

MVV Environment Devonport Ltd
Energy from Waste Combined Heat and
Power Facility
North Yard, Devonport
Wintering Bird Survey Report

April 2011



Prepared for

Revision Schedule

Wintering Bird Survey Report April 2011

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00	1 st March 2011	Draft	Paul Gregory Ecologist	Ian Roach Principal Environmental Consultant	Ian Roach Principal Environmental Consultant
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Scott Wilson
Mayflower House
Armada Way
Plymouth
Devon
PL1 1LD

Tel 01752 676700
Fax 08702386023

www.scottwilson.com

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1 Introduction

1.1 Background

- 1.1.1 Through a competitive tendering process, MVV Environment Devonport Limited (MVV) has been awarded the South West Devon Waste Partnership's (SWDWP) residual waste treatment and disposal contract. The SWDWP is a collaboration that has been established between Plymouth City Council, Torbay Council and Devon County Council to provide a long term solution to deal with the waste from the southwest Devon area that cannot be recycled, reused or composted.
- 1.1.2 MVV's proposal is to construct and operate an Energy from Waste Combined Heat and Power (EfW CHP) facility on land currently situated in the north east of Her Majesty's Naval Base (HMNB) Devonport, Plymouth.
- 1.1.3 Scott Wilson Limited has been employed by MVV as planning and environmental consultants and is undertaking the necessary environmental studies to support the planning application.
- 1.1.4 Scott Wilson Limited has undertaken a Wintering Bird Survey to support the ecology chapter of the Environmental Statement. The objective of the Wintering Bird Survey was to determine the status of wintering birds within the proposed development site; the results of the survey are detailed in this report.

1.2 Limitations

- 1.2.1 The findings and recommendations presented in this report are based on the information available at the time of writing (March 2011) and the site conditions pertaining at the time the survey was undertaken (November 2010 – March 2011).

1.3 Site Description

- 1.3.1 The surveyed area occupies c. 6.3 ha of land centred on national grid reference: SX 446 573. The site access is via the Camel's Head entrance into Her Majesty's Naval Base (HMNB) Devonport, located c. 4 km north west of Plymouth city centre. The site lies in the north of the naval base / dockyard complex. The surrounding landscape is dominated by the urban environments of the city of Plymouth, mainly industrial and residential buildings. The Tamar estuary is located c. 500m to the west of the site. A location plan is provided as Appendix 8.1.
- 1.3.2 Until recently the site was used by a firm called Ashcroft to process demolition rubble, created from different construction projects throughout the Naval Base and dockyard. Semi-natural broadleaved woodland, known as Blackies Wood, occurs towards the north and north western areas of the site, whilst semi-improved grassland and mudflats, associated with the estuarine tributaries, occur towards the east of the site.
- 1.3.3 The land to the west of the site is currently used as a car park, whilst to the east is the Devonport Distribution Facility (DDF), which stands approximately 8m high. The DDF is bordered to the north and south by large areas of tarmac which are currently used as loading bays and service yards. Directly to the south of the site is Weston Mill Lake naval dock.

1.4 Development Description

- 1.4.1 As detailed in paragraph 1.1.2, MVV proposes to construct and operate an EfW CHP facility at the site. The land requirement is c. 3.4 ha. This includes the EfW CHP facility itself, buildings, ancillary equipment, storage areas, office and amenity buildings, weighbridges, site access and landscaping. The facility will be located on the open land formerly used by Ashcroft; the broadleaved woodland to the north and west of the facility will remain with the exception of the felling of two trees which are of local landscape value and have negligible potential to support roosting bats (see Appendix 7.2). Woodland management will be undertaken for the benefit of biodiversity.

2 Legislation and Policy

2.1 Wildlife and Countryside Act

2.1.1 Under the Wildlife and Countryside Act (1981) (as amended), all birds, their nests and eggs are protected, it is thus an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird;
- intentionally or recklessly take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- intentionally or recklessly take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations.

2.1.2 Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species during the breeding season. If any person intentionally or wilfully disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird, that person shall be guilty of an offence. For the purpose of this offence 'Any wild bird' means any bird included in Schedule 1. These are arrestable offences.

2.2 Biodiversity Action Plans

2.2.1 The UK Biodiversity Action Plan (BAP) is the UK Government's response to the Convention on Biological Diversity (1992). It describes the country's important biological resources and has resulted in the production of detailed plans for the protection of key habitats and species.

2.2.2 Through Section 40 of the Natural Environmental and Rural Communities Act (2006), local planning authorities have a duty to consider habitats and species listed within the national BAP (priority species and priority habitats) and local BAPs when considering a planning application.

2.2.3 The Devon Local BAP 2005 ensures that the targets and priorities within the UK BAP are implemented at local level for those habitats and species present in Devon. The Local BAP lists species and habitats that are to be considered during planning applications.

2.3 Planning Policy Statement 9

2.3.1 Protected species are a material consideration in the planning process under Planning Policy Statement 9 (PPS9). PPS9 sets out planning policies on the protection of biodiversity and geological conservation through the planning system.

2.3.2 The Government's objectives are:

***“to promote sustainable development:** ensuring that biological and geological diversity are conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity and geological diversity with other considerations.*

***to conserve, enhance and restore the diversity of England's wildlife and geology:** sustaining, and where possible improving, the quality and extent of natural habitat and geological and geomorphological sites; the natural physical processes on which they depend; and the populations of naturally occurring species which they support.*

***to contribute to rural renewal and urban renaissance by:** enhancing biodiversity in green spaces and among developments so that they are used by wildlife and valued by people, recognising that healthy functional ecosystems can contribute to a better quality of life and to people's sense of well-being; and ensuring that developments take account of the role and value of biodiversity in supporting economic diversification and contributing to a high quality environment.”*

2.3.3 The statement gives advice to Local Planning Authorities to help ensure that the potential impacts of planning decisions on biodiversity and ecological conservation are fully considered. In particular the statement includes the following advice:

“Sites of Special Scientific Interest (SSSI)

Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on a SSSI (either individually or in combination with other developments), planning permission should not normally be granted.

Regional and Local Sites

Criteria based policies should be established in local development documents against which proposals for any development on, or affecting, regional or local sites will be judged.

Ancient Woodland and Other Important Natural Habitats

Planning permission should not be granted for any development resulting in the loss or deterioration of ancient woodland unless the need for, and benefits of, the development outweigh the loss of the woodland habitat. Loss of aged and veteran trees should also be avoided and planning authorities should encourage conservation of such trees in development proposals.

Local authorities should conserve (and identify opportunities to enhance and add to) other important natural habitats identified in the Countryside and Rights of Way Act 2000 Section 74 list through policies in plans.

Networks of Natural Habitats

Local authorities should aim to maintain networks of natural habitats by avoiding or repairing the fragmentation and isolation of natural habitats through policies in plans. Such networks should be protected from development and, where possible, strengthened by or integrated within it.

Previously Developed Land

Where previously developed sites have significant biodiversity or geological interest of recognised local importance, local planning authorities, together with developers, should aim to retain this interest or incorporate it into any development of the site.

Biodiversity within Developments

When considering proposals, local planning authorities should maximise opportunities for building in beneficial biodiversity or geological features in and around developments, using planning obligations where appropriate.

Species Protection

Local authorities must take measures to protect the habitats of wildlife species of principal importance for the conservation of biodiversity in England not already receiving statutory protection from decline, through policies in local development documents. Planning Authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. Planning authorities should refuse permission where harm to the species or their habitats would result unless the need for, and benefits of, the development clearly outweigh that harm."

2.4 Plymouth City Council Local Development Framework

Core Strategy Development Plan Document

- 2.4.1 The Core Strategy sets out the overall planning vision and framework for the city from 2006 to 2021 and beyond. Key policies are as follows:

Policy CS 18 Plymouth's Green Space

- 2.4.2 *"The Council will protect and support a diverse and multi-functional network of green space and waterscape, through:*
- 1. Identifying in the Site Allocations Development Plan Document and Area Action Plans a network of strategically and locally important Greenscape Areas. Development on or adjacent to these Greenscape Areas will not be permitted where it would result in unacceptable conflict with the function(s) or characteristics of that area.*
 - 2. Requiring development proposals to improve the quality and quantity of accessible green space, where appropriate.*
 - 3. Requiring development proposals to address local deficiencies in accessible green space, where appropriate.*

4. *Using its planning powers to safeguard important trees and hedgerows, and to secure provision for soft landscaping where appropriate as part of development."*

Policy CS 19 Wildlife

2.4.3 *"The Council will promote effective stewardship of the city's wildlife through:*

1. *Safeguarding national and international protected sites for nature conservation from inappropriate development.*
2. *Appropriate consideration being given to European and nationally protected and important species.*
3. *Maintaining a citywide network of local wildlife sites and wildlife corridors, links and stepping stones between areas of natural green space.*
4. *Ensuring that development retains, protects and enhances features of biological or geological interest, and provides for the appropriate management of these features.*
5. *Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.*
6. *Supporting wildlife enhancements which contribute to the habitat restoration targets set out in the South West Nature Map and in National, Regional and Local Biodiversity Action Plans."*

3 Methodology

- 3.1.1 A detailed Wintering Bird Survey was undertaken with five survey visits conducted during the period November 2010 to March 2011. The route chosen followed that of the breeding bird survey undertaken in 2010. Standard British Trust for Ornithology (BTO) species codes and symbols for birds were used to map the species present. Surveys were not undertaken in unfavourable conditions such as heavy rain or strong wind that may negatively affect the results; full details of the environmental survey conditions can be found in Appendix 8.5.
- 3.1.2 The survey followed the standard Common Bird Census (CBC) methodology, as detailed by Marchant (1983) and Bibby *et al.* (1992). CBC involves production of maps showing the location of each bird/s. These species maps were analysed to estimate the numbers of the various species within specific habitats of the study area and to compare how the birds were distributed in relation to different elements of the habitat.
- 3.1.3 The full methodology for the CBC involves ten complete mapping visits during the census season, but in practice this is very rarely done and it is very common for wintering bird surveys to comprise three complete mapping visits. For this study, five complete mapping surveys were considered sufficient to evaluate the importance of habitats for wintering birds. The first full survey was undertaken in early November 2010 and the last survey was undertaken in mid-March 2011. A route was mapped-out prior to the surveys being undertaken, paying particular attention to linear features, such as tree lines, and natural features such as waterbodies, areas of scrub and woodland. During each of the survey visits, the site walkover was carried out between 08.00 and 13.00 hours; exact timings are given in Appendix 8.5.
- 3.1.4 In British conditions, bird activity remains at a moderately high level until about noon (Marchant, 1983). Cold, windy or wet days were generally avoided since the activity, and thus detectability, of the birds is much reduced.
- 3.1.5 This report follows the current standard reference on the national conservation status of the UK bird fauna, namely Gregory *et al.* (2009). This publication places UK bird species on one of three lists (Red, Amber, or Green). Red List birds are of high conservation concern, Amber List birds are of medium conservation concern and Green List birds are not currently believed to be of conservation concern (threatened). The locations of Red, Amber and Green List bird/s determined for the site are shown in Appendix 8.2 and summarised in Tables 1 and 2. The BTO species abbreviations used in these figures are given in Appendix 8.3.

4 Results

4.1 Desk Study Results

4.1.1 Bird data has been obtained and reviewed for the general area from the following sources:

- Ministry of Defence (MoD) annual bird count 2001 to 2004 and 2008; and
- Anecdotal information from MoD personnel.

4.1.2 Bird records were obtained from the MoD annual bird count for the period of 2001 to 2004 and 2008. The data supplied by the MoD covers “all species” recorded within the whole of HMNB Devonport site, so are not solely restricted to the MVV development site. The desk study represents all the bird species encountered within the HMNB Devonport site regardless of their conservation status and includes breeding and wintering birds as well as migrants. The full annual bird count for 2001 to 2004 and 2008 including wintering, breeding birds and migrants is reproduced in Appendix 8.4.

4.1.3 The MoD annual bird count revealed buzzard (*Buteo buteo*) and kestrel (*Falco tinnunculus*), which are Schedule 1 species on the site. Herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*) and starling (*Sturnus vulgaris*), which are Red List species, and whitethroat (*Sylvia communis*), swift (*Apus apus*), swallow (*Hirundo rustica*) and house martin (*Delichon urbica*), which are Amber List species, were all found on site during dates of survey.

4.1.4 Green List species recorded on the site were feral pigeon (*Columba livia* x), grey wagtail (*Motacilla cinerea*), pied wagtail (*Motacilla alba yarrellii*), black bird (*Turdus merula*), robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), magpie (*Pica pica*), jackdaw (*Corvus monedula*), blue tit (*Cyanistes caeruleus*), wood pigeon (*Columba palumbus*), collard dove (*Streptopelia decaocto*) and greenfinch (*Carduelis chloris*).

4.1.5 Prior to the field surveys being carried out, anecdotal evidence from MoD personnel suggested that kingfisher (*Alcedo atthis*) use the tributaries and creeks associated with Weston Mill Lake and the Tamar estuary for foraging/feeding during the winter months.

4.1.6 There are HMNB Devonport bird survey records of black redstart (*Phoenicurus ochruros*) overwintering on the bare ground and aggregate spoil heaps within the development footprint. This bird species is protected under Schedule 1 on the Wildlife and Countryside Act (1981). It appears in Appendix 11 of the Bonn Convention on the Conservation of Migratory Species of Wild Animals, whereby a range of states are encouraged to conclude international agreements to benefit the species. It is also a UK National BAP Priority Species that benefits from areas of sparse waste-ground or urban ‘Brownfield’ sites. Sparse vegetation and stony ground are necessary for feeding and many urban or industrial environments adequately provide this habitat requirement.

4.2 Field Survey Results

- 4.2.1 The habitats on site consist of bare ground, continuous scrub, rank semi-improved neutral grassland, ephemeral/short perennials, tall ruderals, semi-natural broadleaved woodland, hard standing and aggregate spoil.
- 4.2.2 Blackie's Wood towards the north west of the site consists of semi-natural broadleaved woodland dominated by pedunculate oak/English oak (*Quercus robur*) and common ash (*Fraxinus excelsior*), common hazel (*Corylus avellana*), common hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) are abundant in the understory with frequent wild cherry (*Prunus avium*) and English Elm (*Ulmus procera*).
- 4.2.3 The continuous scrub on site is dominated by butterfly-bush (*Buddleja davidii*), blackthorn (*Prunus spinosa*), immature sycamore (*Acer pseudoplatanus*), goat willow (*Salix caprea*), and elder (*Sambucus ebulus*). The continuous scrub has been left fairly unmanaged with occasional semi-mature trees.
- 4.2.4 The Wintering Bird Survey revealed herring gull (*Larus argentatus*) and dunlin (*Calidris alpina*) (Red List Species) over-wintering on the site. The herring gull is also a UK BAP priority species. Amber List species recorded overwintering on the site included black-headed gull (*Larus ridibundus*), grey wagtail (*Motacilla cinerea*), little egret (*Egretta garzetta*), mallard (*Anas platyrhynchos*), turnstone (*Arenaria interpres*) red shank (*Tringa totanus*) and dunnoek (*Prunella modularis*), which is also a UK BAP Priority Species.
- 4.2.5 Species recorded outside of the site boundary but which will most probably be using the site were starling (*Sturnus vulgaris*) and skylark (*Alauda arvensis*), both Red List and UK BAP priority species as well as kingfisher (*Alcedo atthis*) and black redstart (*Phoenicurus ochruros*) both Schedule 1 and Amber List species.
- 4.2.6 Black redstarts were specifically targeted for survey as these had been recorded on the site by MoD employees in the past. Three black redstarts were recorded foraging during the Wintering Bird Survey just outside of the site boundary. Several records exist for black redstart over-wintering on the site; they have also been recorded foraging on the aggregate spoil heaps on the site. There are no records of black redstart breeding on the site, however suitable buildings for nesting do occur within the wider dockyard.
- 4.2.7 Most species recorded were widespread and common across the site. Species such as blackbird, chaffinch, great tit and chaffinch were concentrated amongst the scrub and trees within Blackies Wood.
- 4.2.8 The value of the site to birds was highly variable. Typically, the more valuable habitats in terms of species diversity and presence of the more local species included the scrub, woodland and waterside habitats. The crushed aggregate and bare ground provides suitable foraging and feeding habitat for overwintering black redstart.
- 4.2.9 The Wintering Bird Survey recorded thirty nine species either within or adjacent the site boundary. Of these thirty nine species, nine were Red List species, nine were Amber List species and the remaining twenty one were Green List species. Of the species recorded on the site four were Schedule 1 species and six were BAP species (Tables 1 and 2).

Table 1: Species recorded within or adjacent the site boundary

Species	Latin	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Conservation Status
Black-headed gull	<i>Larus ridibundus</i>	c. 21	c. 34	c. 61	1	c. 20	Amber Status
Blackbird	<i>Turdus merula</i>	3	3	5	2	4	Green Status
Blue tit	<i>Parus caeruleus</i>	1	1				Green Status
Buzzard	<i>Buteo buteo</i>	1	1		1	1	Green Status
Carriion crow	<i>Corvus corone</i>	2	1	1	4	4	Green Status
Chaffinch	<i>Fringilla coelebs</i>	4	1				Green Status
Collared dove	<i>Streptopelia decaocto</i>				1		Green Status
Cormorant	<i>Phalacrocorax carbo</i>	1	1	2		1	Green Status
Dunlin	<i>Calidris alpina</i>	3					Red Status
Duncock	<i>Prunella modularis</i>	3	1			3	Amber Status, UK BAP
Feral pigeon	<i>Columba livia</i>		1 flock				Green Status
Goldcrest	<i>Regulus regulus</i>	1	1				Green Status
Goldfinch	<i>Carduelis carduelis</i>	3	2	2	7		Green Status
Great tit	<i>Parus major</i>	1	1			2	Green Status
Greenfinch	<i>Carduelis chloris</i>			3		7	Green Status
Grey heron	<i>Ardea cinerea</i>	1		1	1	1	Green Status
Grey wagtail	<i>Motacilla cinerea</i>	1	1			1	Amber Status
Herring gull	<i>Larus argentatus</i>	4 +	2 +	12	1	2 +	Red Status, UK BAP
House sparrow	<i>Passer domesticus</i>					1	Red Status, UK BAP
Jay	<i>Garrulus glandarius</i>					1	Green Status
Little egret	<i>Egretta garzetta</i>	2	2			1	Amber Status
Long-tailed tit	<i>Aegithalos caudatus</i>	4	0				Green Status
Magpie	<i>Pica pica</i>	c. 25	7	6	3	11	Green Status
Mallard	<i>Anas platyrhynchos</i>		2	5	4		Amber Status
Pied wagtail	<i>Motacilla alba</i>			2			Green Status
Red shank	<i>Tringa totanus</i>	1	1	4	1	1	Amber Status
Redwing	<i>Turdus iliacus</i>			6			Schedule 1 Part 1, Red Status
Robin	<i>Erithacus rubecula</i>	3	6	3		3	Green Status
Turnstone	<i>Arenaria interpres</i>		2				Amber Status
Woodpigeon	<i>Columba palumbus</i>	1 flock	1	5	6	15	Green Status
Wren	<i>Troglodytes troglodytes</i>			2			Green Status

* Wintering Bird Survey Data for Red, Amber and Green List Birds of Conservation Concern¹

¹ Eaton *et al*, Birds of Conservation Concern. June 2009

Table 2: Species recorded outside of the site boundary but may be also using the site

Species	Latin	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Conservation Status
Blackbird	<i>Turdus merula</i>	2	1	4	3	2	Green Status
Black-headed gull	<i>Larus ridibundus</i>			1	76		Amber Status
Black redstart	<i>Phoenicurus ochruros</i>	1					Schedule 1 Part 1, Amber Status
Blue tit	<i>Parus caeruleus</i>	1					Green Status
Buzzard	<i>Buteo buteo</i>			1			Green Status
Carion crow	<i>Corvus corone</i>			6	4	7	Green Status
Chaffinch	<i>Fringilla coelebs</i>			3	2	2	Green Status
Chiff chaff	<i>Phylloscopus collybita</i>					1	Green Status
Collared dove	<i>Streptopelia decaocto</i>	1		14			Green Status
Cormorant	<i>Phalacrocorax carbo</i>				2		Green Status
Dunnock	<i>Prunella modularis</i>					3	Amber Status, UK BAP
Feral pigeon	<i>Columba livia</i>			36			Green Status
Fieldfare	<i>Turdus pilaris</i>				1		Schedule 1 Part 1, Red Status
Goldfinch	<i>Carduelis carduelis</i>	2	1	3	c.5	3	Green Status
Greenfinch	<i>Carduelis chloris</i>				1		Green Status
Great tit	<i>Parus major</i>	1		3	2		Green Status
Grey wagtail	<i>Motacilla cinerea</i>					1	Amber Status
Herring gull	<i>Larus argentatus</i>					13	Red Status, UK BAP
House sparrow	<i>Passer domesticus</i>	1	3	7		4	Red Status, UK BAP
Kingfisher	<i>Alcedo atthis</i>		1	2			Schedule 1 Part 1, Amber Status
Jay	<i>Garrulus glandarius</i>			1			Green Status
Long-tailed tit	<i>Aegithalos caudatus</i>	c.5					Green Status
Magpie	<i>Pica pica</i>	1			1		Green Status
Meadow pipit	<i>Anthus pratensis</i>		1	5			Amber Status
Pheasant	<i>Phasianus colchicus</i>	1			1		No Status
Pied wagtail	<i>Motacilla alba</i>	1			1		Green Status
Redwing	<i>Turdus iliacus</i>			c.15	1		Schedule 1 Part 1, Red Status
Robin	<i>Erithacus rubecula</i>	1			3	1	Green Status
Skylark	<i>Alauda arvensis</i>	1					Red Status, UK BAP
Song thrush	<i>Turdus philomelos</i>		1				Red Status, UK BAP
Starling	<i>Sturnus vulgaris</i>		1 flock	2	14		Red Status, UK BAP
Wood pigeon	<i>Columba palumbus</i>	6		5	4	3	Green Status

5 Evaluation

- 5.1.1 This section summarises the ornithological interest of the site and surrounding land.
- 5.1.2 The MoD annual bird count data 2001 to 2004 and 2008 including non-breeding birds and migrants gives limited information on the importance of the area for over-wintering birds with respect to the MVV development footprint. The data supplied by the MoD covers “all species” recorded within the whole of HMNB Devonport site and it is not known which records, if any, were within the MVV development footprint.
- 5.1.3 Therefore, it is considered that greater weight should be given to the results of the 2010 - 2011 Wintering Bird Survey for the value of the site to support birds (over-wintering, shelter and food). Some species of wintering bird species may be resident all year round so may also be recorded breeding on the site during the summer months.
- 5.1.4 Based upon the results of the Wintering Bird Survey, it is considered that the development footprint provides suitable habitat for wintering birds, as it supports redwing, which is a Schedule 1 and Red List species and dunlin, herring gull, house sparrow, fieldfare, starling, skylark and song thrush which are all Red List species.
- 5.1.5 The site supports Amber list species, such as mallard, meadow pipit, redshank, turnstone, black headed gull, dunnoek, black redstart, little egret, kingfisher and grey wagtail.
- 5.1.6 Green list species include jay, long-tailed tit, magpie, and robin (see Tables 1 and 2 for a full list).
- 5.1.7 Birds recorded on, or adjacent to, the site and listed under Schedule 1 of the WCA, 1981 are redwing, kingfisher, black redstart and fieldfare.
- 5.1.8 Kingfisher, a Schedule 1 and Amber List species, was recorded using the tributaries and creeks associated with Weston Mill Lake and the Tamar estuary for foraging/feeding during the winter months.
- 5.1.9 Black redstart, a Schedule 1, UK BAP priority and Amber List species was recorded during the surveys. This species was also recorded from the desk study foraging on the bare ground and aggregate spoil heaps within the development footprint.

6 Recommendations and Mitigation

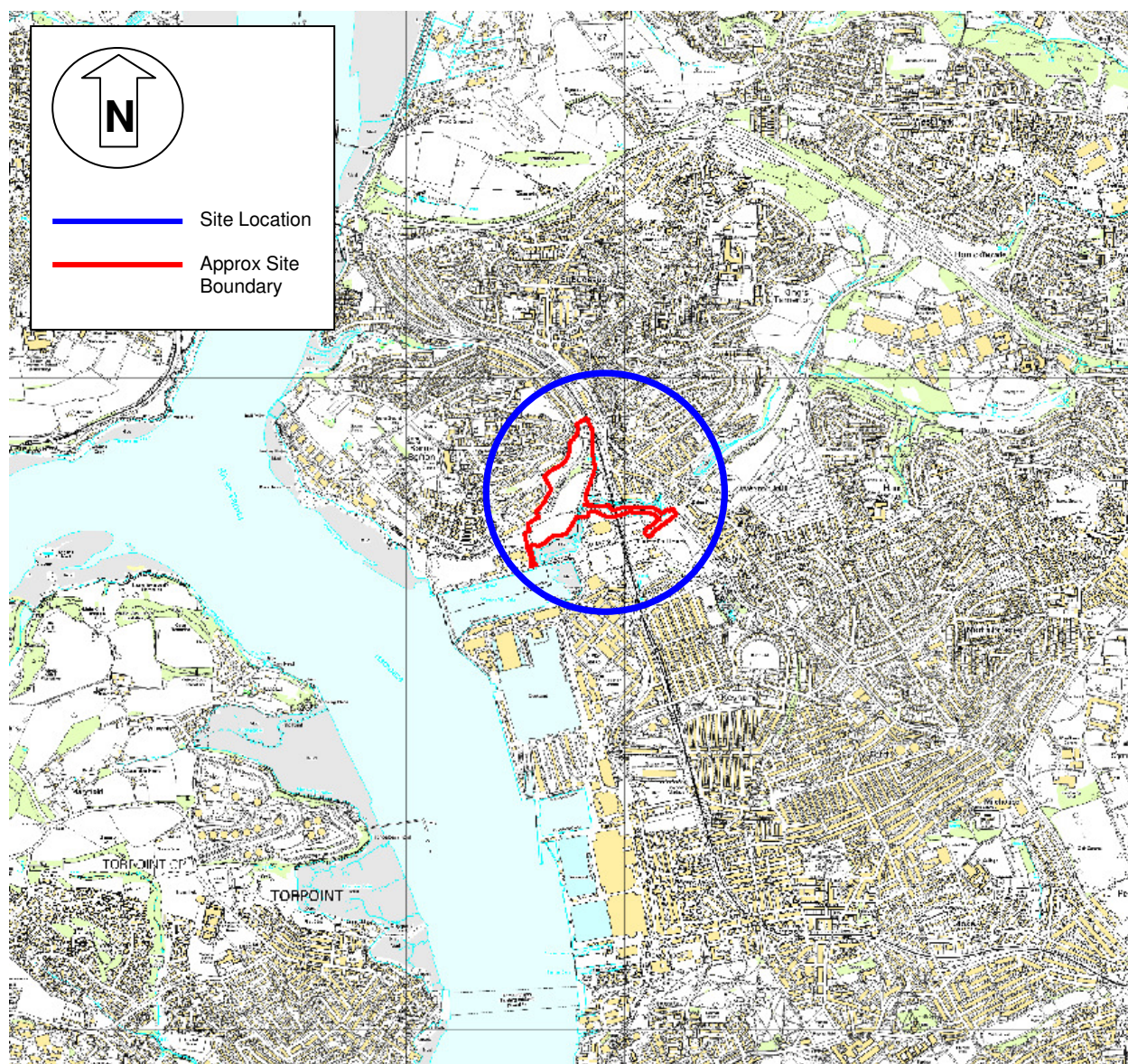
- 6.1.1 In line with PPS9, planning authorities in England should ensure that species of principal importance for conservation of biodiversity are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The provision of compensatory habitat for both priority and rare wintering bird species should be considered in order to mitigate against the loss of the species habitat.
- 6.1.2 The future development of the site has, by its nature, the potential to lead to the loss of over-wintering habitat *i.e.* bare ground and aggregate spoil heaps, which is currently supporting a species of conservation concern, *i.e.* black redstart.
- 6.1.3 The inclusion of a brown roof within the development will compensate for the loss of over-wintering habitat for black redstart.
- 6.1.4 Any vegetation clearance works should be undertaken outside of the bird-nesting season. The nesting season is March – August inclusive, so any vegetation should preferably be cleared during September – February. If clearance work needs to be undertaken during the bird-nesting season, it should be supervised by an ecologist.

7 References

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8 Appendices

8.1 Location Plan



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Figure 1. Site Location Plan

Not to Scale
Date 01.02.11
Project Title:
Devonport Dockyard: Wintering Bird Survey

Scott Wilson Ltd
Mayflower House
Armada Way
Plymouth
Devon PL1 1LD
United Kingdom

Tel: +44 (0) 1752 676 700
Fax: +44 (0) 8702 386 023

8.2 Wintering Bird Maps

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NOTES

Legend

- Bird Transect
- Shedule 1, Part 1
- UK BAP

- B. Blackbird
- BH Black-headed Gull
- BT Blue Tit
- BX Black Redstart
- BZ Buzzard
- C. Carrion Crow
- CA Cormorant
- CD Collared Dove
- CH Chaffinch
- D. Dunnock
- DN Dunlin
- ET Little Egrett
- GC Gold Crest
- GL Grey Wagtail
- GO Gold Finch
- GT Great Tit
- HG Herring Gull
- HS House Sparrow
- KF King Fisher
- LT Long-tailed Tit
- MA Mallard
- MG Magpie
- PH Pheasant
- PW Pied Wagtail
- R. Robin
- S. Skylark
- WP Wood Pigeon

Revision Details	By	Date	Suffix
	Check		

Drawing Status	PLANNING
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Job Title	EfW CHP FACILITY, NORTH YARD, DEVONPORT
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Drawing Title	WINTERING BIRD SURVEY RESULTS NOVEMBER 2010 BOCC = GREEN, AMBER AND RED STATUS
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Scale at A3	1:5,000
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Drawn	MP	Approved	PG
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Stage 1 Check	Stage 2 Check	Originated	Date
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Drawing Number	Rev
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Water Steam System

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NOTES

Legend

- Bird Transect
- UK BAP Species
- Schedule 1

- B. Blackbird
- BH Black-headed Gull
- BT Blue Tit
- BZ Buzzard
- C. Carrion Crow
- CA Cormorant
- CC Chiff Chaff
- CH Chaffinch
- D. Dunnock
- ET Little Egrett
- GC Gold Crest
- GL Grey Wagtail
- GO Gold Finch
- GR Green Finch
- GT Great Tit
- HG Herring Gull
- HS House Sparrow
- KF King Fisher
- LT Long-tailed Tit
- MA Mallard
- MG Magpie
- MP Meadow Pipit
- PW Pied Wagtail
- R. Robin
- RE Red Wing
- RK Red Shank
- SG Starling
- ST Song Thrush
- TT Turnstone
- WP Wood Pigeon
- WR Wren

Revision Details	By	Date	Suffix
	Check		

Drawing Status	PLANNING
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Job Title	EfW CHP FACILITY, NORTH YARD, DEVONPORT
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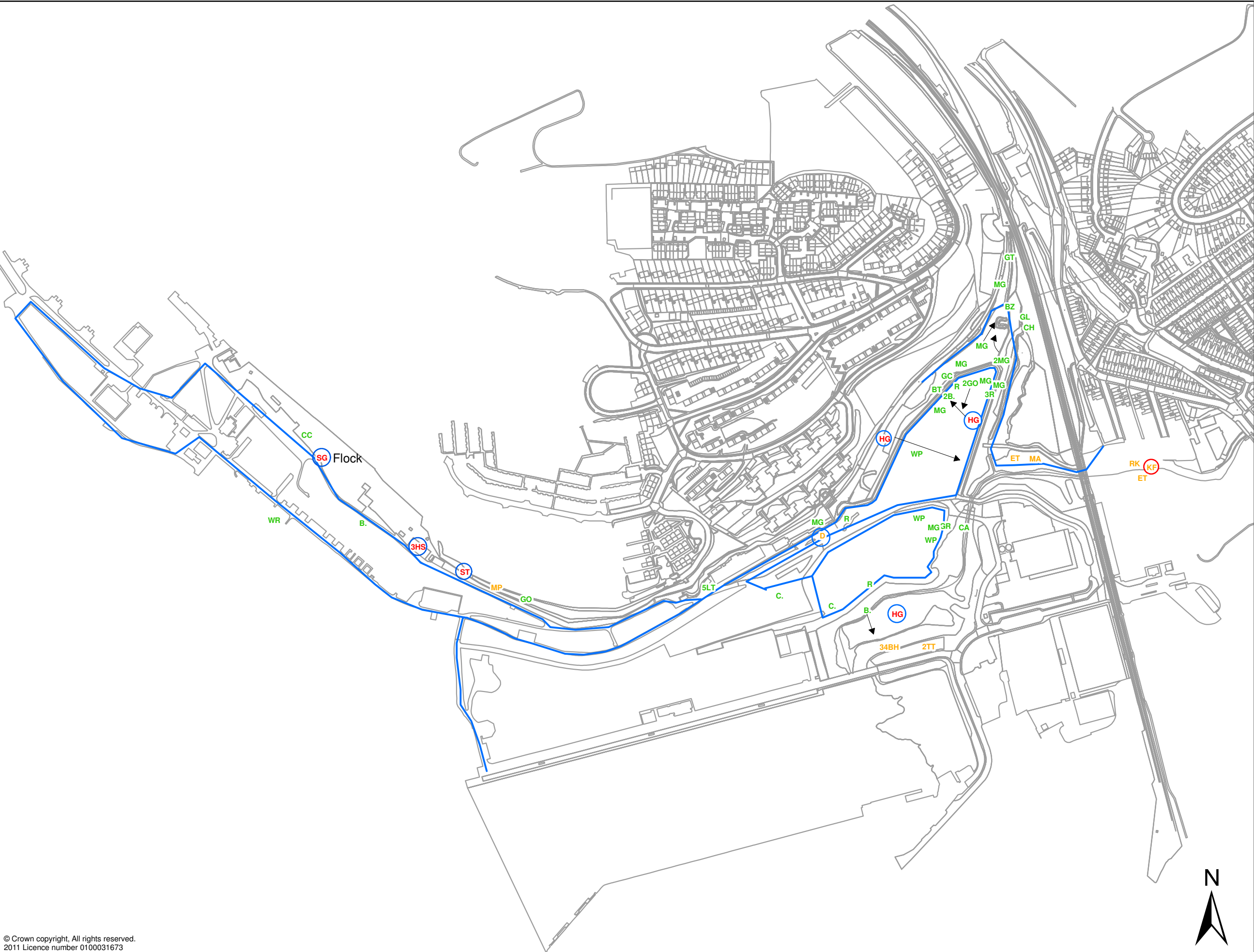
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NOTES

Legend

- Bird Transect
- UK BAP Species
- Schedule 1

- B. Blackbird
- BH Black-headed Gull
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- CD Collared Dove
- CH Chaffinch
- FP Feral Pigeon
- GO Gold Finch
- GR Green Finch
- GT Great Tit
- HG Herring Gull
- HS House Sparrow
- J. Jay
- KF King Fisher
- MA Mallard
- MG Magpie
- MP Meadow Pipit
- PW Pied Wagtail
- R. Robin
- RE Red Wing
- RK Red Shank
- SG Starling
- WP Wood Pigeon
- WR Wren

Revision Details	By	Date	Suffix
	Check		

Drawing Status	PLANNING
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Job Title	EfW CHP FACILITY, NORTH YARD, DEVONPORT
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Drawing Title	WINTERING BIRD SURVEY RESULTS JANUARY 2011 BOCC = GREEN, AMBER AND RED STATUS
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KF Out of Boundary



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NOTES

— Bird Transect

 Schedule 1

B. Blackbird
BH Black-headed Gull
BT Blue Tit
BZ Buzzard
C. Carrion Crow
CA Cormorant
CC Chiff Chaff
CD Collared Dove
CH Chaffinch
D. Dunnock
FF Fieldfare
GR Green Finch
GO Gold Finch
GT Great Tit
HG Herring Gull
J. Jay
MA Mallard
MG Magpie
R. Robin
RE Red Wing
RK Red Shank
SG Starling
WP Wood Pigeon

Revision Details	By	Date	Suffix
	Check		

Drawing Status	PLANNING
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Job Title

EfW CHP FACILITY,
NORTH YARD,
DEVONPORT

WINTERING BIRD SURVEY
RESULTS FEBRUARY 2011
BOCC = GREEN, AMBER
AND RED STATUS

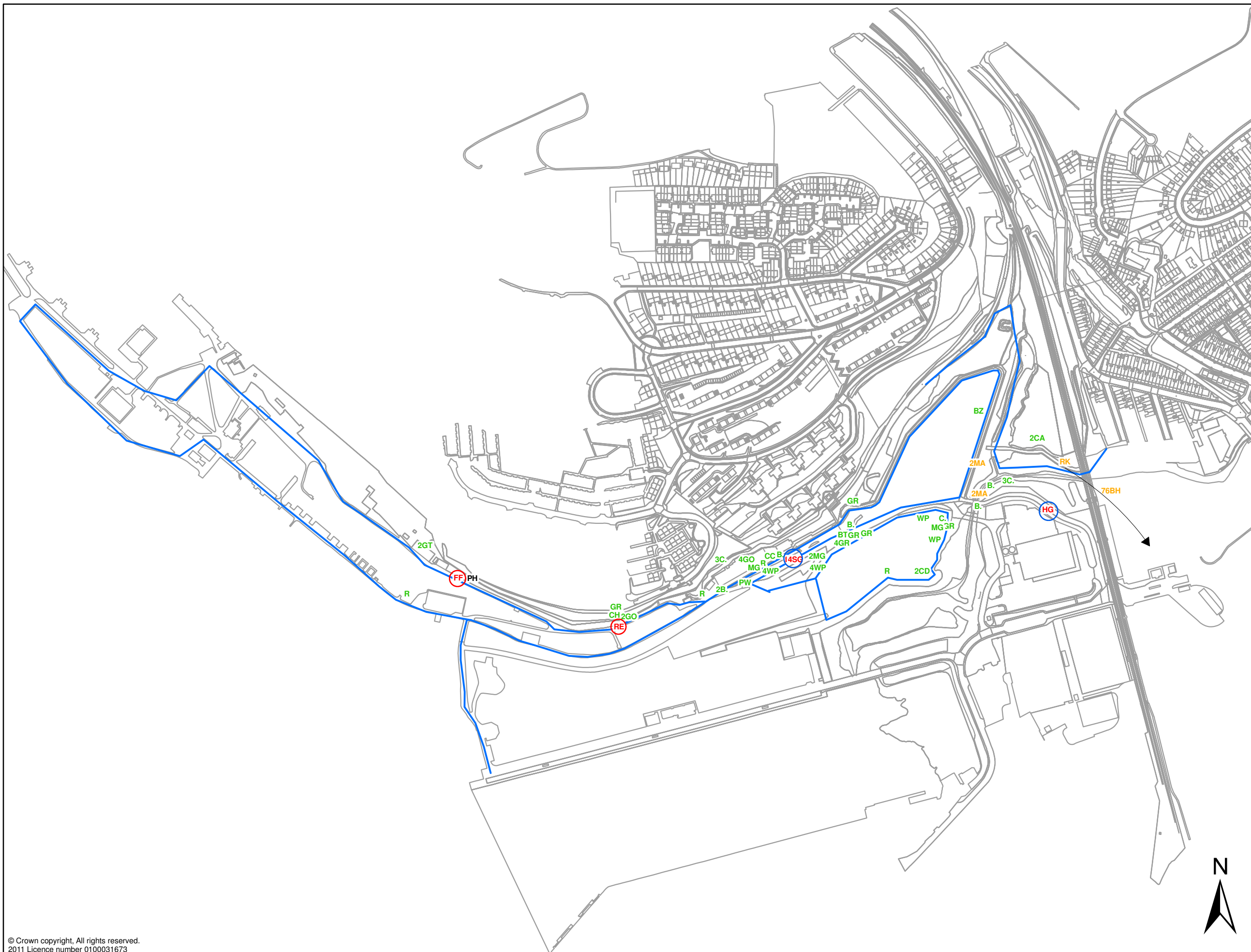
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Drawing Number	Rev
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NOTES

Legend

- Bird Transect
- UK BAP Species

- B. Blackbird
- BH Black-headed Gull
- BT Blue Tit
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- CA Cormorant
- CH Chaffinch
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- GR Green Finch
- GO Gold Finch
- GT Great Tit
- H. Grey Heron
- HG Herring Gull
- HS House Sparrow
- J. Jay
- MG Magpie
- R. Robin
- RK Red Shank
- SG Starling
- WP Wood Pigeon

Revision Details	By	Date	Suffix
	Check		

Drawing Status	PLANNING
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Job Title	EfW CHP FACILITY, NORTH YARD, DEVONPORT
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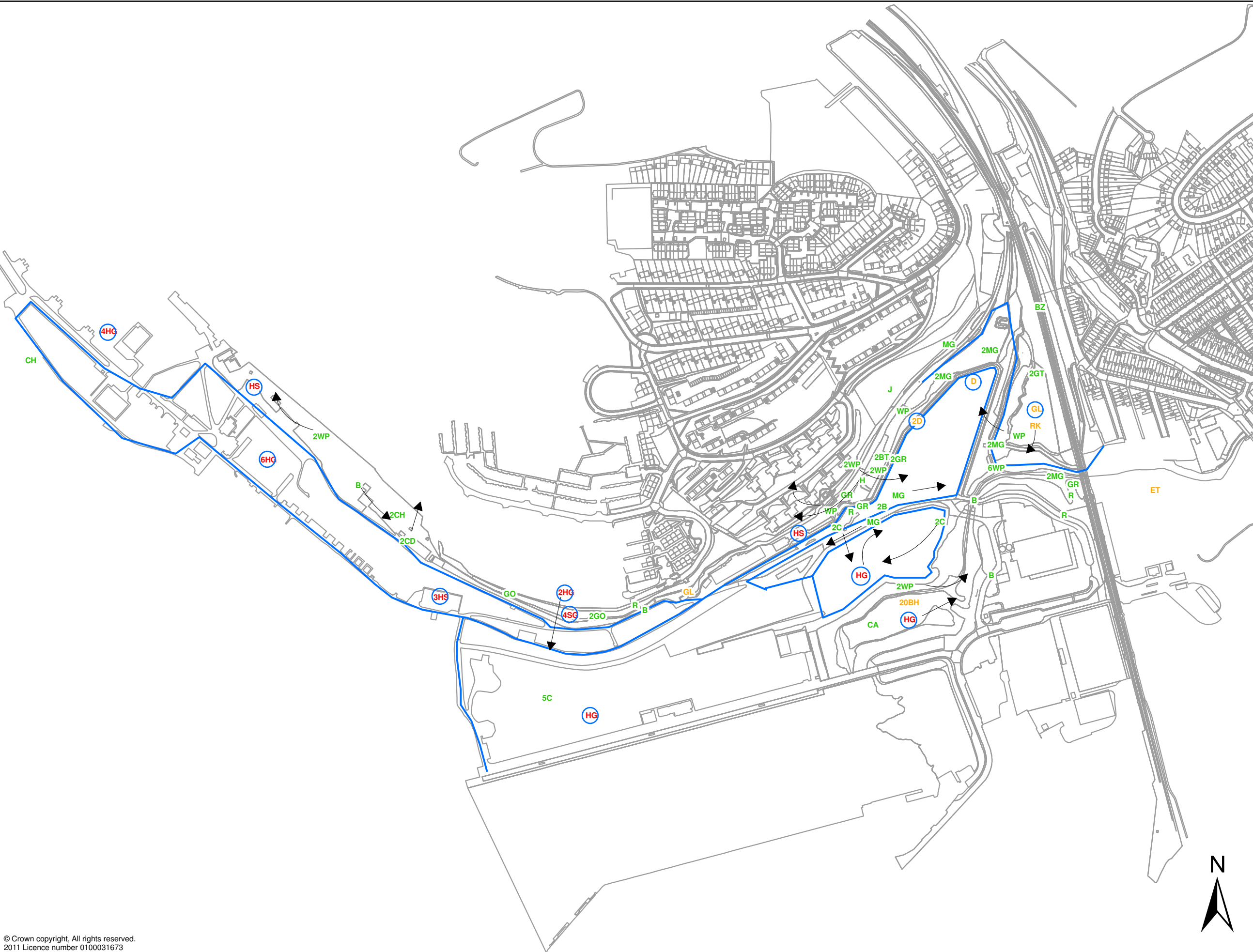
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8.3 Scientific Names and BTO Codes and Conservation Status

Standard BTO codes used in the wintering bird survey and National conservation status of the UK bird species.

BTO code	Species	Scientific Name	Conservation Status
B	Blackbird	<i>Turdus merula</i>	Green
BC	Blackcap	<i>Sylvia atricapilla</i>	Green
BF	Bullfinch	<i>Pyrrhula pyrrhula</i>	Amber
CG	Canada Goose	<i>Branta canadensis</i>	Green
C	Carrion Crow	<i>Corvus corone corone</i>	Green
CH	Chaffinch	<i>Fringilla coelebs</i>	Green
CC	Chiffchaff	<i>Phylloscopus collybita</i>	Green
CD	Collared Dove	<i>Streptopelia decaocto</i>	Green
CO	Coot	<i>Fulica atra</i>	Green
D	Dunnock	<i>Prunella modularis</i>	Amber
FP	Feral Pigeon	<i>Columba livia x</i>	Green
GO	Goldfinch	<i>Carduelis carduelis</i>	Green
GT	Great Tit	<i>Parus major</i>	Green
GR	Greenfinch	<i>Carduelis chloris</i>	Green
H	Grey Heron	<i>Ardea cinerea</i>	Green
HG	Herring Gull	<i>Larus argentatus</i>	Red
HM	House Martin	<i>Delichon urbica</i>	Amber
HS	House Sparrow	<i>Passer domesticus</i>	Red
JD	Jackdaw	<i>Corvus monedula</i>	Green
K	Kestrel	<i>Falco tinnunculus</i>	Amber
L	Northern Lapwing	<i>Vanellus vanellus</i>	Red
LW	Lesser Whitethroat	<i>Sylvia curruca curruca</i>	Green
LI	Linnet	<i>Carduelis cannabina</i>	Red
MG	Magpie	<i>Pica pica</i>	Green
MA	Mallard	<i>Anas platyrhynchos</i>	Amber
MP	Meadow Pipit	<i>Anthus pratensis</i>	Amber
PH	Pheasant	<i>Phasianus colchicus</i>	Introduced
Q	Quail	<i>Coturnix coturnix</i>	Amber
RL	Red-legged Partridge	<i>Alectoris rufa</i>	Introduced
RB	Reed Bunting	<i>Emberiza schoeniclus</i>	Amber
RW	Reed Warbler	<i>Acrocephalus scirpaceus</i>	Green
R	Robin	<i>Erithacus rubecula</i>	Green
SM	Sand Martin	<i>Riparia riparia</i>	Amber
SW	Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	Green
S	Skylark	<i>Alauda arvensis</i>	Red
ST	Song Thrush	<i>Turdus philomelos</i>	Red
SH	Sparrowhawk	<i>Accipiter nisus</i>	Green
SG	Starling	<i>Sturnus vulgaris</i>	Red
SD	Stock Dove	<i>Columba oenas</i>	Amber
SC	(Common) Stonechat	<i>Saxicola torquata</i>	Amber

BTO code	Species	Scientific Name	Conservation Status
SL	Barn Swallow	<i>Hirundo rustica</i>	Amber
SI	(Common) Swift	<i>Apus apus</i>	Amber
W	Northern Wheatear	<i>Oenanthe oenanthe</i>	Amber
WH	(Common) Whitethroat	<i>Sylvia communis</i>	Amber
WW	Willow Warbler	<i>Phylloscopus trochilus</i>	Amber
WP	Woodpigeon	<i>Columba palumbus</i>	Green
WR	Wren	<i>Troglodytes troglodytes</i>	Green

8.4 Bird Survey Data from MoD

Name	2001	2002	2003	2004	2008
Blackbird	12	18	25+	20+	6
Black-headed gull	25	10	5	15	2
Black redstart		3	1		
Blue tit	6	4	10	12	5
Buzzard	1	1	1	2	
Carrion crow	7	7	7	12	10
Chaffinch	4	6	11	10	2
Chiffchaff	1	1	1	2	
Coal tit				2	
Collared dove	6	6	10	8	
Cormorant	1	1	1	1	3
Curlew	1	1	1	1	
Dunnoek	2	2	1	3	
Dunlin	50+	50+	50+	50+	
Feral pigeon	50+	50+	60+	80+	40+
Goldfinch	10	9	9	10	24
Great tit	2		5	12	2
Greater black-backed gull	1	1	1	1	
Greenfinch	8	10	11	18	10
Grey heron	1	2	1	1	1
Grey wagtail				3	
Herring gull	30+	30+	28	20	12
House martin		4	2	4	
House sparrow	60+	30+	50+	45+	15
Jackdaw	5	15	12	12	15
Kestrel	1	1	1	1	
Kingfisher		1	1	1	
Lesser black-backed gull				1	
Linnet	8	6	5	4	
Little egret	1	1	1	1	
Long-tailed tit				4	
Magpie	13	14	16	10	6
Mallard	1		1	1	
Meadow pipit	1	1	1	1	
Mediterranean gull			1		
Mute swan	1	1	1	1	
Oystercatcher	1	1	1	1	
Peregrine		1	1	1	
Pheasant			1	1	1
Pied wagtail	8	2	4	8	
Redshank	1	1	1	1	
Robin	6	3	7	10	8

Rook	1	1	1	1	
Sandwich turn	1	1	1		
Shelduck		1	1	1	
Song thrush	1	2	1	2	
Sparrowhawk	1	1	1		
Starling	30+	20+	20+	12+	25
Stock dove	1	1			
Barn swallow	10	10	18	20	20
Swift	8	8	4	8	3
Turnstone	10+	10+	10+	10	
(Common) Whitethroat	1	3	4	3	
Woodpigeon		14	25+	25+	18
Wren	3	3	7	4	4
Grand Total	162	179	199	245	192

8.5 Environmental Survey Data

Survey No.	Date	Time (24 hrs)	Temp °C	Weather	Other comments
Survey 1	15/11/2010	09:00	Between 6 - 10	Sunny, frosty	High water
Survey 2	10/12/2010	08:15	Between 4 - 6	Frosty, clear sky	High Water
Survey 3	17/01/2011	08:45	9	Cloudy	Low water. Wet and windy previous night.
Survey 4	21/02/2011	08:30	Did not record	Cloudy, rain	High water
Survey 5	09/03/2011	08:15	4	Sunny, some cloud, cold.	Slight breeze, high water