

Barratt Homes

Havant Road, Emsworth

Wintering Bird Survey Report

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Executive Summary

Site location	Land north of Havant Road, Emsworth, Hampshire (OS grid reference SU 73396 06193).
Previous reports/surveys	- An extended Phase 1 habitat survey was undertaken of the site by WYG in July-August 2014 and subsequently updated in June 2016. A further check in February 2017 was made to check that site conditions had not changed. The 2014 survey recommended that wintering bird surveys be undertaken for the site. - Aluco Ecology 2013. This found no use of the site by waders or brent geese but recorded low numbers of brent geese foraging on fields on fields close to the coast.
WYG Survey	- Existing data for the site was reviewed. - WYG completed a Winter Bird survey using the Solent Water Brent Goose Strategy methodology. In agreement with Natural England, two high tide surveys were completed each month between October 2013 and March 2014, and hence a total of 12 visits were made to the site.
Results	- A total of 34 species were recorded using the site; eleven of these species are birds of conservation concern (BoCC) of which four are Red Listed and seven are Amber Listed. Two species are also listed on Schedule 1 of the Wildlife and Countryside Act 1981 Firecrest (<i>Regulus ignicapillus</i>) and Redwing (<i>Turdus illiacus</i>). - No SPA / Ramsar qualifying species were recorded on site during the surveys; either foraging or roosting at high tide times. - The site does not contain suitable habitats for waders or brent geese due to the enclosed nature of the land.
Mitigation and Enhancement Recommendations	- Provision of open space on site including a 1.3km circular trim trail around the perimeter of the site. - A financial contribution of £176 per dwelling will need to be made to the Local Planning Authority in order to mitigate for recreational impact at the SPA as a result of the in-combination impacts of the development. This financial contribution will be used towards protecting and enhancing the SPA such as through wardens. <u>Breeding Birds</u> - If any hedgerows, trees or vegetation require removal to facilitate the proposed development, it is recommended that this is completed outside of the nesting bird season (i.e. undertaken from October to March inclusive). If this is not possible, a search for nesting birds immediately prior to vegetation clearance is required, (undertaken by an ecologist). If any nests are found, a watching brief and appropriate buffer zone may be required. Areas of scrub and hedgerows and adjacent woodland should be retained and enhanced in order to safeguard the bird assemblage onsite.



1.0 Introduction

1.1 Background

WYG was commissioned by Barratt Homes in October 2014 to undertake winter bird surveys at land north of Havant Road (referred to as the "site"), following on from recommendations made during an extended Phase 1 habitat survey (WYG, 2014) with the aim of assessing the site's importance as a habitat for wintering birds. The habitats recorded included improved to semi-improved grassland with a reduced herb content, species poor hedgerows, patches of bramble and scrub.

The site lies within 1.1 km of Chichester and Langstone Harbour Special Protection Area (SPA) and Ramsar Site and the Solent Maritime Special Area of Conservation (SAC), designated for overwintering populations of the following species: brent geese, dunlin (*Calidris alpina*), black-tailed godwit (*Limosa limosa*), common shelduck (*Tadorna tadorna*), Eurasian widgeon (*Anas penelope*), Eurasian teal (*Anas crecca*), northern pintail (*Anas acuta*), common redshank (*Tringa totanus*) and red-breasted merganser (*Mergus serrator*). The harbour is a wetland of international importance for over wintering wildfowl which regularly supports 93,000 individual waterfowl.

Winter bird surveys of the site were undertaken by Aluco Ecology in between 10th January 2013 and 28th March 2013. They recorded the use of fields to the south of Havant Road closer to the coast (off site) by a low number of waders (curlew and lapwing) and brent geese; however, no waders or waterfowl were recorded on the site itself. The Solent Waders and Brent Goose Strategy records the fields to the south of the development as having 'uncertain' useage for waders and brent geese.

1.2 Site Location and Description

The site covers approximately 6.1 hectares, located to the east of Havant in Hampshire, centred on Ordnance Survey grid reference SU734062. The site is bordered to the north-west by the A27, residential development to the east and to the south by the A259 (see Appendix B for the Phase 1 habitat map). The site comprises very short, cattle grazed improved grassland, areas of bare ground, scattered scrub and trees, bramble and defunct hedgerows. Along the north-western boundary, adjacent to the A27, is young plantation woodland mainly comprising field maple and hawthorn. The south-eastern boundary comprises back garden fencing with planted shrubs, with scrub. To the south of the site and adjacent to the footway of the A259 is a hedgerow comprising mainly sycamore. Scrub dominates the north-eastern extent of the site and three defunct hedgerows are present, two of which run north to south and one east to west separating the fields from one another.



1.3 Development Description

It is proposed to develop the site for approximately 147 residential properties, with associated parking, access, gardens, hard and soft landscaping and areas created for local wildlife. An area of open space will be retained within the eastern extent of the site and along the south-eastern boundary of the site. These areas will be managed as tall grassland with scattered trees, in addition to several areas of public open space throughout the scheme. The scheme will be accessed from the southern boundary, with additional foot access provision along the eastern boundary. For the most up to date layout plan please refer to Layout Plan Drawing No. CB_15_105_900, contained in Appendix A.

1.4 Survey Scope

This report provides the results from the wintering bird surveys undertaken between October 2014 and March 2015 in accordance with the Solent and Waders Brent Goose Strategy (SWBGS Steering Group, 2010).

The scope of work comprised:

- A desk study to obtain existing information regarding surveys undertaken on previous occasions.
- Two high tide visits were completed every month through the October 2014 – March 2015 period to assess the numbers and species making use of the site and adjacent habitats.
- An assessment of the potential ecological constraints to and impacts from the proposed development along with recommendations for further survey(s), avoidance, mitigation and enhancement where appropriate.

1.5 Relevant Legislation

All wild birds in the UK are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy the nest (whilst being built or in use) or its eggs. Bird species listed in Schedule 1 of the 1981 Act (as amended) receive further protection which makes it an offence to intentionally or recklessly disturb these species while building a nest or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird (HMSO 1981 & 2000).



In addition, Annex 1 of the EU 'Birds' Directive (1979) lists 194 species that are subject to special conservation measures concerning their habitat in order to ensure their survival and reproduction. Member States are required to designate Special Protection Areas (SPAs) for the Annex 1 and all migratory species. SPAs are scientifically identified areas critical to the survival of the targeted species. The SPAs form part of the Natura 2000 EU network of protected nature sites. The designation of an area as an SPA gives it a high level of protection from potentially damaging developments (European Commission (EC) 1979).

Brent geese are afforded protection under Section 4.2 of the Wild Birds Directive 79/409/EEC. Section 4.2 of the Directive states that all Member States are required to:

"...take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance."

Measures taken by the UK Government in fulfilment of this duty include designating wildlife sites where the species occur. Brent geese are a principle feature of Langstone Harbour Special Protection Area (SPA) and a feature of the Chichester and Langstone Harbour Ramsar Site and Langstone Harbour Site of Special Scientific Interest (SSSI). About 16% of the UK migratory/wintering population of brent geese are present within this SPA. The SPA is also designated for significant numbers of black-tailed godwit, dunlin, grey plover (*Pluvialis squatarola*), redshank and ringed plover (*Charadrius hiaticula*), with the area classed as a Wetland of International Importance regularly supporting a population of 93,000 individual wintering waterfowl (JNCC, 1996).

Birds of Conservation Concern (BoCC) were also recorded and mapped. Red List species have undergone declines of over 50% in either breeding or non-breeding populations / range over the last 25 years. Species listed by Birdlife International as being globally threatened or having undergone an historical decline (between 1800 and 1995) without substantial recent recovery also qualify as a Red List species.

Amber List species have undergone declines of between 25% and 49% in either breeding or non-breeding populations / range over the last 25 years. Species of European Conservation Concern and those recovering from a long-term historical decline are also Amber Listed. Non-breeding species which have at least 50% of their UK wintering sites at fewer than ten localities and those where at least 20% of the European non-breeding populations are found within the UK are Amber Listed too.



All species regularly occurring in the UK which do not qualify for either Red List or Amber List status are placed on the Green List. This includes those species listed as recovering from historical declines which have continued to recover and do not qualify under European or International criteria (Eaton *et al* 2009).



2.0 Methods

2.1 Data Search & Previous survey information

Data on the use of the surrounding areas by important bird populations were obtained through direct consultation with Hampshire Biological Information Centre (HBIC) as part of the previous extended Phase 1 habitat survey (Appendix C).

2.2 Survey Methodology

The Solent Water Brent Goose Strategy methodology was followed (SWBGS Steering Group, 2010) with the aim of assessing the potential impact of the proposed development on important bird species and specifically brent geese and waders associated with Chichester and Langstone Harbour SPA whilst identifying potential ecological constraints to the development and informing ecological mitigation if required.

Usually three years' worth of winter bird survey data is required in accordance with the SWBGS; however, following consultation with Natural England (S. Thmpson [Natural England] – V. Coulthard [WYG] 15th Dec 2015) - it was agreed that one year's worth of data would be sufficient as the habitats on site are sub-optimal for wintering waders and brent Geese.

At the site, 12 counts were undertaken between October 2014 and March 2015. SWBGS (2010) and Gilbert *et al.* (2008) recommend that monthly surveys are undertaken between September and March for high tide counts and between November and February for low tide counts. Each survey occasion took place over four hours, two hours before high tide and two hours after high tide. During the four hours, counts of all species were undertaken every half hour. Vantage point surveys were completed for the first two hours recording bird usage from two fixed positions as it was not possible to adequately see the whole site from one location on site. If any SPA qualifying species were noted, these were plotted on maps; otherwise all birds seen at 15 minute intervals were recorded. The two hours after high tide were spent completing a walkover survey of the site, counting and plotting the locations of all birds seen or heard and their activities. Equipment used by the surveyor included binoculars and a telescope.



2.3 Survey Limitations

At the site, twelve counts were undertaken between the 13th October 2014 and the 28th of March 2015. SWBGS (2010) and Gilbert *et al.* (2008) recommend that monthly surveys are undertaken between September and March for high tide counts and between November and February for low tide counts.

Due to restricted daylight hours, it was agreed with Natural England that the survey carried out on the 19th December could be undertaken from one and a quarter hours before high tide to three hours after high tide (rather than the standard 2 hours before high tide) – this is not considered to have an impact on the data collected as all the other surveys were carried out within the prescribed time frame.

Normally three years wintering bird data is required for winter bird surveys, however due to the unsuitability of the site for waders and brent geese coupled with the fact that data is available from previous survey work (two years of winter bird surveys by Aluco Ecology), it is considered that one year's data is sufficient to provide an assessment of the site for wintering birds but this should be confirmed with Natural England.



3.0 Survey Results

3.1 Data Search Results

3.1.1 Hampshire Biodiversity Information Centre

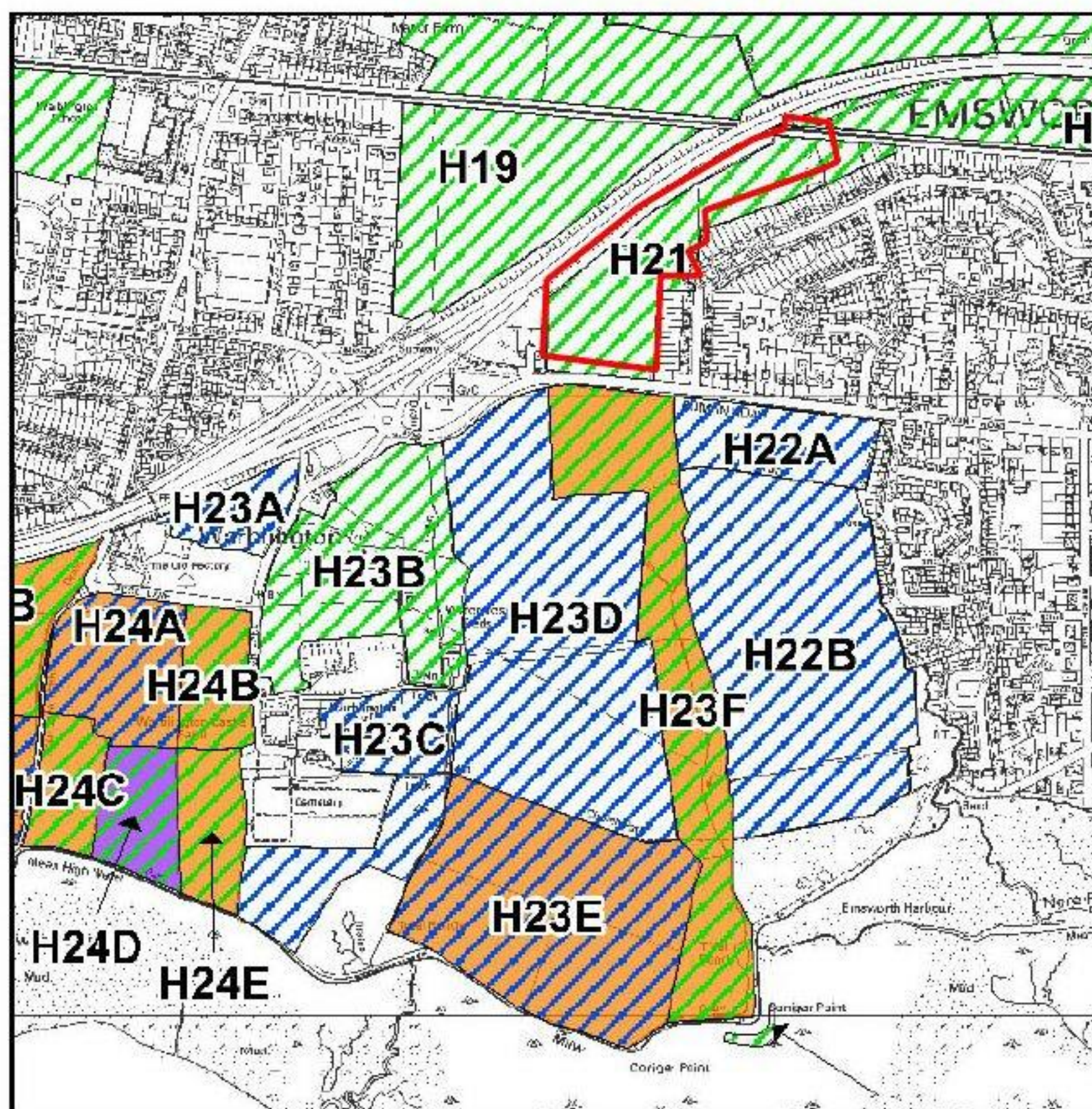
A summary is provided below of the data that has been provided by Hampshire Biodiversity Information Centre including the (SWBGS) (2010) information (Appendix C).

- Brent geese are a principle feature of Langstone Harbour Special Protection Area (SPA) and a feature of the Chichester and Langstone Harbour Ramsar Site and Langstone Harbour Site of Special Scientific Interest (SSSI). About 16% of the UK migratory/wintering population of brent geese are present within this SPA. The SPA is also designated for significant numbers of black-tailed godwit, dunlin and red breasted merganser, with the area classed as a Wetland of International Importance regularly supporting a population of 93,000 individual wintering waterfowl (JNCC, 1996).
- HBIC provided records from the SWBGS (2010) (Figure 1). The site was not assessed for brent geese and was classified as needing further survey work to inform its assessment for waders, therefore the site is 'uncertain' for waders (Figure 1 below). Field H23D to the south of the site had positive records for brent geese in 2002 but had no recorded use for waders. In 2010 no brent geese or waders were recorded. Correspondence with Natural England (pers. comm. 2016) indicated that brent geese have been utilising the field on other occasions but the numbers of birds involved has not been ascertained.

3.1.2 Aluco Ecology

Aluco Ecology carried out a winter bird survey of land to the south of the development area in 2013 which showed that some of the fields to the south of the site are occasionally used by wintering waders. Field H23D (Waders and Brent Goose Strategy Group) to the south of the development site was shown to provide a foraging area for curlew and black-headed gulls/Mediterranean gulls. A peak count of 54 brent geese were feeding on the southern portion of H23D approximately 450 m south of the development site on the 10th January 2013. Overall, records of waders and brent geese were mainly concentrated on fields closer to the foreshore, especially to the west of Warblington such as H24D. Similarly, fields to the east of the cemetery in Warblington (H23C) have habitats more suitable for waders and wildfowl which were reflected in the data collected.

Figure 1. Solent waders & Brent geese survey map showing area H21 (which includes the proposed development site) taken from King (2010).



Brent Geese Site Classification		Wader Site Classification	
	Important		Important
	Uncertain		Uncertain
	No recorded use		No recorded use

3.2 Survey Dates and Weather Conditions

All surveys have been conducted in suitable weather conditions (Table 1); there have been a few occasions where there has been a brief duration of poorer weather conditions which had little impact on visibility and overall the conditions have been good.

**Table 1: Dates and weather conditions**

Date	Portsmouth high tide time	Start time	End time	Cloud cover (Oktas)	Wind speed (Beaufort scale)	Precipitation
13th Oct 2014	15:42	13:40	17:40	8	1	Moderate rain
23rd Oct 2014	12:06	10:05	14:05	7	2	Occasional drizzle
9th Nov 2014	12:30	10:30	14:30	0-4	1-2	None
26th Nov 2014	13:58	11:30	15:30	8	1	None
4th Dec 2014	09:44	07:45	11:45	8	1-2	None
18th Dec 2014	08:23	07:40	11:40	8	4-5	None
6th Jan 2015	12:15	10:15	14:15	4	2-3	Rain showers
22nd Jan 2015	12:44	10:45	14:45	0	1-2	None
5th Feb 2015	12:31	10:30	14:30	8	1-2	Light snow shower
17th Feb 2015	10:09	08:15	12:15	0	1-2	None
3rd Mar 2015	10:24	08:25	12:25	4	2-3	None
18th Mar 2015	09:49	07:45	11:45	2	1-2	None

3.3 Wintering Bird Data

In summary, the survey results show the following (species recorded can be found in Appendix D):

- A total of fifty species was recorded during the surveys of which 34 were regarded as utilising the site rather than flying over it.
- No brent geese were recorded utilising the site and were not recorded flying over during the surveys.
- No waders were recorded utilising the site during the surveys with observations of golden plover *Pluvialis apricorum*, green sandpiper *Tringa ochropus* and curlew *Numenius arquata* being of birds flying over the site. These are not SPA qualifying species.
- Two protected Schedule 1 bird species was recorded utilising the site - redwing *Turdus iliacus* and firecrest *Regulus ignicapillus*. The legal status of this species relates only to breeding birds; redwings do not breed within Hampshire whilst the site does not contain suitable habitats for breeding firecrest.



- A total of four BoCC Red Listed species were recorded during the survey comprising house sparrow *Passer domesticus*, redwing, song thrush *Turdus philomelos* and starling *Sturnus vulgaris*. (Appendix F). Additionally, a fieldfare *Turdus pilaris* was recorded flying over the site on one occasion (wintering species only).
- A total of sixteen BoCC Amber Listed species were recorded during the surveys although some of these were recorded flying over the site rather than actively using it. Such species included black-headed gull *Larus ridibundus*, common gull *Larus canus*, curlew *Numenius arquata*, golden plover *Pluvialis apricaria*, green sandpiper *Tringa ochropus*, lesser black-backed gull *Larus fuscus*, little egret *Egretta garzetta* and Mediterranean gull *Larus melanocephalus*.
- Amber List species recorded utilising the habitats on the site comprised of the following seven species: bullfinch *Pyrrhula pyrrhula*, dunnock, firecrest, grey wagtail *Motacilla cinerea*, kestrel *Falco tinnunculus*, meadow pipit *Anthus pratensis* and stock dove *Columba oenas*.

The notable bird species recorded from the site are listed in Table 2 below (See Appendix E - Plan 1 (BoCC red list species) and Plan 2 (BoCC amber list species) for their locations). The standard BTO codes are shown in brackets after the Common name.

Table 2: Notable bird species recorded wintering (BoCC Red and Amber list) within the survey area.

Common Name (BTO code)	Scientific Name	Comments	Status
Bullfinch (BF)	<i>Pyrrhula pyrrhula</i>		BOCC Amber
Dunnock (D)	<i>Prunella modularis</i>		BOCC Amber
Firecrest (FC)	<i>Regulus ignicapillus</i>	Unlikely breeder	BOCC Amber (Schedule 1 WCA 1981)
Grey Wagtail (GL)	<i>Motacilla cinerea</i>		BOCC Amber
House Sparrow (HS)	<i>Passer domesticus</i>		BOCC Red
Kestrel (K)	<i>Falco tinnunculus</i>		BOCC Amber
Meadow Pipit (MP)	<i>Anthus pratensis</i>		BOCC Amber
Redwing (RE)	<i>Turdus iliacus</i>		BOCC Red (Schedule 1 WCA 1981)
Song Thrush (ST)	<i>Turdus philomelos</i>		BOCC Red
Starling (SG)	<i>Sturnus vulgaris</i>		BOCC Red
Stock Dove (SD)	<i>Columba oenas</i>		BOCC Amber

- No species of bird which are listed as a qualifying feature of the Chichester and Langstone Harbours SPA were recorded using the site.



- Of the fifty birds recorded during the surveys sixteen were recorded only in flight whilst thirty-four were recorded actively using the site. The bird species recorded only flying over the site are considered very unlikely to use the habitats present on site. The proposed development site itself is used by a number of other species; of interest were single firecrests (likely wintering only as no breeding habitat present on site) (Schedule 1 of the Wildlife and Countryside Act 1981, BoCC Amber listed species), recorded on two occasions, and kestrels which were seen on four separate surveys (also no breeding habitat on site) (BoCC Amber Listed species).

3.3.1 Common and Widespread Species

A range of common and widespread bird species (BoCC Green List) were also recorded during the surveys that are typical of species found within the habitats found on site. These were nearly all song birds, the exceptions being common buzzard *Buteo buteo* and sparrowhawk *Accipiter nisus* (Table 3). The full list of species recorded during the surveys is provided in Appendix E.

Table 3: Common (BoCC Green List) bird species recorded wintering within the survey area.

Common Name (BTO code)	Scientific Name
Blackbird	<i>Turdus merula</i>
Blackcap	<i>Sylvia atricapilla</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Carrion Crow	<i>Corvus corone</i>
Chaffinch	<i>Fringilla coelebs</i>
Coal Tit	<i>Parus ater</i>
Collard Dove	<i>Streptopelia decaocto</i>
Common Buzzard	<i>Buteo buteo</i>
Goldcrest	<i>Regulus regulus</i>
Goldfinch	<i>Carduelis carduelis</i>
Great Tit	<i>Parus major</i>
Great Spotted Woodpecker	<i>Dendrocopos major</i>
Greenfinch	<i>Carduelis chloris</i>
Jackdaw	<i>Corvus monedula</i>
Jay	<i>Garrulus glandarius</i>
Long-tailed Tit	<i>Aegithalos caudatus</i>
Magpie	<i>Pica pica</i>
Pheasant	<i>Phasianus colchicus</i>
Pied Wagtail	<i>Motacilla alba</i>
Robin	<i>Erithacus rubecula</i>
Rook	<i>Corvus frugilegus</i>
Sparrowhawk	<i>Accipiter nisus</i>
Woodpigeon	<i>Columba palumbus</i>
Wren	<i>Troglodytes troglodytes</i>



3.3.2 Disturbance

During the bird counts, records were made of the frequency of potential disturbance events to the birds occupying and feeding on the site. No notable instances of disturbance were recorded during the surveys.



4.0 Discussion

4.1 Summary of survey results

Key results of the 12 surveys are as follows:

- No brent geese were recorded using the site by WYG. None of the other species for which Langstone Harbour SPA is designated (i.e. black-tailed godwit, dunlin, grey plover, redshank and ringed plover) were recorded using the site by WYG

During the WYG surveys, the site was noted to have mixed use by birds; the field provided a food resource to a range of bird species with the hedgerows and scrub and offering shelter, perches, foraging areas and potential breeding opportunities. The habitat at the site, which comprised of relatively small, enclosed fields, surrounded by woodland, hedgerows and residential areas and internally divided by further hedgerows and scattered scrub, is not attractive to the intertidal species associated the SPA.

Four Red Listed (BoCC) species (common starling, house sparrow, song thrush, and redwing) and seven amber list species (dunnock, kestrel, grey wagtail, meadow pipit, stock dove and firecrest (also Schedule 1 of the WCA 1981) were recorded. Of these species dunnock, kestrel and stock dove are considered to have potential to breed on site.

The area surveyed consists of habitats that are of unexceptional quality for birds that are widespread and frequent within lowland farmland and suburban environments. Most of the species are BoCC Green Listed and are likely to continue to thrive on site providing that areas of green space (including gardens), scrub and hedgerows are kept as part of any proposals.

4.2 Potential Impacts

4.2.1 Habitat Loss

The areas of habitat which will be impacted by the proposed development include improved grassland, scattered scrub and dense areas of scrub (see Appendix B). The field is considered to have negligible potential to support brent geese or other SPA qualifying species given its proximity to houses, fragmented hedgerows and surrounding trees; however, it is good habitat for common starling, dunnock and house sparrows which all feed in the hedgerows and scrub within the field. Some areas of scrub and grassland are to be lost as a result of the proposals, however sensitive provision of areas of green space and garden planting will mitigate for this loss. Any removal of vegetation should not be carried out during the nesting



season (March-August inclusive) unless inspected by a suitably qualified ecologist no more than 48 hours prior to works commencing. Construction activities and associated noise may disturb breeding birds around periphery of the site, if these are carried out within the breeding season. As the site is located close to the M27 Motorway birds in the area may however be partially habituated to noise disturbance.

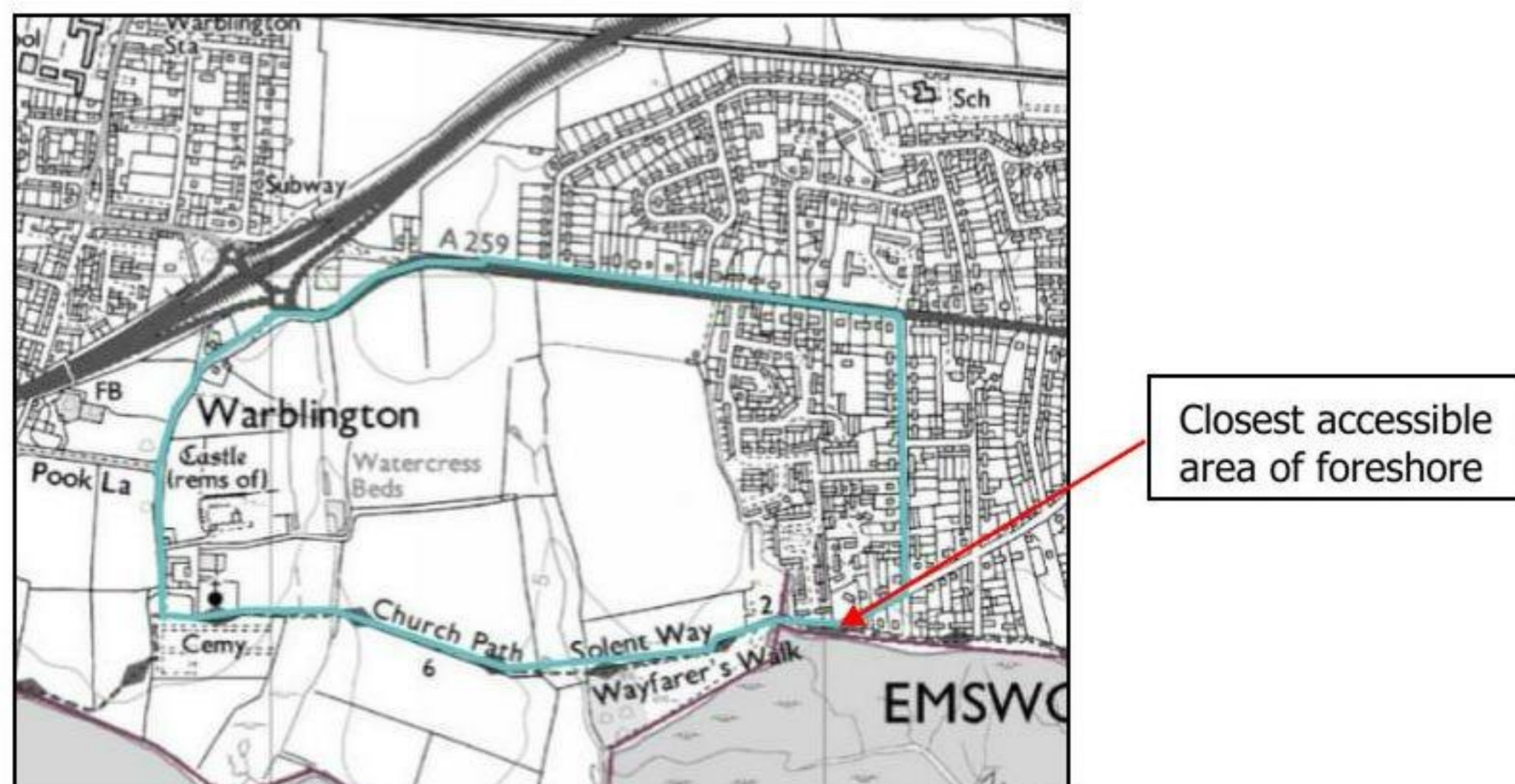
4.2.2 Disturbance to wintering waders and brent geese

It is known that noise associated with construction activities can disturb wintering waders and wildfowl (IECS 2009). Hedgerows between the fields to south of the site and bordering the road to the south of the site are likely to reduce the impacts of noise disturbance to any species present. The nearest site identified as having records of brent geese is approximately 500m to the south away from the site, (H23D, Alco Ecology) and construction sounds are unlikely to cause disturbance at such distances, especially as they likely to be masked by the constant noise originating from traffic using the A27 to the north of the site. It would however be prudent to take measures to that will reduce construction noise in order to prevent possible disturbance to brent geese and waders such as 'damping' pile drivers and placing generators or other noisy equipment in acoustic enclosures.

Fields immediately to the south of the site (H22B and H23F) are considered too enclosed and small in size to be favoured by wintering waders and brent geese. No desire lines or footpaths lead into the fields and a tall hedgerow and mature trees screen them from traffic/pedestrians using the A529. It is not considered likely that any wintering birds potentially using these fields are likely to be impacted upon by the proposals.

It is proposed that parts of the site (roads, parking and hardstanding) are to be raised by 300-600mm this is not likely to impact upon any wintering birds using the field to the south or flight lines due to the presence of mature trees and tall hedgerows to the south of the site, along the adjacent A259.

Increased recreational pressure on the footpath network along the north shore of Chichester Harbour is possible from the addition of 147 homes at the site. Any increase in recreation is likely to be associated with the Solent Way-Church Path, 700 m to the south of the site. However, this link provides a circular walk of approximate 4 km in length that is unlikely to be widely used by new residents' due to the length (Figure 2).

Figure 2: Walking routes from the Site to foreshore

The footpath adjacent to field H23D (where geese were recorded) is located 1.75km from the new residential development. According to Fearnley *et al.* (2010) the visit rate for foot visitors to sites between 1.5-2km away from homes is 0.001633. This equates to an additional 0.63 visits per 16-hour day as a result of the development (assuming 2.4 residents per dwelling). In reality, this is likely to be lower as the Footprint assessment is informed primarily by data collected from desirable locations with attractions like facilities, birdwatching, leisure etc. and they conclude that areas without these attractions (such as the footpath in question) are likely to receive a lower amount of traffic as a result.

Multi-functional green space has been incorporated into the final design which includes an area of 1.5a of public open space on the development site which can be used as a dog exercise area. This area will also incorporate part of the 1.3km circular walking route which runs around the periphery of the site providing signage, dog waste bins, benches and natural play. These areas have been incorporated to encourage dog walkers and residents to use on site facilities rather than walking off site towards Chichester and Langstone Harbour SPA (see Sketch Layout – CB_15_105_900). As such, the proposals on site are considered to offset any potential 'alone' impacts from the development.

All residential development applications within 5.6 km of the Solent SPAs need to provide means of mitigating potential cumulative impacts on the SPAs - this will require a payment of £176 (revised each April) per dwelling before planning permission is granted or by entering into S106 agreement. The



development, therefore, will create an additional £28,336 payment to reduce impacts of development within the SPA.

4.2.3 Other Birds

The inclusion of areas of scrub, grassland and hedgerows within the development proposals will offer potential nesting habitat for a variety of bird species (see section 4.3.2). Some of the benefits in creating additional habitat for typical garden birds may be partially offset by increase in predation from cats associated with the residential development.

4.3 Mitigation & Enhancement

4.3.1 General Habitat Mitigation

The loss of any grassland, mixed scrub and fragmented hedgerows used by common starling, dunnoek and house sparrows will be mitigated for by the creation of a habitat mosaic of hedgerows, trees and interconnected grassland within the site layout; this will offer foraging, roosting and nesting areas to these and other species. Garden habitats will also be utilised by these species. The provision of nest boxes could benefit a range of species: this could include five boxes for swifts, five 'sparrow terraces' and five boxes suitable for tits.

4.3.2 Mitigation and enhancement for brent geese and waders

Brent geese and waders have not been recorded on the site. The relatively enclosed nature of the land, its relatively small size and proximity to adjacent houses render it unsuitable for these species. No mitigation for these species is, therefore, required on site. The provision of a path network onsite will encourage residents to use on-site facilities rather than cross the A27 to travel south towards the coast and hence potentially disturbing brent geese and waders in more sensitive areas offsite. It has been calculated that there will be at most an additional 0.63 visits per day to the nearby Solent Way from the development which is likely to have a limited impact of any brent geese feeding in H23D.

Following consultation, Natural England stated (29th February 2016) stated 'Natural England is satisfied that, on the basis of the objective information provided, it can be excluded that the proposed plan or project will have a significant effect on the Chichester and Langstone Harbours SPA, either individually or in combination with other plans or projects. Furthermore, Natural England is satisfied that the proposed operations are not likely to damage any of the interest features of the Chichester Harbour SSSI'.



Subsequently however Natural England requested that the section of the Solent Way running along the south of field H23D should be fenced in order to prevent any future disturbance to brent geese arising from increased visitor numbers. However, the footpath is on third party land and the landowner would require the footpath to be improved with hard standing in order to prevent the path from becoming poached by confining walkers to a narrow area. Upgrading the footpath in this way will likely result in increased usage and potentially a greater degree of disturbance to brent geese. Therefore, it is considered that fencing or upgrading the footpath will not be beneficial to brent geese that may potentially use field H23D in the future.

In order to mitigate for in-combination impacts from all developments within 5.6km of Chichester and Langstone Harbour SPA a financial contribution of £176 per dwelling will be paid. This is considered likely to mitigate for any in-combination impacts from the development.

4.3.3 Mitigation for Breeding Birds

To avoid destroying or disturbing active bird nests, it is recommended that vegetation clearance is undertaken outside the bird nesting season. This runs from March to September inclusive in any given year. It is considered likely that, if the site is successfully granted planning permission, site clearance will fall within the summer months and hence within the breeding bird season. Therefore, it is recommended that where scrub and/or hedgerows are to be removed, these areas are to be inspected by a suitably qualified ecologist no more than 48 hours prior to works commencing. Should any active nests be found, they must be left *in situ* and not disturbed until all the young have fledged and cease to return to the nest. A buffer of approximately 5 metres should be enacted around each active nest (although the ecologist will confirm this with regards to various species) and every effort must be made not to enter or disturb this area. If, once started, construction works cease for more than five days, it is recommended that an update check is undertaken before any clearance activities are resumed to confirm whether any nesting birds have taken up residence in the intervening period.



5.0 References

Alco Ecology. Brent Geese Use of Land Adjacent To Havant Road/Fortunes Way Havant. January 2009.

Aluco Ecology. Ecological Assesment, Land North of Havant Road, Emsworth. October 2013

Cutts, N., Phelps, A., Burdon, D. (2009) Construction and Waterfowl; Defining Sensitivity, Response, Impacts and Guidance. Institute of Estuarine and Coastal Studies – University of Hull.

Eaton, M.A., Brown, A.F., Noble, D.G., Musgrove, A.J., Hearn, R., Aebischer, N.J., Gibbons, D.W., Evans, A. & Gregory, R.D. (2009) Birds of Conservation Concern 3: The population status of birds in the United Kingdom, Channel Islands and the Isle of Man. British Birds 102. pp 296 – 341.

European commission (EC) (1979) Conservation of wild birds (79/409/EEC) [on-line]. Available from <http://eur-lex.europa.eu/LexUriServ/site/en/consleg/1979/L/01979L0409-20070101-en.pdf> (accessed 6^h Jan 2013).

Fearnly, H., Clarke, R.T. & Liley, D. (2010). The Solent Disturbance & Mitigation Project. Phase II – On-site visitor survey results from the Solent region. ©Solent Forum / Footprint Ecology

Gilbert, G., Gibbons, D.W. and Evans, J. (2002) Bird monitoring methods a manual of techniques for key UK species, RSPB, Sandy Bedfordshire.

HMSO. (1981). *Wildlife and Countryside Act*. www.hmsso.gov.uk

HMSO. (2000). *Countryside Rights of Way Act*. www.hmsso.gov.uk

HMSO. (2006). *Natural Environment and Rural Communities Act*. www.hmsso.gov.uk

King, D. (2010) Solent Waders and Brent Goose Strategy 2010. Hampshire and Isle of Wight Wildlife Trust.

WYG Phase 1 Habitat report, North of Havant Road, Warblington, February 2015



APPENDICES



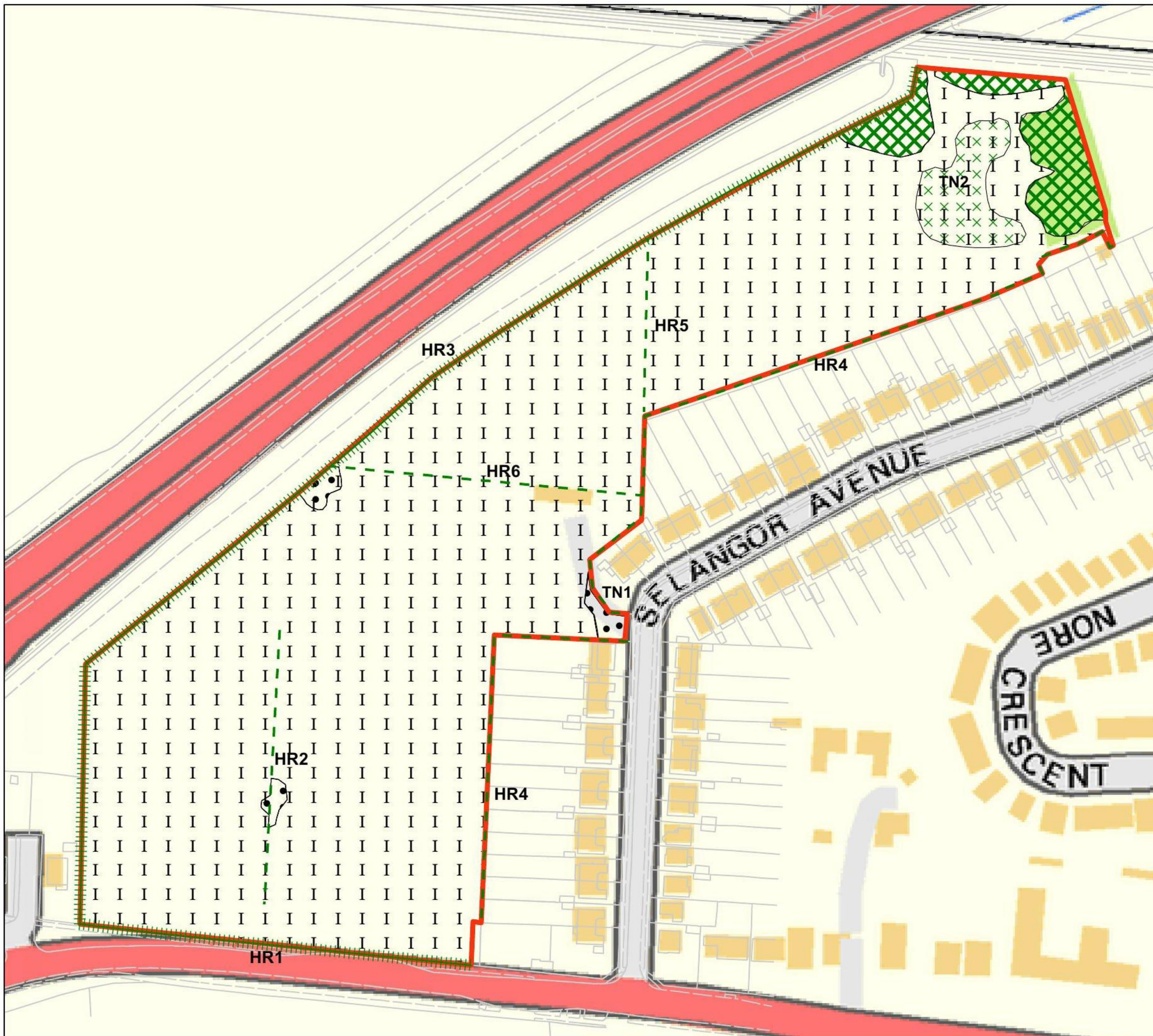
Appendix A – Site Layout

Havant Road, Emsworth: Wintering Birds Survey Report





Appendix B – Phase 1 Survey Plan



Legend

- Species poor, defunct hedgerow
- ||||| Species poor hedge/trees
- Site boundary
- <all other values>
- Bare ground
- Dense/continuous scrub
- Scattered scrub
- Improved grassland

0 25 50 100 Metres

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Land at Havant Road Warblington

Phase 1 habitat survey map

Scale at A3:	Drawn by: Date:	Checked By: Date:	Approved By: Date:
	EA 03/12/14	EH 03/12/14	CM 03/12/14
Project No:	Office	Type	Drawing No.
A088368	45	94	Figure 1
			Revision

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Appendix C – Desktop Study Information



Appendix D – Peak Counts (WYG)

Havant Road, Emsworth: Wintering Birds Survey Report



	13th Oct 2014	23rd Oct 2014	9th Nov 2014	26th Nov 2014	3rd Dec 2014	18th Dec 2014	6th Jan 2015	22nd Jan 2015	5th Feb 2015	17th Feb 2015	3rd Mar 2015	18th Mar 2015
Blackbird	17	37	25	22	26	13	14	14	18	18	19	24
Blackcap		1										
Black-headed gull	(40)	(10)	(23)	(208)	(25)	(171)	(25)	(27)	(17)	(9)	(22)	(62)
Blue tit	6	12	7	11	10	16	12	12	14	14	6	15
Bullfinch					1			6	3 (1)			
Canada goose											(1)	
Carrion Crow	3 (2)	2 (10)	2 (6)	3 (5)	2 (1)	4(1)	7	5 (2)	4	4 (2)	7 (13)	6 (1)
Chaffinch	1	1(3)	3	1	2 (3)		2	4	1	4	6	6
Chiffchaff		2		1	1					1		5
Coal tit											1	
Collared Dove		(7)	(1)	1	(4)	(2)	2 (2)	(1)	(1)		1 (2)	3
Com. buzzard			(1)				1 (1)	1	1	2	1	(1)
Common gull			(3)	(6)			(1)			(1)		

05/12/2017

Havant Road, Emsworth: Wintering Birds Survey Report



	13th Oct 2014	23rd Oct 2014	9th Nov 2014	26th Nov 2014	3rd Dec 2014	18th Dec 2014	6th Jan 2015	22nd Jan 2015	5th Feb 2015	17th Feb 2015	3rd Mar 2015	18th Mar 2105
Curlew					(5)	(7)			(2)			
Dunnoek	7	12	14	14	14	11	9	17	19	23	15	14
Fieldfare					(1)							
Firecrest										1	1	
Goldcrest	5	2	3	5	5	3			5	4	3	2
Golden plover						(7)						
Goldfinch	(2)	9 (2)	1 (4)	(1)	2	(2)	(1)	(1)	(2)	3 (2)	(5)	1 (2)
Great tit	7	8	10	9	13	9	9	12	11	8	14	8
Great spt woodpecker				1			1					
Greenfinch			(1)	2 (2)	3 (3)	1 (1)		3 (3)	5 (1)	4 (4)	5 (8)	2 (4)
Green sandpiper								(1)				
Grey heron											(1)	
Grey wagtail		(1)		(1)	(1)		1	1 (1)	(1)	(1)	(1)	
Herring gull	(2)	(7)	(10)	(32)	(5)	(13)	(25)	(7)	(11)	(11)	(20)	(17)

05/12/2017

Havant Road, Emsworth: Wintering Birds Survey Report



	13th Oct 2014	23rd Oct 2014	9th Nov 2014	26th Nov 2014	3rd Dec 2014	18th Dec 2014	6th Jan 2015	22nd Jan 2015	5th Feb 2015	17th Feb 2015	3rd Mar 2015	18th Mar 2105
House sparrow		5	8 (1)	16	13	8	10	16	16	10	13	5
Jackdaw	(5)	(19)	(11)	(9)	4 (2)	(83)	(8)	(20)	(7)	(57)	(4)	(7)
Jay		1 (1)										1
Kestrel				1				1		1	2	1
Lesser black-backed gull	(2)									(1)	(6)	
Linnet		(1)			(1)							
Little Egret			(1)	(1)	(1)				(1)			(1)
Long-tailed tit	3	12	7	10	19	6	6	2 (2)	4	5	4	2
Magpie	7	6	7 (1)	9 (1)	6	7 (2)	27	9	6		8 (1)	5
Meadow pipit	(3)	(3)	(2)	(1)		(1)		(5)	(3)		(1)	2 (2)
Mediterranean gull											(4)	(8)
Pheasant	3											
Pied wagtail	(1)	(3)	(2)	(4)	(2)	(2)	(1)		(1)			
Redwing					1 (4)	(3)			72			1

05/12/2017

Havant Road, Emsworth: Wintering Birds Survey Report



	13th Oct 2014	23rd Oct 2014	9th Nov 2014	26th Nov 2014	3rd Dec 2014	18th Dec 2014	6th Jan 2015	22nd Jan 2015	5th Feb 2015	17th Feb 2015	3rd Mar 2015	18th Mar 2105
Robin	17	20	21	16	19	11	13	15	10	20	15	18
Rook		(61)	(40)	(46)	(51)	(29)	(83)	(33)	(24)	(34)	(11)	(4)
Skylark		(1)	(5)					(5)				(2)
Song thrush	2	8 (1)	5	4	6 (1)	5	2	5	6	2	4	2
Sparrowhawk	1		1 (1)	1		1	(1)				1	
Starling	(180)	(13)	(24)	(2)	(3)	(5)	(1)		(3)		1 (14)	(5)
Stock dove			(2)	(5)	(1)	(4)	(3)	(3)	(1)	(7)	1 (2)	
Woodpigeon	19 (3)	23 (51)	14 (5)	5 (25)	59 (199)	36 (91)	104 (101)	27(350)	380 (188)	45 (42)	51 (20)	38 (57)
Wren	2	12	19	10	14	9	6	8	7	13		

Figures are the maximum count of birds which were using the site during the Walkover survey or VP survey on each date

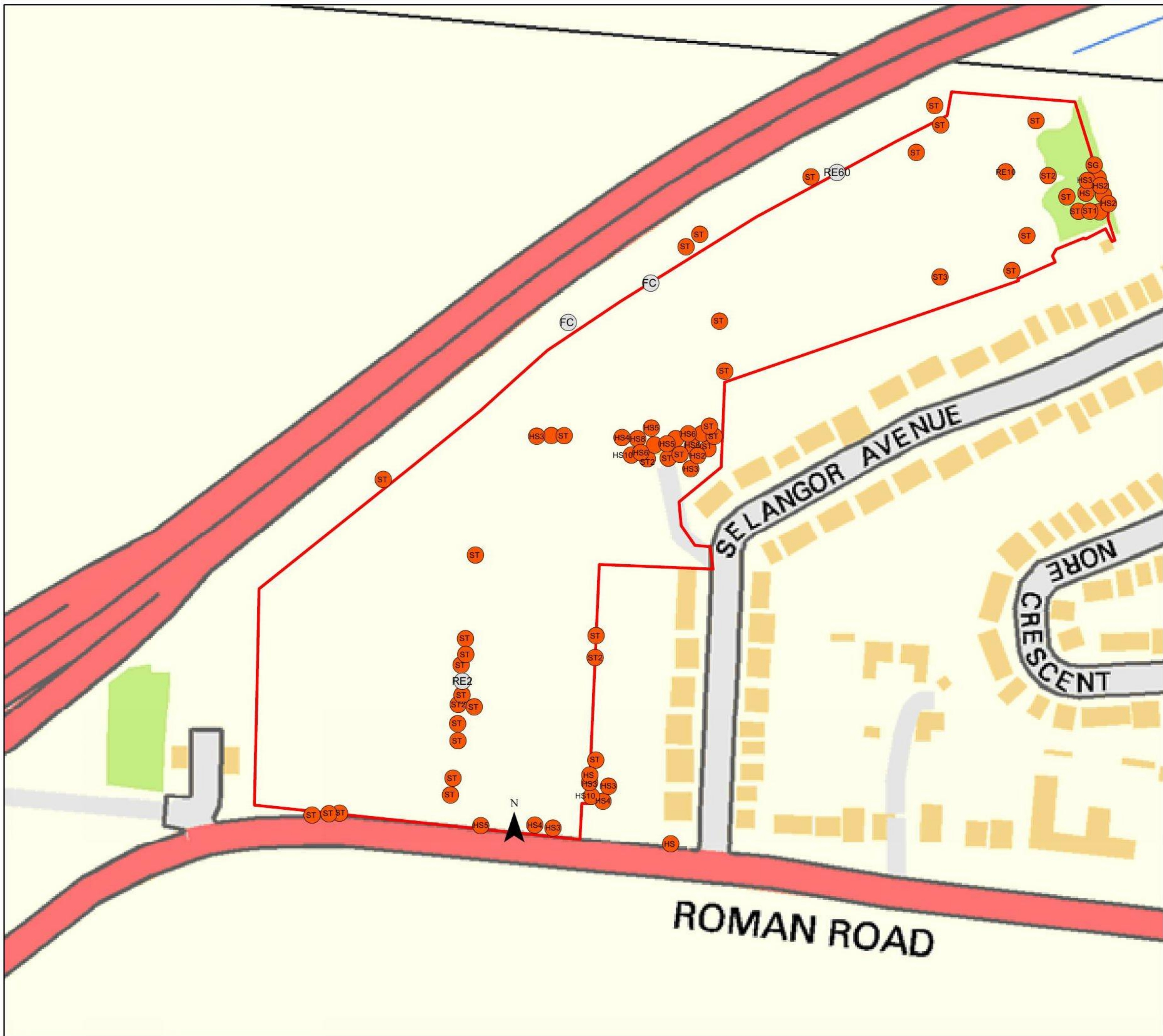
Bold type – Species of Conservation Concern (see also Table 2).

Non bold type – Green listed species or introduced species (pheasant)

() maximum number of birds recorded in flight during either the walkover survey or VP survey



Appendix E: Survey Plans



- Schedule 1 WCA Species
- Red List
- Site Boundary

- Firecrest - FC
- Redwing - RE
- House Sparrow - HS
- Song Thrush - ST
- Starling - SG

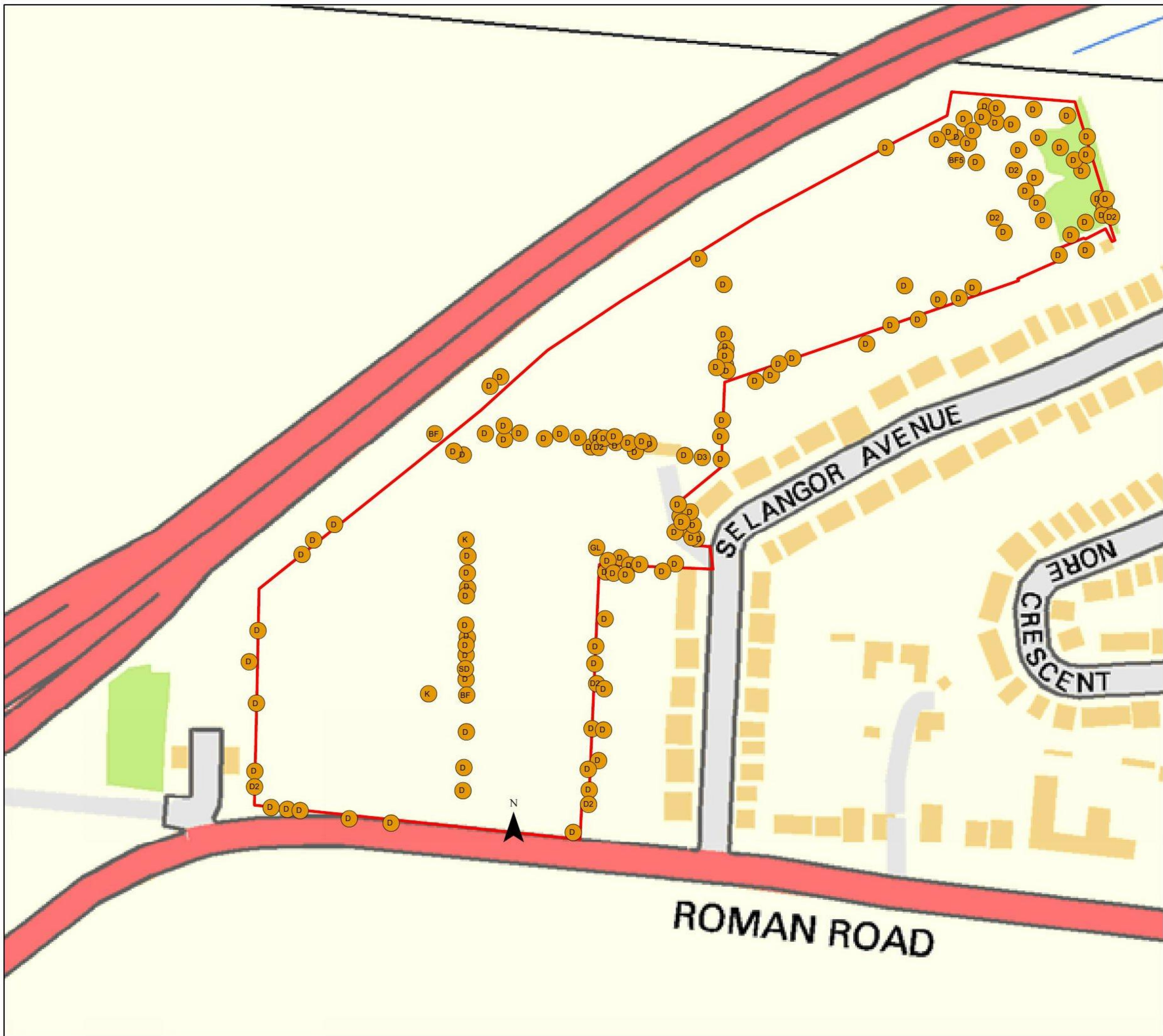
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WYG Planning & Environment creative minds safe hands

Project name Land at Warblington

Drawing title Red Listed Species
Species Included in
Schedule 1 of WCA 1981

Scale at A3:	Drawn by: JS	Date: 30/07/15	Checked By: DG	Date: 30/07/15	Approved By: CM	Date: 09/07/2015
Project No: A088368	Office: 45	Type: 94	Drawing No: Plan 2	Revision		

Base map provided by



— Site Boundary

- | | | |
|--------------|---|----|
| Bullfinch | - | BF |
| Dunnock | - | D |
| Grey Wagtail | - | GL |
| Kestrel | - | K |
| Meadow Pipit | - | MP |
| Stock Dove | - | SD |

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Project name Land at Warblington

Drawing title Amber Listed Species

Scale at A3:	Drawn by: JS	Date: 30/07/15	Checked By: DG	Date: 30/07/15	Approved By: CM	Date: 09/07/2015
Project No: A088368	Office: 45	Type: 94	Drawing No: Plan 2	Revision		

Base map provided by