



EXTENDED PHASE 1 ECOLOGICAL ASSESSMENT

WILSON'S BOATYARD, MARINE WALK, HAYLING ISLAND PO11 9PG

FINAL REPORT

August 2022

Report conditions

<i>Report title</i>	Extended Phase 1 Ecological Assessment –Wilson’s Boatyard, Hayling Island		
<i>Client</i>	David Wilson		
<i>Report status</i>	Final		
<i>Survey date</i>	19 th January 2022		
<i>Written by</i>	<i>Trevor Codlin</i>	<i>Date</i>	09/02/2022
<i>Reviewed by</i>	<i>Izabel Phillips</i>	<i>Date</i>	03/03/2022

Disclaimers

This report has been prepared by Phillips Ecology for the sole use of the client named above. Survey work, assessment, and report writing have been undertaken with all reasonable skill and care, and unless otherwise explicitly stated, is appropriate only for the work, scheme, or project brief provided by the client and intended purposes. The report may not be relied upon by any other party without the express agreement of the client and Phillips Ecology. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where data, drawings, plans or other technical information has been provided to Phillips Ecology for the purposes of preparation of this report, either by the client, their agents or other parties (including but not limited to biological data sets, laboratory results, and mapping), it has been assumed that the information is correct. No responsibility can be accepted by Phillips Ecology for inaccuracies in such data supplied by other parties.

No part of this report may be copied or duplicated without the express permission of Phillips Ecology and the client. Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work, under standard limitations of access to third party land and other limitations as described in the report.

It is the client’s responsibility to note and comply as necessary with any recommendations made in this report, planning conditions derived from these, and any relevant licensing regimes. Phillips Ecology bears no responsibility for any failure to note and comply with legal requirements for works carried out by or in behalf of the client at the above site and for the project this report has been produced to support.

Executive Summary

- This extended phase 1 ecological assessment report has been prepared in order to support a planning application for the proposed extension of an existing pontoon at Wilson's Boatyard, Hayling Island.
- An extended phase 1 ecological assessment of the application site was undertaken on the 19th January 2022 by Trevor Codlin MCIEEM of Phillips Ecology.
- The survey area comprised the existing pontoon, intertidal habitats and area of existing berths and the immediately surrounding area. A data search extended to a 2km radius for designated sites and 1km radius for notable habitats.
- The application site is located within Chichester and Langstone Harbours Special Protection Area (SPA), the Chichester and Langstone Harbours Wetland of International Importance under the Ramsar Convention (Ramsar site), the Solent Maritime Special Area of Conservation (SAC) and the Chichester Harbour Site of Special Scientific Interest (SSSI).
- Providing the works are carried out in accordance with section 10, it can be excluded that the application will have a significant effect on any SAC, SPA or Ramsar site, either individually or in combination with other plans or projects. Therefore, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw.

Contents

1. Introduction	1
1.1 Report purpose	1
1.2 Description of proposal	1
1.3 Report context	1
1.4 Scope of assessment	1
1.5 Survey area	1
1.6 Limitations	1
2. Data search	2
2.1 Methodology	2
2.2 Limitations	2
2.3 Results	2
2.3.1 Statutory designated sites	2
2.3.2 Ancient woodlands	4
2.3.3 Priority habitats	4
2.3.4 Protected Species	5
3. Habitats	6
3.1 Methodology	6
3.2 Limitations	6
3.3 Existing records	6
3.4 Results	6
3.4.1 Intertidal mudflat (H1.1)	6
3.4.2 Shingle (H3)	8
3.4.3 Strandline vegetation (H5)	8
4. Protected and notable species assessment	9
5. Bats	9
5.1 Limitations	9
5.2 Assessment methodology	10
5.3 Results	10
5.4 Assessment	11
6. Breeding and over-wintering birds	11
6.1 Methodology	11
6.2 Limitations	11
6.3 Results	11
6.4 Assessment	12
7. Marine Mammals	12
7.1 Methodology	12
7.2 Limitations	12
7.3 Results	12
7.4 Assessment	13
8. Discussion and Assessment of Impacts	14
8.1 Relevant legislation and policy	14
8.2 Designated sites	15
8.3 Bats	16
8.4 Breeding and wintering birds	16
8.5 Marine Mammals	17

9.	Requirement for further surveys	18
9.1	Designated sites	18
9.2	Bats	18
9.3	Breeding and over-wintering birds	18
9.4	Marine mammals	18
10.	Mitigation recommendations	19
11.	Enhancements	21
11.	Conclusion	22
12.	References.....	23
Appendix 1 – Proposed Block Plan		25

1. Introduction

1.1 Report purpose

This report has been prepared in order to present the extended phase 1 ecological assessment undertaken for the proposed pontoon extension at Wilson's Boatyard, Hayling Island.

1.2 Description of proposal

The current proposals are for the installation of a new pontoon unit with float cages to be attached to the eastern side of an existing pontoon. The new floating pontoon will extend for approximately 160m, comprising 2.5m pontoon units, with 9m x 1m finger units extending in a northerly direction from the new pontoon frame. Four new posts will be required to support the pontoon.

The new pontoon will provide 10 berths, which will be a direct replacement for ten existing berths, which will be relinquished. As such there will be no increase in berthing provision.

1.3 Report context

Critchley Architecture and Design Ltd have prepared a planning application on behalf of David Wilson (the Applicant) for the proposed pontoon extension at Wilson's Boatyard, Hayling Island. It is anticipated that the planning authority, Havant Borough Council, will request that the planning application is accompanied by an ecological assessment. Phillips Ecology have been instructed by the Applicant to undertake this assessment.

1.4 Scope of assessment

An extended phase 1 ecological assessment was carried out on the 19th January 2022. The survey comprised a field survey and desktop study in order to identify notable or protected sites, habitats or species potentially affected by the proposal under consideration.

1.5 Survey area

The survey area comprised the existing pontoon, the footprint of the proposed pontoon extension and the immediately surrounding area. A data search extended to a 2km radius for designated sites and 1km radius for notable habitats.

1.6 Limitations

Limitations which are specific to each phase of the assessment are given in the relevant sections, below.

2. Data search

2.1 Methodology

A desk-based assessment was undertaken by Phillips Ecology on the 19th January 2022 with Multi-Agency Geographic Information for the Countryside (MAGIC). The MAGIC database was consulted for records of statutory designated sites within a 2km radius and priority habitats within a 1km radius of the development site.

2.2 Limitations

The data search results are bound by the following statement contained within MAGICs general disclaimer: *“The materials contained on this website are of a general, informational, nature. We have used reasonable endeavours to ensure the accuracy and completeness of the contents of the pages on this site but the information does not constitute advice and must not be relied on as such.”*

2.3 Results

2.3.1 Statutory designated sites

The application site is located within a 2km radius of eight statutory designated sites. These are all associated with coastal and estuarine habitats and species and comprise Chichester and Langstone Harbours - Ramsar, Solent Maritime - Special Area of Conservation (SAC), Chichester Harbour - Site of Special Scientific Interest (SSSI), Chichester and Langstone Harbours - Special Protection Area (SPA), Solent and Dorset Coast – SPA, Sandy Point – Local Nature Reserve (LNR), Sinah Common – SSSI and Gutner Point - LNR. Details on these are given in Table 1, below.

Table 1: Statutory designated sites within 1km of the application site

Site Name	Approx. distance and direction from the site	Reason for designation
Chichester and Langstone Harbours Ramsar	0km	Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. The site supports wintering bird assemblages of international importance and bird species of international importance, including: ringed plover <i>Charadrius hiaticula</i>, Black-tailed godwit <i>Limosa limosa islandica</i>, Common redshank <i>Tringa totanus tetanus</i>; Dark-bellied brent goose <i>Branta bernicla</i>, Common shelduck <i>Tadorna tadorna</i>, Grey plover <i>Pluvialis squatarola</i>, Dunlin <i>Calidris alpina</i>; and Little tern <i>Sterna albifrons albifrons</i>.
Chichester Harbour SSSI	0km	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels. The site is of particular significance for wintering wildfowl and waders

Site Name	Approx. distance and direction from the site	Reason for designation
Solent Maritime SAC	0km	and also breeding birds both within the harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities. Annex I habitats that are a primary reason for selection of this site: • Estuaries, • Spartina swards <i>Spartinion maritimae</i>; and • Atlantic salt meadows <i>Glauco-Puccinellietalia maritimae</i>. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: • Sandbanks which are slightly covered by sea water all the time; • Mudflats and sandflats not covered by seawater at low tide; ▪ Coastal lagoons; • Annual vegetation of drift lines; ▪ Perennial vegetation of stony banks; • Salicornia and other annuals colonising mud and sand; • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes). Annex II species present as a qualifying feature, but not a primary reason for site selection: • Desmoulin's whorl snail <i>Vertigo moulinsiana</i>
Chichester and Langstone Harbours SPA	0km	The site supports populations of European Importance of the following species listed on Annex I of the Directive: Little tern, Sandwich tern <i>Sterna sandvicensis</i>, Little egret, Bar-tailed godwit <i>Limosa lapponica</i>, Ringed plover, Black-tailed godwit, Dark-bellied brent goose, Dunlin, Grey plover; and Redshank <i>Tringa totanus</i>. The site is also a wetland of international importance, regularly supporting at least 20,000 waterfowl.
Solent and Dorset Coast SPA	1km S	This site is designated to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; The extent and distribution of the habitats of the qualifying features: The structure and function of the habitats of the qualifying features: The supporting processes on which the habitats of the qualifying features rely: The population of each of the qualifying features, and the distribution of the qualifying features within the site. The qualifying features are:

Site Name		Approx. distance and direction from the site	Reason for designation
Sandy Point LNR			• Sandwich tern (Breeding). • Common tern (Breeding). and • Little tern (Breeding).
		1.5km SE	At the south-eastern corner of Hayling Island, Sandy Point Nature Reserve has a mosaic of habitats. This mosaic is made up of sand dunes, heathland, shingle, grassland and scrub. These fragile habitats offer a glimpse into how Hayling Island's southern foreshore would have once looked
		1.7km SW	The site is notified for its coastal habitats including the following: pioneer shingle vegetation, maritime shingle grassland which includes dry acid grassland and lichen rich acid grassland, mobile dune, semi-fixed dune, dune heath and an associated small area of saltmarsh. The site is also notified for the childing pink <i>Petrorhagia nauteuillii</i> an endangered* plant which occurs at just two sites in Britain, and for its outstanding assemblage of nationally scarce** plants including little robin <i>Geranium purpureum</i> , Nottingham catchfly <i>Silene nutans</i> , bulbous meadow-grass <i>Poa bulbosa</i> , bearded fescue <i>Vulpia fasciculata</i> subsp <i>ambigua</i> , dune fescue <i>Vulpia fasciculata</i> , suffocated clover <i>Trifolium suffocatum</i> , smooth cat's-ear <i>Hypochaeris glabra</i> , stiff saltmarsh-grass <i>Puccinella rupestris</i> , mossy stonecrop <i>Crassula tillaea</i> , toothed medick <i>Medicago polymorpha</i> and dotted sedge <i>Carex punctata</i> .
Gutner Point LNR		1.975km N	The harbours that surround Hayling Island are home to tens of thousands of birds. At low tide these birds feed on the exposed mud. At high tide these birds communally 'roost' on the foreshore to conserve energy. Gutner Point on the eastern side of Hayling Island is home to one of the largest roosts in Chichester Harbour.

2.3.2 Ancient woodlands

No non-statutory ancient woodlands are located within a 1km radius of the application site.

2.3.3 Priority habitats

The data search revealed the following priority habitats within 1km of the application site:

- Mudflats
- Coastal saltmarsh

- Saline lagoons
- Deciduous woodland
- Coastal and floodplain grazing marsh
- Good quality semi-improved grassland

2.3.4 *Protected Species*

The data search revealed one record of a protected species licence being granted within a 1km radius of the site, the details are as follows:

- Bat: Common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *P. Pygmaeus* – 2017 - 300m SW

In addition to the above record, a positive great crested newt record is held on the data base approximately 4km north of the site from North Hayling.

3. Habitats

3.1 Methodology

A field survey was carried out on the 19th January 2022 by Trevor Codlin MCIEEM (a licence holder for a variety of species including bats (level 2), hazel dormouse, great crested newt, white-clawed crayfish and qualified marine mammal observer and European Seabirds at Sea (ESAS) surveyor. During the survey, all broad habitat types were identified, and a list was compiled of characteristic plant species within each habitat type. These habitats are described below in accordance with Phase 1 habitat terminology.

3.2 Limitations

The only limitation was that the survey was carried out during the winter months and as such many plant species were not visible. Phillips Ecology had previously carried out ecological surveys at this location, during June 2019, and therefore have a record of species recorded during that survey. This enabled a review of the previous survey information to ensure that a robust assessment was made.

3.3 Existing records

The data search revealed six priority habitats located within a 1km radius of the site. These are generally habitats associated with the nearby coastal and estuarine landscape. Woodland cover is limited within the data search area with only two blocks of priority deciduous woodland recorded, the most significant of these being Tournebury Wood, located to the north of the site and the adjacent estuary. The majority of the surrounding area is characterised by a matrix of residential development associated with South Hayling.

3.4 Results

The survey area comprised intertidal habitats that include mudflat, with occasional patches of remnant vegetation, seaweeds and green and brown algae, and shingle. It appears that the shingle is almost entirely, if not completely submerged at high water and as no obvious strandline was visible. A concrete seawall forms the boundary of the intertidal habitats and the boatyard. Mature tamarisk *Tamarix gallica* trees are located along the sea wall.

The following Phase 1 habitat types were recorded within the application site.

3.4.1 Intertidal mudflat (H1.1)

The proposed location of the new pontoon comprised areas of bare mud, seaweeds, predominantly bladder wrack *Fucus vesiculosus* and green and brown algae (Figures 1 and 2). Some very occasional patches of vegetation were present, it was not safe to access the muds for Health and Safety reasons and therefore it was not possible to examine the vegetation close up, but it was considered that the patches identified comprised predominantly common cord-grass *Spartina anglica* or the hybrid *S. x townsendi*.



Figure 1: View across intertidal habitat, with red solid and dashed line depicting approximate location of new pontoon. All existing boats and other materials will be removed from the intertidal, with new berths situated on the seaward side of new pontoon.



Figure 2: Red solid and dashed line identifies approximate location of proposed new pontoon, all boats in this image will be removed and the berths transferred to the new pontoon and away from the sea defences.

3.4.2 Shingle (H3)

The only areas of shingle are located along the concrete sea defences. Anecdotal evidence suggests that these are entirely covered at high tide, or at least on spring tides. No strandline was evident during the survey (Figure 3).



Figure 3: View of shingle and sea defences. All boats and other materials in this view would be removed from their existing locations, with berths transferred to seaward side of new pontoon.

3.4.3 Strandline vegetation (H5)

The only area of strandline vegetation is considered to be where the existing pontoon attaches to the land. Previous survey work carried out by Phillips Ecology (June 2019) identified a small area vegetated with sea blite *Suaeda maritima*. There was no evidence of this during this survey, and a strandline was not obviously apparent at the time of this survey, which was likely due to the time of year and recent spring tides and/or storm events.

4. Protected and notable species assessment

The scope of works, data search and habitat assessment have informed the scope of the protected and notable species assessment. On this basis, the following protected and priority species have been considered further within this report:

- Bats
- Birds – Breeding and over-wintering
- Marine mammals

The surveyed site has been assessed for its potential to support the above- named protected species based upon the criteria in Table 2.

Table 2 Protected species grading criteria

Grading criteria	Justification
<i>Negligible</i>	Site is entirely unsuitable for species. Presence of species highly unlikely.
<i>Low Potential</i>	Minimal suitable habitat present or, if present, highly degraded/fragmented. Minimal linkage to suitable habitat beyond site. Presence of species unlikely.
<i>Moderate</i>	Presence of some suitable habitat features for species. Surveyed site within/close to known range or known occurrence but factors such as isolation/fragmentation may reduce potential. Presence of species is more likely than not.
<i>High</i>	Presence of optimal habitat features for species. Surveyed site within known range/close to known occurrence. Excellent connectivity to optimal habitat. No justification for discounting presence of species.
<i>Confirmed presence</i>	Species confirmed on site through direct sighting, presence of field signs (e.g. scat, hair, prints, nest, eggs, habitation etc.) or through desk-based assessment.

5. Bats

An assessment was made of the site's suitability to support foraging and commuting bats and was carried out in accordance with the Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition).

No built structures are present within the site and the proposal will not result in any trees being felled, therefore, there were no potential roost features, structures or trees.

5.1 Limitations

Limitations were not encountered during the course of the survey.

5.2 Assessment methodology

The site's suitability for supporting commuting and foraging bats will be assessed against the guidelines within Table 3 which have been adapted from the BCT Good Practice Guidelines.

Table 3 *Suitability assessment guidelines*

Suitability	Description of Foraging/Commuting Habitats
<i>Negligible</i>	Negligible habitat features on site likely to be used by commuting or foraging bats.
<i>Low</i>	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitats. Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not parkland situation) or a patch of scrub.
<i>Moderate</i>	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as tree lines and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such tree, scrub, grassland or water.
<i>High</i>	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of tree and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

5.3 Results

The site comprises intertidal habitats in its entirety, these predominantly include mudflats and some shingle, however, some vegetation is present along the sea defences adjacent to the proposed site, where mature tamarisk shrubs are present.

These habitats superficially appear to provide a limited foraging resource for bats, although sheltered area created by the presence of the mature tamarisk, is considered to be of some value. Phillips Ecology have previously carried out nocturnal surveys using thermal imagers and observed bats foraging over intertidal habitats during periods of the tidal cycle when these habitats are exposed. As such it is possible that bats could commute over the site, potentially from nearby dwellings or woodland habitats, where mature trees are present, to utilise this resource.

5.4 **Assessment**

When considered against the criteria set out in Table 3, the site is considered to support moderate suitability for foraging and commuting bats. This assessment is based on Phillips Ecology's previous experience of bat foraging in association with intertidal habitats, the sites connectivity with suitable foraging habitat and the likely abundance of invertebrates associated with the habitats on site.

6. Breeding and over-wintering birds

6.1 **Methodology**

An assessment was made of the site's suitability to support breeding bird species. Nesting birds will utilise a broad range of habitats, including built structures, trees, scrub, isolated shrubs, dense herbaceous vegetation (terrestrial and aquatic) and open grassland. All bird species and evidence of breeding activity (active or inactive) observed on site were recorded.

In addition, an assessment was made of the site's suitability to support over-wintering and migratory birds, particularly those associated with the adjacent designated sites, and intertidal habitats. The assessment included consideration of the wider sites suitability to support feeding and roosting birds. Permanent revetments, if undisturbed, can provide important high water roosting sites for migratory and over-wintering birds with some areas being of particular importance during periods of adverse weather.

6.2 **Limitations**

The survey was undertaken outside of the breeding bird season and therefore, the assessment relied upon a combination of species present, suitable habitat and inactive nests.

6.3 **Results**

The site is located entirely on an area of intertidal mudflat and therefore there was considered to be no potential nesting bird habitats present. However, the mature tamarisk, located immediately adjacent to the south-eastern site boundary, along the sea defences, is considered to support suitable nesting bird habitat. It is considered that the most likely species that would use this habitat would be common and widespread species such as common woodpigeon *Columba palumbus* and robin *Erithacus rubecula*. Both species were recorded during the survey.

Further consideration was given to potential nesting species located outside the site boundary but close to it. In this instance consideration was given to potential impacts on the breeding colony of herons and egrets that has previously been recorded in Tournebury Woods. Recent data (HOS, 2021) suggests that what was once quite a large heronry, as of 2020 only included two breeding pairs of grey heron *Ardea cinerea*.

The application site is located entirely within intertidal habitats that are considered to be of international importance, for the presence of marine habitats and over-wintering bird populations. During the survey the following species were recorded, little egret *Egretta*

garzetta, brent goose (dark-bellied) *Branta bernicla bernicla*, red-breasted merganser *Mergus serrator*, mute swan *Cygnus olor*, Eurasian teal *Anas crecca*, common redshank *Tringa totanus*, curlew *Numenius arquata* and common kingfisher *Alcedo atthis*.

The survey was undertaken on the rising tide, and with the exception of the little egret, all recorded species were feeding either on the water or along the water's edge. However, the little egret was feeding amongst the boats currently moored on the intertidal, close to the concrete sea defence, within the site itself.

During the survey consideration was given to potential high water roosting sites for local birds. The site is located adjacent to a creek known as Mengham Rithe, with much of the southern side of the creek developed, the most likely roosting areas were considered to be either on the sea defences along the northern edge of the creek, or in the case of herons and egrets, within Tournebury Wood. Significant high tide roosts are known to be present further afield at Black Point and Gutner Point. These sites are located outside of the site boundary at c.1.6km east and c.2km N, and beyond the considered zone of influence.

6.4 **Assessment**

There is no suitable bird nesting habitat located on the site, however mature tamarisk located along the sea defence has the potential to support small numbers of common breeding species.

The intertidal habitats form part of a network of sites that are of international importance for over-wintering birds. However, the close proximity of the working boatyard, and moored boats can deter some species from utilising these habitats. During the survey, most species were observed feeding either in, or along the edge of the water of the rising tide, rather than around moored boats. A single little egret was recorded feeding on the site itself, as such the assessment has confirmed the presence of over wintering birds.

7. Marine Mammals

7.1 **Methodology**

An assessment was made for the potential of the proposals to impact on marine mammals, in particular seals. The assessment was based on a combination of local knowledge, sightings and known studies, including those of harbour seal *Phoca vitulina* (Chesworth *et al*, 2010).

7.2 **Limitations**

Given that this assessment was based on known records and a detailed study into a small, but important local population of harbour seals, there are considered to be no limitations to the survey.

7.3 **Results**

Within The Solent and Portsmouth, Chichester and Langstone Harbours the most frequently encountered marine mammals are grey seals *Halichoerus grypus* and harbour

seals *Phocoena phocoena*. Grey seals are most commonly recorded during the winter months, whereas harbour seals are resident, and reside mainly in Chichester and Langstone Harbours. In addition, there are very occasional sightings of harbour porpoise *Phocoena phocoena*, short-beaked common dolphin *Delphinus delphis* and bottlenose dolphin *Tursiops truncatus*.

Being the only resident species, with the population mainly residing in the Chichester and Langstone harbours, it is unsurprising that harbour seals are recorded along the Hampshire coast. A tagging study carried out by the Wildlife Trust's South-East Marine Programme, investigated the movements of five individuals. The data showed that the species mainly foraged in the eastern Solent, between Southampton and Selsey Bill, utilising a variety of discrete seabed features, such as rocky reefs and underwater structures and the presence of two primary haul out sites were located, one in Langstone Harbour and one in Chichester Harbour. The Chichester harbour site was located to the north-east of the site and off Thorney Island.

7.4 **Assessment**

A small but important population of harbour seals are known to be present in Langstone and Chichester Harbours, as such when assessed against the criteria in Table 2, it is considered that marine mammals may be present and within close proximity of the site at certain times. These times are likely to be when animals are foraging at higher tide states, rather than lower tide states when the water may be too shallow.

8. Discussion and Assessment of Impacts

8.1 Relevant legislation and policy

Circular 06/2005 identifies that applicants should not be required to provide information on protected species unless there is a reasonable likelihood that they will be present and affected by the proposed development. The site is considered to support habitats with suitability and potential for protected species and these may be affected by the proposed development. Therefore, the proposal triggers 'reasonable likelihood' under the Circular.

The Wildlife and Countryside Act 1981 (as amended) and the Habitats Directive, which is transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations) may apply should protected species be confirmed on site.

In the case that a European protected species is found to be present and impacted by the proposal, the local planning authority will be required to engage with the Habitat Regulations. Permission will be granted unless:

- a) the development is likely to result in a breach of the EU Directive, and
- b) is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law (under licence).

When considering whether Natural England would not be unlikely to grant a licence for the identified impact, the local planning authority must consider the three tests which are set out in the Habitat Regulations:

1. the consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'; (Regulation 53(2)(e))
2. there must be 'no satisfactory alternative' (Regulation 53(9)(a)); and
3. the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

Natural England will grant a licence if the development proposal is able to meet the three tests.

Case-law (Morge vs. Hampshire County Council) has clarified that planning authorities are able to grant permission for developments that would cause a breach of the Regulations is likely (i.e. in the case of this proposal, destruction of a bat roost), provided that sufficient information is provided to give the planning authority assurance that the relevant EPSM licence is not unlikely to be granted - i.e. planning authorities also have a duty to assess planning applications against these tests.

8.2 Designated sites

The application site is located within Chichester and Langstone Harbours Special Protection Area (SPA), the Chichester and Langstone Harbours Wetland of International Importance under the Ramsar Convention (Ramsar site), the Solent Maritime Special Area of Conservation (SAC) and the Chichester Harbour Site of Special Scientific Interest (SSSI).

The designated sites support a range of habitats and bird species that are vulnerable to impacts arising from development such as disturbance and pollution during the construction and operational phases of a development. As such, the proposals have the potential to impact the abovementioned designated sites.

The proposals are not looking to increase the levels of activity at the site, but to reconfigure and improve the quality of the facilities for boatyard users, by moving 10 berths, from their existing locations to new locations created by the new pontoon. This will see the berths moved from shingle and mud habitats, immediately adjacent to existing sea defences, to an area of bare mud, isolated patches of vegetation, seaweeds and green and brown algae. The shingle habitats adjacent to the sea defences will then be restored, with all boatyard material removed. The proposed pontoon will be fixed to an existing pontoon at its western end and will extend across an area of intertidal mud. Four new posts will be pile-driven into the intertidal habitat to support the new pontoon.

The potential impact pathways of the scheme have been considered below:

Direct loss

The proposal will replace 10 existing berths with 10 new berths. The proposal will reconfigure the existing arrangement of berths but will not result in any increase in berths at the site. The new pontoon will be fixed to one existing pile and three to four new piles. The three to four new piles comprise the only new contact with the seabed and direct loss of intertidal mudflat.

Degradation

The reconfiguration of the berths will not extend activity further into the designated sites than the existing pontoons and berths associated with Wilson's Boatyard. However, the new berths are to be located further forward into the designated sites than the berths they are replacing. The effect of this will be that an area of the designated site that currently supports the existing berths will be enclosed between the sea wall and the new pontoon.

It is considered that, with the exception of a few species, namely little egret and mute swan, which are more tolerant of human disturbance, most other SPA bird species will not use this area of the designated site, because it is effectively too enclosed.

In addition, the following impacts could occur during construction:

- Increases in levels of dust and sedimentation.

- Increases in the amount of rubbish entering the designated site as a result of dropping or storing litter or other discarded materials associated with the development in loose, uncontained piles.
- The use of heavy plant may present another pathway for the introduction of pollutants and sediments to the water and intertidal habitats through fuel and/or oil spillages.
- Increases in lighting levels, particularly if works are carried out during the winter months.
- The installation of the pontoon could result in physical damage to the intertidal habitats through compaction and scouring.
- The proposed construction and operation of the pontoon extension could impact the designated sites if appropriate pollution prevention measures are not implemented during the construction phase of the development and coatings and treatments unsuitable for use in the marine environment are used on the pontoon.

Disturbance

Disturbance to over-winter birds and marine mammals due to noise and vibration. With regard to over-wintering birds the most significant impact is likely to be an increase in noise and disturbance, in particular during the proposed piling works, if installed between 1st October and the 31st March, the presence of plant and contractors on site during this period is likely to impact SPA bird species through visual and noise disturbance. Birds are susceptible to disturbance, resulting in avoidance behaviours such as flight which may in turn affect feeding behaviour and ultimately impact the birds' health and productivity. However, it is noted that the birds frequenting the habitats within and adjacent to the survey area are generally accustomed to high levels of disturbance associated with the active boatyard and existing pontoon use and so a degree of habituation to activities can be expected. Further details on disturbance are given in section 8.4.

8.3 Bats

The proposal will not result in the loss of habitat which is considered to support suitability for foraging and commuting bats. Therefore, no impacts on foraging and commuting bats are anticipated.

8.4 Breeding and wintering birds

The proposal will not result in the loss of any suitable breeding bird habitat, however, as discussed in section 8.2, if installed between 1st October and the 31st March, the presence of plant and contractors on site for the pontoon installation, and piling works during this period is likely to impact overwintering SPA bird species through visual and noise disturbance.

With regard to noise the following disturbance levels are categorised.

- High Level Disturbance = sudden single noise of 60db or continuous/repetitive noise over 70db (at bird).
- Moderate disturbance = sudden noises at 55-60db and continuous/repetitive noises at 60-72db (at bird).
- Low level disturbance = less than 55db and 55-72db (at bird) in a highly disturbed environment.

The proposed development site lies within the SPA boundary and as such any works during the tidal cycle when mud is exposed has the potential to startle and flush birds. Some species will already be accustomed to noise from the site, but the novel and sudden, loud clang of piling works will have a greater impact on over-wintering birds than the existing noise levels.

Different species respond differently to noise and the impact of noise would be greater during different activities. For example, high tide roosts are when many species gather together to roost at a high point that does not get inundated by the tide. As the tide drops, they start to disperse along the tide line to feed, or in the case of a rising tide, they use staging sites to roost temporarily or follow the tide line to feed until the very last opportunity. High tide roosts are generally limited in availability and therefore disturbance to a high tide roost means that birds have to circle continuously, expending large amounts of energy, and burning valuable resources, before being able to resettle. During the low tide period, disturbed birds can fly a short distance to another part of the SPA when disturbed from a single point, therefore the impact is considered by some to be less.

During the Extended Phase 1 survey the following species were recorded, mute swan, brent goose (dark-bellied), Eurasian teal, curlew, redshank and red-breasted merganser.

Of these brent goose and redshank are considered to have a high sensitivity, curlew a moderate sensitivity. There is no available data for red-breasted merganser or Eurasian teal, but given their general shyness, it would be expected that they have a high sensitivity, whereas mute swan would likely be low.

8.5 Marine Mammals

The only potential pathway to impacts on marine mammals is considered to be through noise and vibration as a result of piling works. As stated above there is a small, but important resident harbour seal population in Langstone and Chichester Harbours. Satellite tracking data has identified they forage throughout the harbour, but at low tide can often be found hauled out in two main places. The closest to the proposed site is located approximately 2.8km NE, and west of Emsworth Channel.

It is currently unclear when piling works would be carried out, but it is considered that the greatest impact would during higher tide states when animals would be foraging rather than low tide when they would be hauled out or further out to sea.

9. Requirement for further surveys

Further surveys are required where there is a reasonable likelihood that a protected species will be present and impacted by the proposed development. An assessment into the requirement for further surveys is presented below, however in summary, no further surveys are considered necessary.

9.1 Designated sites

Subject to the precautionary mitigation measures set out in Section 10, no further surveys are considered necessary.

9.2 Bats

As impacts on foraging and commuting bats are not anticipated, no further recommendations relating to bats are considered necessary.

9.3 Breeding and over-wintering birds

Subject to the precautionary mitigation measures set out in Section 10, no further surveys are considered necessary.

9.4 Marine mammals

Subject to the precautionary mitigation measures set out in Section 10, no further surveys are considered necessary.

10. Mitigation recommendations

10.1 Designated sites

The overarching aim of the ecological survey and assessment work carried out at the site is to inform the planning proposals in order to demonstrate how the development can proceed whilst avoiding or mitigating impacts to designated sites and protected or notable species and habitats. The 'mitigation hierarchy' is an accepted approach which guides this process. The first consideration should always be to design a scheme that avoids the identified impact. Where this is not possible the next step should be to mitigate any impacts that cannot be avoided. The third, which should be used as a last resort, is compensation: this should only be used to off-set any unavoidable impacts.

Direct loss

The loss of designated site habitat from the three to four new piles will be compensated by the removal of existing man-made structures within the designated site habitat. These will comprise the 14 concrete anchor blocks (Figure 4) which support the seven mud moorings which are to be replaced by the new pontoon.



Figure 4: One of 14 mud mooring concrete blocks to be removed from the designated site.

Degradation

Degradation of the designated sites during the construction phase of the development will be minimised by the implementation of a Construction Environment Management Plan (CEMP) which will incorporate the following measures:

- Only coatings and treatments suitable for use in the marine environment will be used on the pontoon.
- The key factor in safeguarding against water pollution during the construction phase will be the diligence of the site manager and operatives. Therefore, the site manager and all site operatives should be made aware of the presence of the designated sites and should understand the requirement to ensure that construction works do not encroach into the designated sites beyond the footprint of the extension.

- Any temporary site compound set out for the storage of equipment, materials or machinery and cutting or mixing materials associated with the construction works should be located as far from the designated sites as possible and not within 10m of the shingle and mudflat habitats. Any temporary compound and all associated construction materials will be removed on completion of the works.
- Any machinery required for the installation of the pontoon will stay on the hardstanding areas of the boatyard and slip way and will avoid the intertidal mudflat habitat.
- If possible, store fuel and oils off site. If this is not possible then a proprietary bunded storage facility of the smallest practicable size located as far from the designated sites as possible and in all cases at least 10m landward from the high-water line.
- If possible, undertake refuelling off site. If this is not possible refuelling should take place as far from the designated sites as possible on an impermeable surface. In practice this is likely to comprise a hardstand portion of the boatyard.
- A spill kit must be maintained on site.

The Solent Seagrass Restoration Project managed by the Hampshire and Isle of Wight Wildlife Trust (HIWWT) is seeking to restore seagrass habitats, to create a wilder Solent, support increased biodiversity and sustainable fisheries, promote greater ecosystem services, cleaner water and create a natural carbon solution to mitigate the effects of climate change. An expanse of mudflats is located within the ownership boundary outside the application site. In order to compensate for the degradation of the habitat within the application site for SPA bird species, options to improve existing habitats within the ownership boundary through the restoration of seagrass beds are being explored. The implementation and management of this will be provided in a Biodiversity Enhancement and Management Plan.

Disturbance

The new pontoon installation will be completed between the period 1st April and 30th September to avoid disturbance to overwintering birds that feed and roost in the area.

11. Enhancements

The delivery of biodiversity enhancement on development sites is promoted by the National Planning Policy Framework (NPPF) and Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006.

Where opportunities exist it is best practice to provide enhancement features which encourage greater biodiversity within development sites in accordance with the NPPF and Local Planning Authority's responsibilities under the NERC Act.

Opportunities for enhancement which are proportionate to the scale of the development include:

- Recreational disturbance is a major issue along the Hampshire coastline and a team of dedicated rangers (www.birdaware.org) patrol the shores attempting to educate users of the issues and how to enjoy the coast without disturbing over-wintering birds. Interpretation plays an important role, and as such the provision of interpretation boards within the boatyard could help inform people of the issues and help change their behaviour.

11. Conclusion

The extended phase 1 ecological assessment has confirmed that the application site is located within Chichester and Langstone Harbours SPA, the Chichester and Langstone Harbours Wetland of International Importance under the Ramsar Convention, the Solent Maritime SAC and the Chichester Harbour SSSI. However, given the scale of the proposal, it is possible to deliver the scheme with a range of measures which avoid impacts on the identified designated sites. These include timing constraints for completion of the installation and pollution prevention measures. In view of the survey findings, and provided the recommendations set out above are followed, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw.

12. References

- **Altringham J D, 2003**, British Bats, Collins New Naturalist
- **Anon, 2001**, *Great Crested Newt Mitigation Guidelines*, English Nature, Peterborough.
- **Bat Conservation Trust, 2016**, BCT Bat Survey Guidelines Third edition.
- **Barn Owl Trust, 2012**, *Barn Owl Conservation Handbook*. Pelagic Publishing, Exeter.
- **Chartered Institute of Ecology and Environmental Management, 2017**. *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Winchester
- **Chesworth, J. C., Leggett, V. L. and Rowsell, E. S. 2010**. *Solent Seal Tagging Project Summary Report*. Wildlife Trusts' South East Marine Programme, Hampshire and Isle of Wight Wildlife Trust, Hampshire.
- **Clark, M. 2017**, *Badgers*. Whittet Books Ltd, Essex
- **English Nature, 2002**, Barn owls on site – A guide for developers and planners
- **Gent T and Gibson S 1998** *Herpetofauna Workers Manual JNCC*
- **Hampshire Ornithological Society (2021)**. *Hampshire Bird Report 2020*. Hampshire Ornithological Society. Dorchester.
- **Joint Nature Conservation Committee. 1993**. *A Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*. Peterborough: Joint Nature Conservation Committee.
- **Mitchell Jones AJ, 2004**, *Bat Mitigation guidelines*, English Nature
- **Mitchell Jones AJ and McLeish A P, The Bat Workers Manual, JNCC**
- **Morris, P. A. (2006)** The New Hedgehog Book. London, Whittet Books.
- **Natural Environment and Rural Communities Act 2006**, Ch 3, s. 40
- **Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. 2000**. *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143 - 155.
- **Pearce G. E., 2011**, *Badger Behaviour, Conservation & Rehabilitation*. Pelagic Publishing, Exeter.
- **Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021)**. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747.

Appendix 1 – Proposed Block Plan





07760 208562

info@phillipsecology.co.uk

www.phillipsecology.co.uk

Hampshire office:
Clifton Cottage
Bucks Head Hill
Meonstoke
Hampshire
SO323NA