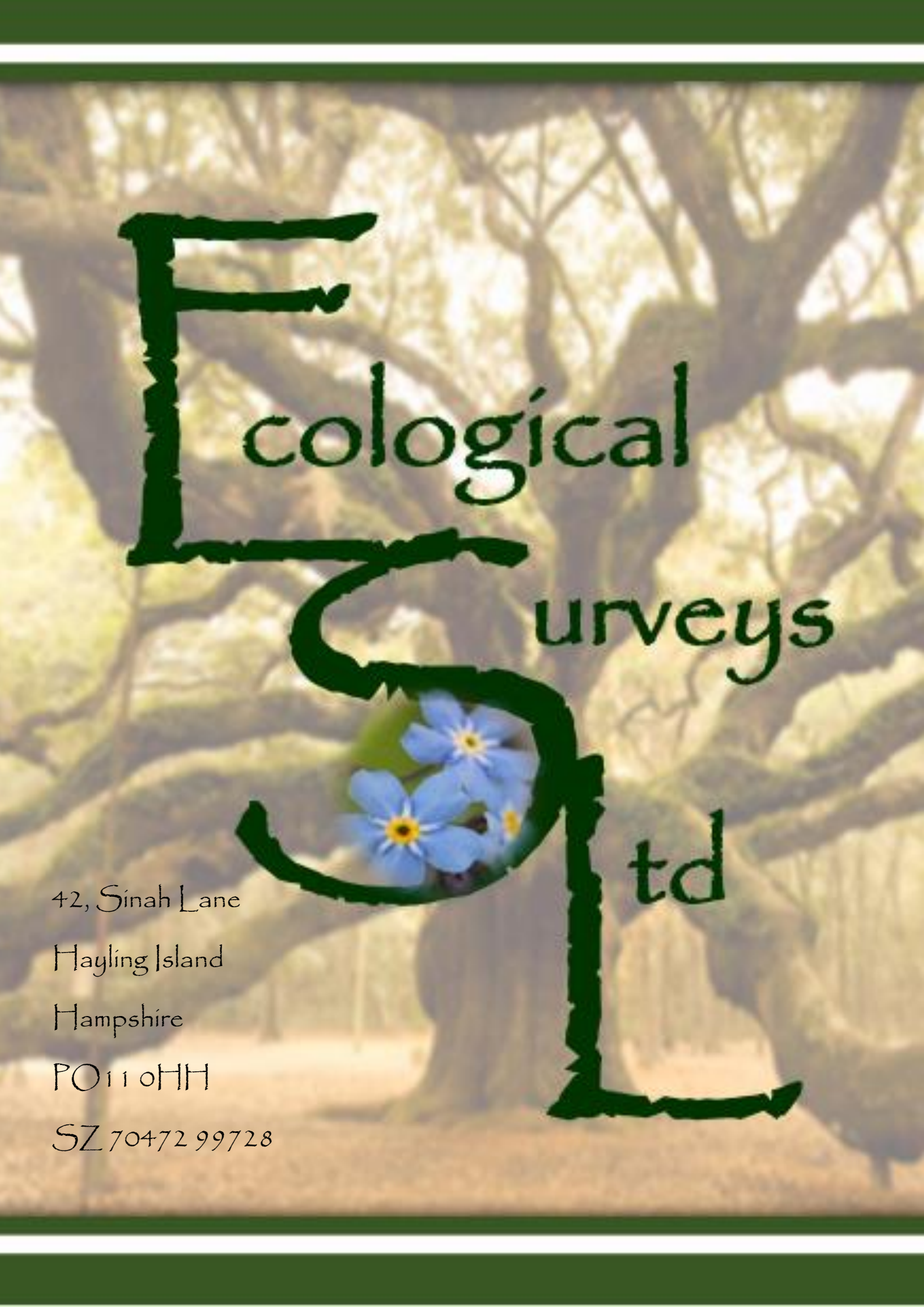




Ecological Surveys Ltd

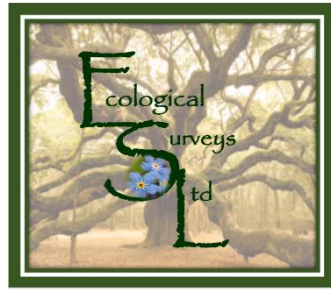
42, Sinah Lane

Hayling Island

Hampshire

PO11 0HH

SZ 70472 99728



ECOLOGICAL IMPACT ASSESSMENT

E_cI_A

November 2015

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1. Survey Details.

It is the responsibility of the client/developer to ensure they familiarise themselves with and comply with any law and legislation relating to this survey's findings and recommendations. An overview of specific governance relating to this survey may be found within section 22 of this report but is by no means comprehensive.

It should be noted that this Ecological Impact Assessment report relates specifically to the specified brief and proposal description. If any changes to the brief or the proposal are made, then Ecological Surveys Ltd should be consulted. A re-appraisal or appraisal amendment may be required.

Biodiversity is dynamic. Therefore, the information contained within this report should only be relied upon for a maximum of twelve months from the date of issue. An updated report will be required after this time.

This report presents the results of an Ecological Impact Assessment (EcIA) of land to the rear of 42, Sinah Lane, Hayling Island, Hampshire. PO11 0HH

The site survey followed the Phase 1 Habitat Survey methodology (JNCC 2010) and was completed on the 10/11/2015 by Ecological Surveys Ltd

Grid reference	SZ 70472 99728
Date of Report	11/11/2015
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Local Planning Authority Ecological Check List

Species potentially impacted by the development are indicated below.

Species	Yes	No	Protected Species Surveys Completed		
			Yes	No	Underway
Bats (roost)	X			X	
Bats (flight line / foraging habitat)	X			X	
SAC Greater Horseshoe Roosts within 10km		X			
Dormice		X			
Otters		X			
Red listed Birds		X			
Barn owls		X			
Other Schedule 1 birds		X			
Breeding birds		X			
Reptiles		X			
Water voles		X			
Badgers		X			
Other protected species		X			
Species of Principal Importance		X			
Conservation Priority Habitat	X	Hedgerow on western boundary			
Significant Natural Area	X		Bordering the site and within 2km		
Invasive species on site		X			

Avoidance, Mitigation, Compensation and Enhancement recommendations within the report	
Avoidance	✓ Protect and preserve the hedgerows and trees where possible ✓ Removal of hedgerows and trees should be outside nesting season and overseen by a suitably qualified ecologist.
Mitigation	✓ Plant Native plants of biodiversity value ✓ Where trees removed: replant/create equivalent ✓ Low lighting (0.5 lux) or none on trees
Compensation	See Section 18
Enhancement	✓ Include native species and some ornamentals with wildlife value into the planting plan (Ecological Surveys Ltd, Landscaping, can provide this.) ✓ 1 Sparrow Terrace ✓ 2 Bird nest boxes ✓ 1 Built in bat box ✓ 1 Hedgehog house ✓ Planting a grass mix other than low amenity lawn grass ✓ Planting of nectar rich plants/shrubs which yield fruits /nuts. ✓ Creation of a wildlife pond

2. Summary

- There ARE conservation priority habitats present: hedgerow on western boundary
- There are NO Key Habitat features present.
- NO rare/protected plants were observed during the survey.
- NO evidence of badgers utilising the site was observed.
- NO evidence of dormice occupying the site was observed during the survey.
- There ARE features on the site that might offer roosting opportunities for bats.
- One bird nest was observed during the survey, and nesting potential exists within the surrounding hedges and trees.
- This site has NO standing water and is therefore not suitable for Amphibians.
- The site grounds have not become overgrown and do NOT provide suitable habitat for reptiles and harvest mice.
- No further ecological surveys are recommended.
- Mitigation requirements are discussed within evaluation and Section 17.
- Recommendations have been made to retain features of value and enhance the site post – construction.
- A Habitats Regulation Assessment (HRA) is unlikely to be required.

3. Conclusions

The following conclusions contained within the body of this report relate specifically to the brief and development proposal descriptions supplied at the time of writing. If the proposals should change, a re-appraisal or appraisal amendment may be required.

Providing the recommendations within this report are adhered to: mitigation and enhancements agreed, there would appear to be no ecological constraints within this site to prevent this development.

4. Introduction

To the best of my knowledge there have been no previous ecological surveys of this site.

The purpose of this report is:

- To identify and describe all potentially significant ecological effects associated with the proposed development
- To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects
- To identify how mitigation measures will/could be secured
- To provide an assessment of the significance of any residual effects
- To identify appropriate enhancement measures
- To set out the requirements for post-construction monitoring

The aim of the survey is to:

- Assess the ecological value of the site by identifying any habitats, features or species of conservation importance that would constitute a potential constraint to the proposed development.
- Provide advice and recommendations where possible to avoid or mitigate any adverse impacts, consider compensation measures if required, and enhance the site post-development.
- If further surveys / reports have been recommended within this report and developers have been keen to submit planning applications, it is unlikely that the results of any further surveys will have been available at the time this EcIA has been submitted.
- The LPA should ensure that any avoidance, mitigation and compensation measures, together with enhancement recommendations are either 'conditioned' where appropriate, or that full permission is withheld pending the agreement of mitigation, compensation (where necessary) and enhancement measures, and the results of protected species surveys are known and reports presented to the LPA.

5. Description of the Site and Proposed Development.

The site proposed for development at present forms the rear garden for 42, Sinah Lane, within the Sinah Lane area of Hayling Island. Hayling Island is an island off the south coast of England, in the borough of Havant in the county of Hampshire. The Island is described as a combination of rural and marine environments that has left a legacy of unique natural history and bio-diversity with walking distances of anywhere on the Island. Hayling Island also has over 3 miles of beaches right on the doorstep of the Solent as well as the Harbours of Langstone and Chichester.

The Island has an array of specially protected areas which prohibit some forms of development. However, 42, Sinah Lane is within an established residential area where development has occurred to a similar degree to their recent proposal. The subdivision proposed for the development of the site pushes the development from an area where the principles for further development are acceptable subject to all other policies and detailed considerations, into a recognised coastal zone which must fulfil specific criteria.

The site contains one dwelling at present - a Grade II Listed modernist house by the architects Connell, Ward & Lucas on a site of 0.4 hectares and is bounded by Sinah Lane at one end (south) and Langstone harbour at the other (north). The proposal is to subdivide the site, roughly half way along its length to create a new area of approximately 0.2 hectares and for a new single storey dwelling to be built, accessed via a new driveway from Sinah Lane.

It is not known at the time of producing this report how the construction will proceed, its phases, or when the development will be completed by.

6. Site Evaluation

There are no natural habitats of ecological significance upon which any protected species rely to be lost to the development of the site. If anything, mitigation and enhancements that will be recommended will actually improve the value of this site for its wildlife potential considerably. To minimise further ecological effects, any

proposed scheme should retain all boundary hedgerows and ensure all recommended ecological surveys are completed and mitigation plans adhered to.

- The site is less than 0.5 hectares and no hedgerows are to be removed therefore a Bat Activity survey is not triggered.
- There is one hedgerow of limited ecology, which will remain intact.
- The trees in the main are to remain intact and are a category 3: unable to support bat roosts at this stage of life or a 2, with some potential e.g. ivy and damaged limbs giving hanging and hiding crevices. However, these trees are not being impacted and will be mitigated for lighting at none or 0.5 low lux max'.

The trees designated for removal are a small hawthorn <2m, a large Monterey Cypress, heavily cut back on the boundary edge to make room on the neighbouring property and deemed dangerous, and an oak which leans into the present site and is heavily asymmetrical.

It is pre-developmentally agreed these trees will be replaced with x2 Monterey Cypress and x2 oaks within the proposed development site (location TBA) with a consideration given to silver birch as a quicker growing tree between/above the trees.

- The lawn is so closely mown it is of low ecological value (although peculiarly there are patches of chives) and it certainly does not provide foraging habitat. The area toward the end of the garden which has partially overgrown is heavily in the shade.
- The structures onsite are flat-roofed and have no potential to host or encourage bat roosting.

Please refer to the Mitigation (17), Compensation (18) and Enhancement (19) sections for more details.

The need for enhancements to improve the restricted biodiversity of this site and minimise ecological impacts HAS been acknowledged and agreed.

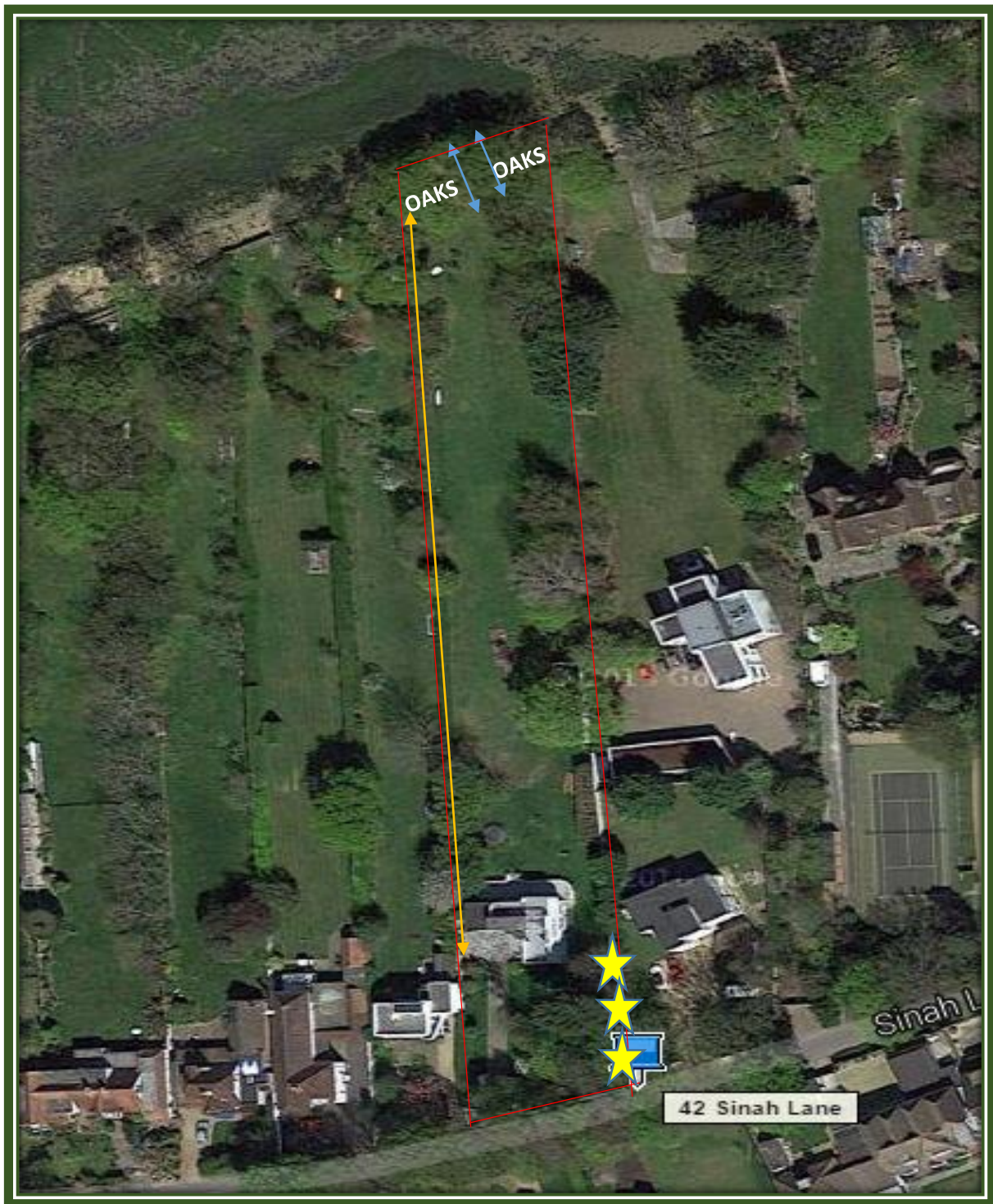
The proposal is to:

- ✓ Blend the new driveway into the landscape, to minimise its impact on the site

- ✓ Retain the access to the slipway from the garden of the new property only to prevent usage and wear-&-tear to the Langstone Harbour: SPA, SAC, Ramsar and SSSI which abuts the foreshore of this site.
- ✓ Include new tree planting within the internal courtyard as an enhancement.
- ✓ Provide a built in bat box, x2 bird boxes, 1 hedgehog box
- ✓ A pond of minimum 2x1m with NO fish, to encourage wildlife
- ✓ Native planting including local provenance

7. Site Map

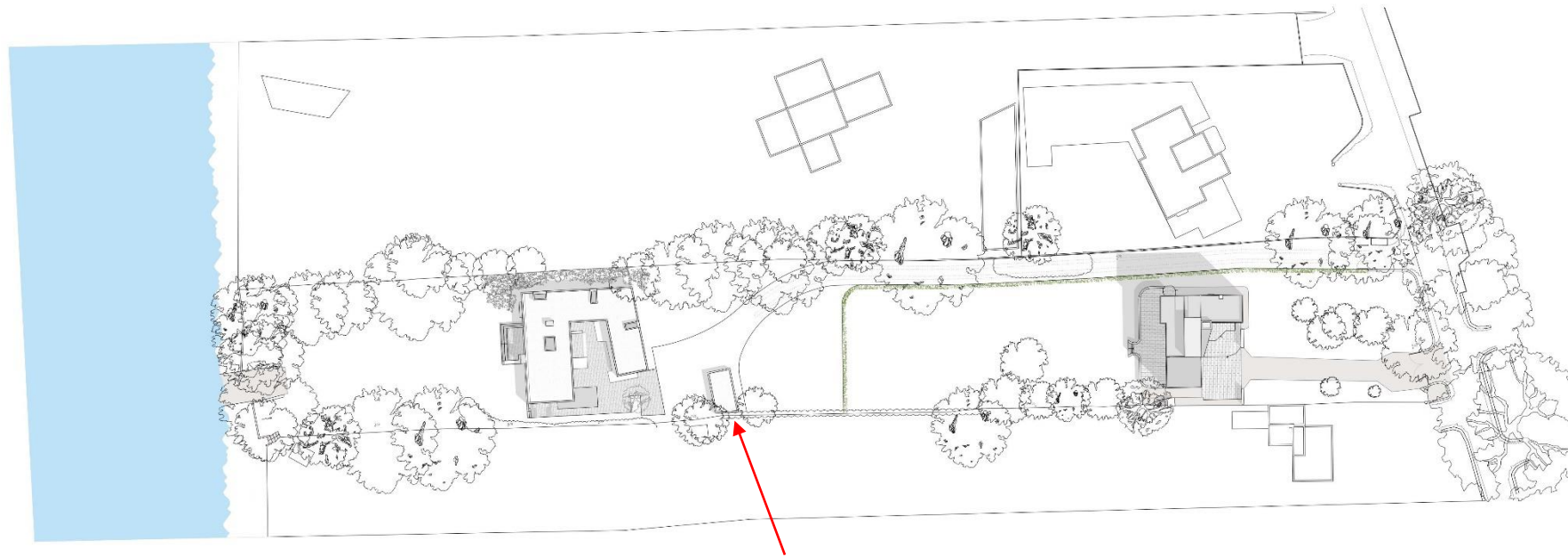
 Slipway
  3 trees designated for removal
  Hedgerow
  Boundary



7a. Existing Site Plan and Proposal



Proposed Site Plan



Built in bat box on this aspect

8. Desk Study

Methodology

The data search focused on websites holding designated sites and habitats, rather than simply species data. The data search radius is set at 2km.

Desk Study Results

Significant Natural Area (all distances measured approx')	
Special Areas of Conservation (SAC)	SOLENT MARITIME
Special Protection Area (SPA)	CHICHESTER AND LANGSTONE HARBOURS
RAMSAR:	CHICHESTER AND LANGSTONE HARBOURS
Site of Special Scientific Interest (SSSI)	LANGSTONE HARBOUR Sinah Common
National Nature Reserve (NNR)	
Local Nature Reserve (LNR):	The Kench Hayling Island +1000m Hayling Billy
Areas of Outstanding Natural Beauty	None found within 2km
BAP Priority Habitat (distance measured from site approximate) within 2km	
Shrub +700m Deciduous Woodland +500 Intertidal Substrate Foreshore within 100m Coastal and Floodplain Grazing Marsh +900 Good quality semi-improved grassland +500 Lowland Dry Acid Grassland +1000 Coastal Saltmarsh +250 Mudflats +150 Coastal Sand dunes +600	
Species Recorded	
Lapwing, Redshanks, Turtle Dove, Yellow Wagtail – None of these species would be expected on a site such as this.	
A ' Habitats Regulation Assessment', HRA) is unlikely to be required on this site. Refer to section 23 for details.	

9. Field Study

Methodology

The Extended Phase 1 Habitat Survey consisted of a walkover assessment of the site using Phase 1 Habitat Survey methodology (JNCC, 2010). This is a standard technique for classifying and mapping British habitats. All areas within the site were surveyed and assessed for indicators of ecological value, including the presence or signs of any protected or rare.

The survey was completed on the 10/11/15 by Ecological Surveys Ltd.

The weather conditions on the day were cool and dry.

The survey study area is shown on the site map. (Section 7) Areas outside of this area were assessed where possible, if evidence from the site indicated that protected species may be present in close proximity. Examples include: badger trails, potential nesting or roosting habitat adjoining the site.

All habitats on site were identified and where required, are recorded within the Report. A plant species list was also compiled (Section 24, Table 2).

A search was made to identify the presence or potential presence of notable and protected species such as dormice, badgers, bats and reptiles following the applicable guidelines from Natural England and relevant conservation organisations.

Any hedges present would have been assessed for their 'importance' under the 1997 Hedgerows Regulations. As all native hedgerows over 20m in length are now classified as a priority habitat feature, these too would be recorded.

10. Survey Limitations

Data held by county record centres is reliant on the information input into the system. The absence of a record of a species in a particular area is not evidence that the particular species does not exist, but may simply be due to a lack of survey effort, or a failure to record its presence. Therefore, an absence of evidence (records) should not be interpreted as evidence of absence.

Consequently, protected species surveys are recommended based on the suitability of habitat and potential presence of such species, rather than simple reliance on the previously recorded or otherwise presence of such species, within the vicinity.

11. Assessment

Methodology

A site visit was undertaken to physically survey the site. Site visits permit a far more accurate assessment of a site, its receptors, habitats and potential species than is ever possible using a desk based assessment alone.

Each habitat type on site is described below and each species recorded or potentially present is also described below.

Whilst the initial survey is not intended to prove conclusively, or otherwise the presence of notable and / or protected species, it does highlight the potential presence of any such species and makes recommendations as to any additional surveys that might be required to ensure the LPA fulfils its responsibilities under the various regulations and legislation intended to protect specified habitats and species.

12. Baseline Ecological Conditions (Habitats)

Grassland (Pasture)

None

Grassland (Amenity)

Closely mown utility lawn front and back of property of fescues and bents with some creeping buttercup and chives.

Hedges and Trees

One 'hedgerow' as defined under the '1997 Hedgerows Regulations' exists on the site.

This is the hedgerow on the western boundary. This hedgerow being longer than 20m and largely comprised of largely native British species, is a BAP priority habitat. Wherever possible, hedgerows should be retained and the client has confirmed this hedgerow will remain intact. The full length of the hedge contains species of leylandii, privet, Cupressus, a small oak and bramble, beech, hawthorn, ivy and dog-rose.

The client has taken measures to protect the exposed root system of the oaks on the foreshore, because she didn't want to lose such beautiful unique specimens. These old wizened oak trees are protected by Tree Protection Orders (TPO's).

Where possible, trees present within the site were assigned a value based on Bat Survey Guidelines (BCT, 2012).

-  **1*** - Tree with multiple, highly suitable features capable of supporting larger roosts.
-  **1** - Tree with definite potential, supporting fewer suitable features than Category 1* trees or capable of supporting roosts for single/low numbers of bats.
-  **2** - Tree with no obvious potential for roosting bats although due to its size and maturity the tree may support some features with limited potential to support bats.
-  **3** - Tree with no roosting potential.

The trees onsite were considered to be a Category 3 apart from two oaks with ivy and a broken limb, designated Category 2.

Bird boxes will enhance the latter two trees.

Water

No standing or flowing water exists on site. No freshwater was apparent in the nearby vicinity.

Woodland

No woodland exists on site

Scrub

No scrub exists on site.

Buildings / Structures

Two structures exist onsite. The first is the listed property known as 42 Sinah Lane which is flat roofed and has no suitability to host bats or birds.

The second outbuilding is similarly flat roofed with an open void. There is nowhere for bats to secrete themselves and no evidence that they are or have done so.

Description and significance of adjoining land / habitats

There are features of significance adjacent to or adjoining this site: Langstone Harbour: SPA, SAC, Ramsar and SSSI abuts the foreshore of this site.

Trees with TPO's are recognised as being potentially within the impact zone of this site: the eastern boundary at Number 40, Sinah Lane, has a weeping willow and scots pine. However, the results of the tree survey conducted should be referred to. A group order covers 15 oak trees on the northern boundary with the foreshore. There are also considered to be significant trees on the front aspect eastern boundary. These trees will not be impacted by the development.

13. Baseline ecological conditions (Species)

Plants

A species list is included within the appendices. This list is restricted to seasonal identification and may not contain every plant onsite. Client's responsibilities are to be found within section 22.

Invertebrates

The habitats on site are common and unlikely to support notable species of invertebrates or species of conservation importance.

Amphibians

The site is unlikely to support amphibians. There is no standing water on site and this prevents any amphibians from breeding here. No water bodies could be seen in adjoining properties or on a Google Earth search.

Overall the site has negligible-low potential to support amphibians

Reptiles

The grassland does not offer suitable habitat for reptiles such as slow worms or possibly common lizards. Overall the site has negligible-low potential to support reptiles.

Birds

There are trees on site with the potential to support nesting birds. A wood pigeon nest was observed within one of the oaks. Protecting and wherever possible avoiding the removal of trees as recommended under previous headings will certainly benefit birds too.

Please refer to the mitigation section.

Schedule 1 birds

No schedule 1 bird species were recorded during the survey. Data information was consulted. Please see appendices.

Bats

Bat roost sites normally consist of caves, buildings of various types, trees with holes / cracks / peeling bark or coverings of ivy.

On this site the obvious potential roost sites are the trees and buildings. Where appropriate, the building exteriors and interiors were searched visually, using binoculars, for field evidence of bats, with particular attention being paid to sheltered areas such as window ledges and pipes where bat droppings might lie undisturbed from the weather, insect prey remains, urine stains, oil stains from bats repeatedly moving over a small area and polishing the surface and the potential presence of bats either dead or alive.

All structures were searched carefully for evidence of bats and none was recorded. All trees were identified for their defining characteristics to support bat habitation and the conclusion was each tree was designated either Category 3: no potential or Category 2: some limited potential. These trees are not affected by the development.

Bats may use this site for foraging purposes, however, to put this into perspective, bats are known to use numerous kinds of sites to forage for food. The hedgerow will offer some foraging potential but the utility grassland offers negligible potential. Protection of the hedgerows are important for several species not just bats and wherever possible the hedgerows should be protected and retained.

Some bat species have learned to utilise street lighting as feeding stations, whilst others prefer total darkness and shun lighting. In general, low light levels are to be preferred. It is therefore important that light is not focused on hedgerows. Please see the mitigation section for ideas on how to limit light interference.

The site is considered to have negligible-low potential to support foraging bats, with low potential to host roost sites.

Badgers

The site was surveyed for the presence of badger activity and setts. Any setts identified were classified into the following sett types:

- **Main sett** - large number of entrance/exit with signs of recent activity including fresh spoil and well-worn obvious tracks to and from the sett.
- **Annexe sett** – entrance/exits close to a main sett and connected by frequently used pathways.
- **Subsidiary sett** - small number of entrance/exits not connected to another sett by paths.
- **Outlier sett** - one or two holes with signs of occasional use.

No setts or other evidence of badger activity was observed on site. It is possible that badgers may on occasion traverse the site. There are however, no badger tracks, paths, latrines or any other indication that badgers regularly use this site. Consequently, the proposed development is unlikely to have any significant impact on badgers.

Dormice

Dormice are a protected species. It is possible for dormice to be found within small areas of woodland and within fragmented hedgerows. The connectivity of such small sites is very important and if such connectivity exists it is possible that dormice might spend at least part of the year, even if simply commuting, in such areas.

Dormice are also proven to cross roads including dual carriageways. Consequently, if a site has seasonal foraging opportunities and is within a known dormouse area, even if in close proximity to roads, there is the possibility that dormice may visit such sites.

Survey of this site concluded:

- This habitat is not suited to habitation by dormice. Sub-optimal habitat coupled with poor connectivity makes their presence highly improbable.
- Data searches do not show records of dormice within or near the vicinity of this site.

Other mammals

None observed or expected given the type of habitat and location.

14. Biodiversity Action Plan (BAP) Priority Species or Species of Principal Importance

Under the NERC (2006) Act, local authorities have a responsibility to protect Priority species, not just 'Protected Species'. Priority species may be included within the County Biodiversity Action Plan or be listed as a National Biodiversity Action Plan (BAP) species.

The following Priority Species are present or potentially present on site:

- None recorded.

15. Further Survey Work

ODPM Circular 06/2005 'Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System' advises that the presence of a protected species is a **material consideration** that must be taken into account by the local planning authority when determining the outcome of planning applications. Where there is potential for a protected species to be present on site full survey data is necessary to properly address the impacts of the proposed development upon these species. If the survey work is not carried out before planning application is determined there is a risk that not all material considerations will have been addressed. This may cause delays in determining the outcome of the planning application while full survey data is collected and analysed.

"However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present **and** affected by the development" Defra circular 01.2005 *Biodiversity and Geological Conservation – Statutory Obligations and their Impact Within the Planning System* 2005.

- Providing the mitigation measures are followed as recommended, no further surveys are necessary at this time.

16. Results of Protected Species / Species of Principal Importance Surveys

There are NO recommended Protected Species / Species of Principal Importance surveys required.

The LPA should ensure that any avoidance, mitigation and compensation measures, together with enhancement recommendations, are either 'conditioned' where appropriate, or that full permission is withheld pending the agreement of mitigation, compensation (where necessary) and enhancement measures, and the results of protected species surveys are known and mitigation if required, is presented to the LPA.

17. Assessment of effects and mitigation measures

Plants

- **Potential impacts** – Loss of some native species of low ecological value.
Loss of trees x3 trees
- **Mitigation measures** – Replacement/planting of native species of local provenance on any new or present hedgerow/ and or within border
Replacement of lost trees with x2 Monterey Cypress, x2 oaks as screening, possible silver birch for quick growing screen
- **Significance of residual effects** – Minimal where mitigation followed

Invertebrates

- **Potential impacts** – Unlikely
- **Mitigation measures** – Retain as many trees/shrubs as possible.
- **Significance of residual effects** – Minimal

Amphibians

- **Potential impacts** – Unlikely
- **Mitigation measures** – Not necessary. Enhancement of pond agreed.
- **Significance of residual effects** – N/A and Improved

Reptiles

- **Potential impacts** – Unlikely
- **Mitigation measures** – N/A
- **Significance of residual effects** – Negligible if mitigation followed.

Birds

- **Potential impacts** – Loss of nesting / roosting sites
- **Mitigation measures** – Retention of hedges and trees
- **Significance of residual effects** – Minimal if mitigation followed

Schedule 1 birds

- **Potential impacts** - None as no Schedule 1 birds present on site
- **Mitigation measures** – None
- **Significance of residual effects** – N/A

Bats

- **Potential impacts** – Loss of limited foraging / navigational aids
- **Mitigation measures** – Retention of hedges and trees. Restriction on light spill onto hedgerows and trees in particular category 2 trees: 0.5 lux maximum
- **Significance of residual effects** – Negligible if mitigation followed.

Badgers

- **Potential impacts** – Potential loss of foraging area.

- **Mitigation measures** – Not required as adequate foraging available in surrounding area and a garden area will still exist on this site.
- **Significance of residual effects** – Negligible.

Dormice

- **Potential impacts** – None
- **Mitigation measures** – Not required, however, retention of hedgerows and limitation on lighting of hedge lines, will ensure the hedges are as they have been.
- **Significance of residual effects** – Negligible

Other Mammals

- **Potential impacts** – None
- **Mitigation measures** – N/A
- **Significance of residual effects** – N/A

18. Compensation:

Where compensation measures are considered necessary to off-set significant residual effects, these are described below.

Habitats	Actions	Compensation Measures Required
Grassland (Pasture)	None	None
Grassland (Amenity)	Removal	None
Hedges and Trees	None	Should any portion of hedgerow need to be removed it can be mitigated for onsite by the planting of an equivalent area of hedgerow, OR where mitigation is not possible, the hedgerow should be compensated for offsite with an equivalent area planted. LPA agreement is required for offsite compensation.
Water	Unaffected	None
Woodland	Unaffected	None
Scrub	None	None
Buildings/ Structures	Renovation /demolition	Old buildings often offer nesting / roosting opportunities for birds. New buildings, with an emphasis on draft proofing and insulation do not offer the same opportunities. However, this building offered no such potential. Enhancements however are required.
Other	None	None

19. Enhancement

Enhancement measures are required under the National Planning Policy Framework (NPPF). *This must be undertaken by a suitably qualified ecologist and a report evidencing completion of enhancement works sent to LPA.* The National Planning Policy Framework (NPPF) sets out the UK Government's national policies on enhancement of biodiversity and promotion of ecosystem services through the planning system.

Birds

Modern buildings no longer offer nesting opportunities for birds in the manner that older properties do. So, to enhance the nesting opportunities on site, nest boxes are recommended. See below. Nesting boxes should be a mixture of both 'open fronted' and 'hole type' boxes in order that they appeal to the widest possible number of species. These boxes should be erected not less than 3m high unless tucked tightly under an eave.



This example (left) hole fronted box is available from:

<https://www.nhbs.com/title/158587/1b-schwegler-nest-box>

Boxes are available from a range of outlets and this advice is in no way prescriptive; however, Schwegler (type) Nest Boxes are much longer lasting than wooden ones and are therefore preferable.

The 'common' house sparrow has declined significantly and is now a red-listed bird. Part of the reason for its decline is believed to be a lack of suitable nest sites within modern houses.



There is a link within the appendices giving details of suitable nest boxes. The choice of supplier is not prescriptive

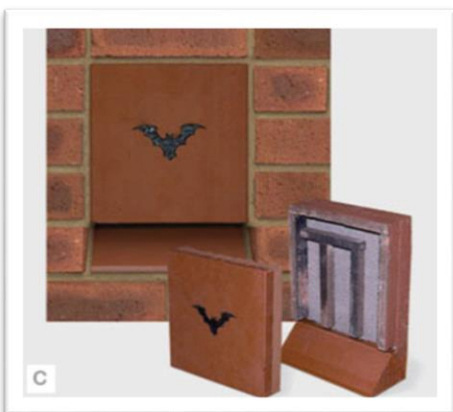
<http://www.nhbs.com/title/174850/1sp-schwegler-sparrow-terrace>

New developments offer an opportunity to help. I would therefore recommend one house sparrow box, or sparrow 'terrace' to be erected upon the new property. This could be on the garage or house. To avoid conflict with residents, erection of the boxes should not be above doors or windows.

In total, the recommended enhancement for birds equates to 2 individual nest boxes set within the large trees on site and 1 house sparrow nest box, erected upon the new structure. *Nest boxes should be installed by an experienced ecologist, who will confirm to the LPA that the enhancement work has been completed.*

Bats

One bat box built into the end of the new property facing the trees would offer potential bat roosts and augment the natural roosting opportunities. The box can be built into either the garage or house. These boxes should be erected not less than 3m high unless positioned directly under an eave.



There are other bat box designs available and different types can be found to match individual properties. Details of this and others can be found here:

<http://www.ibstock.com/sustainability-ecozone.asp>

Plants

Areas of new planting/landscaping should be created to compensate for habitat loss, and should consist of wildlife-attracting and/or native species of local provenance, with appropriate aftercare and management to ensure that these areas are maintained.

Wherever possible the planting of 'open spaces' with a grass mix other than traditional amenity type grass can be beneficial to a range of invertebrates and consequently to species which feed directly or indirectly upon them. This link to the Royal Horticultural Society (RHS) provides advice on such plantings.

<https://www.rhs.org.uk/advice/profile?pid=436>

Not only do such wildflower areas look beautiful but they actually require less maintenance than traditional lawns.

Planting of nectar rich shrubs or trees which produce either fruit or nuts, will be of benefit, either directly or indirectly, to a multitude of organisms. Species lists are provided in appendices.

Hedgehogs:

No evidence of hedgehogs was observed, however 1 hedgehog box, placed in the base of any shrubs being planted (or alongside the boundary hedges), would offer a home to these once common, now rare UK BAP species. Garden fences should permit the free movement of hedgehogs between gardens and the surrounding countryside. This means raising a fence up 150mm or allowing a gap between panels.

Other:

The client has proposed and agreed to a pond of no less than 2m x 1m being established on the property. This pond will be planted and maintained as a wild-life pond to improve habitat diversity and not used as a fish-pond. This would offer ideal habitat for the BAP Priority species- Common toad and also common newt species too.

20. Impact Avoidance During the Construction Phase

Trenches or large excavations should be covered overnight to prevent wildlife such as badgers or hedgehogs falling in and failing to escape. If this is not possible then a strategically placed plank may provide a means of escape. Any large bore pipes should be capped at the end of the day to reduce the potential for badgers and other wildlife entering and becoming trapped.

Areas that are being retained should be protected from damage during construction by erecting Heras (or similar) fencing around these features. The fencing should be erected outside the line of the canopy as this helps protect the roots from compaction of the soil.

Any areas proposed for planting post-development should be fenced off where possible to prevent compaction of the soil through vehicle movements.

Contractors must ensure that no harm can come to wildlife by maintaining the site efficiently, clearing away any material such as wire in which animals can become entangled and preventing access to toxic substances.

If there is a substantial delay before development commences, the site should be maintained in a way that would prevent wildlife colonising it and causing constraints in the future. Such management should include mowing grassland at least twice a year and preventing scrub encroachment.

Piles of brush wood and or log piles should be carefully inspected for signs of wildlife prior to their removal. This is especially crucial during the period March – September (inclusive) as some species of bird choose such sites to construct their nests. Ideally removal of such features should be done outside of the nesting season. If this is not possible, it is recommended that these features are covered in such a way as to exclude / prevent birds and / or reptiles taking up residence. Should nesting birds or reptiles be discovered, work must cease immediately and ecological advice sought.

All hedgerows / trees / shrubs removal should be done outside of the bird nesting season March – September (inclusive). If removal is not possible during this period,

careful checks of such, must be conducted by a suitably experienced ecologist prior to works commencing.

21. Site Images



Front of site where access is proposed on the east boundary. This tree is proposed for removal and heavily weighted to the front.



View to the north end of the site and clearly showing the mown grass of little diversity.



Flat roofed structure to be demolished. Unsuitable to bats owing to the open void roof.



Flat roofed listed building onsite. Unsuitable to bat habitation.



Border on the east.



Hedgerow on the west.

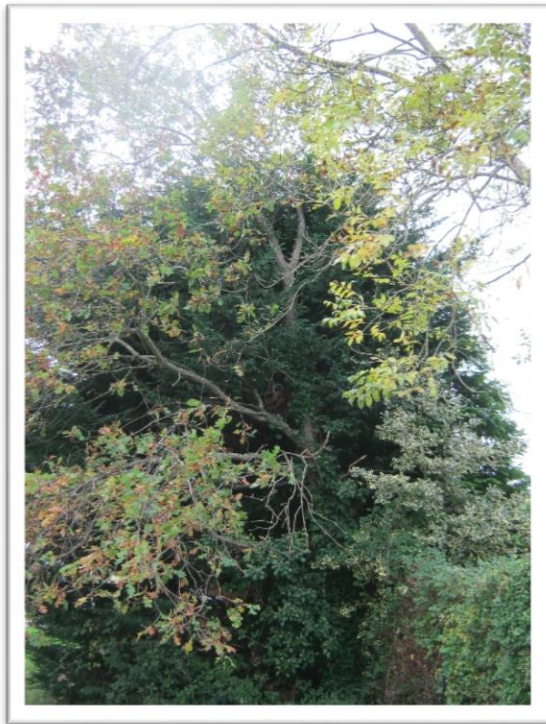


Image on left: Category 2 tree.
Image above: access to the foreshore mostly inaccessible with tree limbs.

22. Planning Policy and Legislation

Local Planning Authorities are charged with the responsibility for protection of endangered species under the European Union Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC. This Directive is implemented in the UK by the Conservation (Natural Habitats & Conservation) Regulations 1994 (Statutory Instrument No 2716) amended in 1997.

The presence of a protected species is a material consideration when a local authority is considering a planning application that could affect any protected species.

“However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development”, Defra circular 01.2005 Biodiversity and Geological Conservation – Statutory Obligations and their Impact Within the Planning System 2005.

The National Planning Policy Framework (NPPF) sets out the national planning policy which is committed to minimising impacts on biodiversity and providing net gains in biodiversity where possible. Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species as identified under the Natural Environment and Rural Communities Act (2006). Local Planning Authorities will seek to produce a net gain in biodiversity, by requiring developers to design wildlife into their plans and to ensure that any unavoidable impacts are appropriately mitigated for.

Hedgerows

Any hedgerows classified as ‘important’ under the 1997 Hedgerows Regulations cannot be removed without a Hedgerow Removal Notice issued by the relevant Local Authority unless previously approved as part of a planning permission. The UK Biodiversity Action Plan (BAP) now classifies any native hedge over 20m in length as a priority habitat feature. Priority hedgerows should be those comprising 80% or more cover of any native tree/shrub species.

The LA is the arbiter as to classification of hedgerows

Plants

The Wildlife and Countryside Act 1981 makes it an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8 and prohibits the unauthorised intentional uprooting of such plants. Certain plant species are also afforded protection under the EC Habitats and Species Directive (92/43/EC).

Invasive Non Native Plants:

The site owner has a responsibility to:

- Prevent invasive, non-native plants on their land spreading into the wild and causing a nuisance.
- Prevent harmful weeds on your land spreading onto a neighbour's property

The owner of the site must not plant in the wild or cause certain invasive and non-native plants to grow in the wild. This can include moving contaminated soil or plant cuttings. If this occurs there is a fine or prison term for up to 2 years.

The most commonly found invasive, non-native plants include:

- Giant hogweed
- Himalayan balsam
- Rhododendron ponticum
- New Zealand pigmyweed (this is banned from sale)
- Japanese knotweed

The site owner is not legally obliged to remove these plants or to control them. It is important that they are identified and their spread controlled in the most appropriate way.

Prevent the spread of harmful weeds

A number of weeds are a danger to animals, or cause problems for agricultural production if left to spread unchecked. The following weeds are controlled by law:

- common ragwort
- spear thistle
- creeping or field thistle
- broad-leaved dock
- curled dock

It's not an offence to have these weeds growing on your land, but you must:

- stop them spreading to agricultural land, particularly grazing areas or land used for forage, like silage and hay
- choose the most appropriate control method for your site, e.g. if it is a protected site
- not plant them in the wild

If you allow these weeds to spread onto someone else's property, Natural England could serve you with an enforcement notice. You can also be prosecuted if you allow animals to suffer by eating these weeds.

Refer to www.gov.uk/prevent-the-spread-of-harmful-invasive-and-non-native-plants for further advice.

Badgers

Badgers are protected by the Protection of Badgers Act (1992) and the Wildlife and Countryside Act (1981), Schedule 6. Under the Wildlife and Countryside Act it is illegal to intentionally kill, capture, injure or ill-treat any badger. Under the Protection of Badgers Act, it is an offence to obstruct, destroy or damage a badger sett or disturb badgers within a sett. Disturbance is defined, for development purposes, as any activity that could damage a sett or be greater than what badgers commonly tolerate. Badgers are seen to be tolerant of low-moderate disturbance levels.

This is only a guide to the main provisions of the law. Natural England does not provide legal advice to developers and the text of the Act should be consulted and professional legal advice sought for exact interpretations of offences and defences. The Protection

of Badgers Act 1992 is based primarily on the need to protect badgers from baiting and deliberate harm or injury. It also contains restrictions that apply more widely and it is important for developers to know how this may affect their work. All the following are criminal offences: to

- Wilfully Kill, Injure, Take, Possess OR Cruelly ill-treat a badger;
- Attempt to do so
- Intentionally or recklessly interfere with a sett.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the Sett is not damaged or obstructed.

Since development operations may take place over a protracted period, Natural England recommends that plans consider the effect of the development on seasonally-used setts as well as currently occupied setts. If a sett has shown signs of occupation within the past few months, it could be in use by badgers when development starts and should therefore be taken into account during the survey and any planning stages of the development. Where interference with a sett showing signs of use cannot be avoided during the development, a licence should be sought from Natural England.

Penalties for offences can be severe with fines of up to £5,000 plus up to six-month imprisonment, for each illegal sett interference, or badger death or injury. The legislation does, however, recognise the need for a range of legitimate activities to be carried out and allows licences to be granted for certain purposes permitting work that would otherwise be illegal. The purposes for which licences can be granted include:

- Preventing serious damage to land, crops, poultry or any other form of property (e.g. a house, garden, road etc.)
- Any agricultural or forestry operations
- Any operation to maintain or improve any existing watercourse or drainage works, or to construct new works required for the drainage of land, including works of defence against sea or tidal water

- Preventing the spread of disease
- Development
- Scientific or educational purposes, or conservation
- Preservation or archaeological investigation of scheduled ancient monuments

Natural England will normally only issue a licence after detailed planning permission has been granted, where applicable, so that there is no conflict with the planning process. Licences will only be issued in advance of full planning permission in exceptional circumstances. Local authorities and developers need to be aware that it may be necessary for an environmental assessment to be carried out, prior to the development, if the proposed development site hosts badgers. Before the planning application is determined, the local planning authority should request a detailed ecological survey/report and developers should be prepared to provide the following information:

- The numbers and status of badger setts and foraging areas that are affected by the proposal;
- The impact that the proposal is likely to have on badgers and what can be done by way of mitigation;

Judgment on whether the impact is necessary or acceptable; and a recommendation as to whether a licence will be required.

Planning Permission and badger licensing are separate legal functions. Thus receiving planning permission from the Local Authority is no guarantee that development operations will not breach the Protection of Badgers Act 1992. Similarly planning permission does not guarantee that a badger licence will be granted. It is important, therefore, that developers take adequate account of badgers at the planning stage in order to ensure that badgers will not be affected or, where a licence is required, that appropriate mitigation measures can be implemented.

Bats

All species of bat, their habitat and roosts are protected by the UK Wildlife and Countryside Act (1981) and the EC Habitats and Species Directive (92/43/EC), enacted in the UK by the Conservation of Habitats and Species Regulations (2010).

All British bats are European protected species (EPS), included on Annex IV (a) of the European Communities Habitats Directive. Annex IV (a) species are protected in this country under Schedule 2 of the Conservation of Habitats and Species Regulations 2010. Additionally, bat species in the UK are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 12 of the Countryside Rights of Way Act 2000. In combination this makes it an offence to:

- Deliberately* kill, injure or capture bats;
- Intentionally or recklessly disturb a bat in its roost, or deliberately disturb a group of bats;

Intentionally or recklessly damage, destroy or obstruct access to a bat roost (a bat roost is interpreted as any structure or place which is used for shelter or protection, regardless of whether bats are present at the time or not);

- Possess or transport a bat or any part of a bat, unless acquired legally; and
- Sell, barter or exchange bats or parts of bats.

In a court, 'deliberately' may be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action will potentially have.

Otters, Dormice.

Otter and dormice habitat are afforded protection under UK and EU legislation and are protected by the UK Wildlife and Countryside Act (1981) and the EC Habitats and Species Directive (92/43/EC), enacted in the UK by the Conservation of Habitats and Species Regulations (2010).

Hazel dormice, their breeding sites and resting places are protected by law.

You may be able to get a licence from Natural England if you can't avoid disturbing them or damaging their habitats.

What you must not do

You're breaking the law if you do certain things including:

- Capture, kill, disturb or injure hazel dormice (on purpose or by not taking enough care)
- Damage or destroy a breeding or resting place (even accidentally)
- Obstruct access to their resting or sheltering places (on purpose or by not taking enough care)
- Possess, sell, control or transport live or dead hazel dormice, or parts of hazel dormice

You could be sent to prison for up to 6 months and be fined £5,000 for each offence if you're found guilty.

Activities that can harm hazel dormice:

Hazel dormice can be affected by:

- Handling
- Disturbance, e.g. Noise and light, woodland and hedgerow management
- Habitat removal, clearing woodland and removing hedgerows

In most cases you should be able to avoid harming the hazel dormice, damaging or blocking access to their habitats.

Birds

All British birds, their nests and eggs are protected in law. It is an offence to deliberately take, kill or injure any wild bird or to take, damage, or destroy any nest or egg of any wild bird under Part 1 of the Wildlife and Countryside Act 1981 (as amended). However, Schedule 1 provides an additional tier of protection so that rare species are especially protected by increased penalties and cannot be intentionally or recklessly disturbed when nesting.

Reptiles and Amphibians

In addition to the planning implications, it should be noted that all species of reptile and amphibian are protected by the UK Wildlife and Countryside Act (1981), under Schedule 5. Reptiles such as adder, common lizard, slow worm and grass snake are protected against intentional killing, injuring or selling. Species such as the smooth snake, sand lizard and great crested newt are also protected by European legislation as above.

Other species have even greater protection. Failure to take appropriate action to protect reptiles may result in a criminal prosecution.

Invertebrates

A number of invertebrates, including the white-clawed crayfish, are protected by the UK Wildlife and Countryside Act 1981 (as amended), under Schedule 5.

23. Habitats Regulation Assessment (HRA)

Appropriate assessment (or 'Habitats Regulation Assessment', HRA) is one of the most powerful tools currently available to control the environmental impacts of development. Whereas sustainability appraisal is a decision-informing tool, appropriate assessment is often described as a decision-making tool because has the potential to stop development.

Appropriate assessment tests whether a plan or a project is likely to have a significant negative impact on any:

- Special Protection Area (SPA) – a European designation which protects birds
- Special Area of Conservation (SAC) – a European designation which protects habitats
- RAMSAR site – a European designation which protects wetlands.

Jointly, these are called 'European sites'. Appropriate assessment does not apply to other designations, like Sites of Special Scientific Interest (SSSI) or Areas of Outstanding Natural Beauty (AONB).

If the proposed development has the potential to impact up on any of the European sites, the LPA can request an HRA be conducted. The responsibility for conducting such an HRA lies with the LPA, but they can insist that all relevant information is provided to them by the developer.

Proximity to a site is not the defining factor, potential 'impact' is, and for large projects this could be up to 15km from the site. The closer to a protected site, the more likely it is that an HRA will be required, even for a very small site.

24. Appendices

Table 1

Scientific Names Of Species Mentioned In The Text.	
Scientific name	Common name
<i>Meles meles</i>	Badger
<i>Pieris brassicae</i>	Large white
<i>Muscardinus avellanarius</i>	Dormouse
<i>Erinaceus europaeus</i>	Hedgehog
<i>Plecotus auritus</i>	Brown long-eared bat
<i>Plecotus austriacus</i>	Grey long-eared bat
<i>Pipistrellus pipistrelles</i>	Common pipistrelle bat
<i>Pipistrellus pygmaeus</i>	Soprano pipistrelle bat
<i>Pipistrellus nathusii</i>	Nathusius' pipistrelle bat
<i>Myotis nattererii</i>	Natterers' bat
<i>Myotis mystacinus</i>	Whiskered bat
<i>Myotis brandtii</i>	Brandt's bat
<i>Myotis daubentonii</i>	Daubenton's bat
<i>Myotis bechsteinii</i>	Bechsteins' bat
<i>Nactylus noctula</i>	Noctule bat
<i>Nactylus leislerii</i>	Leislars bat
<i>Eptesicus serotinus</i>	Serotine bat
<i>Barbastella barbastellus</i>	Barbastelle bat
<i>Rhinolophus ferrumequinum</i>	Greater horseshoe bat
<i>Rhinolophus hipposiderous</i>	Lesser horseshoe bat
<i>Lacerta vivipara</i>	Common lizard
<i>Vipera berus</i>	Adder
<i>Anguis fragilis</i>	Slow worm
<i>Natrix natrix</i>	Grass snake
<i>Rana temporaria</i>	Common Frog
<i>Bufo Bufo</i>	Common Toad
<i>Coronella austriaca</i>	Smooth snake
<i>Lacerta agilis</i>	Sand lizard
<i>Triturus cristatus</i>	Great crested newt
<i>Parus major</i>	Great tit
<i>Passer domesticus</i>	House sparrow

Table 2

Flora species recorded on site		
DAFOR scale: - Frequency of species on the site: Dominant-Abundant-Frequent-Occasional-Rare		
R	Apple tree	<i>Malus domestica</i>
R	Ash	<i>Fraxinus excelsior</i>
R	Beech	<i>Fagus sylvatica</i>
A	Bents	<i>Agrostis capillaris</i>
O	Bracken	<i>Pteridium</i>
O	Bramble	<i>Rubus</i>
O	Broad leaved dock	<i>Rumex obtusifolius</i>
O	Chives	<i>Allium schoenoprasum</i>
R	Cordyline	<i>Cordyline australis</i>
O	Cow Parsley	<i>Anthriscus sylvestris</i>
O	Creeping buttercup	<i>Ranunculus repens</i>
O	Creeping thistle	<i>Cirsium arvense</i>
R	Dog-rose	<i>Rosa canina</i>
R	Escallonia	<i>Escalloniaceae</i>
A	Fescue	<i>Festuca</i>
O	Hawthorn	<i>Crataegus</i>
R	Hogweed	<i>Heracleum sphondylium</i>
R	Holly	<i>Ilex aquifolium</i>
O	Ivy	<i>Hedera</i>
O	Lesser Celandines	<i>Aquilegia vulgaris</i>
O	Leylandii	<i>Cupressus × leylandii</i>
R	Lilac	<i>Syringa</i>
R	Magnolia	<i>Magnolia grandiflora</i>
R	Monkey Puzzle Tree	<i>Araucaria araucana</i>
O	Monterey Cypress	<i>Cupressus macrocarpa</i>
O	Pedunculate Oak	<i>Quercus robur</i>
F	Privet	<i>Ligustrum</i>
O	Silver birch	<i>Betula pendula</i>
O	Sorrel sp.	<i>Rumex</i>
O	Stinging Nettle	<i>Urtica dioica</i>
R	Sycamore	<i>Platanus occidentalis</i>
R	Weeping Larch	<i>Larix decidua 'Pendula'</i>
O	Wood Avens	<i>Geum urbanum</i>
O	Woundwort	<i>Stachys sylvatica</i>

Table 3

Recommended Planting

Ecological Surveyss Ltd are able to provide this service on request

25. Data Search Results

Contained within the body of the report.

26. References and Further Information

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Data search websites: ~

- Barn Owl Trust www.barnowltrust.org.uk
- Multi Agency Geographical Information for the Countryside: www.magic.gov.uk
- National biodiversity network: www.nbn.org.uk/Home.aspx
- UK Biodiversity Action Plan:- www.ukbap.org.uk/NewPriorityList.aspx
- www.gov.uk/prevent-the-spread-of-harmful-invasive-and-non-native-plants
- Hampshire & Isle of Wight Wildlife Trust www.hiwwt.org.uk/

END.