

**LAND AT LOWER ROAD,
BEDHAMPTON**

ECOLOGICAL ASSESSMENT ADDENDUM

OCTOBER 2020

CONTENTS

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1.0	INTRODUCTION	1
1.1	Background	1
1.2	Previous Survey Work	1
2.0	DETAILS OF THE DEVELOPMENT	2
2.1	Introduction	2
2.2	Biophysical Changes associated with the Development Scheme	2
3.0	UPDATE WALKOVER SURVEY	4
3.1	Introduction	4
3.2	Designated Sites	4
3.3	Habitats and Vegetation	4
3.4	Protected Species	4
3.5	Evaluation	4
4.0	ADDITIONAL IMPACT ASSESSMENT & MITIGATION	5
4.1	Introduction	5
4.2	Habitats & Vegetation	5
4.3	Protected Species & Species of Conservation Concern	5
5.0	CONCLUSIONS	6
6.0	REFERENCES	6

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1.0 INTRODUCTION

1.1 Background

- 1.1.1 An amended Application for the erection of 50 No. dwellings and associated access & open space is proposed for Land at Lower Road, Bedhampton, by Bargate Homes. A detailed ecological assessment was provided with an Outline Application for the site in 2019 (see Aluco Ecology, 2019) and this addendum addresses potential for additional ecological assessment for the amended Application.
- 1.1.2 A detailed scheme for the site has been developed, and this is reproduced at **Figure 1** below.
- 1.1.3 This document considers the existing ecological baseline, impact assessment, mitigation method statements and biodiversity mitigation for the 2019 scheme based on the proposed changes from the amended Application.

1.2 Previous Survey Work

- 1.2.1 A number of species are protected under legislation and policy; namely the Conservation of Habitats & Species Regulations 2010 in relation to the European protected species (eg bats, dormouse, great crested newts) and the Wildlife & Countryside Act 1981 (as amended) and Countryside & Rights of Way Act (CROW) 2000 for protected species and the designation and protection of SSSIs (**Technical Appendix 1**). The Protection of Badgers Act 1992 gives protection to Badgers *Meles meles*.
- 1.2.2 Aluco Ecology has undertaken ecological survey work on the site for all protected species groups (see Aluco Ecology 2019). The results have identified the following ecological features potentially affected by the works and construction area:
- The site is in proximity to the Solent coastal designated International Sites, the closest being Chichester to Langstone Harbours Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar Sites;
 - The site is included within the Solent Brent Goose Strategy as a ‘Secondary Support Area’ for Waterfowl – data for use of the site and assessment is included in the detailed ecological assessment for the Outline Application in 2019 (Aluco Ecology, 2019);

- Vegetation and habitats, including arable habitats and a small section of hedge within the construction zone are impacted, as well as retained woody vegetation, hedges and trees with associated grasslands. New habitats are proposed to be created on public open space on site;
- A number of widespread nesting birds have been recorded on site;
- A number of bat species have been recorded foraging and commuting around the site and local area;
- Badgers *Meles meles* may be present in the wider area but not direct evidence has been noted on site, Fox *Vulpes vulpes* has been recorded on site;
- A small populations of Slow Worm *Anguis fragilis* is recorded on site.

2.0 DETAILS OF DEVELOPMENT

2.1 Introduction

- 2.1.1 **Figure 1** shows the amended Masterplan, which is similar to the 2019 Application, an Application for development of 50 units with associated access and open space at the southern end of the site.

2.2 Biophysical Changes associated with the Development Scheme

Pre-Construction Site Clearance

- 2.2.1 Existing vegetation within the construction zone will be required to be removed and ground re-profiled within the development area.

Construction

- 2.2.2 The construction of the development has the potential to affect protected species and ecological features, some of which are afforded protection under the legislation and policy outlined in Section 1 above.

- 2.2.3 A landscape strategy, planting plan, and Landscape Management and Maintenance Plan has been prepared for the site (see Terra Firma, 2020). This provides for formal and informal habitat creation and landscaping both around the main development footprint and new public open space habitats south of the main development area. This continues to be informed by the ecology mitigation and prescriptions from the 2019 Application (see Aluco Ecology, 2019).

Operation

- 2.2.4 The public open space areas of the site are designed to fulfil a multi-purpose role of biodiversity gain, landscaping and public open space. Additional planting has been provided in the Landscape Management & Maintenance Planting Plan (Terra Firma, 2020).



Figure 1: Amended Site Layout (HGP, 2020)

3.0 UPDATE WALKOVER SURVEY

3.1 Introduction

- 3.1.1 An update walkover survey and desktop assessment, including data search with the Hampshire Biodiversity Information Centre was undertaken in September 2020. The methodology for this survey is further detailed in **Technical Appendix 1**.

3.2 Designated Sites

- 3.2.1 There are no significant changes to the designated sites within the zone of influence from the 2019 assessment. The proposed development site is listed under the Solent Brent Goose Strategy as a ‘secondary support area’ for waterfowl. No additional waterfowl records for the site (H05) have been provided since the previous assessment in 2019. Mapping for statutory and non-statutory designated sites from the updated Hampshire Biodiversity Information Centre data search is provided at **Technical Appendix 2**.

3.3 Habitats and Vegetation

- 3.3.1 The 2020 walkover survey considered the habitats on site in relation to the previous survey work and assessment. The main habitats on site remain as before, with arable providing the majority of the site area, and small amounts of grassland, and woody boundary vegetation. In 2020 the arable habitat had not been cultivated and this resulted in a wider arable weed flora across the field, in parts being dominated by Cockspur *Echinochloa crus-gallii*. No additional notable arable species were recorded.
- 3.3.2 The boundary habitats and an adjacent off site small ornamental garden pond remained as described by previous survey work.

3.4 Protected Species

- 3.4.1 As a part of the update walkover survey, habitats on site were assessed for potential changes to the habitats of protected and notable species from the previous survey work. This included searching for signs of protected species using the methodology set out in **Technical Appendix 1**.
- 3.4.2 The habitats have not changed significantly since the previous survey effort and no additional significant changes to protected and notable species features are considered likely.

3.5 Evaluation

- 3.5.1 The evaluation of the ecological features from the previous survey work has been re-considered following the update survey in 2020 and they are all considered to remain valid.
- 3.5.2 Photos from the update site visit are provided in **Technical Appendix 2**.

4.0 ADDITIONAL IMPACT ASSESSMENT & MITIGATION

4.1 Introduction

- 3.1.1 This section considers the additional impact assessment for the features covered in the original ecological assessment and whether there are any additional significant ecological impacts that will occur as a result of the amended scheme.

3.2 Impact Assessment

Designated Sites

- 3.2.1 The previous assessment agreed mitigation payments to Havant Borough Council for impacts on the internationally designated sites in the Solent. This included payments to schemes for offsetting recreational and urbanisation impacts adjacent to the coast, and payments to the new scheme relating to support sites to the coastal designated sites, of which the site is considered a 'secondary support area' in the updated Brent Goose Strategy (SWBGS, 2018). The agreement followed policy set out in the Havant Local Plan 2036 and relevant guidance and assessment (HBC, 2017; HBC, 2019)
- 3.2.2 Recent research into nutrient neutrality within the Solent has determined that nutrient loads from development and other land uses is having an adverse impact on the designated European & International Sites. On this basis Natural England are requesting nutrient neutrality on developments within the zone of influence of the Solent designated sites (Natural England, 2019). Supplementary Planning Guidance at Havant Borough Council has provided further advice on calculating nutrient loads and procedure for mitigation within the District (HBC, 2020). A nutrient calculation for the current development has been provided and shows that the removal of arable production combined with additional green space south of the proposed development footprint will result in a negative nutrient loading from the operational scheme (Nitrogen Budget Calculation, 2020). On this basis, adverse impacts on the designated sites in the Solent and Chichester Harbour are not predicted.

Habitats and Vegetation

- 3.2.3 No additional impacts are predicted on the habitats and vegetation, and no additional mitigation is proposed within the amended development, and the existing mitigation strategy for retained and created habitats and management for biodiversity features remains valid. An updated Landscape Plan for the scheme is provided, which has regard to ecological mitigation measures outlined in the previous ecology assessment (see Terra Firma, 2020).

Protected Species & Species of Conservation Concern

- 3.2.4 No additional impacts are predicted on ecological features identified in survey work. This includes protected and notable species and species of conservation concern. An updated desktop data search has not returned any additional significant records since the previous assessment, including a search by the Hampshire Biodiversity Information Centre. The existing detailed mitigation measures for protected species therefore remain valid.

5.0 CONCLUSIONS

- 5.1 An amended Application of the proposed development scheme at Lower Road, Bedhampton has been proposed. This is for a scheme of 50 dwellings with associated access and open space as before. This amended Application has been considered in light of the existing ecology impact assessment and mitigation proposals for the previous Application (Aluco Ecology, 2019). No additional significant impacts are predicted on the features identified in the original ecological impact assessment and mitigation. No additional mitigation measures are proposed and the existing ecological mitigation strategy and proposed habitat retention and creation as well as mitigation method statements for protected species is still considered valid for this re-plan.

6.0 REFERENCES

Aluco Ecology (2019) Land at Lower Road, Bedhampton, Ecological Assessment

Havant Borough Council (HBC) (2017) Habitats Regulations Assessment Draft Screening Statement. Prepared to support the Draft Havant Borough Local Plan 2036.

Havant Borough Council (HBC) (2019) Havant Borough Biodiversity Strategy, January 2019

Havant Borough Council (HBC) (2020) Position Statement and Mitigation Plan for Nutrient Neutral Development, Supplementary Planning Guidance, August 2020

Natural England (2019) Advice on Achieving Nutrient Neutrality for New Development in the Solent Region for Local Planning Authorities, Version 2, June 2019

Natural England & Gov. (2020) Standing Advice for Protected Species from www.gov.uk

Nitrogen Budget Calculation (2020) Lower Road Bedhampton Nitrogen Calculator V2

Solent Waders and Brent Goose Strategy (SWBGS) (2018) Guidance on Mitigation and Off-setting Requirements – for Local Planning Authorities.

Terra Firma (2020) Landscape Proposals Dwg Nos. 1860-TF-00-00-DR-L-1002-7

Technical Appendix 1

Ecological Appraisal Method

Introduction

The methodology for this appraisal is based on the Guidelines for Ecological Impact Assessment (EcIA) in the United Kingdom published by the Chartered Institute of Ecology and Environmental Management (IEEM June 2006, CIEEM 2016). Regardless of whether a statutory Environmental Impact Assessment is required, these guidelines provide a robust framework for ecological assessment at any scale.

Desk Study

The first stage of the appraisal is a desk study of the proposed development site and associated Zone of Influence. This provides background information on the site and local environment so as to more effectively target field survey and further desk research.

The Multi Agency Geographical Information for the Countryside (MAGIC) database is searched for information regarding nationally or internationally designated sites within proximity of the development site.

The National Biodiversity Network (NBN) data base is searched to provide background information on local protected species records. The NBN provides access to a substantial volume of biodiversity data for the UK. Although rarely site specific, it does provide valuable background information on the local occurrence of protected species.

Where appropriate, the local environmental/biological records centre is consulted to provide information regarding locally identified sites and records of protected and/or notable species within the zone of influence of the proposed development.

Site Survey Methodology

The aims of the survey are to record land-use and broad vegetation types present on the site and in the surrounding areas, and to evaluate the habitats and vegetation communities ecological value along with the potential to support protected species, species of principal importance, and any other notable species.

Where relevant, habitat immediately adjacent to the site is also assessed as this can have a bearing on the possible presence of protected species on the site and the ecology of adjacent areas can be affected by development nearby.

Habitats and Vegetation

Habitats and vegetation communities are recorded on a broad scale by visually noting contrasting land uses, vegetation zones and landscape features, such as hedgerows and trees. Dominant plant species are recorded in each of the areas identified, as are any notable plant species, such as protected species and habitats or notifiable weeds.

Protected Species

Many plant and animal species are legally protected in the UK. Some, such as bats, badger, water vole and great crested-newt are commonly encountered on development sites.

Case law has established (Regina vs. The Cornwall County Council ex parte Hardy 2001) that “It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted.

For the most regularly encountered protected species, a brief summary of methods follows:

Bats

Bats use buildings and trees for roosting and breeding, and so the potential for any of these features on site to support bats was considered, as was the sites potential for providing bat foraging habitat. An Appraisal survey will consider potential features that could support a Bat roost, and this may include external inspections of the trees and buildings on site. The Appraisal survey will also consider bat habitats in relation to foraging and commuting potential, with semi-natural vegetation features considered and evaluated.

Where an inspection is undertaken this will look for the presence of bats as well as signs of their presence such as Bat droppings, e.g. within cavities and buildings; Staining at potential roost access points; Lack of bat evidence cannot be taken to mean the lack of use by bats because of a number of potential limitations:

- Signs of bats can be easily washed off by wind or rain;
- Droppings are hard to see where rubble and other floor debris may obscure them;
- Low numbers of droppings can easily be missed especially where they may become damp and deteriorate;
- Evidence of bats may not be apparent where bats roost out of view, such as in tree cavities etc.

Badgers

An initial inspection is undertaken during the Appraisal survey for evidence of the presence of Badgers *Meles meles*, in particular Badger setts, on or near to the site. The Appraisal will search for presence of Badger foraging activity and territorial behaviour. Such signs include foraging trails, foraging scrapes in short grass, which are commonly known as 'snuffle holes' (shallow scrapes in soft ground or even turf rolling created by foraging for ground-dwelling invertebrates such as worms and grubs), footprints, hairs caught under fences, sett entrances, and latrine sites.

Dormice

The Appraisal survey will consider the potential for presence of Dormouse on or near the site, principally through habitat suitability, combined with data on occurrence within the area from the data search. Where suitable habitat occurs, further survey for feeding signs on hazel nuts where Hazel occurs, and searches for arboreal nests. If it a site is considered suitable, further Phase 2 survey work may be required.

Other Mammals

Consideration is also given in an Appraisal survey to the potential for habitats to support other legally protected mammals, and those of nature conservation significance. Where waterbodies and watercourses occur on or near to the site, the potential presence of species including Water Vole *Arvicola amphibious* and Otter *Lutra lutra* are considered. Depending upon the geographic location consideration is also given to species such as Red Squirrel.

Breeding Birds

Any notable bird species seen during the Appraisal survey are recorded. The type and quality of breeding, foraging and roosting habitats available for birds is also considered and interpreted with particular reference to protected or notable bird species, and birds of conservation concern.

Consideration is given to any features which could support nesting birds, including buildings and other structures, and areas of vegetation that may be affected by a development.

Reptiles

Any areas of habitat considered suitable for supporting reptiles are noted (for example, areas of rough grassland and scrub, banks, burrows, and rubble piles, compost heaps). If a site is considered suitable, further Phase 2 survey is usually required if an impact from the development or project is considered likely.

Great Crested Newt

An Appraisal Survey considers habitat suitability, through the occurrence of suitable ponds and/or terrestrial habitat, and this will be combined with knowledge on their distribution from biological records for the area. If a site is considered suitable, further Phase 2 survey is usually required if an impact from the development or project is considered likely.

Invertebrates

A very small proportion of invertebrates are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended), although a relatively high number of invertebrates are included within the UK and local BAPs, and many more species are identified as being Nationally Scarce. Most invertebrates require specialist knowledge in order to identify them, although some groups, including butterflies and dragonflies, can be readily identified by generalists. Therefore, apart from recording any species of these readily identifiable groups, an Appraisal Survey concentrates on recording the presence of any key habitats of nature conservation importance considered suitable for supporting more scarce and restricted invertebrates, for example bare ground, dead wood and botanically rich habitats.

Survey Constraints and Limitations

An Appraisal survey is carried out during a brief window of time. Therefore the survey can only provide a snapshot of the range of plants and animals that might be present. However, professional judgement is used to interpret the habitat features recorded, and their likely value for supporting protected and notable species, including species of principal importance. Survey was restricted through land access as it is unusual to have a landowner owning land surrounding that which is being surveyed.

Assessment Guidelines

Introduction

The IEEM guidelines (2006) and updated in 2016 (CIEEM, 2016) provide three principal reasons for an ecological feature being valued and therefore included: biodiversity value, social/community value, and economic value.

The evaluation and assessment undertaken assigns one of a number of value labels based on a geographic scale as follows:

- International
- National
- Regional
- County
- District
- Local (Parish)
- Within the zone of influence

Value is determined with reference to the following factors:

- level of designation (sites) or biodiversity-based protection (legal and policy);
- biodiversity value (e.g. inclusion in Biodiversity Action Plans, rarity, position in ecosystem, assemblages and communities, size and diversity);
- social and economic value;
- legal issues (eg protected sites).

All impacts of the scheme on features of local importance or greater are assessed in the impact assessment stage

Assessment of Likely Impacts

The ecological impact assessment methodology used is based on the following considerations.

Characterisation of Likely Impacts

The potential impacts identified as a result of the proposals are characterised according to the following parameters:

- Positive or negative
- Magnitude (and extent if not synonymous)
- Duration
- Reversibility
- Timing and frequency

Significance of Impact

A significant impact on a valued ecological feature (whether negative or positive) is defined in CIEEM's guidelines as an impact on the integrity of a defined site or ecosystem, and/or the conservation status of habitats or species within a given geographical area. These terms are defined below.

Integrity

Integrity is defined as follows. *'The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.'* A site or ecosystem that achieves this is considered to be at favourable conservation status.

Conservation Status

For habitats, conservation status is determined by the sum of the influences acting on the habitat and its typical species, which may affect its long-term distribution, structure and functions as well as the long-term survival of its typical species within a given geographical area.

For species, conservation status is determined by the sum of the influences acting on the species, which may affect the long-term distribution and abundance of its populations within a given geographical area.

Impact Prediction

For guidance as to whether an impact is likely to result in an adverse effect on the integrity or conservation status of a feature, reference has been made to the conservation objectives for that feature where they are available, for example in habitat and species action plans. Otherwise professional judgement has been made based on available information.

The confidence in the prediction that an activity will give rise to a significant adverse impact on a valued ecological feature is given based on a four point scale:

- Certain (or near-certain);
- Probable;
- Unlikely; and
- Extremely unlikely

Drawing Assessment Together

The above factors – value, integrity and conservations status of the feature, prediction and characterisation of the impact and overall significance of the impact is brought together in the final assessment. This is done without additional mitigation measures that may be proposed. An impact is then summarised as significant or not.

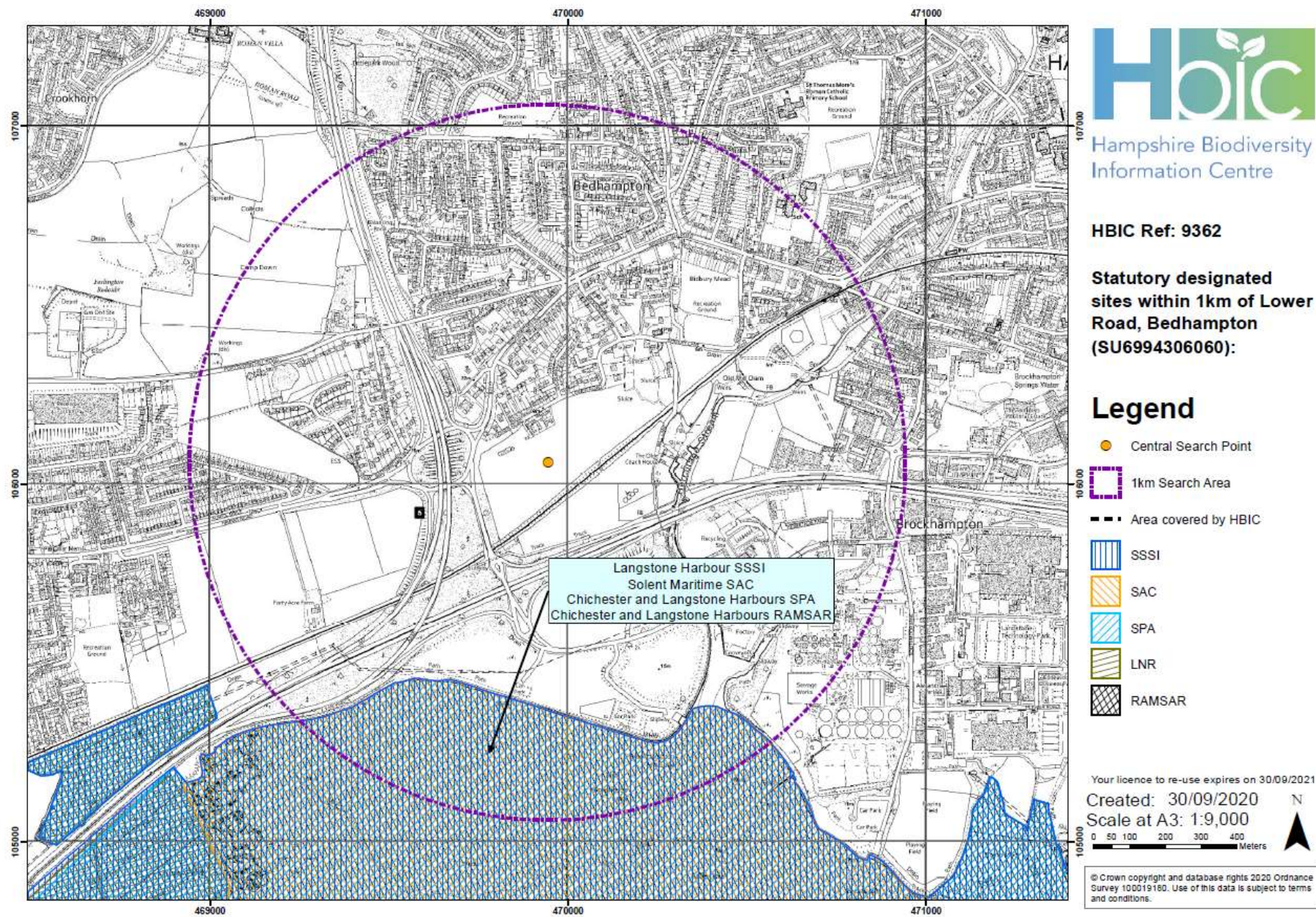
Mitigation, Compensation and Enhancement

Where impacts are characterised as significant mitigation or compensation may be offered to prevent, reduce or offset such impacts. In addition enhancement measures may be built into a scheme to ensure that the scheme is compliant with the proactive measures outlined in the latest Government policy on nature conservation (National Planning Policy Framework).

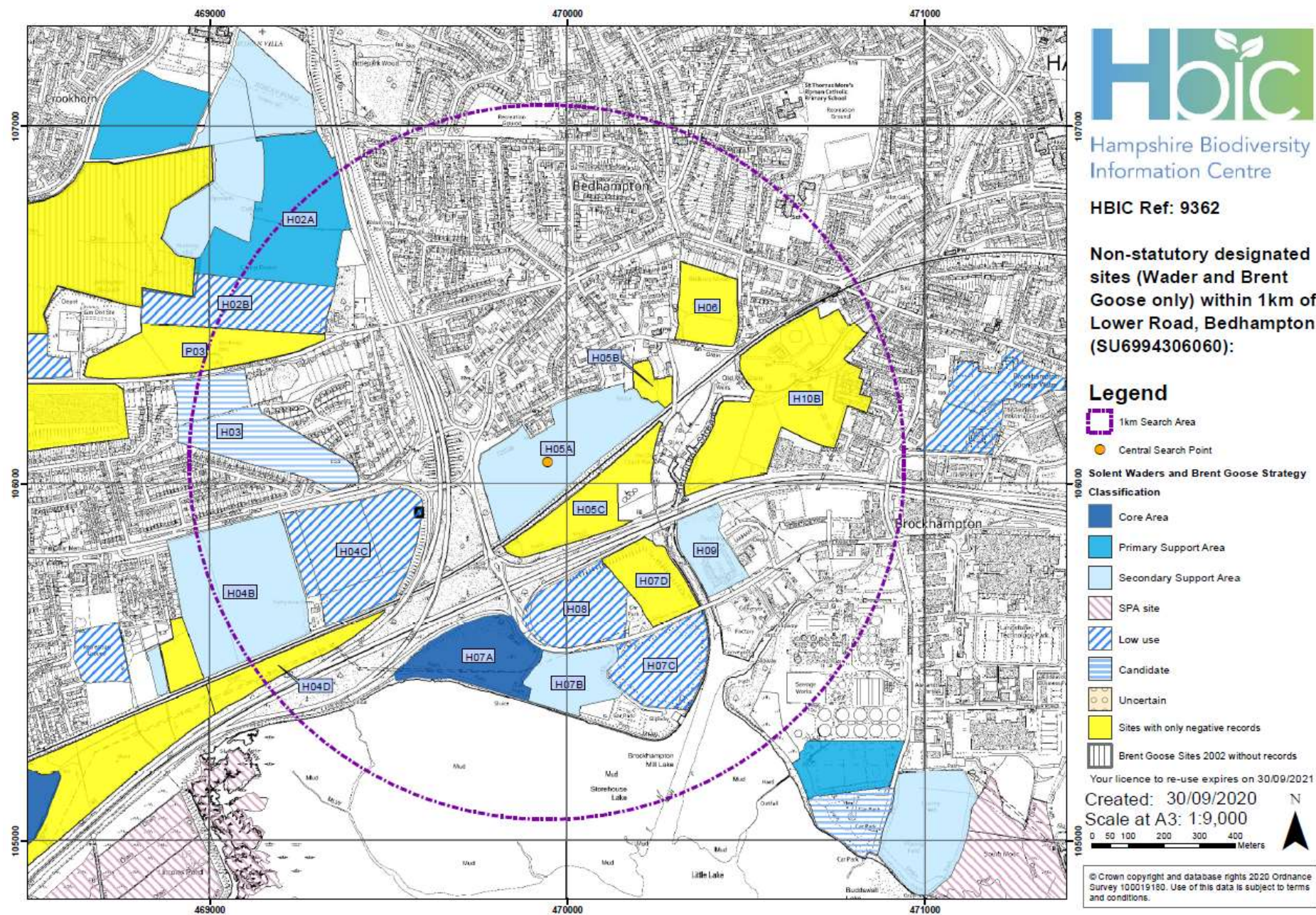
Technical Appendix 2

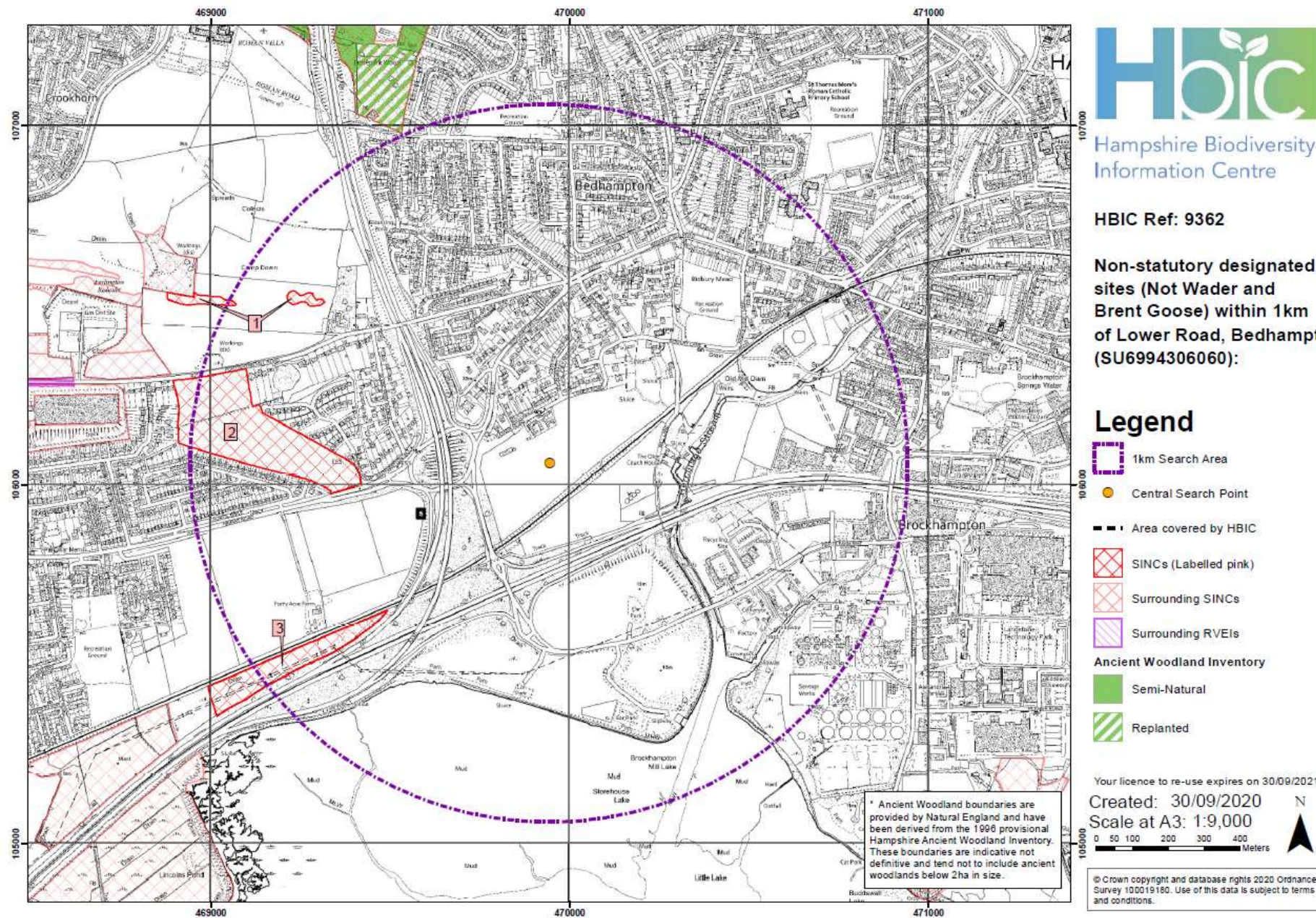
Designates Sites Mapping from HBIC

September 2020



Please note: The boundaries for statutory sites have been provided as digital data from Natural England (NE); this digital data is indicative not definitive. Paper maps produced by NE at the time the sites were designated show the official site boundaries.





Details of Sites of Importance for Nature Conservation (SINCs) within the search area (Data from HBIC):

Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
1	SINC	HV0019	Camp Down Grassland Remnants	SU69000651	2D		0.66
2	SINC	HV0027	Fields off Havant Road	SU69180613	6A	Euphorbia exigua	8.11
3	SINC	HV0028	Farlington Marshes Grassland (North-East)	SU69200550	2A/4A		2.90

Please see [Criteria for SINCs in Hampshire](#) for more information on Sites of Importance for Nature Conservation in Hampshire.

Technical Appendix 3

Update Walkover Survey Site Photos

A selection of photos from the update walkover survey are provided below showing the main habitats and features on site.



Photo 1: Arable Habitats September 2020 (note abundance of non-native annual Cockspur in absence of cultivation)



Photo 2: Arable area of the site viewed looking north from southern boundary. Again showing how dominant the non native Cockspur has become over the arable



Photo 3: Arable area east of tree belt – also uncultivated in 2020



Photo 4: Northern Boundary Grassland Strip (showing grading into Cockspur dominated arable areas)



Photo 5: Northern Boundary



Photo 6: Southern boundary with railway in SE corner of the site. Showing increase in ruderal species along the edge of thhe site – with dominant Mugwort in the arable margin.



Photo 7: Tree belt habitat with limited edge habitat and understorey