

# PRELIMINARY ECOLOGICAL APPRAISAL

Proposed Residential & Commercial Development  
Pilot House Site, Bembridge Harbour, Isle of Wight

Mr M. Meisel

NN1684R01-Rev01  
14 September 2023



## DOCUMENT CONTROL

DOCUMENT TITLE	PEA	REVISION	01
DOCUMENT NUMBER	R01	ISSUE DATE	SEPT 2023
PROJECT NUMBER	NN1684	STATUS	FINAL

AUTHOR	E. Mason BSc (Hons) MSc	DATE	14/09/23
REVIEW	T. Pullan BSc (Hons)	DATE	14/09/23
AUTHORISATION	J. Owen	DATE	14/09/23

## REVISION HISTORY

REVISION NUMBER	DETAILS	DATE
Rev -01	Update to 2018 assessment and re format	14/09/23

This report was prepared on behalf of 'the Client' (as detailed in the report) and takes into account any particular requirements and instructions from the client. Its use is governed by the Contract between the client and E3S Consulting Ltd. Where produced, the document shall be reproduced in full. Any other use shall be subject to the prior written permission of E3S Consulting Ltd. Unless indicated otherwise, all material in this document is the property of E3S Consulting Ltd. 'E3S Consulting Ltd', 'E3S Consulting' and 'E3S' are trading names of E3S Consulting Ltd.

# CONTENTS

1	INTRODUCTION .....	1
1.1	PROJECT BACKGROUND .....	1
1.2	PROPOSED DEVELOPMENT .....	1
2	METHODOLOGY .....	1
3	LOCAL AND NATIONAL POLICIES AND LEGISLATION .....	1
3.1	LOCAL PLANNING POLICY AND LEGISLATION .....	1
3.2	ISLE OF WIGHT BIODIVERSITY ACTION PLAN (BAP) .....	1
4	SITE DETAILS .....	2
4.1	SITE WALKOVER .....	2
5	HABITAT CLASSIFICATION .....	3
6	PUBLIC RECORDS .....	3
7	RECORDED STATUTORY SITES .....	4
8	PROTECTED AND NOTABLE SPECIES .....	4
9	LIMITATIONS .....	5
10	CONCLUSIONS .....	5
11	MITIGATION & ENHANCEMENT .....	6

## FIGURES

Figure 1: Site Location

Figure 2: Site Photographs

# 1 INTRODUCTION

## 1.1 Project Background

1.1.1 E3S Consulting Ltd (E3S) have been engaged by Mr M. Meisel (The Client) to undertake a Preliminary Ecological Appraisal (PEA). The PEA is required to support the proposed plans residential and commercial planning applications at the Pilot House Site, Bembridge, Isle of Wight (The Site).

## 1.2 Proposed Development

1.1.2 It is understood that the proposed development includes the demolition and rebuild of the existing residential building, refurbishment of the existing workshop into several industrial units and the construction of a number of industrial units across the open land.

# 2 METHODOLOGY

2.1.1 The PEA establishes whether there are any ecological influences on the site. This includes searching for designated nature conservation areas e.g., Statutory Sites of Special Scientific Interest (SSSI) or non-statutory Local Wildlife sites within a 1km radius of the site, and internationally important sites such as Special Areas of Conservation (SAC) or Special Protection Areas (SPAs).

2.1.2 Publicly available information relating to the known presence of notable species and/or habitats within the site's proximity is also selected at this stage. Following this, a site walkover assesses the potential for any identified ecological factors that could influence or be influenced by the proposed development. Any further assessment work is subsequently identified and scoped.

# 3 LOCAL AND NATIONAL POLICIES AND LEGISLATION

## 3.1 Local Planning Policy and Legislation

3.1.1 Policy DM12 of the Island Plan Core Strategy provides development control policy in relation to biodiversity. The council will support proposals that conserve, enhance and promote the landscape, seascape, biodiversity, and geological interest of the island. Development proposals are expected to:

Protect the integrity of international, national, and local designations relating to landscape, seascape, biodiversity, and geodiversity including the reasons for these designations, the weight given to them, and enhance their features of interest wherever possible;

Ensure new development avoids both direct and indirect adverse effects upon the integrity of designated sites, and if necessary, provides appropriate mitigation measures;

Promote the maintenance and enhancement of the links between designated sites, especially through the provision of, and/or enhancement to green infrastructure (GI), and appropriate local designations;

Reflect the aims and objectives of the AONB Management Plan, the Council's Landscape Character Assessment, Historic Landscape Characterisation, and any further relevant landscape assessment;

Positively contribute to meeting the aims and objectives of the Isle of Wight's local Biodiversity Action Plan (BAP) and Local Geodiversity Action Plan; and

Minimise the threats and promote the opportunities arising from climate change on the island's landscape, seascape, biodiversity, and geodiversity.

## 3.2 Isle of Wight Biodiversity Action Plan (BAP)

3.1.2 Based on the above legislation, the Isle of Wight Council is committed to the following species action plans:

The red squirrel (*Sciurus vulgaris*) has been identified by the UK Biodiversity Steering Group as a priority species for conservation action; and

The woodland bat Habitat Action Plan (HAP) covers a suite of old forest bat species which are dependent upon woodland and wood-pasture habitat for their survival.

### 3.1.3 And the following HAPs:

Farmland Biodiversity - Farmland is not defined as a habitat in the UK BAP but contains a mosaic of different habitat types e.g., arable and horticulture, improved grassland, boundary and linear features, and standing and open water. Collectively, these habitats can be of high biodiversity and nature conservation importance;

Woodland Habitat - Identifies a total of six native woodland types as priority habitats of which, three can be found on the Isle of Wight: lowland mixed deciduous woodland, wet woodland, wood pasture, and parkland; and

Lowland Meadows Habitat - Lowland meadows have been selected as a HAP for the Isle of Wight. This is to ensure that national objectives for this priority habitat (identified under the UK BAP) are translated into effective action on the island considering local issues.

## 4 SITE DETAILS

### 4.1 Site Walkover

- 4.1.1 A site visit was undertaken on the 11 September 2023 by E3S. Access to the site was gained from Embankment Road. The site covers an area of approximately 0.50ha and is centered on 'Pilot House' which is a single-story dwelling bordering Embankment Road.
- 4.1.2 To the west of pilot house the site is predominantly open land currently utilised as a laydown for environment agency flood defence investigation works and an access to the existing Bembridge Marine Works. To the east of Pilot house, the site consists of an existing warehouse structure and concrete hard stand. There are separate accesses to all three portions of the site, all off Embankment Road.
- 4.1.3 Embankment road bounds the site to the north. To the east of the site is a boat yard, to the west is another area of vacant land. Low lying marshland and open water bounds the site to the south in the western portion of the site, this marshland is designated as a SSSI, SAC and RAMSAR site. The eastern portion of the site backs onto another commercial site, the land of the adjacent site is considerably lower than the subject site. It is understood that this adjacent site has received planning permission for development comparable to that proposed for the subject site (application reference number P/00260/18) with construction works nearing completion.
- 4.1.4 The western portion of the site is relatively level however a steep slope exists at the rear of the site dropping to the marsh land to the south. Paddock dumped clayey fill is located along a strip of the open land. An access track also transects the site forming an access road to the lower level commercial site to the east (to the rear of the eastern section of the subject site). The adjacent site levels are approximately 2-3m lower than the subject site. The front site boundary is fenced and consists of grassland with a portion in the middle of the site recently cleared to accommodate a temporary laydown facility for EA works. Japanese knotweed was identified on site as identified in the site photographs.
- 4.1.5 The eastern warehouse is split into multiple units and a concrete hard stand. The existing units are in a poor state of repair and generally constructed of steel/ wood frame and metal/ wood or cement fibre cladding. The units appear to have been utilised for various purposes including a car mechanics workshop and art gallery. The rear unit of the main building was a mechanics workshop. The front unit is separated from the rear unit by a corridor. The side building was not accessible at the time of the visit, however the underfloor of the building is being used for storage with black bags of waste and other items visible through gaps in the locked doors.

4.1.6 A site location plan and photographs taken during the walkover are presented as Figure 1 and Figure 2 of this report respectively.

## 5 Habitat Classification

5.1.1 The habitats present on-site have been defined using the UK Habitat Classification Key (UK Habitat Classification Working Group 2018). The following habitats were identified on-site:

5.1.2 Modified grassland (g4);

5.1.3 Developed land/sealed surface (u1c);

5.1.4 Mixed scrub (h3h);

## 6 Public Records

6.1.1 Public records were assessed to include any recorded habitats or species on the site. Relevant designation and species findings are presented below and in Table 1.

Table 1- Sites of importance for nature conservation (SINCs) within 1km of site

Site Code	Site Name	Subsite Code	1a Ancient semi natural woodland	1c Other semi natural woodland	2a Agricultural Grassland	4 Coastal Habitats	5a Wetland habitats	5b Reed swamps	6a BAP species	6c Significant Island population	7b RIGGS	8a Social value
C173	Spring Copse	C173A	✓						✓			
C174	Eight Acre Copse	C174A	✓						✓			
C226	Priory Woods	C226A	✓	✓		✓			✓	✓	✓	✓
C265	Brading Marshes	C265A			✓		✓	✓	✓			✓

### Designation Criteria

1a – All ancient semi-natural woodlands. This comprises all sites on the Natural England Provisional Ancient Woodland Inventory.

1c – Other semi-natural woodland, they comprise important community types of a restricted distribution in the country, particularly semi-natural wet woodlands and species – rich secondary woodlands.

2a – Agriculturally unimproved grassland. These are grasslands which are composed of a mixed assemblage of indigenous species in essentially semi-natural communities which have been able to develop without the major use of herbicides and inorganic fertilisers, and without the added influences of processes such as ploughing, re-seeding and drainage management.

4 – Coastal Habitats – All remaining natural and semi natural coastal and estuarine habitats, which retain some nature conservation interest, including sand dunes, saltmarsh, brackish ponds, grazing marshes and coastal grasslands, sea cliffs, landslips, slopes and chines.

5a – Wetland Habitats – Areas of open freshwater (e.g. lakes, ponds, rivers, streams, and ditches), which support a significant assemblage of aquatic flora and fauna.

5b – Reed swamps, fens, flushes, seepages, springs, inundation grasslands etc that support a significant assemblage of flora and fauna characteristics of unimproved and waterlogged (seasonal or permanent) conditions.

6a – Species – Any site which supports a variable population of one or more species protected under the habitats Regulations or listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981 (as revised and amended) or in Red Data of Britain and Ireland.

6c – Any site that supports a significant proportion of the Island population, or contributes significantly to the range in the Island, of a national BAP priority species, or a local BAP species which could be at risk because of very small populations, recent rapid decline, or habitat loss or decline.

7b – Regionally Important Geological/ Geomorphological Sites (RIGGS)

8a – Social Value – A site which has value for the appreciation of nature.

## 7 Recorded Statutory Sites

7.1.1 Recorded statutory sites within 1km of the site were identified using the Isle of Wight Local Records Centre (LRC). Further information was gathered on the designated sites using publicly available online resources. The information is presented in Table 2 below.

Table 1: *Statutory Sites Identified within 1km of the Site*

Statutory Sites	Name	Within ≤ 1km (Y/N)	Approx. distance from the site (m)	Approx. direction from the site	Connectivity to site (Indirect, Direct, No)
SAC	Solent and isle of wight lagoons	Y	1	S	Indirect terrestrial, hydrological, and arboreal connectivity
SPA and potential SPA (pSPA)	Solent & S'hampton Water	Y	1	SE/N/NW	Indirect terrestrial and hydrological connectivity
National Nature Reserve (NNR)	N/A	N	N/A	N/A	N/A
Ramsar	Solent & S'hampton Water	Y	480	NE	Direct arboreal and hydrological connectivity
PAWS		Y	500	S	No

## 8 PROTECTED AND NOTABLE SPECIES

8.1.1 Local records provide details of rare and protected species within 1km of the site, these records, along with an assessment of the relevance of the site to those species can be summarised as follows:

8.1.2 Birds - No evidence of old bird nests was identified in the buildings on site. During any works to buildings on site and in the surrounding grounds a site check should be made for nesting birds. Nesting season generally runs from March to August inclusive.

8.1.3 The site's hedgerows and scrub provide suitable habitat for foraging and nesting birds. Any vegetation clearance required to accommodate the proposed development will need to be done outside of bird nesting season (March-August). The scale and nature of the development makes it unlikely that a significantly adverse impact on the local bird populations will occur.

8.1.4 Bats – The existing buildings on site have numerous openings and features which may support bats. The buildings have also been left open to the elements for a number of years increasing the likelihood of usage by local bat populations. Therefore a Preliminary Roost Assessment should be undertaken in relation to all buildings on site. No trees on site provide suitable roosting features and opportunities for bats

8.1.5 The scrub along the south western boundary may provide foraging and commuting routes for bats. However, as only minimal vegetation removal is required, no likely adverse effects are predicted on the local bat population.

8.1.6



8.1.7 Dormice – There is no suitable habitat in extent or quality for dormice on site. If during site works any evidence of dormice is identified, a qualified ecologist should be contacted immediately.

8.1.8 Fish – The adjacent lagoon provides potential for fish species. However, the proposed development is unlikely to be of any impact.

8.1.9 Invertebrates – LRC data identifies records of the anemone, *Nematostella vectensis* from the harbour lagoon. This is a nationally scarce marine species and a UK BAP and NERC priority for conservation effort species. The proposed development is unlikely to be of any impact

- 8.1.10 Plants – Vegetation on site includes a scrub area of grass, brambles and nettle. No trees were identified on site. No rare or protected species of plants were encountered during the site walkover. Japanese knotweed was also encountered on the western portion of the site.
- 8.1.11 Reptiles – LRC records for all four native island reptiles have been identified within 1 km of site. The site does provide the potential to support reptile species with a mix of cover for refuge, open areas for basking and piled materials that may provide hibernation sites across areas of the western portion of the site. However, the majority of this area of the site has already been impacted by the temporary laydown established on site for flood defence works, as such, a staged clearance approach should be adopted for this area of the site. The detailed methodology for such an approach should be detailed within a impact assessment and agreed with the local authority.
- 8.1.12 The high salinity of the lagoon/harbour and estuarine nature is likely to preclude amphibian activity on and near the site.
- 8.1.13 Invasive and non-native species – The LRC have identified the following invasive and non-native plant species within 1km of the site: three-cornered garlic (*Allium triquetrum*), montbretia (*Crocasmia pottsii x aurea = C. crocosmiiflora*), Japanese knotweed (*Fallopia japonica*), and Indian balsam (*Impatiens glandulifera*). Japanese knotweed was identified on the western portion of the site
- 8.1.14 On-site vigilance for the invasive and/or non-native species identified in this report should be maintained during any work. Optimum surveying period for flora is from April-September.
- 8.1.15 There are LRC records of invasive and/or non-native animal species within 1km of the site which include Mandarin duck (*Aix galericulata*), Canada goose (*Branta canadensis*), ruddy duck (*Oxyura jamaicensis*), and barn owl (*Tyto alba*). These species are listed under the Wildlife & Countryside Act Schedule 9, Part 1 which lists species established in the wild which may not be released/allowed to escape into the wild unless licensed to do so.
- 8.1.16 No invasive and/or non-native animal species were identified during the sight visit. However, any sightings during the construction phase should be reported to an ecologist.

## 9 LIMITATIONS

- 9.1.1 General - The survey provides a single snapshot of the site and does not account for seasonal variation or species which may take up residence after the published report. Furthermore, lack of signs of a particular species does not confirm its absence, merely that there was no indication of its presence at the time of the site survey.
- 9.1.2 The PEA is valid for 2 years (or any material change in the site, whichever is sooner) after which an updated PEA will be required to assess if there are any changes to the site's condition.
- 9.1.3 [REDACTED] Although the site was examined for signs of [REDACTED] and their setts, there is no guarantee that sett entrances can be located, especially if the sett is currently inactive, seasonally used, and/or concealed.

## 10 CONCLUSIONS

- 10.1.1 As a minimum, a Preliminary Roost Assessment should be undertaken in relation to all buildings on site. A staged clearance approach to the remnant grassland around the temporary laydown should also be established.
- 10.1.2 The site is located on the edge of the Lagoon which is a site of wetland habitat receiving the highest level of European and UK protection for conservation importance.
- 10.1.3 There is the potential for damage from the site in the form of run-off from soil/fuel/plant machinery etc. The impact of any works on site can be minimised through the provision of good site management to ensure the proper level of precautionary safeguarding of the close and vulnerable



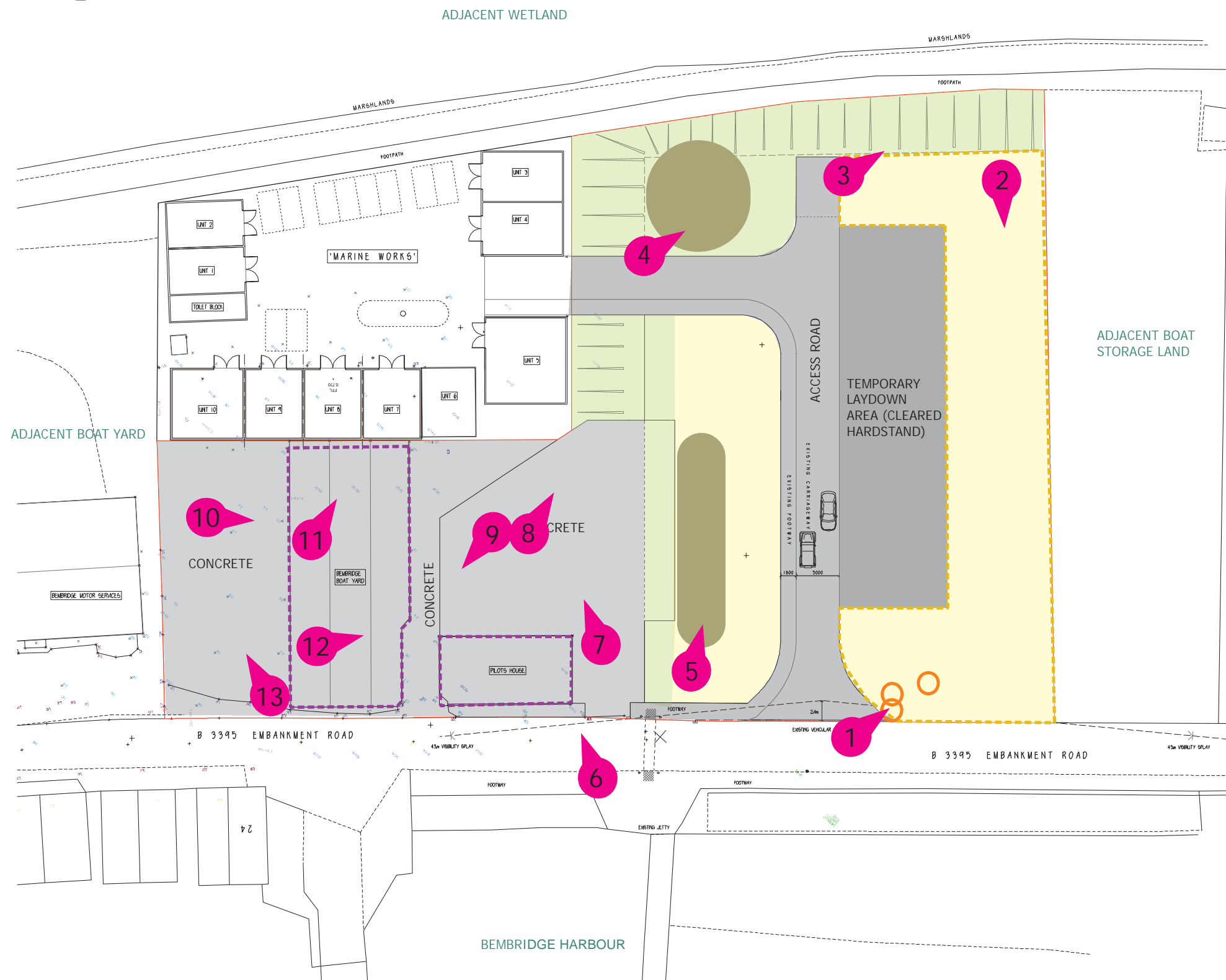
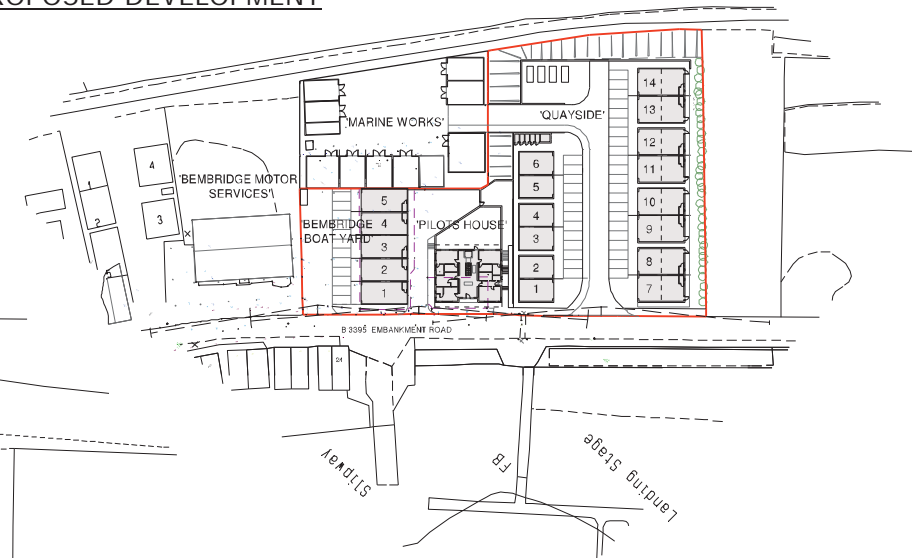
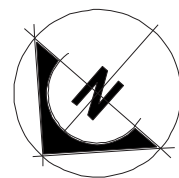
habitat.

- 10.1.4 The further survey information combined with the proposed development plans should be utilised to form a detailed impact assessment for the site with an EcIA. However, in general it is anticipated that the following mitigation and enhancement measures will be required.

## 11 MITIGATION & ENHANCEMENT

- 11.1.1 The following measures are proposed; however, the list is not exhaustive and will be updated to reflect the outcomes of further surveys and subsequent risk assessment.
- 11.1.2 Construction and operation activities leading to disturbance of the SPA, SSSI and the overwintering bird assemblages – Works involving loud percussion should be avoided during wintering bird period (1st October-31st March). Non percussion construction methodologies should be utilised (i.e. driven piles).
- 11.1.3 Area of scrub grassland onsite has the potential to support nesting and breeding birds – If works are carried out in the bird nesting season (March – August) the site should be surveyed for nesting birds prior to works to prevent any disturbance to nesting and breeding birds.
- 11.1.4 Clearance of the scrub grassland that may cause loss of habitat and biodiversity – The planting of native species of hedge plants is recommended e.g. Hazel, Hawthorn, Blackthorn, Bramble and Buckthorn to retain terrestrial and arboreal connectivity between the site and the surrounding landscape to allow movement between the site and surrounding habitats for various terrestrial and arboreal wildlife
- 11.1.5 It is recommended that that bird/bat boxes be installed in the proposed development to increase nesting and roosting opportunities.
- 11.1.6 Conducting works during daylight hours only or selecting LED sensor operated downward facing, hooded, and low-level lights to minimise disturbance to potential commuting and foraging bats and [REDACTED] which are active outside of daylight hours.

PROPOSED DEVELOPMENT



KEY

- DEVELOPED LAND/ SEALED SURFACE (u1c)
- MODIFIED GRASSLAND (g4)
- MODIFIED SCRUB (h3h)
- STOCKPILED FILL
- SITE BOUNDARY
- PRELIMINARY ROOST ASSESSMENT (PRA) BUILDINGS
- STAGED CLEARANCE AREA (REPTILES)
- APPROX. JAPANESE KNOTWEED LOCATIONS (INDICATIVE ONLY)
- PHOTOGRAPH NUMBER, LOCATION AND VIEW DIRECTION (FIGURE 2)

Drawn	CB
Approved	JO
Date	14/09/2023
Scale	NTS
Original	A3

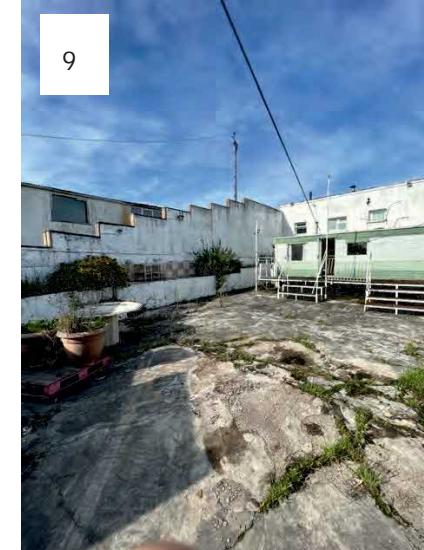


Client:	MR M MEISEL		
Project:	PROPOSED COMMERCIAL & RESIDENTIAL DEVELOPMENT, PILOT HOUSE, BEMBRIDGE HARBOUR, ISLE OF WIGHT		
Title:	SITE LOCATION PLAN		
Project no:	NN1684	Figure no:	FIGURE 1
		Rev:	1






WESTERN AREA (HISTORIC LANDFILL)



CENTRAL RESIDENTIAL AREA



EASTERN AREA

Drawn	CB		Client:	MR M MEISEL		
Approved	JO		Project:	PROPOSED COMMERCIAL & RESIDENTIAL DEVELOPMENT, PILOT HOUSE, BEMBRIDGE HARBOUR, ISLE OF WIGHT		
Date	14/09/2023		Title:	SITE PHOTOGRAPHS		
Scale	NTS		Project no:	NN1684	Figure no:	FIGURE 2
Original	A3				Rev:	1