the scale of the Site, it was considered that undertaking a search of records within 2km of the Site would provide sufficient data to inform this Ecological Appraisal, with an additional extended search for any European and internationally designated sites in the locality. The data relevant to this survey has been extracted from the original data search for this report.
- 4.5. Records of designated sites and important statutory sites designated for their nature conservation value were also requested from the North East Scotland Biological Records Centre (NESBReC), and searched for using Multi-Agency Geographic Information for the Countryside (MAGIC)¹³. Sites with statutory, national or international designations could typically include Local Nature Reserves (LNR), notified or candidate Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar Sites.

Otter

- 4.6. The otter survey included two methods, including a search for signs of otter use and potential habitat features, and observational surveys.
- 4.7. The habitats on Site, including a 500m buffer extend from the northern and southern extents of the Site (Figure 1) and suitable habitat features potentially linked to the Site (i.e. ditches and ponds), were searched for signs of otter activity. This included:
- potential resting places (holts, couches and hovers);
 - mammal paths;
 - footprints;
 - spraints, and;
 - feeding remains.
- 4.8. In addition, two vantage point surveys were undertaken of suitable habitats along the coast at lower tides. Surveyors were positioned along the cliff edge of the headlands at the northern and southern reaches of Nigg Bay. These two vantage points allowed views into Nigg Bay and to the north and south of the bay (Figure 1). Vantage points surveys were conducted for two hours at sunrise on the 21st November, 2014.

Survey Limitations

- 4.9. Ecological surveys are limited by factors which affect the presence of animals such as the time of year, migration patterns and behaviour. Therefore, the absence of evidence of any particular

¹³Multi-Agency Geographical Information for the Countryside (MAGIC) Available on-line from www.magic.gov.uk

species should not be taken as conclusive proof that the species is not present, or that it will not be present in the future. However, professional judgement allows for the likely presence of these species to be predicted with sufficient certainty so as to not significantly limit the validity of these findings.

- 4.10. Access to cliff faces, particularly to the south to the Site, were limited to those easily accessible without the need for climbing equipment. Bays were accessed, where safe, at low tide.

5. Results

Records

- 5.1. Records of otter within 2km of the Site were provided by the North East Scotland Biological Records Centre (NESBReC) and the Aberdeen Harbour Board.

Table 1: Ecological Records Search:

Species	Location	Protection/Status
Otter <i>Lutra lutra</i>	Record located approximately 250m inland from Girdle Ness (within the Site boundary). Record dated 2008.	Wildlife and Countryside Act 1981 (as amended), Schedule 5 (UKBAP) - Species listed on the UK Biodiversity Action Plan. (SBL) - Scotland has provided a list of notable species, identified on the Scottish Biodiversity List.

Otter

- 5.2. All signs and sighting of otter are identified on Figure 1. Photographs of the features are set out in Appendix A.
- 5.3. Two vantage point surveys were undertaken at sunrise for two hours during low tide (Figure 1). The early morning was chosen to lessen the effect of human disturbance. No otters were seen from either vantage point.
- 5.4. The surveys undertaken of the Site looked for signs of otter (Figure 1 and Appendix A). The following were identified:
- Old spraints on vegetation and flat stones were identified on the northern and southern headlands. The spraints were focused around the northern edges of both headlands; and
 - Feeding signs were identified along the northern face of the Girdle Ness headland.
- 5.5. No resting places or potential holts were noted during the surveys. Long grass around the points could provide temporary couches; however, given the Site is frequented by dog walkers and recreational walkers this is considered unlikely.

Cetaceans

- 5.6. On the 21st November a pod of approximately four dolphins was observed from the Aberdeenshire Coastal Path at Long Slough from the southern section for the Site boundary. Due to the distance of the dolphins from the coastline it was not possible to discern the species. Further survey work for marine mammals is currently been undertaken by Fugro-EMU.

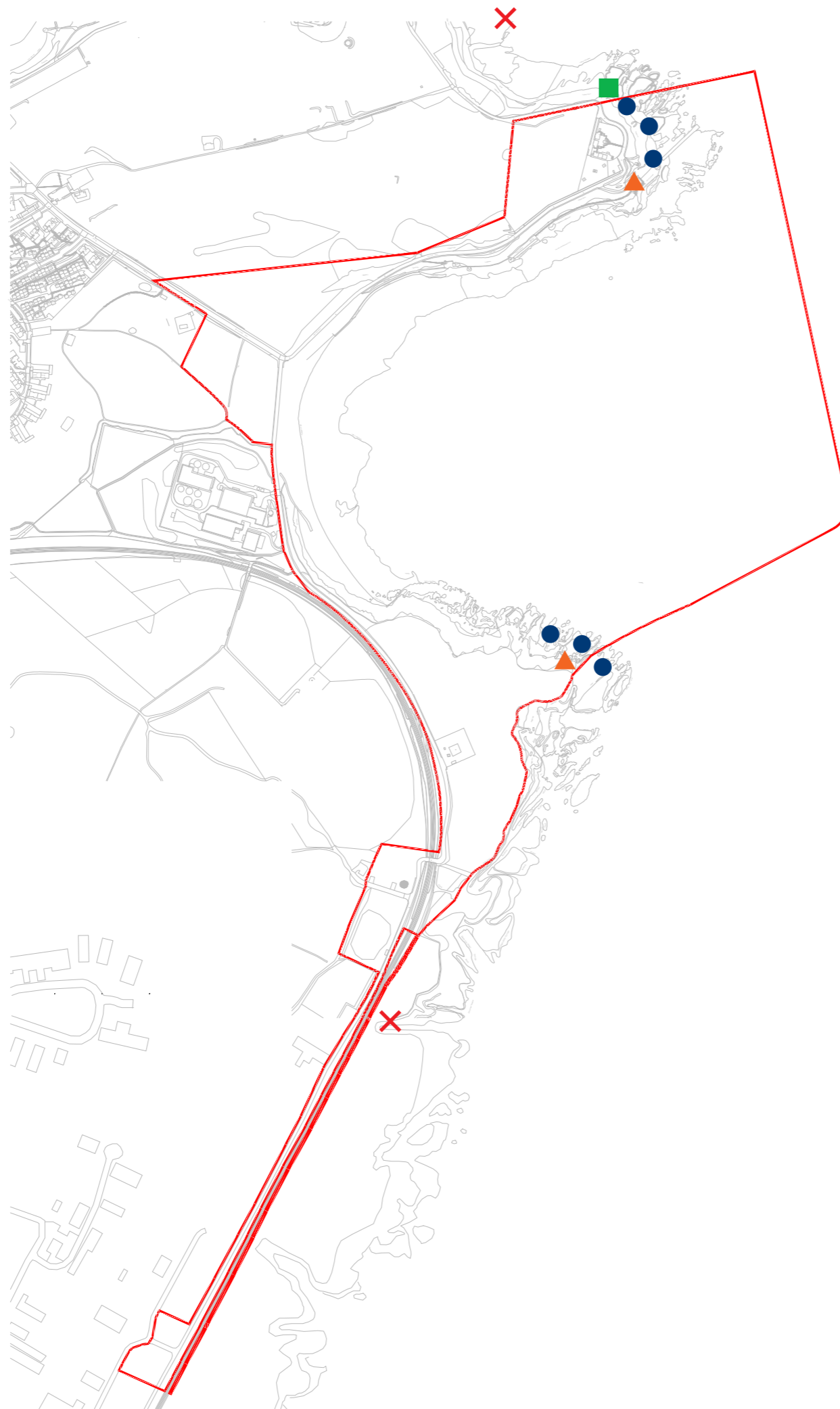
6. Discussion and Recommendations






Otter

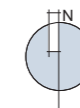
- 6.1. From the evidence gathered it was established that otter use the Girdle Ness and Greg Ness headlands to feed, with spraints and feeding signs identified within these two areas. The spraints noted were all old suggesting that otter do not use these areas continuously; however, from this single survey the frequency or pattern of use cannot be established.
- 6.2. Territories of otter which use coastal habitats as part of a territory are typically smaller than in fresh water, with ranges as small as 4 to 5km of coastline. The presence of spraints to the north and south of Nigg Bay suggest that otters currently using the lower section of the River Dee also forage around the neighbouring coastline to the south. Otters require access to fresh water therefore it is assumed that a single otter territory is present which includes the mouth of the River Dee.
- 6.3. The proposed harbour development will reduce the availability of foraging habitat within a single existing territory at the mouth of the River Dee. This loss of foraging habitat may lead to the loss of this territory depending on alternative foraging availability in the River Dee. It is recommended that features allowing otters to traverse the new man-made structures and allow for the potential restoration of the foraging habitat and subsequent territory are considered. Given that otter currently using the Site must be commuting across Nigg Bay from the River Dee, it is assumed that otter would over time become habituated to the new harbour also.
- 6.4. Given the local value of otter, Aberdeen Harbour Board (AHB) would consult with Aberdeen City Council (ACC) and Scottish Natural Heritage (SNH) to agree the scope for further otter surveys during the planning application process.
- 6.5. As otter activity can change over time, the findings of the current survey are likely to be considered potentially out of date after 12 months following completion of the survey, it is recommended that further surveys are undertaken pre-construction to provide accurate evidence of local otter activity that would be deemed accurate for a further 12 months.
- 6.6. Advice from a suitably qualified ecologist should be sought in regards to the proposed mitigation measures for otter, in regards to their location and construction. These recommendations should also be approved by Scottish Natural Heritage (SNH).

FIGURES

Figure 1: Otter Survey Plan



-  Site Boundary
-  Extent of Walkover Survey
-  Otter Spraint
-  Vantage Point
-  Feeding Signs



Project Details	WIB14221-100: Aberdeen Harbour
Figure Title	Figure 1: Otter Survey Plan
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APPENDICES

A. Photographs

Plate number	Plate	Description
1		Otter spraint along shore line at Greg Ness
2		Feeding remains along shore line at Girdle Ness