

DRAFT

40 ACRES AND HARTS FARM,
HAVANT, HAMPSHIRE.

**Ecological Assessment and
Winter Bird Survey Results**

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1. INTRODUCTION

1.1. Background

- 1.1.1. Ecology Solutions was commissioned by Kestrel Properties Limited in January 2008 to undertake an ecological assessment and a winter bird survey, of land at 40 Acres and Harts Farm near Havant, Hampshire (see Plan ECO1).
- 1.1.2. The site is proposed for a mixed-use development, although no specific proposals have been advanced at present. The Composite Site Plan (drawing No. 100707/S03) is reproduced at Appendix 1 and the assessment has been made against this plan.

1.2. Site Characteristics

- 1.2.1. The site is split into two separate plots of land, one either side of the A27 at its junction with the A3 (M). To the northwest is the plot known as 40 Acre Farm; it is approximately 23 hectares in size. The site is bordered by the A2030 (Havant Road) to the north and the Havant to Portsmouth railway line to the south. There is built development to the west and north of Havant Road. This part of the site will hereafter be referred to as Plot A.
- 1.2.2. To the southeast is the plot known as Harts Farm Way; it is approximately 26 hectares in size. The site is bordered by Hermitage Stream to the east, which opens out into the Langstone Harbour that runs along the entire length of the southern boundary. The A27 acts as the entire northern boundary. Harts Farm Way cuts across the northeast corner of the plot and crosses the Hermitage Stream. Hereafter this area of the site will be referred to as Plot B.
- 1.2.3. Plots A and B combined consist largely of grassland and arable land. Other habitats present included hedgerows, woodlands, buildings, hardstanding, coastal margins, scrub, recolonising ground and ruderal vegetation.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the site as a whole. The importance of the habitats present is evaluated with regard to current guidance published by the Institute of Ecology and Environmental Management (IEEM)¹.
- 1.3.2. Where necessary mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate, potential enhancement measures are put forward and reference made to both National and Local Biodiversity Action Plans.

¹ Institute of Ecology and Environmental Management (2006) *Guidelines for Ecological Impact Assessment in the United Kingdom* (version 7 July 2006). <http://www.ieem.org.uk/ecia/index.html>.

2. SURVEY METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

- 2.2.1. In order to compile up to date background information on the site and its immediate surroundings Ecology Solutions contacted the Hampshire Biodiversity Information Centre (BIC) and the Hampshire Bird Recorder.
- 2.2.2. To date, information has not been received from either organisation. This information will be added to the report where relevant on receipt of the data.
- 2.2.3. Further information on designated sites was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)² database, which utilises data provided by Natural England. In addition, information from Natural England's own online database (Nature On The Map)³ for designated sites was obtained. This information is reproduced, where appropriate, on Plan ECO1 and at Appendices 2 and 3.

2.3. Habitat Survey Methodology

- 2.3.1. A survey was carried out in February 2008 to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and associated plant species, with notes on fauna utilising the site.
- 2.3.2. The site was surveyed based around extended Phase 1⁴ survey methodology, as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.
- 2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.
- 2.3.4. All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. This is particularly applicable given the timings of these surveys,

² <http://www.magic.gov.uk>

³ <http://www.natureonthemap.gov.uk>

⁴ Joint Nature Conservation Committee (1993). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

however given the habitats present it is unlikely that any key or significant changes to the assessment would arise.

2.4. Faunal Survey

- 2.4.1. General faunal activity observed during the course of the survey was recorded, whether visually or by call. Specific attention was paid to the potential presence of any protected, rare, notable or Biodiversity Action Plan species. In addition, specific surveys were undertaken for bats, Badgers *Meles meles* and Wintering Birds in early and mid February 2008.
- 2.4.2. **Bats.** All buildings were subject to an initial assessment in February 2008 to ascertain their potential to support bat roosts.
- 2.4.3. All trees within the site were assessed for their potential use by bats. Ladders and binoculars were used where necessary.
- 2.4.4. For a tree to be classed as having some potential for roosting bats or signs of activity, it must usually have one or more of the following characteristics:
- obvious holes, e.g. rot holes and old woodpecker holes;
 - dark staining on the tree below a hole;
 - tiny scratch marks around a hole from bats' claws;
 - cavities, splits and / or loose bark from broken or fallen branches, lightning strikes etc; and / or
 - very dense covering of mature Ivy over trunk.
- 2.4.5. **Badgers.** Specific surveys were undertaken to search for evidence of Badgers during the Phase 1 survey, and comprised two main elements. The first of these was a thorough search for evidence of Badger setts. For any setts that were encountered each sett entrance was noted and plotted even if the entrance appeared disused. The following information was recorded:
- i) The number and location of well used or very active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.
 - ii) The number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.
 - iii) The number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

- 2.4.6. Secondly, Badger activity such as well-worn paths and run-throughs, snagged hair, footprints, latrines and foraging signs was recorded so as to build up a picture of the use of the site, if any, by Badgers.
- 2.4.7. **Birds.** During the Phase 1 survey all birds were identified either by sight or call and recorded. A further three specific winter bird surveys were undertaken with emphasis on Brent Geese *Branta bernicla* to ascertain the current level of use of each plot. Three surveys were carried out during February, at varying states of the tide, for three hours to monitor numbers and movements of the birds.
- 2.4.8. The surveys were carried out in favourable weather conditions, and followed standard survey techniques in accordance with BTO/RSPB survey methodology.

3. ECOLOGICAL FEATURES

3.1. The site was subject to an ecological survey in February 2008. The vegetation present enabled the habitat types to be satisfactorily identified and an accurate assessment of the ecological interest of the habitats to be undertaken.

3.2. The following main habitat / vegetation types were identified:

- Arable Land;
- Grassland;
- Woodland;
- Hardstanding;
- Recolonising Ground;
- Scrub;
- Ruderal Vegetation;
- Composting Vegetation;
- Buildings;
- Coastal Margins and
- Hedgerows.

3.3. The location of these habitats is shown on Plan ECO2

3.4. Each habitat present is described below with an account of the representative plant species present.

3.5. Arable Land

3.5.1. The arable land is only present at Plot A. The arable land was mostly ploughed Maize *Zea mays* stuble (see photograph 1) at the time of survey, but there are areas of Strawberry *Fragaria ananassa* beds and market garden. The Strawberry beds are in the northeast corner of F2 and the northwest corner of F4 (see plan ECO2). The market garden area was in the southwest corner of F4. F5 was entirely ploughed and F3 was ploughed except the southwest corner that had been turned into a children's play area. There was one small patch of Barley *Hordeum vulgare* in the northeast corner of F4 by the side of the track leading to the buildings.

3.5.2. Species associated with these areas include Creeping Thistle *Cirsium arvense*, Scarlet Pimpernel *Anagallis arvensis*, Broadleaved Willowherb *Epilobium montanum*, Ground Ivy *Glechoma hederacea*, Scentless Mayweed *Tripleurospermum inodorum*, Common-field Speedwell *Veronica persica* and Strawberries.

3.6. Grassland

3.6.1. The grasslands between the two plots were markedly different in their species composition and management. The grassland at Plot A was improved grassland mown very short. It contained species such as Annual Meadow-grass *Poa annua*, Sheep's Fescue

Festuca ovina, Cocksfoot *Dactylis glomerata*, White Clover *Trifolium repens*, Daisy *Bellis perennis*, Mouse-eared Chickweed *Cerastium fontanum*, Groundsel *Senecio vulgaris*, Dove's-foot Crane's-bill *Geranium molle*, Bristly Oxtongue *Picris echioides* and Ragwort *Senecio jacobaea*.

- 3.6.2. The grassland at Plot B was principally semi-improved grassland. It was probably only mown annually with some areas not being cut for longer periods. Species present include Cocksfoot, Creeping Bent *Agrostis stolonifera*, Annual Meadow-grass, Yorkshire-fog *Holcus lanatus*, Sheep's Fescue, White Clover, Spotted Medic *Medicago arabica*, Common Vetch *Vicia sativa*, Pignut *Conopodium majus*, Daisy, Mouse-eared Chickweed, Broadleaved Dock *Rumex obtusifolius*, Ribwort Plantain *Plantago lanceolata*, Burnet Saxifrage *Pimpinella saxifraga*, Yarrow *Achillea millefolium*, Creeping Cinquefoil *Potentilla reptans*, Wild Carrot *Daucus carota*, Ragwort, Cleavers *Galium aparine*, Heath Bedstraw *Galium saxatile*, Field Scabious *Knautia arvensis*, White Campion *Silene latifolia*, Creeping Buttercup *Ranunculus repens* and Perforate St John's-wort *Hypericum perforatum*. In one place in the south eastern area of grassland at Plot B Pyramidal Orchids *Anacamptis pyramidalis* leaves are emerging. The location of these orchids is marked on Plan ECO2. There is an area of wetter grassland to the north of Harts Farm Way road (see Photograph 4) that also contained Hard Rush *Juncus inflexus*, Cut-leaved Crane's-bill *Geranium dissectum* and Lesser Celandine *Ranunculus ficaria*.

3.7. Woodland

- 3.7.1. There are a few small areas of immature to semi-mature woodland planted around the grassy areas at Plot B. The areas of woodland are usually on the slopes of the grassy mounds. There is also an area of woodland that goes round the eastern and northern boundary of Plot A, on the banks of the roads. However this is outside the boundary of the site.
- 3.7.2. The woodlands at Plot B comprise Field Maple *Acer campestre*, Willow *Salix* sp, Pedunculate Oak *Quercus robur*, Grey Poplar *Populus alba x tremula*, Goat Willow *Salix caprea*, Ash *Fraxinus excelsior*, Elder *Sambucus nigra* and Spindle *Euonymus europaeus*. The understorey consisted of Wild Privet *Ligustrum vulgare*, Hogweed *Heracleum sphondylium* and Cow Parsley *Anthriscus sylvestris*, with a ground flora of Ivy *Hedera helix*, Lords and Ladies *Arum maculatum*, Wild Onion *Allium vineale* and Sweet Violets *Viola odorata*.
- 3.7.3. A stand of Japanese Knotweed *Fallopia japonica* is present to the south of Harts Farm Way road before it crossed the Hermitage Stream, in Plot B. It is on the edge of the wood and had spread up the bank between the trees (See Plan ECO2).

3.8. Hardstanding

- 3.8.1. The areas of hardstanding are associated with roads, tracks and car parking areas in both Plot A and Plot B. They are a mixture of concrete and Tarmac roads and tracks with some of the tracks and the car parks being compacted gravel and stone.

3.9. Recolonising Ground

- 3.9.1. The areas of recolonising ground are along the sides of the Harts Farm Way road and are associated with recent road improvements at the junction with the A27 in Plot B (see Plan ECO2). Species present here include Bristly Oxtongue, Broadleaved Dock, Spotted Medic, Black Medick *Medicago lupulina*, Common Bent *Agrostis capillaris*, Sea Couch *Elytrigia atherica*, Evening Primrose *Oenothera biennis*, Scarlet Pimpernel, Scentless Mayweed, Bistort *Persicaria bistorta*, Dog's Mercury *Mercurialis perennis*, Sea Spurrey *Spergularia media*, Rough Dogs-tail *Cynosurus echinatus*, Sea Storksbill *Erodium maritimum*, Dove's-foot Crane's-bill, Creeping Buttercup and Wild Carrot.

3.10. Scrub

- 3.10.1. Most of the scrub areas were situated in Plot B, with just one small area around the buildings at Plot A. The small area of scrub at Plot A consisted of Elm *Ulmus procera*, Bramble *Rubus fruticosus* agg., Dog Rose *Rosa canina* and Ivy. The scrub areas within Plot B were split into two types; Blackthorn *Prunus spinosa* dominated scrub, and scrub dominated by Gorse *Ulex europaeus* and Bramble (see Photograph 2). The Blackthorn dominated scrub ran along the northern boundary of the plot. The Gorse and Bramble scrub ran through the middle of the plot and around the car parks and areas of hardstanding.
- 3.10.2. The Gorse and Bramble scrub comprised Gorse, Bramble, Broom *Cytisus scoparius*, Dogwood *Cornus sanguinea*, Elder *Sambucus nigra*, Wild Privet, Mugwort *Artemisia vulgaris*, Broadleaved Dock *Rumex obtusifolius*, False Oat Grass *Arrhenatherum elatius*, Cow Parsley, Bristly Oxtongue, Nettle *Urtica dioica* and Creeping Thistle.
- 3.10.3. The Blackthorn scrub comprised more woody saplings. Including Blackthorn, Ash, Dogwood, Sycamore *Acer pseudoplatanus*, Grey Poplar and Hawthorn *Crataegus monogyna*.

3.11. Ruderal Vegetation

- 3.11.1. A more ruderal element has established adjacent to the recolonising ground within Plot B. This area comprised Bristly Oxtongue, Mugwort, Broad-leaved Dock, Charlock *Sinapis arvensis*, Nettle and Ragwort.

3.12. Composting Vegetation

- 3.12.1. There are a number of places on both plots where vegetation has been piled and left to compost. At Plot A the piles comprised grass

cuttings, rotting Pumpkins and Marrows and old straw. At Plot B the piles comprised of only grass cuttings (see Photograph 3), which were presumably taken from the grass areas on the site.

3.13. Buildings

- 3.13.1. The only permanent buildings on the site are at Plot A. The buildings are labelled **B1** to **B7** on Plan ECO2. Their construction fabric and form are detailed below together with their potential to support roosting bats.
- 3.13.2. **B1** is a warehouse like barn, made from corrugated tin walls and roof around a steel frame. There is a small brick toilet block on its eastern side. The building was open to the rafters and there are no roof voids. This building has no potential to support roosting bats.
- 3.13.3. **B2** is a wooden plank walled building with a green tarpaulin roof. It was open inside with the windows and doors blacked out to create a dark interior. It had been used as a Halloween cave while selling Pumpkins. This building has no potential to support roosting bats.
- 3.13.4. **B3** is a metal storage container that is associated with building **B2**. Access could not be gained. This building has no potential to support roosting bats.
- 3.13.5. **B4** is of similar construction to **B2** with planked walls and tarpaulin roof, although the building is more open and light in nature. This building has no potential to support roosting bats.
- 3.13.6. **B5** is a semicircular tin shed made from corrugated sheets over a steel frame. This building has no potential to support roosting bats.
- 3.13.7. **B6** is a large metal storage container. It was locked at the time of survey and no access could be gained. This building has no potential to support roosting bats.
- 3.13.8. **B7** is a two-storey brick building, but is devoid of internal walls and a roof. Scaffolding has been erected within the structure to prevent the walls collapsing. The outside wall was clad with Ivy. This building has no potential to support roosting bats.

3.14. Coastal Margins

- 3.14.1. A small strip of land that ran around the edge of the harbour front in Plot B, contained more salt tolerant species. These included Sea Purslain *Atriplex portulacoides*, Sea Couch, Sea Kale *Crambe maritima*, Golden Sandphire *Inula crithmoides*, Bristly Oxtongue, Sea Wormwood *Seriphidium maritimum*, Common Sea-lavender *Limonium vulgare*, Mallow *Malvus* sp. and Mugwort.

3.15. Hedgerows

- 3.15.1. There are thirteen hedgerows present within the site, all of which are present within Plot A; these are labelled H1-H13 on Plan ECO2 and are described below:
- 3.15.2. H1 is a gappy line of Alder *Alnus glutinosa* trees of about 4-5m in height, with occasional Hawthorn, Ash and Dog Rose. The ground flora consists of Bramble, Nettle, Ragwort, Cocksfoot, Creeping Thistle, Broad-leaved Willowherb *Epilobium montanum* and Cleavers *Galium aparine*.
- 3.15.3. H2 is a similar type of hedge to H1, but less gappy with Burnet Saxifrage within the ground flora together with those mentioned for H1.
- 3.15.4. H3 is a Bramble and Dog Rose hedge grown over a post and rail fence, to about 2m in height. It has Hogweed, Canadian Fleabane *Conyza canadensis*, Yorkshire-fog, Nettle, Creeping Bent and Creeping Buttercup within the ground flora.
- 3.15.5. H4 is another Alder tree line like H1 and H2, it borders the railway line to the south. Additional species include Elder and Grey Willow *Salix cinerea*.
- 3.15.6. H5 is similar in structure and composition to H3 running along a post and rail fence. At its northern end a few more woody species occur with Purple Plum *Prunus cerasifera Nigra*, Wild Cherry *Prunus avium* and Ash being present. The ground flora includes Burnet Saxifrage, Teasel *Dipsacus fullonum*, and Pendulous Sedge *Carex pendula*.
- 3.15.7. H6, H7, H9, H10, H11, and H12 are all Alder tree line hedges similar in structure to H1, H2 and H4. H10 has a section of new planting running north from half way along its length, planted with Alder.
- 3.15.8. H8 is an old Hawthorn dominated hedgerow. It is gappy and unmaintained to a height of about 3m. The Hawthorn specimens are covered in Ivy, which also dominates the ground flora.
- 3.15.9. H13 is a hedge that forms the boundary between the site and several residential gardens. It is a mixture of Garden Privet *Ligustrum ovalifolium*, Dogwood, Forsythia *Forsythia x intermedia*, Holly *Ilex aquifolium*, *Euonymus* sp., Lilac *Syringa vulgaris* and *Hebe speciosa*. It varies between 1.5m and 3m in height along its length.

4. WILDLIFE USE OF THE SITE

4.1. During the survey general observations were made of any faunal use of the site with specific attention paid to the potential presence of protected or notable species. Specific surveys were also undertaken with regard to bats, Badgers and birds.

4.2. Bats

4.2.1. All buildings within the site were subject to an initial assessment for their potential to support bat roosts.

4.2.2. The buildings present within the site were considered unsuitable for roosting bats due to their type and construction materials. No evidence of use by bats was observed during initial inspections undertaken.

4.2.3. The trees on site are, on the whole unsuitable for roosting bats, having no obvious rot holes or splits. Two Willow trees that were growing close to the buildings around Plot A were mature but had been pollarded over the years. There were no obvious holes or cracks, but they were Ivy covered, which may offer some limited roosting potential.

4.2.4. It is expected that some bat foraging will occur within the different habitats, particularly along the hedgerows, woodland edge, and around scrub.

4.2.5. To date no data has been returned by the Hampshire BIC.

4.3. Badgers

4.3.1. No Badgers setts were recorded within the site.

4.3.2. Other evidence for the presence of Badgers was searched for such as latrines and push-throughs, but no signs of any Badger activity was observed.

4.3.3. There is suitable habitat available for Badgers to forage within the site particularly the areas of grassland and woodland, whilst the maize crop is also likely to provide suitable opportunities at certain times of year. However due to the network of highways surrounding the plots, connectivity to other sites may be a prohibiting factor in Badgers utilising the site.

4.3.4. To date no data has been returned by the Hampshire BIC.

4.4. Other Mammals

4.4.1. There were signs of recent Rabbit *Oryctolagus cuniculus* activity in various places around the site and there were also Fox *Vulpes vulpes* spore and droppings observed at both plots.

4.5. Reptiles

- 4.5.1. There are habitats within the site that are suitable for reptiles. The areas of grassland within Plot B, although cut, have areas of ranker more tussocky grassland around their margins. These are associated with the scrub and the areas of composting vegetation, which may act as suitable breeding areas for reptiles. The coastal margins are also of a ranker structure that could support reptiles.
- 4.5.2. The habitats within Plot A were not suitable for reptiles, although the composting vegetation could act as a breeding site, particularly for Grass Snakes *Natrix natrix*, and attract reptiles from outside the site.
- 4.5.3. To date no data has been returned by the Hampshire BIC.

4.6. Amphibians

- 4.6.1. The site is devoid of suitable aquatic habitats for amphibians. The habitats within Plot B are suitable for Great Crested Newts during their terrestrial phase, but due to the lack of suitable freshwater habitats within the surrounding area it is considered highly unlikely that this species would be present.
- 4.6.2. To date no data has been returned by the Hampshire BIC.

4.7. Invertebrates

- 4.7.1. The habitats at the site are likely to support a range of common invertebrate species, but there is no reason to suggest that any protected or notable species would be present.
- 4.7.2. To date no data has been returned by the Hampshire BIC.

4.8. Birds

- 4.8.1. The site offers some opportunities for nesting birds in terms of the trees, shrubs and hedgerows.
- 4.8.2. A number of bird species were recorded either by sight or call within the site during the Phase 1 habitat survey. These included Blackbird *Turdus merula*, Robin *Erithacus rubecula*, Blue Tit *Cyanistes caeruleus*, Wren *Troglodytes troglodytes*, Dunnock *Prunella modularis*, Wood Pigeon *Columba palumbus*, Magpie *Pica pica*, Sparrow Hawk *Accipiter nisus*, Pied Wagtail *Motacilla alba yarrellii*, Long-tailed Tit *Aegithalos caudatus*, Skylark *Alauda arvensis*, Goldfinch *Carduelis carduelis*, Blackcap *Sylvia atricapilla*, Carrion Crow *Corvus corone corone* and Greenfinch *Carduelis chloris*.
- 4.8.3. The site was also surveyed on three separate occasions, using the Wetlands Bird Survey Technique, to ascertain the level of use by waders, wildfowl and gulls, due to its proximity with the Chichester and Langstone Harbours SPA. A specific search was made for

evidence of grazing by Dark-bellied Brent Geese as previous records had indicated their presence.

- 4.8.4. The surveys took place on the 1st February, 13th February, and 20th of February 2008 to make sure that the site was visited at different states of the tide. All waders, gulls and wildfowl species were noted and the number of each species recorded, for both the plots and the immediate surrounding harbour.
- 4.8.5. No waders or wildfowl were recorded from within Plot A during any of the surveys. Black-headed Gulls *Larus ridibundus* were recorded on the second and third visit with 17 and 6 individuals recorded respectively. The plot was checked for evidence of grazing by Brent Geese in terms of droppings and or feathers, but there was no signs present.
- 4.8.6. This plot seemed to hold little or no potential for waders or wildfowl, and only acted as a small roosting area for Black-headed Gulls.
- 4.8.7. Plot B supported both waders and wildfowl during the three surveys. On all three surveys waders were recorded feeding on the northeast corner of this plot on the area known as the playing field (see Plan ECO2 and Photograph 4). These were mixed flocks of Curlew *Numenius arquata* and Oystercatchers *Haematopus ostralegus* (see Table 1). Brent Geese were also recorded feeding on this area during the first survey (see Photograph 6). Evidence of fresh geese grazing was also recorded on the second visit with fresh droppings being present, although no geese were visually recorded.

Table 1. Species and Numbers of Waders and Wildfowl Using Plot B for Foraging or Roosting.

Species	Survey 1	Survey 2	Survey 3
Curlew	3	2	5
Oystercatcher	27	4	11
Dark-bellied Brent	51	-	-

- 4.8.8. The harbour immediately surrounding Plot B (see Photograph 5) also contained waders, wildfowl and gulls during all three surveys. The species recorded were Curlew, Oystercatcher, Dark-bellied Brent Geese, Wigeon *Anas penelope*, Mallard *Anas platyrhynchos*, Red-brested Merganser *Mergus serrator*, Redshank *Tringa totanus*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina*, Mute Swan *Cygnus olor*, Lesser Black-backed Gull *Larus fuscus*, Black-headed Gull, Herring Gull *Larus argentatus* and Common Gull *Larus canus*. Table 2 gives a breakdown of the species and numbers present.

Table 2. Species and Numbers Of Waders, Waterfowl and Gulls Using the Harbour Immediately Surrounding Plot B

Species	Survey 1	Survey 2	Survey 3
Curlew	8	5	7
Oystercatcher	63	36	44
Dark-bellied Brent	750	120	130
Wigeon	100	44	40
Mallard	4	2	3
Red-breasted Merganser	-	23	8
Redshank	52	8	27
Grey Plover	17	-	34
Turnstone	3	42	32
Dunlin	80	25	120
Mute Swan	2	2	2
Lesser Black-backed Gull	8	4	7
Black-headed Gull	124	74	80
Herring Gull	17	19	12
Common Gull	6	2	-

4.8.9. To date no data has been returned by the Hampshire BIC or the Hampshire Bird Recorder.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Site Evaluation

- 5.1.1. The latest guidelines for ecological evaluation produced by IEEM proposes an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe⁵. These are broadly used across the United Kingdom to rank sites, so priorities for nature conservation can be attained. For example, current Site of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England may be of importance at its northern limits, say in the border country.
- 5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The Hampshire BAP highlights a number of habitats and species. These are referred to below where relevant.
- 5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the International level.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

⁵ Ratcliffe, D A (1977). *A Nature Conservation Review: the Selection of sites of Biological National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

5.2. Habitat Evaluation

Designated sites

- 5.2.1. **Statutory sites.** There are no statutory designated sites of nature conservation interest within the site itself, although the site is adjacent to the Langstone Harbour Site of Special Scientific Interest (SSSI). This area is also classified as the Chichester and Langstone Harbours Ramsar and SPA, and the Solent Maritime Special Area of Conservation (SAC)(see Plan ECO1 and Appendices 2 and 3).
- 5.2.2. There are two Local Nature Reserves (LNR) close to the site. Farlington Marsh LNR is adjacent to the south west corner of Plot A and the West Hayling LNR is approximately 2km to the south east of Plot B (see Plan ECO1).
- 5.2.3. Plot A is separated from the bulk of the SPA, Ramsar, SAC and SSSI by the railway line and the A27/A3(M) intersection. It is considered that impacts to the designated sites due to construction within this plot would be minimised by the buffering effect of these two features, regards must be taken in respect of water contamination and pollution during construction and during the operation phase through runoff.
- 5.2.4. Plot B is directly adjacent to the SAC, SPA Ramsar site and the SSSI. However the area of land within this plot, being brought forward for development, is set back from the edge of the designated sites and is separated by areas of grassland and woodland. Impacts affecting the designated sites are likely to be restricted to noise, dust pollution and contaminated runoff during construction phase and increased human activity and surface water runoff during the operational phase.

Dust

- 5.2.5. Dust arising during construction work only has a significant impact within 20m due to heavy soiling of vegetation, further than that it is dispersed and of negligible significance. The impacts of dust on the designated sites will be mitigated for by best engineering practice adhering to current guidance and legislation, i.e. store aggregate on far side of construction site and away from designated site and spray dry materials to limit airborne movement.

Noise

- 5.2.6. Noise emanating during construction may impact upon roosting and foraging birds. It is recommended that potential adverse impacts through noise pollution be mitigated for through standard industry practice, adhering to current guidance and legislation. Any particularly noisy construction procedures such as piling should be constrained to periods in the summer between April and September, as the SPA is designated for its assemblage of wintering waterfowl, which would be disturbed by loud noises.

Laden silt / Surface runoff

- 5.2.7. Potential of laden silts and surface runoff from the construction site entering the adjacent designated sites is considered low. Nonetheless it is recommended that standard engineering safeguards, such as interceptor fencing is installed to negate this low risk.
- 5.2.8. During the operational phase measures should be in place to prevent water contamination through runoff. There should also be limited access to the edge of the designated sites to limit the impact of human disturbance. There should be adequate provision for recreation within the proposed development to reduce *ad hoc* use of the designated site and result in detrimental impacts.
- 5.2.9. **Non-statutory sites.** Information has not been received from the Hampshire BIC as yet indicating the proximity of any non-statutory sites to the site.

Habitats within the site

- 5.2.10. The main features present within the site that are of high value to wildlife are the grassland/woodland/scrub mosaic areas, and the coastal margins. The grassland areas within Plot A are of reduced value due to their management, and on the whole Plot A has relatively little ecological value. Proposed landscaping within this plot should use native local species where possible, and include areas of wildlife planting to increase its floristic diversity.
- 5.2.11. The vast majority of land being lost to the development at Plot B was of lower ecological value due to the recolonising ground left during the road construction. The area of greatest ecological value is the area of grassland that supports foraging waders and Brent Geese. This can be compensated for with a management strategy for the remaining habitats that will create a similar sort of habitat, more details can be seen in Faunal Evaluation section on Birds. The ecological value of other habitats can be maintained or enhanced through better management for wildlife and wildlife planting in areas of poorer ecological value, for example the scrub should be controlled to stop further encroachment into the areas of grassland, and the woodlands could be managed to provide a better ground flora, diversity and overall structure.
- 5.2.12. **Japanese Knotweed.** Japanese Knotweed is listed in the Wildlife and Countryside Act 1981 (as amended) under Schedule 9 Part II which makes it an offence to cause to grow in the wild any plant listed on the schedule. As such all relevant precautions should be taken when carrying out actions that could potentially spread the plant. In addition it should be noted that all soil and plant material (containing Japanese Knotweed) is regarded as controlled waste and is subject to various legal controls in terms of transporting and disposal off site. For example, the Environment Agency require that this waste be disposed of at licensed landfill sites which have a lined contained system. As such careful

consideration would need to be given to the disposal of any parts of the species and its presence should be considered within the Construction Method Statement (CMS) or similar, to ensure that the ground work operations which are carried out in this area of the Application Site avoid spreading the species and comply with legislation.

- 5.2.13. It is recommended that a contractor specialising in the eradication of Japanese Knotweed is commissioned to carry out the removal and eradication of this species. It is also recommended that a guarantee, of at least 10 years, is sought for the eradication exercise given the persistent nature of this species.

5.3. Faunal Evaluation

Bats

- 5.3.1. All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are also included in Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). These include provisions making it an offence to:

- Intentionally kill, injure or take (capture) bats;
- Intentionally or recklessly disturb bats in a roost or any other structure or place it uses for shelter or protection;
- Intentionally or recklessly damage, destroy or obstruct access to bat roosts even if bats are not in residence.

- 5.3.2. If proposed work is likely to destroy or disturb bats or their roosts Natural England should be consulted, and if necessary any works carried out under a licence.

- 5.3.3. No evidence of bat roosts was observed within the site. It is possible that bats use the site for foraging and commuting. Linear features such as woodland edges, tree lines and hedgerows should be incorporated into landscaping schemes to provide navigation and foraging corridors for bats.

- 5.3.4. The site could be enhanced for bats by providing roosting opportunities through the instillation of bat boxes on retained trees or newly constructed buildings.

Badgers

- 5.3.5. The Protection of Badgers Act 1992 consolidates the previous Badgers Acts of 1973 and 1991. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain, with particularly high populations in the south.

- 5.3.6. As well as protecting the animal itself, the 1992 Act also makes the intentional or reckless destruction, damage or obstruction of a Badger sett an offence. A sett is defined as "any structure or place

which displays signs indicating current use by a Badger". 'Current use' is defined by Natural England as any use within the preceding 12 months.

- 5.3.7. In addition, the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence by constituting 'cruel ill treatment' of a Badger.
- 5.3.8. No evidence of Badgers was found within the site, and therefore no mitigation or compensation should be required for the development proposal. Although given the dynamic nature of this species it may be pertinent to undertake check surveys immediately prior to the commencement of any development works.

Reptiles

- 5.3.9. All species of reptile are protected by the Wildlife and Countryside Act (1981), with special protection being afforded to Sand Lizards and Smooth Snakes under the Conservation (Natural Habitats, etc) Regulations 1992.
- 5.3.10. There are habitats within the site that have the potential to support reptiles, although the habitats would be unlikely to support Sand Lizards or Smooth Snakes. A reptile survey of the site should be undertaken to establish the presence or absence of this group.
- 5.3.11. A reptile survey entails laying artificial refugia within areas of suitable habitat and checking these refugia over 7 separate dates. These surveys can be carried out between April and September with April, May and September being the optimal months.
- 5.3.12. It is important to note that the potential presence of common reptiles is not a constraint to development per se, but a matter of logistics given the legislation only protects the animals and not their habitat. As such providing sufficient effort was employed, in the form of a translocation exercise, prior to the commencement of construction/ground clearance works, no offence would be committed. In this particular case any translocated animals could easily be accommodated within the site, outside the development areas.

Birds

- 5.3.13. Section 1 of the Wildlife and Countryside Act is concerned with the protection of wild birds, whilst Schedule 1 lists species are protected by special penalties. No Schedule 1 species were recorded within the site itself during the surveys.
- 5.3.14. There are opportunities for nesting birds, in terms of the trees, scrub and hedges, within the site. As all species of birds receive general protection whilst nesting, to avoid a possible offence, it is recommended that clearance of suitable nesting vegetation (including tree felling) be undertaken outside of the breeding

season (March to July inclusive) or that checks be made for nesting birds by an ecologist immediately prior to removal.

- 5.3.15. The loss of suitable nesting habitat as part of any development proposals for this site could be offset with the addition of nest boxes, put up on retained trees and buildings post-development. All nest boxes should be situated out of direct sunlight and out of the reach of predators, particularly cats.
- 5.3.16. Landscape planting associated with the development proposals would offset any losses to vegetation, and therefore nesting sites, in the medium to long term.
- 5.3.17. Plot A had no foraging waders and wildfowl, and only a small number of roosting gulls. It therefore requires no specific mitigation in relation to these.
- 5.3.18. The area that the waders and Brent Geese were feeding on within Plot B is the area being brought forward for development. There was no evidence of foraging on other areas within this plot. The number of geese and waders feeding on this area were low in the context of the numbers present on the adjacent harbour. It is thought that the loss of this small amount of habitat that is used for grazing would have no detrimental effect on the population as a whole due to the presence of alternative foraging areas. It is thought that the geese did not use the other areas of grassland in the plot due to its length. Geese prefer to feed on short grassland, and the area they were using was slightly wetter land where the grass had not grown as much. Management of the other grassland areas could increase the suitability for grazing geese and therefore mitigate for the loss of the small area currently utilised.

6. PLANNING POLICY CONTEXT

6.1. The planning policy framework that relates to nature conservation issues at 40 Acres Farm and Harts Farm Way site is issued at three main administrative levels – nationally through Planning Policy Statement 9, regionally through the Draft South East Plan (published March 2006), and locally through the Havant Borough District-Wide Local Plan. Any proposed development will be judged in relation to the policies contained in these planning documents.

6.2. National Policy

Planning Policy Statement 9

- 6.2.1. Guidance on national policy for biodiversity and geological conservation is provided by Planning Policy Statement 9 (PPS9), published in August 2005. PPS9 confirms the Government's commitment to the protection of biodiversity and geological conservation through the planning system.
- 6.2.2. PPS9 requires local authorities to fully consider the effect of planning decisions on biodiversity and geological conservation, and ensure that appropriate weight is attached to statutory nature conservation designations, protected species and biodiversity and geological interests within the wider environment.
- 6.2.3. It also considers the potential biodiversity and geological conservation gains which can be secured within developments, including the use of planning obligations.
- 6.2.4. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Regional Policy

- 6.3.1. Policies providing guidance on the relationship between development and nature conservation in the southeast are provided by the South East Plan.
- 6.3.2. There are three policies within the Draft South East Plan (NRM4, NRM5 and NRM6), which refer to the protection and enhancement of designated sites and the maintenance and enhancement of the region's biodiversity resources. NRM5 specifically to the region's woodland resources, while NRM6 refers specifically to the protection and enhancement of the regions coastal habitats is considered relevant to this assessment.

6.4. Local Policy

- 6.4.1. The site lies entirely within the Borough of Havant. The Havant Borough District-Wide Local Plan was adopted in September 2005 and contains five policies relating to wildlife and biodiversity

conservation; policy NC1 is an overall policy protecting biodiversity, NC2 specifically regards SSSIs, NC3 is in regard of internationally designated sites, NC4 for Sites of Importance for Nature Conservation and LNRs and NC5 for any other areas of conservation importance.

6.5. Discussion

- 6.5.1. It is considered that the development proposals, following the recommendations in this report, would fully accord with national, regional and local policy and will avoid any significant impacts on any designated sites for nature conservation. The potential presence of protected species is acknowledged and measures to safeguard these put forward, where necessary. These measures, in combination with other ecological enhancements discussed, will in turn contribute to the aims and objectives of the Hampshire BAP.

7. SUMMARY AND CONCLUSIONS

7.1. Ecology Solutions was commissioned by Kestrel Properties Limited in January 2008 to undertake an ecological assessment and a winter bird survey, of land at 40 Acres and Harts Farm near Havant, Hampshire. The site is split in to two plots for the purpose of this report Plot A the 40 Acres Farm plot and Plot B the Harts Farm Way plot.

7.2. The site is proposed for a mixed-use development, although no specific proposals have been advanced at present. The Composite Site Plan (drawing No. 100707/S03) has been used to make the assessment.

Statutory Sites

7.3. There are no statutory designated sites of nature conservation interest within the site itself, although part of the site is adjacent to the Langstone Harbour Site of Special Scientific Interest (SSSI). This area is also classified as the Chichester and Langstone Harbours Ramsar and Special Protection Area (SPA) and the Solent Maritime Special Area of Conservation (SAC).

7.4. There are two Local Nature Reserves (LNR) close to the site. Farlington Marsh LNR is adjacent to the south west corner of Plot A and the West Hayling LNR is approximately 2km to the south east of Plot B.

Non-statutory sites

7.5. To date no information has been returned on the locations of non-statutory sites.

Habitats

7.6. A survey based on extended Phase 1 methodology was carried out in February 2008 to ascertain the general ecological value of the land contained within the boundaries of the site.

7.7. The habitats within Plot A are generally of little nature conservation interest. The habitats of relatively greater value areas present at Plot B, such as the grasslands and coastal margins, are largely being retained and the small amount of loss will be compensated for with habitat management of the retained habitats and additional wildlife planting.

7.8. Japanese Knotweed is listed in the Wildlife and Countryside Act 1981 (as amended) under Schedule 9 Part II which makes it an offence to cause to grow in the wild any plant listed on the schedule. As such all relevant precautions should be taken when carrying out actions that could potentially spread the plant. It is recommended that a contractor specialising in the eradication of Japanese Knotweed is commissioned to carry out the removal and eradication of this species.

Protected Species

7.9. Bats No evidence of bat roosts was observed within the site. It is possible that bats use the site for foraging and commuting. Linear

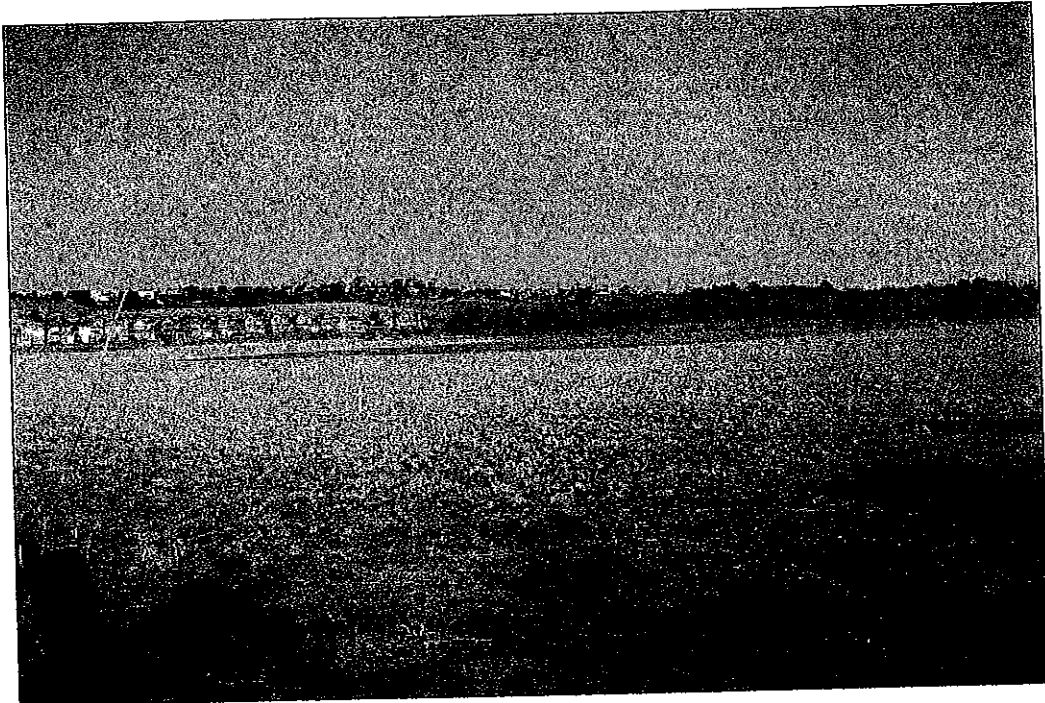
features such as woodland edges, tree lines and hedgerows should be incorporated in to landscaping schemes to provide navigation and foraging corridors for bats.

- 7.10. The site could be enhanced for bats by providing roosting opportunities through the instillation of bat boxes on retained trees or newly constructed buildings.
- 7.11. Badgers No evidence of Badgers was found within the site, and therefore no mitigation or compensation should be required within the development proposal.
- 7.12. Reptiles There are habitats within the site that have the potential to support reptiles. A reptile survey of the site should be undertaken to establish the presence or absence of this group.
- 7.13. If reptiles were found to be present on site, in order to avoid an offence, it would be necessary to move the reptiles prior to the commencement of clearance work on site. These could be moved to areas of suitable habitat to be retained within the rest of the site.
- 7.14. Birds Section 1 of the Wildlife and Countryside Act is concerned with the protection of wild birds, whilst Schedule 1 lists species are protected by special penalties. No Schedule 1 species were recorded within the site itself during the surveys.
- 7.15. There are opportunities for nesting birds, in terms of the trees, scrub and hedges, within the site. As all species of birds receive general protection whilst nesting, to avoid a possible offence, it is recommended that clearance of suitable nesting vegetation (including tree felling) be undertaken outside of the breeding season (March to July inclusive) or that checks be made for nesting birds by an ecologist immediately prior to removal.
- 7.16. The loss of suitable nesting habitat as part of any development proposal for the site could be offset with the addition of nest boxes put on retained trees and buildings post-development. All nest boxes should be situated out of direct sunlight and out of the reach of predators, particularly cats. New planting undertaken as part of the development proposals would compensate for losses to vegetation in the medium to long term.
- 7.17. The area that the waders and Brent Geese were feeding on within the site is the area being brought forward for development. There was no evidence of foraging on other areas of the site. The number of geese and waders feeding on this area were low in the context of the numbers present on the adjacent harbour. It is thought that the loss of this small amount of habitat that is used for grazing would have no detrimental effect on the population as a whole due to the presence of alternative foraging areas. It is thought that the geese did not use the other areas of grassland in the plot due to its length. Geese prefer to feed on short grassland, and the area they were using was slightly wetter land where the grass had not grown as much. Management of the other grassland

areas could increase the suitability for grazing geese and therefore mitigate for the loss of the small area currently utilised.

- 7.18. There is no evidence to suggest that any other protected species would utilise the site.
- 7.19. In conclusion, all relevant ecological issues have been addressed and on the evidence of the specific ecological surveys undertaken, and with the implementation of the on going surveys, mitigation and recommendations set out in this report, there is no evidence to suggest that there would be any overriding ecological constraints in relation to any proposed development of the site.

PHOTOGRAPH 1: Plot A: Arable land and grassland mosaic.



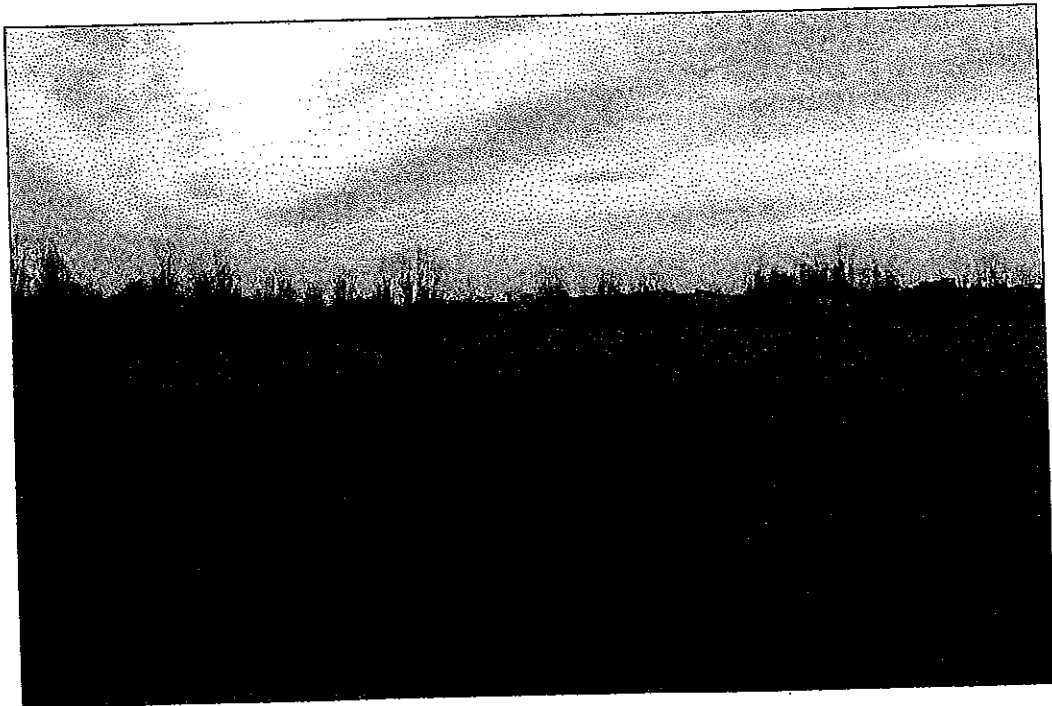
PHOTOGRAPH 2: Plot B: Gorse and Bramble scrub with associated ranker grassland.



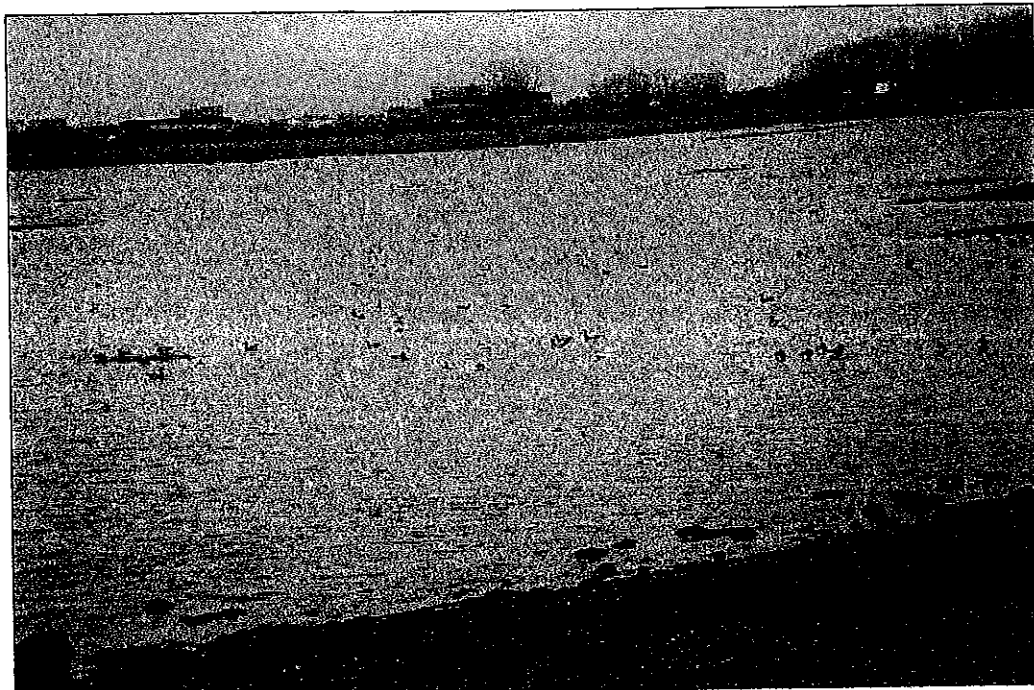
PHOTOGRAPH 3: Plot B: Composting Vegetation.



PHOTOGRAPH 4: Area of wetter grassland/ bird feeding area.

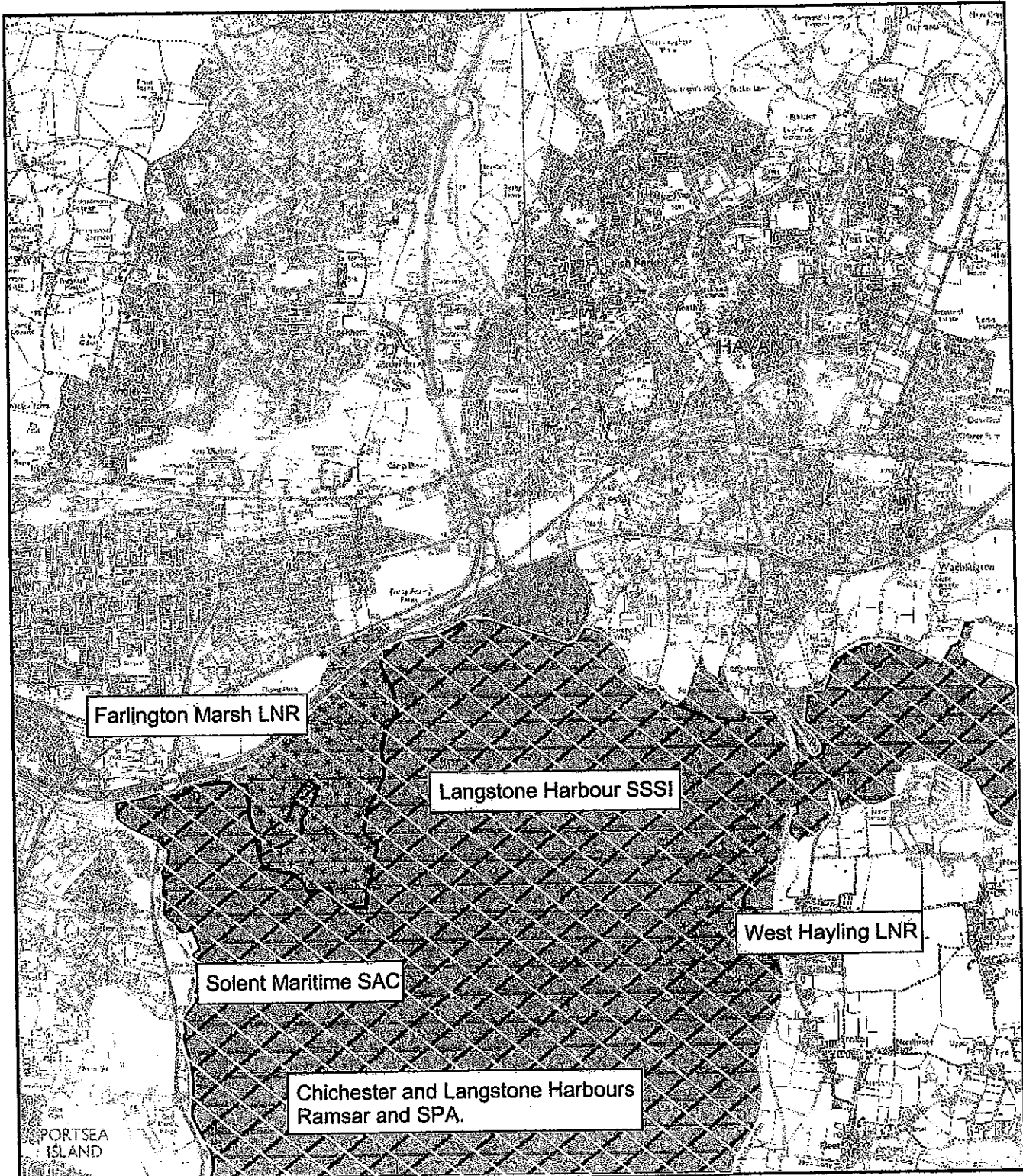


PHOTOGRAPH 5: Harbour front at Plot B with Brent Geese.



PHOTOGRAPH 6: Foraging Brent Geese at Plot B.





Farlington Marsh LNR

Langstone Harbour SSSI







West Hayling LNR


Solent Maritime SAC

Chichester and Langstone Harbours
Ramsar and SPA.

PORTSEA
ISLAND

KEY:

-  SITE LOCATION
-  SPECIAL PROTECTION AREA (SPA)
-  SPECIAL AREA OF CONSERVATION (SAC)
-  RAMSAR SITE
-  SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
-  LOCAL NATURE RESERVE (LNR)





ecology solutions ltd

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HAVANT, HAMPSHIRE

**PLAN ECO1:
SITE LOCATION AND
DESIGNATED SITES**