

Parkersharp

Environmental

Extended Phase1 Habitat Survey

Salterns House Salterns Lane Hayling Island

Grid reference; SZ 7328 9926

Richard Sharp April 2016

Executive Summary:

The land at Salterns House is being put forward for development by the current residents; the proposal is to subdivide the current plot into two and construct a new property. Due to the lands proximity to highly designated sites for nature conservation there are constraints to development but with mitigation the scheme is deliverable.

The proposed development site is part of a mature garden. The garden as a whole has several large mature trees, a large lawn with herbaceous and shrub beds around the edges. The property is bounded on the south by a beech hedge and on the north by the tidal mudflats of Chichester Harbour. On the east and west boundaries are mature gardens with open oak woodland. A pond is located on the eastern boundary, which leaks and is regularly fished by herons, there are compost heaps and a large log pile situated in the SE corner along with a rockery which is situated around the pond and veg patches in the NW corner. The above could provide potential habitats for reptiles and amphibians. Trees on site showed no obvious bat roost potential and the current buildings are not included in the development proposal, though the garden could provide potential foraging areas for species of bat. Three active robins nest were located around the garden in shrubs and outbuildings.

Mature gardens can be seen as important edge habitat to the designated site of Chichester Harbour but It is unlikely that any protected species are present within or supported by the site or land within the development footprint. The location, small size of the site and nature of the development (building a second property on lawn area) should combine to produce no adverse impacts on the surrounding species, habitats or general wildlife.

It would be difficult to enhance the biodiversity value of the site with this development but the present features should be retained and protected during the development process. The following methods are suggested:

1. Site and vegetation clearance to be undertaken outside of bird nesting season – March to August inclusive and/or the site has been first checked by a suitably qualified ecologist.
2. All mature trees and hedges on the site should be scheduled for retention under the development proposals and should be protected during construction following BS5387:12 (*Trees in relation to design, demolition and construction – Recommendations*).
3. Present garden features; pond, rockery, compost and log piles, herbaceous and shrub beds, should if possible be maintained. If they require removal then reasonable avoidance measures will be followed under the supervision and guidance of an ecologist.

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1.0 Introduction and aims

1.1 Parkerssharp Environmental were commissioned by Sedgehill Ecology Services to undertake an extended phase 1 survey at Salterns House, Salterns Close, grid reference SZ 7328 9926. The development proposals are to subdivide the property and construct an additional dwelling with separate entrance.

1.2 The main aims of the extended phase 1 survey were to:

- Map the main ecological features of the site and compile a plant list.
- Assess the presence or absence of protected species/ species of conservation concern.
- identify any legal and planning policy constraints relevant to nature conservation which may affect the development
- Determine the potential of further ecological issues, need for mitigation or other ecological surveys.
- Make recommendations for minimising impacts on biodiversity and providing net gains in biodiversity, where possible, in accordance with Chapter 11: *Conserving and Enhancing the Natural Environment*, of the National Planning Policy Framework (NPPF) (DfCLG,2012) and DSP 13-16 of the Hampshire Local Plan, Fareham.

1.3 The survey was carried out by a qualified ecologist Richard Sharp on the 10th April 2016. The prevailing weather conditions were dry with sunny spells and wind strength of at least force 3.

2.0 Methodology

2.1 The field survey comprised of an extended Phase 1 survey (JNCC, 2010) of the proposed development site. This is a standard technique for obtaining baseline ecological information for areas of land, including proposed development sites.

2.2 Incidental records of fauna were also made during the survey and the habitats identified were evaluated for their potential to support legally protected species and other species of conservation concern.

3.0 Constraints

3.1 The survey was undertaken at a sub optimal time of year though many spring and early summer plants had started to produce florets and plant heads. The timing of the survey does mean that some latter flowering or short lived annual species may have been missed but the nature of the site and the hard edge to Chichester Harbour preclude the presence of native plant communities that are rare or threatened. It is felt that these constraints will have not affected the results of the survey in a detrimental fashion.

3.2 The nature of the site being a large garden does not entirely fit with the standard methodology of the Phase 1 survey (JNCC 2010), which is directed towards natural wildlife and open countryside sites. There are some urban habitats descriptors within the Phase 1 methodology but they do not necessarily fit well with garden habitats.

3.3 A data search of the local records centre (HBIC) was recommended to the client but not taken up. The NBN gateway was referred to however due to copyrights could not be reproduced within this report.

4.0 Results

Extended Phase 1 Habitat Survey

4.1 The phase 1 map of the site is shown in Appendix 6. The maps in Appendix 1 show the locations of statutory and non-statutory designated sites within 1 km of the site.

4.2 The whole site is a rectangular plot covering an area of 3,453 m² or 1/3 ha. The development plot (shown in appendix 7) consists of mature garden, takes up the western 1/3 of the site and is subdivided by brick walls into 2 distinct areas;

- Main lawn - with trees and shrub beds
- N terrace – Lawn with occasional shrubs

The site is bounded on the south side by a beech hedge which runs along Salterns Close, the eastern boundary is made up of herbaceous plants and shrubs some thick enough to be a hedge the neighbouring garden here is heavily wooded with Oaks. The northern boundary is lawn with a sea wall down onto the tidal mudflats of Chichester Harbour; the western boundary is made up of shrubs and the mature trees of the neighbouring garden, again mainly Oaks. There are 5 significant mature trees within the boundary of the property;

- 1 yew SE corner
- 1 Walnut SE corner – immature beech tree growing from hedge as well
- 1 Oak S boundary
- 1 Cedar of Lebanon W boundary between dwelling and outbuildings
- 1 dead Oak on N terrace

4.3 The wider landscape is characterised by a mixture of urban development, small scale pastoral fields with hedges, mudflats and saltmarsh, semi natural oak woodland, lowland heathland, coastal shingle (vegetated and non-vegetated). The urban development is mainly in one block bounded by the other habitats mentioned.

4.4 There is one pond on site around 3m² which leaks and thus has a fluctuating water level though never entirely dries out (according to resident), it is well vegetated with lilies, duck weed and submerged vegetation. A search of aerial imagery found no other ponds within 500m but located two boating lakes divided from the site by urban development.

4.5 There are four broad habitat types on site, these are:

- Improved grassland - Lawn
- Hedgerows and trees
- Tall ruderals and scrub - Herbaceous and shrub beds
- Pond

4.6 Each habitat is described below and their distribution shown on the plan in Appendix 1.

Improved Grassland – Lawn

4.7 The main habitat on site by area comprising a tightly mown mature rye grass *lolium perenne* lawn with Daisy *Bellis perennis*, Dandelion *Taraxacum ruderalia*, Ribwort plantain

Plantago lanceolate, Yarrow *Achillea millefolium*, Chickweed *Stellaria media*, Primrose *Primula vulgaris*.

Hedgerows and Trees

4.8 One distinct hedgerow forms the southern boundary of the site along Salterns Close. It's a single species beech *Fagus sylvatica* hedge c. 3m high x 1.5m wide which contains one mature Oak *Quercus sp. petraea or robur*, and an immature Beech *Fagus sylvatica* at the east end. The east and west boundaries are made up of shrub beds which in places are of a hedge like nature but will be dealt with the Scrub section.

4.9 In the SE corner are a mature Yew *Taxus baccata* and an immature Walnut *Juglans sp.* under which are the log pile and compost heaps. Between the buildings is a mature Cedar of Lebanon *Cedrus libani*, the eastern boundary has a Pear *Pyrus sp.* and the Oaks *Quercus sp. petraea or robur* of the neighbouring garden. There is a dead Oak *Quercus sp. petraea or robur* on the north terrace, this had no evidence of wood pecker, bat or insect activity.

4.10 There is a large dead stump of indeterminate species on the S side which would be removed along with the associated shrub bed in the development. This stump showed some use by invertebrates.

Tall ruderals and Scrub

4.11 Made up of both garden and native species these occur in beds up to 3m wide on the eastern and northern boundaries of the main lawn. The beds are well maintained with species including Euphorbia *Euphorbia sp.*, Elder *Sambucus niger*, Holly *Ilex aquifolium* Willow *Salix sp.*, Forsythia *Forsythia sp.*, Broom *Cytisus scoparius*, Ferns, Contoneaster *Contoneaster sp.*, Rose *Rosa sp.*, Privet *Ligustrum sp.*, Blackthorn *Prunus spinosa* Clematis *Clematis sp.*, Viburnum *Viburnum sp.*, Bay *Laurus nobilis*, Bluebells *Hyacinthidessp.*, Daffodils *Narcissus sp.*, Garlic *Allium sp.*, Herb Robert *Geranium robertianum*, Geranium *Geranium sp.*, Grape Hyacinth *muscaria sp.*. These areas provide the main structure in the garden, along with the compost heaps, log piles and pond, providing wildlife with its nesting, hibernating and foraging potential.

Pond

4.12 The pond is 3m² on the eastern boundary and backed by a rockery. It has emergent and floating vegetation including Duckweed *Lemna sp.*, Lilies *lilace*. It is not overshadowed and has potential terrestrial amphibian habitat around it.

5.0 Impact Assessment and Recommendations

No records search has been carried out and cannot inform this section of the survey report.

Statutory Sites

5.1 The site backs onto Chichester Harbour which is a highly designated coastal, riverine, estuary complex. Within 2km of the site there are land areas with Site of Special Scientific Interest, Ramsar, Special Protection Area and Special Area of Conservation designations (see maps in Appendix 1).

5.2 The development is unlikely to impact on these designated sites due to its small size and the nature of the site.

Protected Habitats

5.3 No priority habitats are present on site.

5.4 The hedgerows along the site boundaries are not classified as 'important' under the Hedgerow Regulations (1997) due to the lack of species diversity displayed, defunct structures and lack of adjoining hedgerows.

5.5 All trees on the site that are scheduled for retention under the development proposals should be protected during the demolition and construction phases of the development following BS5387:12 (Trees in relation to design, demolition and construction – Recommendations).

Protected Species

Plants

5.6 All the plant species on the site are widespread and common and the development proposals will not affect any rare or threatened species. The species composition of the site could be improved by using the species listed in Appendix 3.

Bats

5.7 All bat species are legally protected under Section 9 of the Wildlife and Countryside Act (1981) (as amended) and Regulation 41 of The Conservation of Habitats and Species Regulations (2010) making bats a material consideration in the planning process.

5.8 There were no obvious roost sites or potential identified on the trees and outbuildings, though a full bat survey of the main dwelling was not undertaken. The site is classified as 'small' in size under The Bat Conservation Trust Guidelines (Hundt, 2012) though the nature of the site and its connectivity to the wider countryside mean it has good potential as foraging and commuting habitat.

Birds

5.9 Chichester Harbour is designated partly for its assemblages and use by waders and other sea/coastal birds. These birds are unlikely to make heavy use of the site except for Herons attracted by the pond.

5.10 The site is used by common garden species such as Robins and Blackbirds for nesting and foraging. Three active nests were observed on the survey visit in shrubs and outbuildings. The provision of nest boxes could mitigate any loss of nesting sites through the development. Pheasants breed in nearby woods visit the garden for foraging (see photo in appendix 3).

5.11 All breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended). Therefore, if any nesting bird habitat is to be lost or disturbed (i.e. crops, hedgerows, shrubs and trees) it should be cleared outside of the nesting season, which is generally March to the end of August, or immediately after an ecologist has confirmed active nests are not present.

Badger

5.12 Badgers *Meles meles* are legally protected under The Protection of Badgers Act 1992 and as such, are of consideration when applying the principles of the NPPF (DfCLG, 2012). No evidence of badgers or their use of the site was observed during the survey visit.

Dormice

5.13 Dormice *Muscardinus avellanarius* are protected under United Kingdom law, primarily by The Wildlife and Countryside Act (1981) (as amended) and regulation 41 of The Conservation of Habitats and Species Regulations (2010). The nature of the structure of the vegetation on site means it is highly unlikely to support any dormice.

Invertebrates

5.14 The survey was undertaken at a sub optimal time for invertebrate survey though it is unlikely the site hosts many rare or threatened invertebrate assemblages. There is one feature, a dead tree stump, which may provide increased invertebrate potential (Stag beetle *Lucanus cervus*) though this may have to be removed during development it should be retained on site.

5.15 Considering the above statement it is unlikely that the proposed development will impact significantly on rare, threatened or common invertebrate species.

Great Crested Newts

5.16 GCN are legally protected under section 9 of the Wildlife and Countryside Act (1981) (as amended) regulation 41 of The Conservation of Habitats and Species Regulations (2010) thus making GCN a material consideration of the planning process.

5.17 The pond on site is not regarded as high quality and an aerial photo search did not reveal a significant pond density within a 500m radius of the site. The survey visit was just within spawning season but no newts were seen and an egg search was not undertaken.

5.18 It is thought that the proposed development would not impact GCN populations locally and no further survey work is recommended.

Other reptiles and amphibians

5.19 The site has potential for use by the common reptile and amphibian species (Common toad *Bufo bufo* has been recorded on site), providing basking, spawning and hibernation sites. The use will be at a low density and if these features are protected during the development process impacts on such species will be negligible.

5.20 Common species of reptiles and amphibians are primarily legally protected under the Wildlife and Countryside Act 1981 (as amended) making it an offence to:

- Intentionally, or recklessly, kill or injure any of the above species;
- and/or; Sell, or attempt to sell, any part of the species, alive or dead.

A presence absence survey is not needed for this development.

Other terrestrial mammals

5.21 Hedgehog *Erinaceus europaeus* are protected under UK law, by the Wildlife and Countryside Act 1981 (as amended). The scrub/ruderal, woodland and hedgerow boundaries provide potential habitat for hedgehogs. Precautionary measures are to be put in place with the careful clearing of any scrub/ruderal or hedgerow boundaries under ecological supervision.

6.0 Conclusions and mitigations

6.1 Habitats on site are thought to be of ecological value to common and widespread species, the potential for protected species on site is low. The pond and rockery, compost heaps and log piles have good potential to provide spawning, hibernating and foraging opportunities for reptiles and amphibians; whilst the shrub beds are important for the bird species present for foraging and nesting. The above features plus the beech hedge connecting to the surrounding gardens/habitats provides medium potential for hedgehogs on site. It is this edge/buffer and connecting nature of the habitats which give the site its ecological importance in the local area.

6.2 The proposed development (subdividing the plot and constructing a new dwelling), and its location will result in no adverse impacts upon surrounding habitats, protected species and wildlife in general, no further ecological surveys are required. The following reasonable avoidance methods are recommended:

- Site clearance and vegetation works to be undertaken outside the bird nesting season (March to the end of August) or immediately after an ecologist has confirmed the absence of active nests.
- Protecting trees present shrub beds and pond, during building and development work as per BS5387:12 (*Trees in relation to design, demolition and construction – Recommendations*).
- Large tree stump on southern boundary should be retained and protected in situ; if removed it must be retained on another part of the development plot with a partially shaded southerly aspect and dug into the ground, particular attention should be placed on retaining Stag beetle larvae.

It is understood that the following two features are used regularly by the house holders and fluctuate in size/presence overtime. They should be retained in the garden of the new development and if present during development period should be treated by:

- Compost heap to be taken apart under ecological supervision post hibernation and pre egg laying period for reptiles (Grass snake *Natrix natrix*). Best undertaken between April and May.
- Log pile in SE corner to be retained on site. If it needs to be moved it should be taken apart by hand under ecological supervision post reptile and amphibian hibernation. Best undertaken in April.
- Pond, rockery and herbaceous/shrub beds on the north, east boundaries and south east corner should be defined and protected using reptile/amphibian fencing.

6.3 The site could be enhanced ecologically in accordance with chapter 11 of the NPPF (DfCLG, 2012), By the erection of bird and bat boxes on suitable trees within the development site and increasing the size of the shrub beds using native wildlife friendly plantings (Appendix 3&4).

7.0 References

ARG UK (2010). Advice Note 5, Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Group UK.

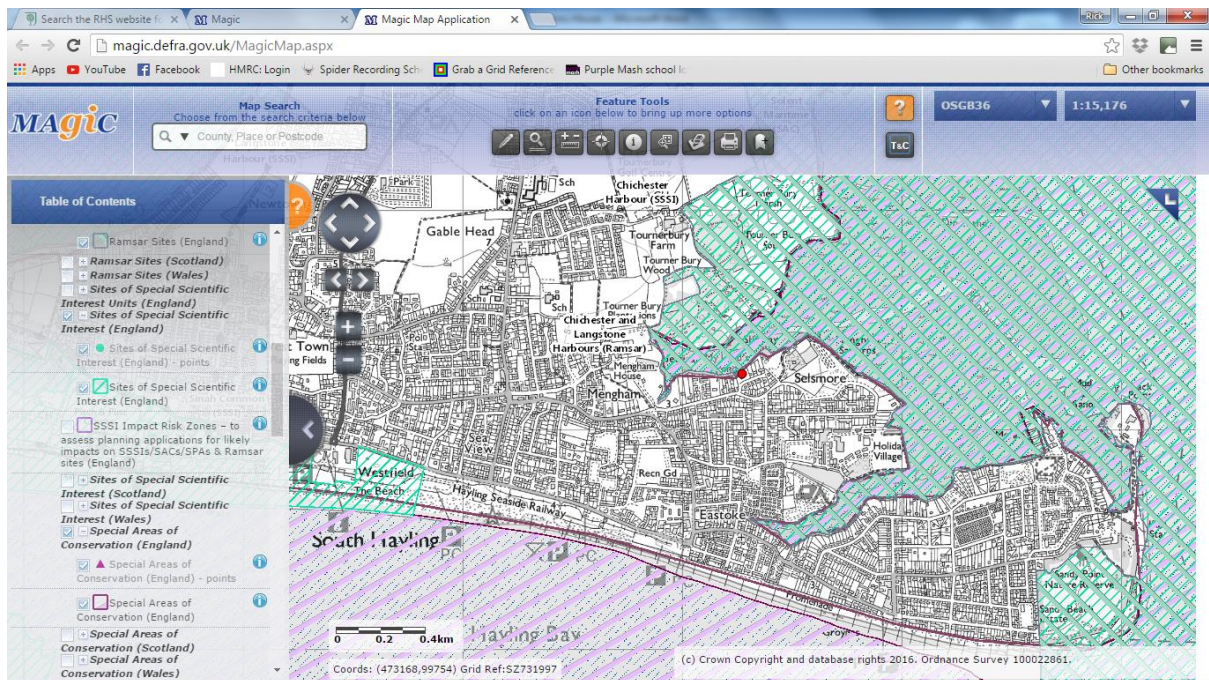
Department for Communities and Local Government (2012). National Planning Policy Framework. www.communities.gov.uk

Gent, A.H., & Gibson S.D. (1998). *Herpetofauna workers' manual*. Joint Nature Conservation Committee, Peterborough.

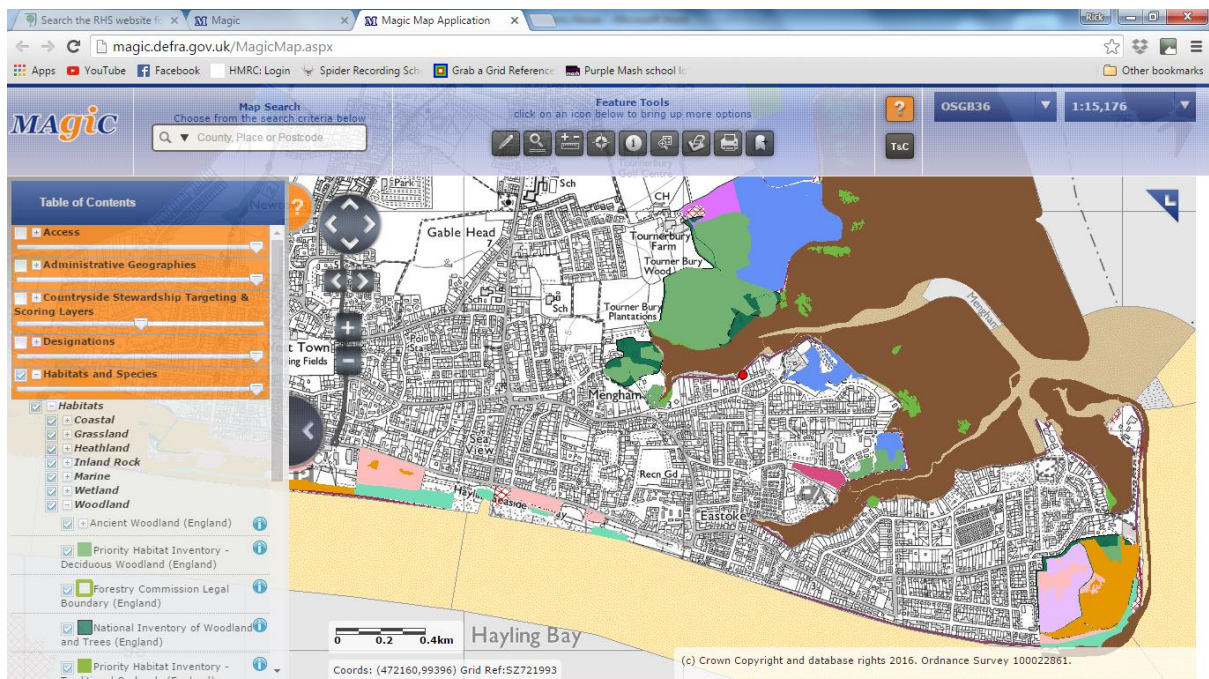
Hundt (2012). Bat Surveys-Good Practice Guidelines 2nd Edition. Bat Conservation Trust, London.

JNCC (2010) *Handbook for Phase 1 habitat survey- A technique for environmental audit*. ISBN 0 86139 636 7.

Appendix 1



Map showing designated sites SSSI, AONB, SAC – red spot locates the site



Map showing priority habitats in Hampshire – red spot locates site

Appendix 2



Main Lawn – development area



North terrace showing dead oak, sea wall and tidal mudflats



View across mudflats to woodland site



Rockery and pond



Rockery and pond



Example of shrub beds



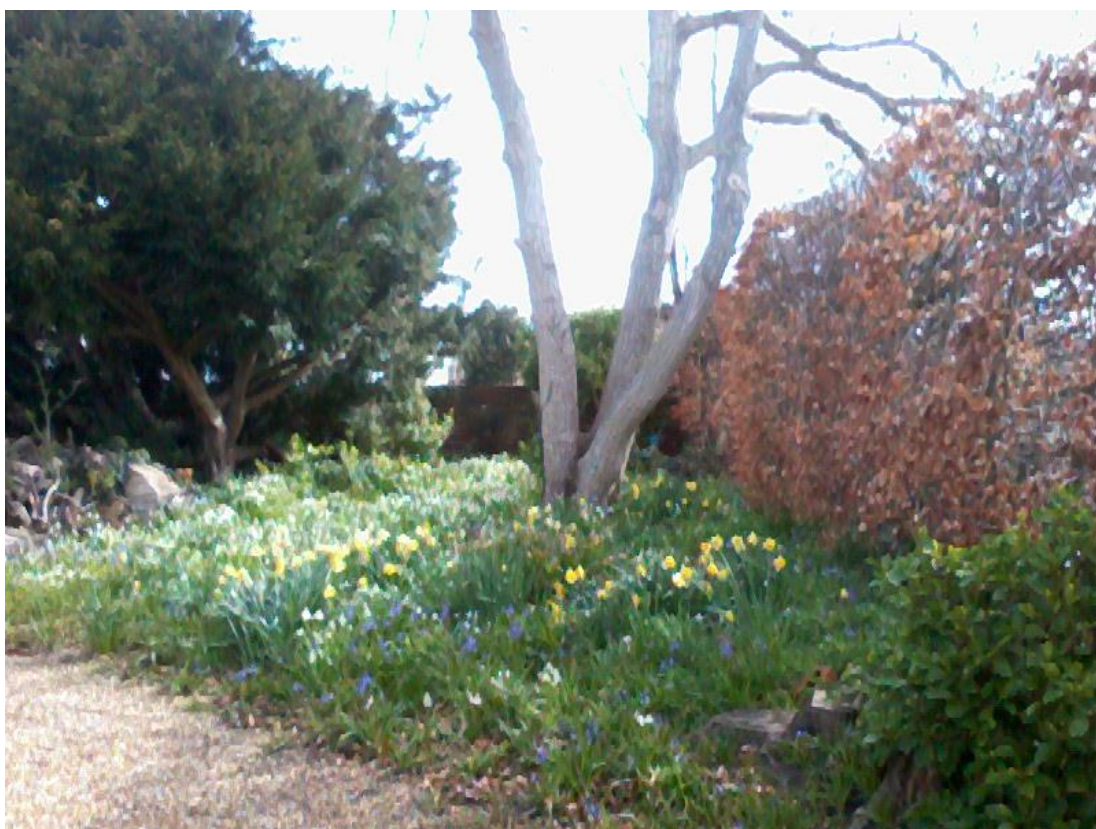
Log pile



Compost heap



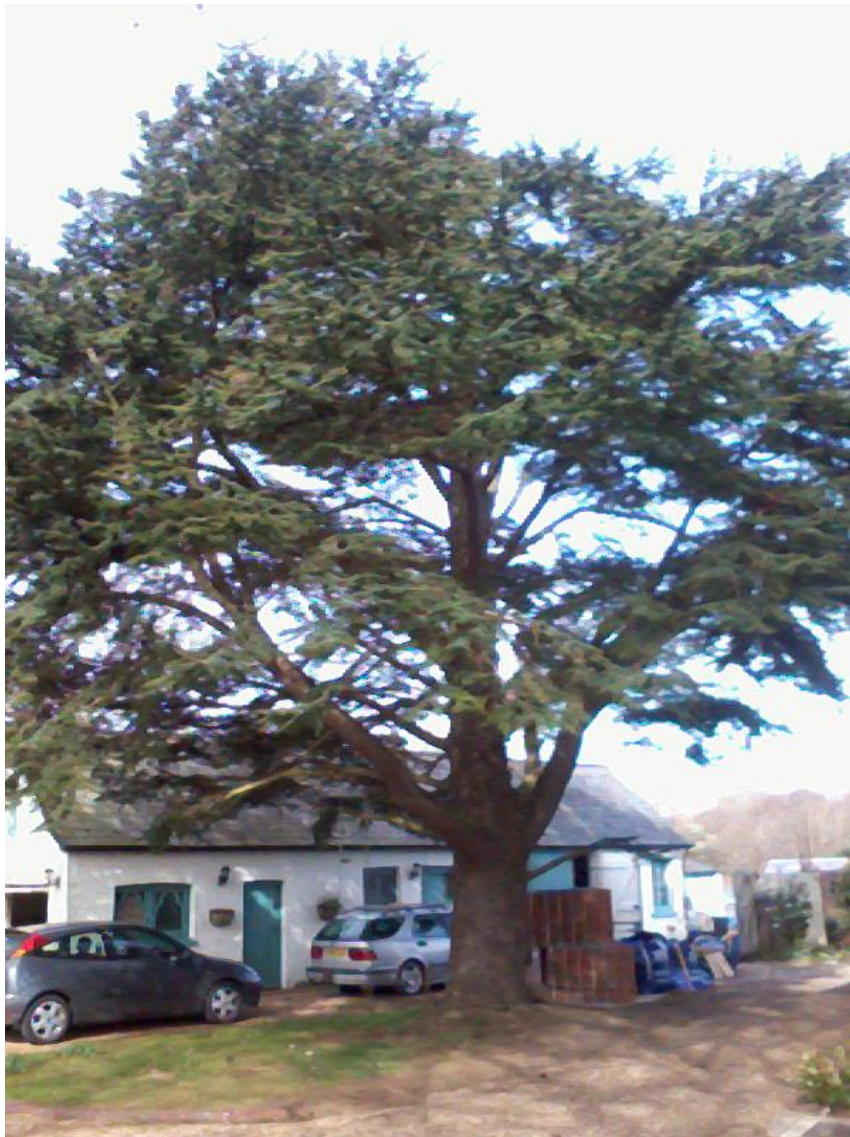
Dead stump – would need to be removed to create access



Walnut tree, beech hedge, yew tree and woodland flower area in SE corner



Mature Yew tree SE corner



Cedar of Lebanon



Pheasant footprints in concrete of patio N terrace

Appendix 3

<u>Wildlife Friendly / Native species</u>	
Large Trees	
Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Elm	<i>Ulmus procera</i>
Oaks	<i>Quercus robur and Q. petraea</i>
Small-leaved lime	<i>Tilia cordata</i>
White willow	<i>Salix alba</i>
Wild cherry	<i>Prunus avium</i>
Medium/Small Trees	
Alder	<i>Alnus glutinosa</i>
Aspen	<i>Populus tremula</i>
Crab apple	<i>Malus sylvestris</i>
Field maple	<i>Acer campestre</i>
Holly	<i>Ilex aquifolium</i>
Rowan	<i>Sorbus aucuparia</i>
Silver birch	<i>Betula pendula</i>
Yew	<i>Taxus baccata</i>
Native Shrubs	
Blackthorn	<i>Prunus spinosa</i>
Dog wood	<i>Cornus sanguinea</i>
Elder	<i>Sambucus nigra</i>
Guelder rose	<i>Viburnum opulus</i>

Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Plants for underneath trees or shady areas	
Archangel	<i>Lamium galeobdolon</i>
Betony	<i>Stachys officinalis</i>
Bluebell	<i>Hyacinthoides non-scriptus</i>
Bugle	<i>Ajuga reptans</i>
Foxglove	<i>Digitalis purpurea</i>
Ground ivy	<i>Glechoma hederacea</i>
Lily of the valley	<i>Convallaria majalis</i>
Lords-and ladies/cuckoopint	<i>Arum maculatum</i>
Nettle-leaved bellflower	<i>Campanula trachelium</i>
Primrose	<i>Primula vulgaris</i>
Sweet violet	<i>Viola odorata</i>
Wild daffodil	<i>Narcissus pseudonarcissus</i>
Wood avens	<i>Geum urbanum</i>
Climbers	
Bramble	<i>Rubus fruticosus</i>
Dog rose	<i>Rosa canina</i>
Field rose	<i>Rosa arvensis</i>
Ivy	<i>Hedera helix</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Wild privet	<i>Ligustrum vulgare</i>
Exotic shrubs for wildlife value	
Serviceberry	<i>Amelanchier canadensis</i>
Butterfly bush	<i>Buddleja davidii</i>

Japanese quince	<i>Chaenomeles japonica</i>
Creeping cotoneaster	<i>Cotoneaster frigidus</i>
Variegated cotoneaster	<i>Cotoneaster horizontalis</i>
Mahonia	<i>Mahonia spp.</i>
Mock orange	<i>Philadelphus spp.</i>
Firethorn	<i>Pyracantha coccinea</i>
Lilac	<i>Syringa vulgaris</i>
Bodant viburnum	<i>Viburnum bodnantense</i>
Laurustinus	<i>Viburnum tinus</i>

Appendix 4

Bat and bird boxes are recommended for this development at least two of each, the default industry standard are boxes by Schwegler but any similar design would be appropriate.

2F Schwegler General Purpose Bat Box

Should be erected 2m above ground level facing SE or SW



2B Schwegler Nest Box

Boxes with 26 and 32mm holes should be used and place appropriately.



Appendix 5

This section details the legislation relevant to the protection of species and habitats. It also details the relevant policies within national, regional, and local planning policy.

NPPF

The National Planning Policy Framework in summary requires that the planning system should aim to contribute and enhance the natural and local environment. The aims are to: protect and enhance valued landscapes as well as geological conservation interests and soils; recognising the wider benefits of ecosystem services; and minimising impacts on biodiversity and providing net gains in biodiversity where possible.

UK BAP

The UK Biodiversity Action Plan was published in 1994 in response to the Biodiversity Convention. The plan aims to enhance biological diversity of the UK through implementation of the Habitat Action Plans (HAPs) and Species Action Plans (SAPs), written for priority habitats and species.

Biodiversity Laws

Statutory protection is afforded to certain wild habitats and species through European Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (the 'Habitats Directive'). This has been adopted into UK legislation through the provisions of the Conservation of Habitats and Species Regulations, 2010. At the national level protection is found in Wildlife and Countryside Act (WCA 1981; as amended) and it is designed to protect species and habitats considered to be of principal importance to safeguard for the purpose of conserving biodiversity.

Under Regulation 41 it is an offence to deliberately capture or kill a wild animal of a European protected species, deliberately disturb any such animal and to damage or destroy a breeding site or resting site. Since August 2007 amendments to the Conservation (Natural Habitats) Regulations 1994 have changed the term 'deliberately disturb' such that it is an offence if the species are disturbed in such a way that it is likely to significantly affect the colonies ability to survive, breed or rear their young; or affect the local distribution or abundance of that species.

The WCA 1981 as amended is the principle mechanism for the statutory protection of wild flora and fauna in the United Kingdom. Reptiles, including slow worms and grass snakes, are protected under part of Schedule 9(1) of the Wildlife & Countryside Act 1981 (as amended) against intentional killing and injuring. Nesting birds are protected under the WCA 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs.

All species of bats are strictly protected through UK and European regulations. Bats have been placed on protected lists due to the overall steady decline of species over the last century. They are protected under the Wildlife and Countryside Act 1981 (as amended), under which bats are protected from intentional or reckless disturbance. Additional protection for all bat species is provided under Schedule 2 of The Conservation of Habitats and Species Regulations 2010. Licences are needed if the disturbance is a significant effect on

the bat colony and would otherwise be an offence. Licences are granted after strict following of Section 44 under the Habitat Regulations, following the submission of a licence application to Natural England. Licences permit the work that is otherwise considered to be an offence under the legislation.

Badgers are protected under Badger Protection Act 1992 and under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); badgers are classified as a species of conservation concern under the UK Biodiversity Action Plan and listed under Appendix III of the Bern Convention.

The dormouse is protected under EC Directive 92/43/EEC as transposed into UK law under the Conservation of Habitats and Species Regulations 2010. This makes it an offence for anyone without an appropriate licence to: 'Capture or kill a dormouse; disturb a dormouse; damage or destroy a breeding site or resting place; or transport, sell or exchange a live or dead dormouse or any part of a dormouse.'

The dormouse is afforded full protection under Section 5 of the Wildlife and Countryside Act 1981 (as amended). It is illegal to: 'Deliberately or recklessly kill, injure or disturb a dormouse; or deliberately or recklessly damage, destroy or obstruct access to a dormouse breeding site or resting place.'

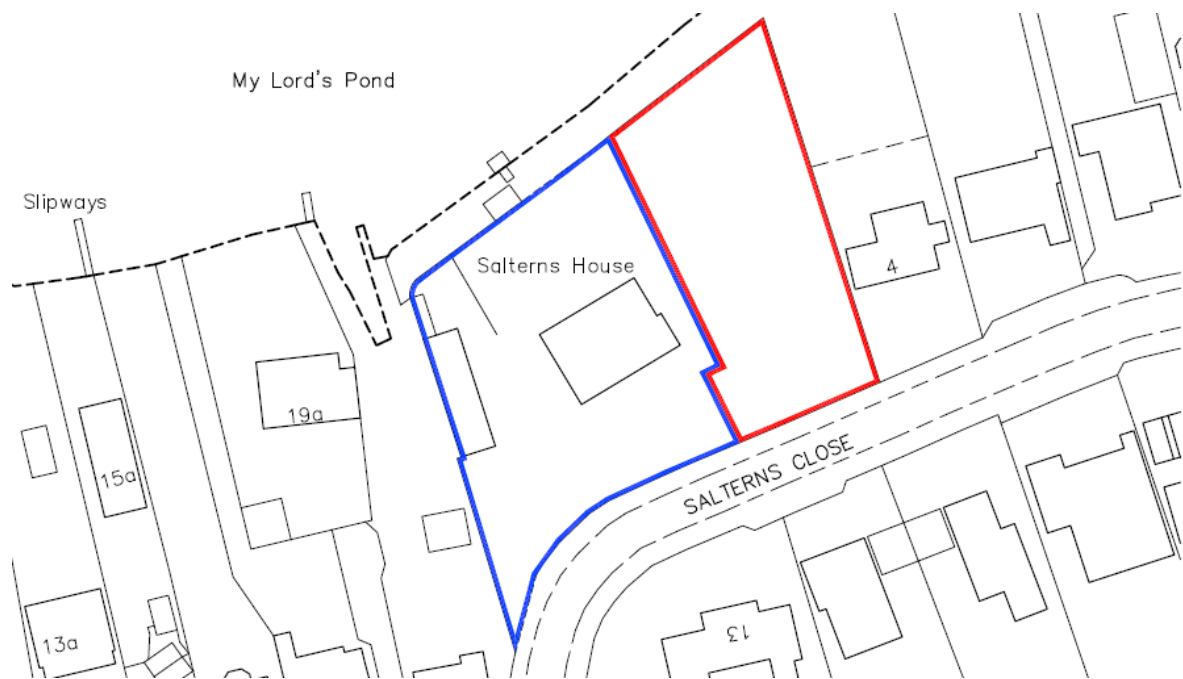
Appendix 6



Salterns House Phase 1 habitat Survey Map

	Buildings
	Lawn
	Trees and hedges
	Shrub and herbaceous beds
	Pond

Appendix 7



Site as a whole = red and blue boundaries

Development plot = red boundary