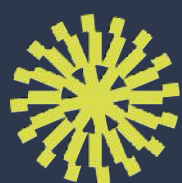


Ecological Impact Assessment



South of Saltmarsh, Hayling Island

16th July 2025



**Tyler
Grange**

TG Report No. 13956_R06a_16th July 2025_CCRD_AP

Report No:	Date	Revision	Author	Checked
13956_R06a	16 th July 2025	a	Christian Cairns BSc (Hons) MSc Robyn Darnell BSc (Hons) MSc	Amber Perrett BSc (Hons) MCIEEM

Disclosure:

This report, all plans, illustrations, and other associated material remains the property of Tyler Grange Group Ltd until paid for in full. Copyright and intellectual property rights remain with Tyler Grange Group Ltd.

The contents of this report are valid at the time of writing. Tyler Grange shall not be liable for any use of this report other than for the purposes for which it was produced. Owing to the dynamic nature of ecological, landscape, and arboricultural resources, if more than twelve months have elapsed since the date of this report, further advice must be taken before you rely on the contents of this report. Notwithstanding any provision of the Tyler Grange Group Ltd Terms & Conditions, Tyler Grange Group Ltd shall not be liable for any losses howsoever incurred arising as a result of reliance by the client or any third party on this report more than 12 months after the date of this report.



Contents:

Summary	
Section 1: Introduction	1
Section 2: Summary of Relevant Legislation and Planning Policy	4
Section 3: Methodology	5
Section 4: Ecological Features and Evaluation	15
Section 5: Potential Impacts, Mitigation and Enhancement	37
Section 6: Conclusions	47

Appendices:

Appendix 1: Legislation and Planning Policy	
Appendix 2: Detailed Survey Methodologies and Results	
Appendix 3: Biodiversity Net Gain BNG Assessment	
Appendix 4: Wintering Bird Methodology and Results	

Plans:

13956/P23a: Habitat Features Plan	
13956/P25a: Fauna Survey Results Plan	



Summary

- S.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Hayling Island Builders HIB. It sets out the findings of an ecological impact assessment of a parcel of land known as 'Land South of Saltmarsh Lane' Ordnance Survey Grid Reference SU712002, hereinafter referred to as the 'Site,' to inform an outline planning application for residential development (planning reference: APP/21/01351). This report was originally prepared in 2021 and submitted with the outline planning application and this edition (version a) includes updates to previous work, completed in 2025.
- S.2. The Site comprises two arable fields of negligible ecological importance, divided by a ditch and bound by hedgerows and ditches of local ecological importance. The Hayling Billy Trail Local Nature Reserve (LNR) is immediately adjacent to the Site, to the west, residential development to the north and east and further arable land to the south.
- S.3. There are seven National Sites Network Sites (NSNSs) (which include Ramsar sites for the purpose of this report) within 10 km of the Site, the closest of which is Chichester and Langstone Harbours Special Protection Area (SPA) and Ramsar site, located approximately 0.2 km northwest of the Site. Several SPAs and Ramsar sites are associated with the Solent area (hereafter referred to as 'the Solent NSNSs') which support internationally important populations of dark-bellied brent goose *Branta bernicla bernicla* and waders. The Solent Waders and Brent Goose Strategy (SWBGS) (Whitfield, D. *et al*, 2024) identifies a network of sites considered to represent functionally linked land to the Solent NSNSs. The Site itself is classified forms H34D in the Solent Waders and Brent Goose Strategy as a 'Low Use Site' within the SWBGS. Low Use Sites are defined as "*Sites that have records of birds but in low numbers*" (Whitfield, D. *et al*, 2024). However, no brent geese or other qualifying features of any NSNSs were identified utilising the Site during wintering bird surveys completed during winter seasons of 2011/12, 2012/13, 2015/2016, 2017/2018, 2018/2019 and 2020/2021. Although not considered to be in current use by brent geese and waders, given the loss of the Site as a potential future resource for such species, a compensatory site will be provided to ensure suitable foraging habitat is maintained in perpetuity. A Brent Goose and Wader Mitigation Strategy (reference: **13956/R07i**) and sHRA report (reference: **13596/R08**) have been prepared to support the application
- S.4. Habitats of most ecological importance, namely boundary hedgerows, scattered trees and ditches, on the Site are proposed to be retained and will be protected during construction through implementation of a Construction Ecological Management Plan (CEMP). Habitat creation and enhancement of retained habitats will include Suitable Drainage System (SuDS), additional tree planting and improved grassland management, expected to be confirmed through detailed design at reserved matters stage and controlled based on production and implementation of detailed soft landscape proposals, planting specification and Landscape and Ecological Management Plan (LEMP), anticipated to be conditioned.
- S.5. Based on the Illustrative Masterplan (Mosaic 2021) submitted with the application, an initial Biodiversity Net Gain (BNG) assessment using Defra 3.0 was completed in 2021. This BNG assessment confirmed the Site will achieve +0.47 % in Habitat Units and a gain of +27.94% in Hedgerow Units.



- S.6. In terms of fauna, retention and enhancement of the boundary habitats such as scattered trees, hedgerows, grassland and the ditches will maintain suitable habitats for fauna recorded during surveys, including foraging and commuting bat species and reptile species. Habitat enhancements which will be accommodated within the Site include planting and improved management measures to increase floristic species diversity, as well as installation of bat and bird boxes, reptile refugia and log piles, within suitable locations, to be confirmed by an ecologist.
- S.7. With the implementation of the mitigation and enhancement strategy described, the proposed development would be in conformity with relevant legislation and planning policy, as set out in **Appendix 1**. The strategy would be controlled by appropriately worded planning controls to ensure the implementation of a CEMP, LEMP and measures set out within the sHRA report.



Section 1: Introduction

Instruction

- 1.1 This report has been prepared by Tyler Grange Group Ltd on behalf of Hayling Island Builders HIB. It sets out the findings of an Ecological Impact Assessment (EclA) of a parcel of land known as 'Land South of Saltmarsh Lane', West Town, Hayling Island, centred on OS Grid Reference SU712002, to inform an outline planning application for residential development of up to 60 homes (planning reference: APP/21/01351). This land, defined by the Site boundary illustrated on Habitat Features Plan **13956/P23a** and shown on **Figure 1.1** below, is hereinafter referred to as 'the Site'.



Figure 1.1: Site boundary indicated by a red line (Source: Google Earth® 2025)

Context

- 1.2 This assessment is based on the information submitted with the outline planning application for the Site along with update ecology work completed in 2025. All matters are reserved except for access; therefore, detailed design is expected to be subject to planning condition and to be provided as part of a future reserved matters application, subject to permission.
- 1.3 The Solent Waders and Brent Goose Strategy (SWBGS) (Whitfield, D. et al, 2024) has been produced by the Solent Waders and Brent Geese Strategy Steering Group to inform decisions relating to development proposals in relation to the important brent goose and wading bird populations within and around the Special Protection Area (SPAs) and Ramsar sites of the Solent Coast. A metric-based approach has been adopted to classify habitats based on their importance, with each land parcel also allocated a reference. The Site is known as H34D within the SWBGS (Whitfield, D. et al, 2024), illustrated on **Figure 1.2**, below.





Figure 1.2: Site classification within the Solent Waders and Brent Goose Strategy Network (Whitfield, D. et al, 2024)

- 1.4 'The Oysters', land north of Station Road, Hayling Island development was consented (Planning reference APP/15/00919) in December 2015 for the development of 76 residential units and 1000sqm of light-industrial accommodation Class B1 to the south of the Site, beyond adjacent arable fields. The ecology report submitted with the reserved matters application (WYG, 2015) acknowledges the 'Brent Goose Mitigation Strategy' submitted with the outline application Tyler Grange, 2013 which identified a change in land use and habitat management of H34D the Site, controlled by a Section 106 agreement (hereafter 'S106'). The update surveys undertaken in 2015 confirmed the change from paddock to arable land had been undertaken. As a result, the report did not address additional mitigation requirements in line with SWBGS, 2010 (now 2024) beyond those previously identified. The signed Unilateral Undertaking (UU) for the consented scheme made a commitment to financial contributions towards the 'Solent Mitigation Strategy' for in combination recreational impacts.
- 1.5 Although the long-term management of the habitat reversion within the Site is understood not to be legally controlled, the conversion of 1.5 ha of paddocks to arable land is referred to in the Havant Borough Council (HBC) Biodiversity Strategy (HBC, 2019).

Consultation

- 1.6 The scope of surveys was discussed with Tristan Norton, Senior Ecologist, Hampshire Country Council (now Principal Ecologist of HBC), on the 16th August 2021, who was in agreement with the approach. A further response (dated 22/05/2025 and available on the HBC planning portal) was received from Tristan Norton in 2025 to the applications, including an updated Brent Goose and Wader Strategy produced by Tyler Grange in 2025 (reference: **13956/R07i**), confirming agreement



on the approach set out. The approach to protected species surveys was also broadly confirmed as appropriate in 2025, notwithstanding a request for further information regarding ecology work updated in 2025, landscaping and reptile mitigation. The further information requested was provided to Tristan Norton on 11th June 2025 and is included within this EclA wherever appropriate.

- 1.7 A shadow Habitat Regulations Assessment (sHRA) has also been prepared in 2025 (reference: **13956/R08**), to be submitted to Havant Borough Council (HBC). The sHRA is considered to provide sufficient information to allow the council to complete Habitat Regulations Assessment (HRA) as the competent authority.

Purpose

- 1.8 This report:
- Uses available background data, results of field surveys and consultation with Hampshire County Council, to describe and evaluate the ecological features present within the likely Zone of Influence (Zol)¹ of the proposed development;
 - Describes the actual or potentially significant ecological impacts as a result of the proposed development; and
 - Where appropriate, describes mitigation and enhancement proposals, together with planning controls, to ensure conformity with legislation and policy listed in **Appendix 1**.
- 1.9 This assessment and the terminology used are consistent with the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018)).

¹ Defined as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project Site, for example where there are ecological or hydrological links beyond the Site boundaries.



Section 2: Summary of Relevant Legislation and Planning Policy

2.1 Specific habitats and species receive legal protection in the UK under various pieces of legislation, including those listed below, of relevance to the proposed development:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000; and
- The Natural Environment and Rural Communities Act (NERC) 2006.

2.2 Where relevant, the assessment takes account of this legislative protection.

2.3 Relevant planning policy for the proposed development is summarised below, with more detail contained in **Appendix 1**.

- The National Planning Policy Framework (NPPF) 2024;
- HBC Local Plan (Core Strategy) (2011):
 - Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough;
 - Policy CS13 Green Infrastructure; and
 - DM8 Conservation, Protection and Enhancement of Existing Natural Features
- HBC Local Plan (Allocations) (2014):
 - Policy DM23 Sites for Brent Geese and Waders; and
 - Policy DM24 Recreational Disturbance to Special Protected Areas (SPAs) from Residential Development.
- The draft Havant Local Plan ('Building a Better Future Plan'), although this is not currently adopted, namely:
 - Policy 19 – Biodiversity Net Gain;
 - Policy 20 – International and National Nature Conservation-Sites;
 - Policy 21 – The Local Ecological Network;
 - Policy 22- Recreational Disturbance on International Sites;
 - Policy 23 – Water Quality Effects on International Sites;
 - Policy 24 – Protected and notable species; and
 - Policy 25 – Solent Wader and Brent Goose Strategy Sites.



Section 3: Methodology

Scoping

- 3.1 The Site is defined by the Site boundary, see Habitat Features Plan, reference: **13956/P23a**.
- 3.2 The scope of the EclA was determined by undertaking a data search and initial Site visit to undertake habitat surveys.
- 3.3 Consideration of the potential Zol for different ecological features as a result of the proposed development informed the search areas for the data search, described below. Subsequently the Zol was reconsidered for different ecological features to determine the scope of further surveys required to inform this assessment, where a reasonable likelihood of the species being present and affected by the proposed development meant there was potential for significant ecological impacts or a requirement for mitigation measures to ensure legal compliance.
- 3.4 Potential impacts that are considered unlikely to be significant have been scoped out at the relevant stages of this assessment.

Data Search

- 3.5 The aim of the data search is to collate existing ecological records for the Site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on constraints that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- 3.6 Search areas for which records were requested or checked were selected for each feature/group to ensure relevant features within the Zol of the proposed development have been considered.
- 3.7 The data search area extended to a 2 km radius for records of protected species and species of principal importance, 2 km for non-statutory and nationally designated statutory sites and 10 km for National Site Network Sites (NSNSs). For the purposes of this report, the term 'NSNSs' refers to SPAs, potential SPAs, Special Area of Conservation (SACs), candidate SACs and Ramsar sites.
- 3.8 The data search was initially conducted in April 2021 and updated in March 2025. The following organisations and resources were contacted and consulted:
 - Hampshire Biodiversity Information Centre (HBIC) Records Centre, for protected and priority species and details of non-statutory sites;
 - Multi-Agency Geographic Information for the Countryside (MAGIC) (MAGIC, 2025), for locations of NSNSs and national statutory sites;
 - Section 41 of the NERC Act 2006 for species and Habitats of Principal Importance (HoPI) in England, subject to conservation action, to assist with the evaluation of ecological resources and to inform site enhancement strategies;



- The Havant Borough Biodiversity Strategy (HBBS) (HBC, 2019), for local priority habitats and species subject to conservation action, to assist with the evaluation of ecological resources and to inform site enhancement strategies; and
- HBC website for details of relevant local planning policies and supplementary planning guidance.

3.9 Information supplied by these organisations has, where relevant, been incorporated into the following assessment, with due acknowledgement.

Extended Phase 1 Habitat Survey and UK Habitats (UKHabs) Survey

- 3.10 An extended Phase 1 habitat survey of the Site was undertaken on 9th April 2021 by Katherine Bubb, an experienced ecological consultant and full member of CIEEM.
- 3.11 The Phase 1 habitat survey methodology was based on guidance set out in the 'Handbook for Phase 1 habitat survey' (JNCC, 2010). This entailed classifying and mapping broad habitat types present. A basic inventory of the habitats and representative species list was produced. Where access allowed, adjacent habitats were also considered, in order to assess the Site within the wider landscape.
- 3.12 An update habitat survey was carried out by Christian Cairns, an experienced ecologist and qualifying member of CIEEM, on 12th March 2025. UK Habitat Classification (UKHab) (UKHab Ltd, 2023).
- 3.13 During both surveys, note was taken of the more conspicuous fauna, and any evidence of, or potential for the presence of protected flora and fauna or those of principal importance.
- 3.14 The weather conditions during the surveys were dry with light winds and good visibility.

Bat Surveys

Preliminary Bat Roost Assessment (PBRA) / Ground Level Tree Assessment (GLTA)

- 3.15 A PBRA was undertaken in 2021 on all trees on or immediately adjacent to the Site boundary to record Potential Roost Features (PRFs) and determine the level of potential of each tree to be used by roosting bats. The PBRA was undertaken on 28th June 2021 by Christian Cairns, an experienced ecologist and Qualifying member of CIEEM in accordance with best practice guidance relevant at the time of survey (Collins *et al.* 2016).
- 3.16 Since the PBRA in 2021, a new version of the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' has been released (Collins, 2023) As such, preliminary surveys on trees are now called Ground Level Trees Assessments (GLTA) and the previous survey work was updated in accordance with the new survey guidance in 2025.
- 3.17 The GLTA in 2025 was completed on all trees on or immediately adjacent to the Site boundary to record PRFs and determine the level of potential of each tree to be used by roosting bats. The assessment was undertaken on 12th March 2025 by Christian Cairns, an experienced



ecologist and Natural England level 1 bat licence holder (Licence reference 2023-11629-CL17-BAT).

- 3.18 The location of the trees at the Site are shown on the Tree Constraints Plan **13956/P01a**. All trees were inspected from the ground aided by the use of binoculars and a high-powered torch.
- 3.19 Features recorded may include woodpecker holes, frost cracks, deadwood, knot holes and limb wounds. The potential of the trees to support roosting bats was assessed using the criteria shown in **Table 3.1** below.

Table 3.1: Assessment of Tree Suitability Criteria - adapted from Collins, 2023.

Suitability	Description of Roosting Habitats
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Dusk Emergence Survey

- 3.20 The scope of dusk emergence and/or dawn return to roost surveys was determined following completion of the ground level tree assessment. Owing to the moderate potential of T22 to support roosting bats, a dusk emergence survey was undertaken by Judy Tung on 16th August and by Jack Hargreaves on 6th September in order to confirm the presence or likely absence of roosting bats. Survey visits were undertaken in line with best practice guidelines (Collins, 2016.)
- 3.21 On each visit, one surveyor was located to the east of the tree in order to observe potential roost features. The surveyor used an EMT 2 Pro and Batlogger M2 detector, respectively, to listen to and record any bats heard. The dusk emergence survey commenced approximately 15 minutes before sunset and finished approximately 90 minutes after sunset.

Aerial Tree Inspection

- 3.22 Tree T22 (a English oak *Quercus robur*) was climbed on 9th May 2025 by Jason Walker (Licenced bat worker: 2017-27699-CLS-CLS), and its identified PRFs inspected with an endoscope, to determine the presence or likely absence of roosting bats.
- 3.23 The PRFs identified during the ground level assessment were various areas of lifted bark and potential knotholes. These were aerially assessed using tree climbing techniques and were inspected using a combination of a torch, mirror and an endoscope. The tree was accessed using a throw-bag to enable the climber's rope to be installed onto suitable anchor points, prior to the climber leaving the ground.
- 3.24 All PRFs, noted during the ground level assessment were accessed and successfully assessed during the climbed inspection. The weather at the time if the survey was cloudy but warm, considered to be suitable conditions for the climbed assessment.



Activity Surveys

- 3.25 The Site was initially assessed for its suitability to support foraging and commuting bats in accordance with best practice guidance (Collins, 2016). This assessment was updated in 2025 (Collins, 2023).
- 3.26 Following assessment, the Site was considered to have low to moderate suitability to be used by foraging and commuting bats given the dominance of arable habitat on the Site and surrounding area and gappy nature of a number of the boundary hedgerows. Given the proposed retention of the western boundary hedgerow, therefore avoiding potential impacts to this feature providing potential connectivity beyond the Site, along the Hayling Billy Trail, it was considered seasonal activity surveys would provide sufficient survey information to inform our assessment rather than monthly visits, as required by best practice guidance relevant at the time of survey for moderate suitability habitats (Collins, 2016).
- 3.27 Seasonal activity surveys comprising static deployment and walked transect surveys were undertaken in spring (May) and summer (June/July) and autumn (September) in accordance with best practice guidance relevant to low suitability habitat at the time of survey (Collins, 2016). Full survey dates and metadata are provided in **Table A2.1** in **Appendix 2** and results are presented in **Table A2.2-A2.4** in **Appendix 2**.
- 3.28 A transect route, illustrated on Fauna Survey Results Plan **13956/P25a** was walked by one or two surveyors, which covered all potential features of interest across the Site. Each survey visit started at sunset and ended approximately two hours after sunset, in accordance with survey good-practice guidelines (Collins, 2016)).
- 3.29 Static Anabat Express and Anabat Swift detectors were placed in three locations, as illustrated on Fauna Results Plan **13956/P25a** for a minimum of five consecutive nights on each survey visit.
- 3.30 A Batlogger M2 was used on all walked transect visits. Echolocation calls were recorded and saved for post survey analysis. Surveyors used a combination of visual observation and echolocation detection techniques to identify any bat activity on the Site. Bat Explorer software was used to analyse sonograms of any calls which could not be identified in the field.

Wintering Bird Surveys

- 3.31 Wintering bird surveys have been undertaken by Tyler Grange Group Ltd historically for surrounding development applications and ongoing monitoring. These surveys, which included the Site itself (referred to as H34D within the SWBGS (Whitfield, D. *et al*, 2024)) were undertaken during winter seasons 2011/12, 2012/13, 2015/2016, 2017/2018, 2018/2019 and then in 2020/2021. Surveys were undertaken in line with the methodology set out in SWBGS, 2010. Full details of methodology, survey dates and metadata are provided in **Appendix 4**.



Great Crested Newt Surveys

Habitat Suitability Index (HSI) Assessment Survey

- 3.32 Using OS mapping and aerial imagery, two ponds were identified off-Site within 250 m of the Site boundary (hereafter referred to as 'Pond P1' and 'Pond P2'). A series of drainage ditches are also present within arable fields beyond the Site to the south.
- 3.33 A HSI assessment of Ponds P1 and P2 and ditches D1-D4 was conducted on 28th June 2021 by Christian Cairns, a Natural England level 1 great crested newt (GCN) *Triturus cristatus* Licence holder (Licence reference 2018-36206-CLS-CLS), and Oliver Kippax-Chui. The survey followed the methodology set out in best practice survey guidelines (Oldham, *et al.*, 2000) and comprised assessing different pond parameters from the pond edge. The location of the waterbodies/courses subject to survey are illustrated on Fauna Survey Results Plan **13956/P25a**.
- 3.34 The Amphibian and Reptile Groups (ARG) Advice Note 5 (ARG UK, 2010) regarding HSI guidance was used, whereby a number of factors including pond location, water quality, macrophyte cover and shading were assessed. A score is given to each waterbody between 0 and 1, with scores closer to 0 having lower probability of GCN occurrence. The HSI scores are provided below:
- <0.5 Poor;
 - 0.5 – 0.59 Below average;
 - 0.6 – 0.69 Average;
 - 0.7 – 0.79 Good; and
 - >0.8 Excellent.
- 3.35 The purpose of the HSI assessment is to provide a measurement of the habitat suitability to support amphibians and does not confirm the presence or likely absence of GCN within the Site. However, in general, ponds with a higher habitat suitability assessment score are more likely to support GCN than one with a lower score. This assessment does not replace the need for further GCN surveys.

eDNA Survey

- 3.36 In order to confirm the presence or likely absence of GCN from waterbodies where potential for GCN was identified, these waterbodies were subject to environmental DNA eDNA analysis which following laboratory analysis confirmed a positive or negative result for GCN DNA.
- 3.37 Twenty water samples were taken from ditch D3 within the Land North of Oysters Site (for full details of this site see report **13956/R05a**) and off-Site ponds P1 and P2 on 28th June 2021 by licenced ecologist Christian Cairns GCN (licence holder ref: 2018-36206-CLS-CLS), following the methodology of the field protocol outlined in the Technical Advice Note (Biggs, *et al.*, 2014). Due care and attention during eDNA sampling were taken to avoid stirring up



sediment and to take samples covering the full extent of the ponds including clear areas of water, deeper areas of the pond and areas close to potential egg laying vegetation, to ensure that every possible chance of detecting GCN, should they be present, was taken for each waterbody. The samples were tested by Nature Metrics following the laboratory procedure within the same document.

Reptile Survey

- 3.38 A reptile survey was undertaken within areas of the Site with potential to support reptile species, which included species-poor semi-improved grassland habitat around the arable field margins and east of the central ditch D2.
- 3.39 The surveys were conducted in line with Froglife's Advice Sheet 10 (Froglife, 1999) (Froglife, 1999). This involved laying refuges comprising squares of roofing felt 1 m x 0.5 m where potential for reptiles was noted. A total of 27 artificial refugia were set out on 5th July 2021 at a density of 10.8 refuges per hectare based on the total Site area 2.51 ha.
- 3.40 Following a 'bedding in' period of at least 14 days, seven checks of the artificial refuges and natural refuges were conducted during suitable weather conditions between 26th July and 24th August 2021 by Jack Hargreaves, a suitably experienced ecologist. The dates and weather conditions of the surveys are shown in **Table A2.20** and results presented within **Table A2.21** within **Appendix 2**. Natural basking areas were also observed for the presence of reptiles during the survey checks, along with note of incidental sightings.

Water Vole Survey

- 3.41 A water vole *Arvicola amphibius* survey was undertaken of onSite ditches D1 - D3 on 28th June 2021 by Christian Cairns and Oliver Kippax-Chui.
- 3.42 The survey comprised a habitat suitability assessment to determine the potential for each ditch to be used by water vole, if present, as well as a presence or likely absence survey to look for relevant field signs.
- 3.43 Water vole signs searched for included burrows, droppings, latrines, feeding stations, lawns, nests, footprints and runways in vegetation. The survey methods followed those detailed in the Water Vole Mitigation Handbook (Dean, *et al.* 2016). The survey was undertaken from within the channel where possible and safe access allowed, or along the banks of the ditches.

Summary

- 3.44 **Table 3.2** below summarises the further surveys undertaken, together with dates. **Appendices 2** and **5** should be referred to for further details concerning survey metadata and detailed methodologies.



Table 3.2: Summary of Surveys Completed

Survey	Date	Appendix	Summary of Scope
Phase I habitat survey	09.04.2021	N/A	Mapping and classification of habitats within the Site.
UK Hab survey	12.03.2025	N/A	Mapping and classification of habitats within the Site.
Bat survey	28.06.2021	2	Ground level preliminary bat roost assessment of trees within or adjacent to Site boundary.
	V1 16.08.2021 V2 06.09.2021		Dusk emergence surveys of T22, with moderate potential to be used by roosting bats.
	V1 27.05.2021 V2 16.08.2021 V3 06.09.2021		Bat activity survey comprising a walked activity transect on-Site on each visit.
	V1 27.05.2021 – 31.05.2021 V2 29.06.2021 – 03.07.2021 V3 06.09.2021 – 10.09.2021		Bat activity survey comprising deployment of three static bat detectors on-Site on each visit.
Wintering bird surveys	Oct/November – March 2011 - 2021	4	Survey of Site and other surrounding fields approximately every 2 weeks at high tide following the methodology published in the SWBGS, 2010.
GCN survey	28.06.2021	2	Habitat suitability index HSI assessment survey of onSite watercourses D1-D3 and off-Site ponds P2 and P3.
	28.06.2021		eDNA survey of off-Site waterbodies considered to have potential for GCN.
Reptile survey	26.07.2021 – 28.08.2021	2	Reptile survey within suitable grassland habitat within the field margins and east of central ditch D2.
Water vole survey	28.06.2021	2	Habitat suitability and presence likely absence survey of on-Site watercourses D1 – D3.

Evaluation

- 3.45 The evaluation of habitats and species is defined in accordance with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018).
- 3.46 The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county and local².
- 3.47 Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance.

² In this assessment, local importance is considered within the context of the borough and/or where there is potential for significant effects, at less than the county scale.



Impact Assessment

- 3.48 The assessment of impacts identifies and characterises impacts and their impacts as a result of the proposed development on important ecological features. This includes consideration of impacts at all relevant stages of the development, including construction and occupation.
- 3.49 Characterisation of impacts has been undertaken based on CIEEM guidance (CIEEM, 2018)) with reference to where they are considered to be positive or negative, their extent, magnitude duration, reversibility, timing and frequency, as appropriate.
- 3.50 Assessment of the significance³ of any residual impacts has been made following consideration of avoidance and mitigation measures, where these have been incorporated into the Illustrative Masterplan (Mosaic 2021) and Landscape Strategy Plan (reference: **13956_P18a**) or can be guaranteed with the use of available planning controls.
- 3.51 The significance of impacts on ecological receptors has been qualified with reference to an appropriate geographic scale of reference. Although, it is worth noting that the scale of significance of an impact may not be the same as the geographic context in which the feature is considered important.
- 3.52 The assessment then identifies appropriate compensation measures to offset significant residual impacts⁴. Finally, opportunities for ecological enhancement are identified.

Application of Mitigation Hierarchy

- 3.53 Application of the mitigation hierarchy is fundamental to the ecological impact assessment process. This requires consideration of the following measures, in order of priority, for all potential impacts⁵, to determine the most appropriate mitigation, compensation and enhancement strategy for the project. This is taken into account within **Section 5** of this report.
- Avoidance – measures to avoid harm to ecological features;
 - Mitigation – measures to avoid or minimise potential impacts as part of the design or guaranteed by planning controls;
 - Compensation – measures required to offset significant residual negative impacts following avoidance and mitigation; and
 - Enhancement – measures over and above requirements for avoidance, mitigation and compensation to provide biodiversity net gain.

³ For the purpose of EclA, a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific e.g. for a designated site or broad e.g. national/local nature conservation policy or more wide-ranging enhancement of biodiversity. Effects can be considered significant at a wide range of scales from international to local.

⁴ Once measures to avoid and mitigate ecological impacts have been finalised, assessment of the residual impacts is undertaken to determine the significance of their effects on ecological features.

⁵ Impacts are defined as actions resulting in changes to an ecological feature.



Limitations and Assumptions

- 3.54 The species data collated during the data search are only those records submitted to HBC and therefore should not be taken as a definitive list of the protected species and those of principal importance to occur within the study area.
- 3.55 On visit three of the static detector deployment, one of the static detectors did not record for five nights. Despite this, the number and nature of species recorded was consistent with the other two survey visits. As a result, this is not considered to have affected the assessment of the assemblage of bats utilising the Site, and their importance due to the consistency of results between visits and with the nearby Land North of the Oysters, Hayling Island Site (Tyler Grange report reference **13956/R05a**).
- 3.56 Based on best practice guidance, reptile survey visits should be undertaken when the air temperature is between 9°C and 18°C (Froglife, 1999). Survey visit 1 was undertaken when the air temperature was 19°C, just above this recommended maximum, although slow worm was still recorded on this visit. The remaining visits were undertaken within optimal weather conditions. As a result, this is not expected to be a significant limitation to the survey results overall and our assessment of the importance of the reptile assemblage on the Site.
- 3.57 There were no limitations to the GCN or water vole surveys on the Site, which were undertaken at the optimal time of year based on relevant best practice. Although the off-Site pond P3 was not accessible due to dense vegetation and steep banks, given the lack of available nearby records and results of surveys on-Site, which confirmed the likely absence of GCN, it is considered unlikely they would be present within this waterbody. Consultation with Tristan Norton, Hampshire Country Council, confirmed that GCN are not known/expected to be present on Hayling Island. This was also confirmed to be the case for water vole. As a result, given the lack of available records and lack of field signs recorded on the 28th June 2021, it was agreed a second survey visit in the second half of the season between July and September was not required.
- 3.58 The updated data search and habitat survey in 2025 confirmed that no significant changes to the baseline conditions had occurred at the Site since previous surveys in 2021. Given this, it was not considered necessary to further repeat the reptile, bat activity or wintering bird surveys as results from these surveys are unlikely to have changed. Tristan Norton of HBC confirmed in 2025 that the bat survey data previously provided is sufficient (consultation response dated 22/05/2025 and available on HBC planning portal). Furthermore, correspondence with HBC confirmed that water vole and great crested newts are likely absent from Hayling Island and therefore repeat water vole, HSI assessment and GCN eDNA were not considered necessary during update survey work in 2025. The survey effort is considered adequate and proportionate to the Site conditions and therefore the scope of surveys is considered sufficiently robust and is not considered to place a limitation on the conclusions of this report. Repetition of the reptile survey would not change the outcome of this report given that high populations of reptiles were found around the boundaries of the site and the habitats within the interior of the Site were confirmed to remain sub-optimal for reptiles in 2025, comprised of cereal cropland.
- 3.59 The BNG assessment has not been updated as part of the update 2025 work. Minor changes in the baseline of the Site were identified. These changes were primarily due to identifying



some hedgerow and tree line features as off-Site that were previously recorded on-Site, following closer inspection of the Site against the red line boundary. The baseline value of the Site is therefore likely to be lower if the BNG was repeated in 2025 when compared with the 2021 metric. Given this, and as the design will be refined at reserved matters stage, it was not considered necessary to update the BNG metric in 2025. The BNG metric will be fully updated at detailed design stage, ensuring a net gain is achieved.

Quality Control

- 3.60 This report has been through a technical review process, with the final sign off being undertaken by an Associate or Full member of CIEEM. All CIEEM members are bound to abide by the Institute's Code of Professional Conduct



Section 4: Ecological Features and Evaluation

Designated Sites

Statutory Designated Sites

- 4.1 The data search identified seven NSNSs within 10 km and five nationally designated sites within 2 km of the Site. These are listed in **Table 4.1** below, along with a summary of their qualifying features/reason for designation, distance from the Site and evaluation of their ecological importance. Those present within 2 km are illustrated on **Figure 4.1**, below, provided by HBIC.

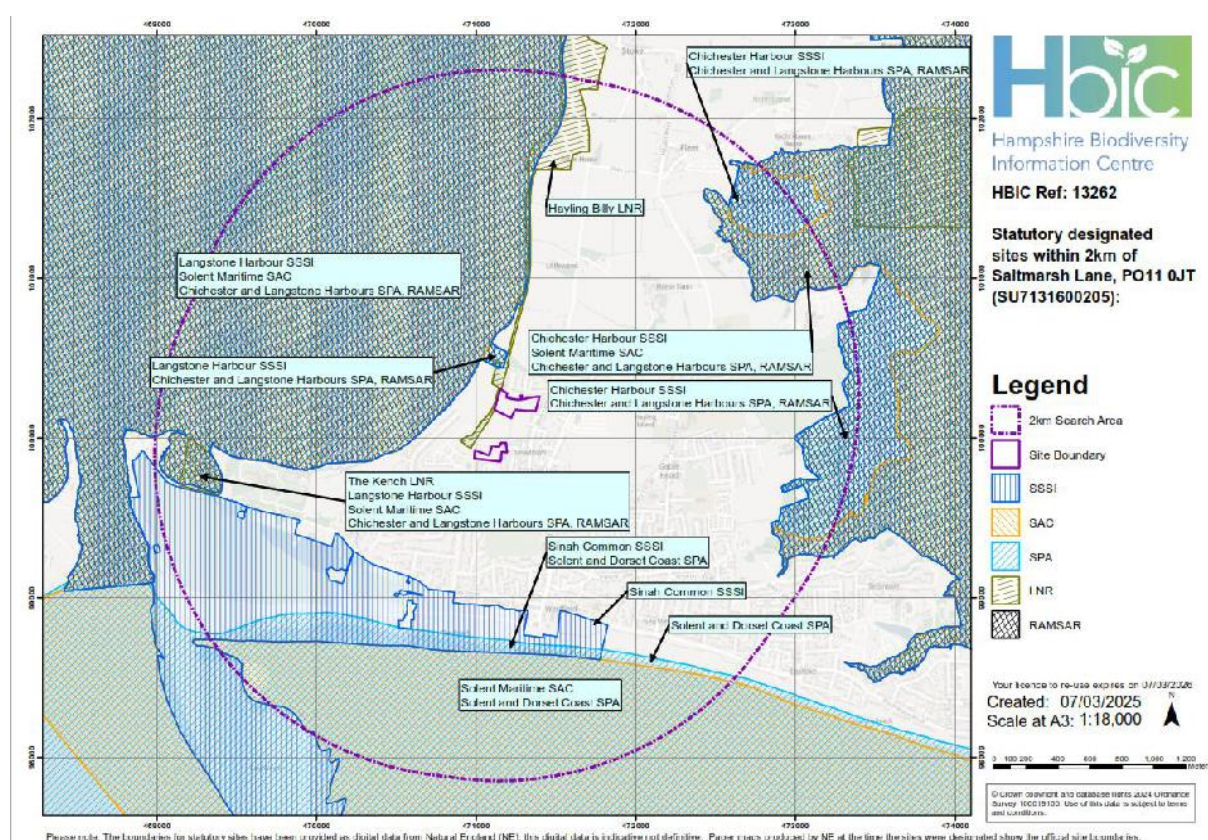


Figure 4.1: Statutory designated sites within 2 km of the Site. NB: Site boundary shown includes the Land South of Saltmarsh Lane Site (see report **13956/R06a** for the EIA for this application)

- 4.2 The Site is located within a Site of Special Scientific Interest (SSSI) impact risk zone, identified on MAGIC (MAGIC, 2025).

Table 4.1: Statutory Designated Sites Within the Data Search Area

Site name and Designation	Distance	Description and reason for designation	Ecological Importance
Chichester and Langstone Harbours Ramsar Site	c. 0.2 km west	Site is comprised of two large estuarine basins linked by a channel and including extensive intertidal mudflats, saltmarsh, sand and shingle spits, and dunes supporting reedbeds and some grassland. Numbers of wintering waterbirds	International



Site name and Designation	Distance	Description and reason for designation	Ecological Importance
		regularly exceed 20,000 individuals and include internationally and nationally important numbers of several species.	
Chichester and Langstone Harbours Special Protection Area (SPA)	c. 0.2 km west	This site supports breeding little tern <i>Sternula albifrons</i> and sandwich tern <i>Sterna sandvicensis</i> ; on passage and over-wintering little egret <i>Egretta garzetta</i> and overwintering bar-tailed godwit <i>Limosa lapponica</i> . The site also supports migratory ringed plover <i>Charadrius hiaticula</i> , black-tailed godwit <i>Limosa limosa islandica</i> , dark-bellied brent goose <i>Branta bernicla bernicla</i> , dunlin <i>Calidris alpina</i> , grey plover <i>Pluvialis squatarola</i> , redshank <i>Tringa totanus</i> and ringed plover <i>Charadrius hiaticula</i> . The area also regularly supports an assemblage of at least 20,000 waterfowl. The mudflats are rich in invertebrates and also support extensive beds of algae, especially, eelgrasses <i>Zostera</i> spp. and <i>Enteromorpha</i> species.	International
Solent Maritime Special Area of Conservation (SAC)	c. 0.2 km west	<p>The site is a major estuarine system on the south coast of England with four coastal plain estuaries and four bar-built estuaries. It is unique in Europe as having four tides each day. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass <i>Zostera</i> spp. and green algae, sand and shingle spits, and natural shoreline transitions. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete <i>Sabellaria spinulosa</i> on the steep eastern side of the entrance to Chichester Harbour.</p> <p>The site is also designated as it is the only site for smooth cord-grass <i>Spartina alterniflora</i> in the UK and is one of only two sites where significant amounts of small cord-grass <i>S. maritima</i> are found. It is also one of the few remaining sites for Townsend's cord-grass <i>S. x townsendii</i> and holds extensive areas of common cord-grass <i>Spartina anglica</i>, all four taxa thus occurring here in close proximity. It has additional historical and scientific interest as the site where <i>S. alterniflora</i> was first recorded in the UK and where <i>S. x townsendii</i> and, later, <i>S. anglica</i> first occurred.</p> <p>The site is also designated as it contains the second-largest aggregation of Atlantic salt meadows in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of ungrazed saltmarsh and support a different range of communities dominated by sea-purslane <i>Atriplex portulacoides</i>,</p>	International



Site name and Designation	Distance	Description and reason for designation	Ecological Importance
		common sea-lavender <i>Limonium vulgare</i> and thrift <i>Armeria maritima</i> . The site also shows rare and unusual transitions to freshwater reed swamp and alluvial woodland as well as coastal grassland.	
Solent and Dorset Coast SPA	c. 1.4 km south	The Solent and Dorset Coast SPA is located along the coasts of Dorset, Hampshire, Isle of Wight and West Sussex and adjacent areas offshore. It overlaps, abuts and is close to many designated areas. It is designated for supporting more than 1 % of Great Britain's breeding population of: sandwich tern <i>Sterna sandvicensi</i> ; common tern <i>Sterna Hirundo</i> and little tern <i>Sternula albifrons</i> .	International
Solent & Isle of Wight Lagoons SAC	c.4.71 km north-west	The site is a series of coastal lagoons, including percolation, isolated and sluiced lagoons. With a range of salinities and substrates, the site supports diverse fauna including: the nationally rare foxtail stonewort <i>Lamprothamnium papulosum</i> , the nationally scarce lagoon sand shrimp <i>Gammarus insensibilis</i> , and the nationally scarce starlet sea anemone <i>Nematostella vectensis</i> .	International
Portsmouth Harbour SPA	c. 7.2 km north-west	Portsmouth Harbour is a large, industrialised estuary. Together with the adjacent Chichester and Langstone Harbours, it forms one of the most important sheltered intertidal areas on the south coast of England. The site is designated as it supports non- breeding black-tailed godwit, non-breeding dark-bellied brent goose, non-breeding dunlin, non-breeding red-breasted merganser <i>Mergus serrator</i> .	International
South Wight Maritime SAC	c. 9.0 km south	This SAC is designated for the presence of internationally importance habitat including, reefs, vegetated sea cliffs and submerged or partially submerged sea caves.	International
Langstone Harbours SSSI	c. 0.14 km north.	Langstone Harbour is a tidal basin which at high water resembles an almost landlocked lake. Extensive mud flats are exposed at low tide. The harbour includes one of the largest areas of mixed saltmarsh on the south coast and is of international importance as a rich intertidal system supporting high densities of intertidal invertebrates and large populations of migrant and overwintering waders and wildfowl, dependent upon them and upon the extensive beds of eelgrass <i>Zostera</i> species. The harbour acts as a summer and autumn assembly ground for waders during the moult and as a post-moult wintering ground. The harbour supports internationally important numbers of dunlin, grey plover, black-tailed godwit, redshank and ringed plover, the total numbers of waders present sometimes exceeds 40,000. In the 1970s and 1980s Langstone Harbour alone has consistently	National



Site name and Designation	Distance	Description and reason for designation	Ecological Importance
		supported in excess of 5,000 wintering dark-bellied geese, or 5-10% of the world population.	
Sinah Common SSSI	c. 1.1 km south	Site with maritime shingle grassland, sand dunes, heath and saltmarsh. Site is designated as it supports one of two populations in the UK of childing pink <i>Petrorhagia nanteuilii</i> as well as supporting other nationally scarce plants.	National
Chichester Harbour SSSI	c. 1.5 km east	<p>The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands.</p> <p>The extensive intertidal mudflats are the feeding grounds, at the relevant times of year for internationally important numbers of ringed plover, grey plover, redshank, black-tailed godwit, dunlin, sanderling <i>Calidris alba</i>, curlew <i>Numenius arquata</i> and greenshank <i>Tringa nebularia</i> (the latter two in autumn particularly). Bar-tailed godwit numbers are of European importance. Amongst the wildfowl, shelduck, teal <i>Anas crecca</i> and dark-bellied brent goose numbers are of international importance with 5% of the world population of the latter. The unimproved permanent pasture behind the sea wall provides alternative feeding sites for the geese and major high tide wader roosts.</p>	National
Hayling Billy Local Nature Reserve (LNR)	Adjacent to western boundary	Contains coastal footpath, bridlepath and cycleway along shoreline of Langstone Harbour, following former Hayling Billy railway route.	Local
The Kench, Hayling Island LNR	c. 1.7 km south-west	The site is a saltmarsh and tidal inlet of Langstone Harbour which provides sheltered feeding areas for birds.	Local



Non-Statutorily Designated Sites

- 4.3 A total of 14 non-statutory designated sites were identified within 2 km of the Site. The closest of which was Sinah Warren Village Marsh Site of Nature Importance (SINC), approximately 0.9 km southwest of the Site boundary. All non-statutory designated sites within 2 km of the Site are listed in **Table 4.2** below, along with a summary of their reason for designation.
- 4.4 These sites are designated for their ecological importance within Hampshire. As a result, they are considered to be of **county ecological importance**.

Table 4.2: Non-statutory Designated Sites Within the Data Search Area.

Designation	Approximate distance from the Site	Reason for designation
Sinah Warren Village Marsh SINC	0.9 km southwest	Designated for presence of sea wormwood <i>Seriphidium maritimum</i> and golden samphire <i>Inula crithmoides</i> .
Hayling Billy Line	1.1 km north	Designated for presence of notable species, divided sedge.
Gun Site Car Park and Open Space SINC	1.5 km southwest	Designated for presence of one of Hampshire's rarer wildflowers, little robin <i>Geranium purpureum forsteri</i> .
Beachlands East SINC	1.5 km southeast	Designated for presence of sand couch <i>Elytrigia juncea</i> , burr medic <i>Medicago polymorpha</i> , bulbous bluegrass <i>Poa bulbosa</i> , suffocated clover <i>Trifolium suffocatum</i> and burr chervil <i>Anthriscus caucalis</i> .
Mill Rythe Lane Saltmarsh SINC	1.5 km north	Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.
Long Marsh SINC	1.5 km north	Designated for presence of divided sedge <i>Carex divisa</i> , common glasswort <i>Salicornia europaea</i> and sea wormwood.
Pill Box Field	1.6 km north	Designated for semi-improved grasslands which retain a significant element of unimproved grassland and presence of notable species, divided sedge.
Plot 6114 South of Knott's Marsh	1.8 km north	Designated for agriculturally unimproved grasslands which are not of recent origin
The Kench Beach East SINC	1.8 km southwest	Designated for sea radish, European marram grass <i>Ammophila arenaria</i> and golden samphire.
The Kench Scrubs SINC	1.8 km southwest	Designated for presence of purple glasswort <i>Salicornia ramosissima</i> , English scurvy grass <i>Cochlearia anglica</i> , beetle <i>Cercyon Cercyon depressus</i> , golden samphire, beetle <i>Cyclodinus salinus</i> and sea radish <i>Raphanus raphanistrum</i> subsp. <i>Maritimus</i> .



Designation	Approximate distance from the Site	Reason for designation
West Lane Field A	1.9 km north	Designated for semi-improved grasslands which retain a significant element of unimproved grassland.
Mill Rythe Holiday Village	1.9 km northeast	Designated for semi-natural coastal and estuarine habitats (including saltmarsh, intertidal mudflats, sand dunes, brackish ponds, saline lagoons, inundation grasslands of the coastal plain, maritime cliffs and maritime grasslands.
Fields & Saltmarsh South of Copse Lane	1.9 km northeast	Designated for semi-improved grasslands which retain a significant element of unimproved grassland. As well as coastal grazing marsh.
Hayling Island Beach	2.0 km southeast	Designated for semi-natural coastal and estuarine habitats including saltmarsh, intertidal mudflats, sand dunes, brackish ponds, saline lagoons, inundation grasslands of the coastal plain, maritime cliffs and maritime grasslands and the presence of a number of notable plant species.

- 4.5 The Hayling Island South Policies Map HBC Local Plan Allocations adopted July 2014 illustrates the Site as DM23 “Uncertain Sites Brent Geese and/or Waders”. This classification has subsequently been updated as part of the SWBGS (Whitfield, D. *et al*, 2024) and is now classified as a “Low Use Site”, illustrated by the yellow hatched lines on **Figure 1.2**.
- 4.6 Low Use Sites are those sites that have records of birds but in low numbers. They are considered to have the potential to be used by waders or brent geese. *“These sites have the potential to support the existing network and provide alternative options and resilience for the future network.”* SWBGS, 2018. As there is potential for these sites to be used by SPA species including qualifying features and assemblage species they are understood to support the functionality and integrity of the designated sites for these features.

Habitats and Flora

- 4.7 The habitats present within the Site, and where possible on adjacent land, are shown on Habitat Features Plan **13956/P23a** and are described below.
- 4.8 All habitats present are described below along with their UK Habitat (UKHab) Classification codes. Where these are of less than local ecological importance they are not considered as part of the impact assessment within **Section 5** of this report.

Non-cereal Crops C1e

- 4.9 The Site was dominated by two fields containing non-cereal crops habitat, known to be planted on a crop rotation, which we understand to alternate between winter wheat and legumes, see **Photograph 4.1** below.





Photograph 4.1: Cropland habitat within the Site.

- 4.10 Non-cereal crops are common and widespread in the surrounding area. Field margins comprised of modified grassland, so are not considered to represent habitat of principal importance. As a result, arable habitat on the Site is considered to be of **negligible ecological importance**.

Modified Grassland G4

- 4.11 Modified grassland was present around the Site making up field margins, see **Photograph 4.2** below. This habitat was subject to regular mowing, maintaining a short sward height of up to approximately 5-10 cm. Species present include Yorkshire fog *Holcus lanatus*, ribwort plantain *Plantago lanceolata*, broad-leaved dock *Rumex* sp., creeping buttercup *Ranunculus repens*, cock's foot *Dactylis glomerata*, dandelion *Taraxacum* sp. and common nettle *Urtica dioica*. Some areas of encroachment for scattered bramble scrub are also present.



Photograph 4.2: Modified grassland within the Site.



- 4.12 Grassland on-Site was species poor and limited in extent. Evidence of disturbance and enrichment of the soil from adjacent farming practices was evident due to the presence of bare ground and undesirable species including nettle and broad-leaved dock. As such these habitats are not considered to represent HoPI nor would they qualify under SINC criteria in Hampshire. As a result, they are considered to be of **negligible ecological importance**.




Hedgerows

- 4.13 Habitat descriptions for hedgerows on or adjacent to the Site boundaries are included in **Table 4.3**, below.

Table 4.3: Hedgerow descriptions and condition assessment

Hedgerow	Habitat type	Description	Photograph
H1 (Previously labelled as Hedgerow H2 in earlier version of this report)	Other native hedgerows H2a6	Species-rich hedgerow with scattered mature oak trees, up to approximately 13 m tall. Species present include English elm <i>Ulmus procera</i> , elder <i>Sambucus nigra</i> , rose <i>Rosa</i> sp., blackthorn, hawthorn <i>Crataegus monogyna</i> , dogwood <i>Cornus sanguinea</i> and bramble, with holly <i>Ilex aquifolium</i> present rarely. Ground flora dominated by species indicating nutrient enrichments such as nettle, broad-leaved dock. and ivy <i>Hedera helix</i> . The hedgerow species appear to be subject to management, although gaps are present, including one of approximately 2 m likely to be an old gateway.	 <p>Photograph 4.3 Hedge H1 along west Site boundary</p>
H2 (Previously labelled as Hedgerow H8 in earlier version of this report)	Other native hedgerows H2a6	Defunct section of species-poor hedgerow dominated by field maple. Appears to be regularly managed, cut to approximately 2m above the ground. Ground flora vegetation associated with ditch margins.	 <p>Photograph 4.4: Hedgerow H2 along the south Site boundary, adjacent to Ditch D3</p>



Hedgerow	Habitat type	Description	Photograph
H3 (Previously labelled as Hedgerow H7 in earlier version of this report)	Other native hedgerows H2a6	Defunct, species-rich hedgerow with trees. Tree species including hawthorn, oak and common ash <i>Fraxinus excelsior</i> , growing up to approximately 10 m tall. Hedgerow species present include bramble, field maple and blackthorn which appear to be subject to periodic management. Nettle and cleavers are dominant within ground flora with daffodil, butcher's brome <i>butcher's brome</i> , cow parsley <i>Anthriscus sylvestris</i> and lords and ladies <i>Arum maculatum</i> .	 <p>Photograph 4.5: Hedgerow H3 along the south Site boundary, adjacent to Ditch D3</p>

4.14 Previous survey work in 2021 identified several hedgerows which have since been removed or would no longer qualify as hedgerows in 2025 due to vegetation growth and when considering the latest UK Habitat Classification habitat descriptions (UKHab Ltd., 2023). The numbers above and on Habitat Features Plan **13956/P23a** have been adjusted to reflect the removal/reclassification of these hedgerows, details of which are included below;

- Previous hedgerow H1 – re classified as a line of trees outside of the Site boundary, south of ditch D1 as such has not been included in **Table 4.3** above;
- Previous hedgerow H3 – a length of ornamental shrub along the boundary which has since been removed;
- Previous hedgerow H4 – A length of Lawson cypress *Chamaecyparis lawsoniana* hedgerow adjacent to access driveway which has since been removed;
- Previous hedgerow H5 – An area of scrub now classified as mixed scrub, detailed overleaf; and
- Previous hedgerow H6 – A length of hedgerow dominated by bramble and hawthorn now classified as mixed scrub, detailed overleaf.

4.15 All hedgerows on-Site composed of at least one woody UK native species, as such, hedgerow H1 would comprise 'Habitats of Principal Importance' (HoPI) (JNCC, 2008). Trees presents are mature or early mature, so not replaceable in the short term. Hedgerows on-Site are considered to contribute to connectivity beyond the Site boundary, for which conservation objectives are established by national and local planning policy see **Appendix 1**. As a result, they are considered to be of **local ecological importance**.

Scattered Trees

4.16 Scattered trees, not associated with hedgerows are present on and immediately adjacent to the Site, shown indicatively on the Habitat Features Plan **13956/P23a**, and described in detail in the



Preliminary Arboricultural Impact Assessment report submitted with the planning application Tyler Grange report reference **13956/R01**. These include English oak, silver birch *Betula pendula* and beech *Fagus sylvatica* trees, see **Photograph 4.6** below.



Photograph 4.6: Scattered trees in the centre of the Site adjacent to ditch D1.

- 4.17 Scattered trees include a number of mature or early mature specimens which are not replaceable in the short to medium term. As a result, these are considered to be of **local ecological importance**.

Bramble Scrub H3d

- 4.18 Scattered bramble scrub is present along the eastern Site boundary, at garden boundaries where this vegetation has not been managed/cleared expected by residents, see **Photograph 4.7** below.



Photograph 4.7: Length of bramble scrub along the east Site boundary.

- 4.19 Scattered scrub on the Site is species poor, limited in extent and lacking diverse age structure. As a result, this habitat is considered to be of **negligible ecological importance**.

Mixed Scrub H5h

- 4.20 Mixed scrub was present along the western Site boundary see **Photograph 4.8** below. Species included blackthorn, hawthorn, dogwood, honeysuckle *Lonicera periclymenum* and bramble.





Photograph 4.8: Length of mixed scrub along the east Site boundary.

- 4.21 Mixed the mixed scrub on-Site, limited in extent and lacking diverse age structure. As a result, this habitat is considered to be of **negligible ecological importance**.

Wet Ditches

- 4.22 A series of drainage ditches are present along the southern margins of the Site and between the two arable fields, running north to south. At the time of the UKHabs survey all ditches were wet with approximately 5 cm of water, but also contained areas of inundated terrestrial vegetation indicating the ditches are not regularly wet.
- 4.23 Ditch D1, shown in **Photograph 4.9** below, is a drainage ditch running along the south Site boundary connected to Ditch D3. The ditch is steep sided approximately 2-3 m deep and 2 m wide. Species present on the steep banks and bank top include Yorkshire fog, ribwort plantain *Plantago lanceolata*, dock *Rumex sp.*, cock's foot *Dactylis glomerata*, dandelion *Taraxacum sp.*, common nettle *Urtica dioica*, cow parsley, white dead nettle and stitchwort *Stellaria sp.* Algae dried at the bottom of the ditch indicates it must hold water at times of heavy rainfall.
- 4.24 Ditch D2, shown in **Photograph 4.10** below, is similar to D1 and runs through the entre of the Site Ditch D2 flows north from a piped culvert beneath the farm access track to a brick culvert at the boundary with residential gardens. The banks are very steep and over deepened, as for D1, with dense bankside vegetation although an absence of submerged or emergent vegetation within the channel, with the exception of algal growth. The ditch is approximately 2-3 m deep and 2 m wide.
- 4.25 Ditch D3, shown in **Photograph 4.11** below, is similar to D1 and D2, and connects to ditch D2 to the north and D1 of the east. The ditch is steep sides 2-3 m deep and 2 m wide, with vegetated banks and absence of submerged or emergent vegetation within the channel. The ditch is approximately 2 – 3 m deep and 2 m wide.





Photograph 4.9: Ditch D1 along the south Site boundary.



Photograph 4.10: Ditch D2 running through the centre of the Site.





Photograph 4.11: Ditch D3 along the south Site boundary.

- 4.26 Owing to their drainage function, the ditches on-Site have varying levels of water with some being present during the UKHab survey. However, bankside vegetation is well established, so they are considered to contribute connectivity beyond the Site boundary, for which national and local planning policy consideration is required, see **Appendix 1**. As a result, they are considered to be of **local ecological importance**.

Ponds

- 4.1 Two off-Site ponds are present beyond the south-east of the Site. Pond P1 (as shown in **Photograph 4.12** below) comprised a pooled area of water at the eastern end of drainage ditch D1, which is culverted beneath the field access way, from Signal Way. Some bulrush and flag iris *Iris pseudacorus* are present within the pond. The water was found to have a 'very turbid' turbidity score of four (ARG UK, 2010) at the time of the survey.
- 4.2 Pond P2 (as shown in **Photograph 4.13** below) comprised a large balancing pond within a fenced area surrounded by modified grassland. New tree planting is also present within this fencing. Bulrush *Typha latifolia* is present around the pond margins.
- 4.3 A further small woodland pond (Pond P3, **Photograph 4.14** below)) was identified to the north-west of the Site during the 2021 surveys. However, this pond was largely inaccessible due to dense vegetation and steep banks.





Photograph 4.12: Balancing Pond P1 connected to Ditch D1 via a culvert, east of the Site boundary

4.4



Photograph 4.13: Balancing Pond P2, south of the Site within 250 m



Photograph 4.14: Woodland Pond P3, north-west of the Site within 250 m



Fauna

- 4.27 Details of protected and priority species confirmed or with potential to utilise the Site, including a summary of the results of surveys, are described below and should be read in conjunction with the Fauna Survey Results Plan **13956/P25a**.

Badger

- 4.28 No badger *Meles meles* records were returned by the data search. A number of mammal holes were recorded on the Site illustrated by TN1-TN3 on Habitat Features Plan **13956/P23a**. The entrance at TN1 was D-shaped, located on the off-Site ditch bank. The entrance was not blocked, so potentially partially used, although no evidence of use was present at the time of the survey. TN2 represents a rabbit burrow, characterised by a small, rounded entrance hole and TN3 is considered likely to be a fox den, as the entrance hole was taller than wide, although additional holes in this location appear to have been created by rabbits. An additional mammal hole was identified at the base of T22 see Fauna Survey Results Plan **13956/P25a** during the PBRA survey. This hole was considered old and disused.
- 4.29 No other field signs or evidence of badger such as latrines, hairs or footprints were recorded on the Site. Habitats present on the Site could provide opportunities for setts and/or foraging and commuting opportunities for badgers. Although, owing to the lack of evidence, it is considered unlikely they are using the Site regularly, either occupying setts or foraging.
- 4.30 The updated survey work in 2025 found no additional signs of badger on-Site or within 30 m, as such badger are still considered likely absent from the Site.
- 4.31 Badger is protected for welfare rather than conservation reasons, principally to protect them from persecution. They are a common and widespread species, as such a population, if present, would be of **negligible ecological importance**.

Bats

- 4.32 The data search returned records of brown long-eared bat *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, Leisler's bat *Nyctalus leisleri*, Nathusius's pipistrelle *Pipistrellus nathusii*, Natterer's bat *Myotis nattereri*, noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, and soprano pipistrelle *Pipistrellus pygmaeus*.
- 4.33 According to MAGIC website (MAGIC, 2025), the closest European Protected Species licence return was c. 0.6 km north-east of the Site, and allowed damage of a resting place for brown long-eared, common pipistrelle and soprano pipistrelle.



PBRA and GLTA

- 4.34 Two trees were identified within or immediately adjacent to the Site boundary that possessed suitable Potential Roosts Features (PRF's) in 2021.
- T22, a common oak located in the centre of the Site, adjacent to ditch D2 was found to have two broken limbs; one 6 m up south facing the other 5 m up north-east facing which could support roosting bats. As a result, this tree was confirmed to have **moderate suitability**; and
 - T26, a common oak located along the southern Site boundary, was found to have several areas of cracked bark with potential to support single to low numbers for crevice dwelling species. As a result, this tree was confirmed to have **low suitability** to support roosting bats.
- 4.35 Other trees surveyed were confirmed to have **negligible suitability** to support roosting bats.
- 4.36 The update GLTA in 2025 confirmed the above findings of the PBRA for tree 22, which was classified as 'Further Assessment Required' in accordance with updated best practice guidance (Collins, 2023).
- 4.37 Tree T26 was determined to not have any PRF's that could support roosting bats during the GLTA in 2025 and is therefore considered to be of **negligible suitability** for roosting bats.

Dusk emergence survey

- 4.38 In line with best practice at the time of survey (Collins, 2016), no further surveys were required of T26, with low suitability.
- 4.39 Two emergence surveys were completed of T22 in 2021. No bats were recorded to emerge from T22 on either of the emergence survey visits. Incidental bat activity was recorded during the emergence surveys, comprising common and soprano pipistrelle foraging and commuting along ditch D2 and around T22, during the survey, as well as noctule flying over the Site.

Aerial tree climbing inspection

- 4.40 In line with best practice guidance (Collins, 2023), an aerial tree climbing inspection was undertaken on Tree T22 in 2025 to determine if the PRF's designated as FAR had any potential to support roosting bats. Upon inspection the PRFs identified from the ground could not support roosting bats due to their small size, exposure and limited access for bats to roost. As such, tree T22 was deemed of negligible suitability to support roosting bats and **roosting bats are considered likely absent from the Site.**

Bat Activity – Walked Transects

- 4.41 Bat activity recorded on the transect surveys completed in 2021 was dominated by soprano and common pipistrelle, with *Myotis* bat species and noctule also recorded occasionally. Owing to the similarly and overlapping parameters of *Myotis* bat species, echolocation calls recorded have not been identified to species level. Bat activity observed was concentrated along the southern boundary of the Site, with the highest activity levels recorded in the south-west and south-east corners, and at the southern end of D2 between H7 and H8. Detailed results are provided in **Tables A2.2, A2.3 and A2.4**, within **Appendix 2**.



Bat Activity - Static Monitoring

- 4.42 Bat activity recorded by static monitoring on the Site in 2021 was dominated by common and soprano pipistrelle species, with noctule, *Myotis* species and brown long-eared also recorded. The results for each of the three static locations shown on the Fauna Survey Results **Plan 13956/P25a** and are provided in **Tables A2.5 – A2.13** within **Appendix 2**.
- 4.43 Recorded bat activity was highest at location 3 on visits one and two, comprising predominantly pipistrelle species activity and occasional noctule passes. This corresponds with the areas of higher activity recorded on the walked transect surveys. Given this, and observations from the dusk emergence survey in 2021, it is likely this is due to bats foraging up and down the central ditch D2. It is not possible to infer numbers of bats from these results, as activity recorded could represent individual bats recorded repeatedly. Activity levels recorded at locations 1 and 2 are broadly similar to each other on visits one and two, although on visit three, bat activity was highest at this location. This corresponds with activity recorded on the transect survey. *Myotis* species passes were also recorded at location 1 on 2nd July and all three locations on 6th September.
- 4.44 Soprano pipistrelle and noctule are both species of principal importance in England. One *Myotis* species, Bechstein's bat, is also a Species of Principal Importance (SoPI) as well as an Annex II species of the Conservation of Species and Habitats Regulations 2017 (as amended).
- 4.45 Based on the 'Bat Mitigation Guidelines' (CIEEM, 2023) common and soprano pipistrelle are both considered abundant and widespread within southern England, with noctule, brown long-eared and the majority of myotis bat species with the exceptions of Alcahloe and Bechstein's recorded as less abundant. Based on this guidance, each species/group population is considered to be of **local ecological importance**. The assemblage of foraging and commuting bats utilising the Site is considered to be of less than county ecological importance, which given the valuation for each species present, is considered to be of **local ecological importance**.
- 4.46 Updated survey work in 2025 confirmed the habitats on-Site had not significantly changed since the previous survey work in 2021 and the Site is managed in the same way since 2021. As such, the above bat activity survey work is still considered valid for the purpose of this impact assessment.

Birds

- 4.47 Records were returned of dark-bellied brent geese from HBIC, a species for which the Solent SPAs are designated, with the closest being c. 0.1 km west of the Site. One historic record of a maximum count of seven lapwing was also returned from January 2009. No records of brent geese from the Site itself were returned from the data search.
- 4.48 HBIC also returned records of red listed Birds of Conservation Concern (BoCC) (Stanbury *et al.*, 2021), defined in **Appendix 4**, within the study area including the following species with potential to be present on the Site:
- Breeding birds: yellowhammer *Emberiza citronella*, linnet *Linaria cannabina*, grey wagtail *Motacilla cinerea*, western yellow wagtail *Motacilla flava*, spotted flycatcher *Muscicapa striata*, house sparrow *Passer domesticus*, marsh tit *Poecile palustris*, turtle dove



Streptopelia turtur, starling *Sturnus vulgaris*, song thrush *Turdus philomelos* and mistle thrush *Turdus viscivorus*.

- Waders and wintering bird species with potential to forage on inland arable and grassland habitats: common ringed plover *Charadrius hiaticula*, European herring gull *Larus argentatus*, black-tailed godwit *Limosa limosa*, curlew *Numenius arquata*, lapwing, lesser redpoll *Acanthis cabaret*, white-fronted goose *Anser albifrons*, redwing *Turdus iliacus* and fieldfare *Turdus pilaris*.

- 4.49 No birds of conservation concern were recorded on-Site during the habitat surveys and no evidence of nesting birds was recorded.
- 4.50 Updated survey work in 2025 confirmed the habitats on-Site had not significantly changed since the previous survey work in 2021 and the Site is managed in the same way since 2021.
- 4.51 Although there are opportunities for breeding birds on the Site within boundary hedgerows, scattered trees and scrub vegetation, large numbers would not be expected, and given the availability of these habitats in the wider area populations would not be expected to be dependent on the Site. Any assemblage of breeding birds would therefore be considered to be of **negligible ecological importance**.
- 4.52 Results of wintering bird surveys undertaken by Tyler Grange Group Ltd, which included the Site itself, are included in **Appendix 4**. During all survey seasons, no brent geese or other qualifying species of the Solent NSNs were recorded within the Site. Ten lapwing were recorded in the field to the north H34D in February 2012. Lapwing are not a qualifying feature of the NSNs identified in the data search although are a wading bird listed within the SWBGS (Whitfield, D. *et al*, 2024).
- 4.53 Although no brent geese or other qualifying species have been identified at the Site during numerous years' of wintering bird surveys (see **Appendix 4**), given the Site's classification as a 'secondary support area' for waders and dark-bellied brent goose, it is considered to be part of a network of sites and is therefore assumed to be up to **county to regional ecological importance** for wintering birds on a precautionary basis.

Great Crested Newt

- 4.54 No records of GCN have been returned from HIBC in the last 10 years. The most recent and closest record was 1.75 km east of the Site from 2014. Although the grid reference provided SU73010020 differs from the site name/location PO9 6DG, which is over 10 km north of the Site, on the mainland.

Habitat Suitability Index assessment survey

- 4.55 HSI calculations for onSite ditches D1 – D3 and off-Site ponds P2 and P3 are provided in **Tables A2.14 – A2.19** in **Appendix 2**.
- 4.56 OnSite ditch, D1 was scoped out of further assessment by the Phase 1 habitat survey in 2021, as it was considered to be unsuitable for GCN, due to being dry. Ditches D2 and D3 were scoped out due to the presence of flowing water and given a lack of suitable submerged or emergent vegetation for egg-laying/shelter.



- 4.57 Based on their HSI scores, overall, off-Site pond P2 was recorded to have **below average** suitability to be used by GCN and P3 was considered to have **good suitability**.

eDNA survey

- 4.58 eDNA survey results were negative for Ponds P1 and P2, confirming the likely absence of GCN from these waterbodies. It was not possible to access pond P3 to undertake an eDNA survey, described within the Limitations and Assumptions section, above.
- 4.59 Based on this result, the absence of further suitable waterbodies within 250 m of the Site and consultation with Tristan Norton, Senior Ecologist, Hampshire Country Council (now HBC), who confirmed that GCN are not known/expected to be present on Hayling Island, despite the presence of potentially suitable terrestrial habitats around the boundaries of the Site, GCN are not expected to be present and are therefore not considered further in this assessment.
- 4.60 Given the above, and the eDNA survey results, GCN are considered likely absent from the Site and the HSI and eDNA were not updated as part of the update work in 2025.

Reptiles

- 4.61 The data search returned three records for adder *Vipera berus*, one record for slow-worm *Anguis fragilis* and one record of grass snake *Natrix helvetica* within 2 km of the Site in the last 10 years. The nearest of these was a record of adder⁶ in 2021 which was c.1.3 km south west of the Site.
- 4.62 Surveys confirmed the presence of a high population of slow worm, based on a peak count of 53 adults recorded within approximately 0.26 ha of suitable habitat within the Site margins (HGBI, 1998)). Detailed results are provided in **Table A2.20** in **Appendix 2**. Given the availability of connected, suitable habitats beyond the Site boundary, including in adjacent residential gardens to the north and east, reptiles present on the Site would be expected to be part of a wider population, present locally.
- 4.63 The Site could be considered as a 'key reptile site' (Froglife, 1999)) as the slow worm population itself could be considered 'exceptional', given the peak count of over 20 adults. Slow worm is a SoPI. Given the presence of 'one or more notable species' could be used as criteria for allocating a SINC, in Hampshire (HBC, 2019), the population of slow worm utilising the Site is considered to be of **local ecological importance**.
- 4.64 Updated survey work in 2025 confirmed the habitats on-Site had not significantly changed since the previous survey work in 2021 and the Site is managed in the same way since 2021. Therefore, it is considered unlikely that the distribution or number of reptiles recorded would be significantly different from the 2021 results if surveys were to be repeated. As such, the above reptile survey work is still considered valid for the purpose of this impact assessment.

⁶ Note – A 1 km² grid square record was returned for adder in 2017 which encompassed the Site. Given the lack of precision for this record, it has been discounted for the next nearest record.



Water Vole

- 4.65 No records of water vole *Arvicola amphibius* were returned by the data search. Initially, as it was not possible to discuss survey scoping with the LPA, a habitat suitability assessment was undertaken of the ditches present on the Site.
- 4.66 Descriptions of the waterbodies are included in the Habitats and Flora section of this report. Habitats within the ditches could provide opportunities for water vole burrowing, foraging and commuting, if present.
- 4.5 No evidence of water vole was recorded during the survey. A series of mammal runs were recorded along the banks of ditch D2, considered likely to be caused by rats, although no other field signs were recorded. Consultation with Tristan Norton, Senior Ecologist, Hampshire Country Council (now Principal Ecologist at HBC), confirmed that water vole is not known or expected to be present on Hayling Island. Therefore, despite the presence of potentially suitable habitats on the Site, water vole are considered likely absent from the Site and it was not considered necessary to update the water vole survey in 2025.

Other Species

- 4.67 Two records for common toad *Bufo bufo* have been returned by HBIC with the closest being approximately 0.07 km east of the Site from 2014. There is potential for toads to be present within areas of suitable terrestrial habitat on the Site, including the base of hedgerows, trees and scrub vegetation, in areas of species-poor semi-improved grassland around the field margins and within the network of ditches. Toads generally breed in large deep ponds. As a result, the ditches on-Site are unlikely to provide suitable conditions given their low and fluctuating water levels, although there is potential, they could breed in off-Site pond P2 and P3. If present on the Site, their population would be considered to be of **negligible ecological importance**. Although, as common toad is a species of principal importance, consideration of this species to ensure avoidance of harm, will be combined within the reptile mitigation strategy see **Section 5**.
- 4.68 Eighteen records of European hedgehog *Erinaceus europaeus* have been returned from HBIC with the closest being approximately 0.46 km south of the Site from 2020. Hedgehogs are known to travel on average 1.6 km a day (HBC, 2019), based on this, available records and presence of potentially suitable habitat on-Site, there is potential for hedgehog to be present, seeking shelter at the base of hedgerows, trees and scrub vegetation or foraging within grassland habitat. Hedgehog is a species of principal importance with a declining population. It is estimated that 30% of the British hedgehog population has been lost between 2002 and 2013 (HBC, 2019). As a result, if present, a population of hedgehog utilising the Site would be considered of **local ecological importance**.
- 4.69 Ninety-five records of stag beetle *Lucanus cervus* have been returned from HBIC with the closest being approximately 0.04 km south from 2020. There is potential for stag beetle to be present within hedgerows on the Site, although a lack of deadwood reduces the likelihood of them being present. Stag beetle is a relatively widespread species in southern England PTES, 2021. As a result, if present a population on the Site would be considered to be of **negligible ecological importance**. Although, as stag beetle is a SoPI, there is potential to provide ecological enhancements of benefit to this species, discussed within **Section 5**, of this report.



Summary

- 4.70 A summary of ecological features present on the Site or within the Zol of the proposed development is provided in **Table 4.4** below. This includes those features considered to be important ecological features, or those where further consideration is required to ensure legal or planning policy compliance, which are taken forward as part of the impact assessment.

Table 4.4: Summary of important ecological features considered within the impact assessment

Ecological Feature	Ecological Importance	Relevant Legislation and Planning Policy
Designated Sites		
Solent NSNs - Chichester and Langstone Harbours Ramsar Site and SPA and Portsmouth Harbour SPA	International	Conservation of Habitats and Species Regulations 2017 (as amended) (CHSR) , National Planning Policy Framework (NPPF) 2024, HBC Core Strategy (HBCS) 2011: Policy CS11, Havant Borough Allocations Plan 2014 Policy DM24
Component designated sites to the above - Langstone Harbour SSSI and Chichester Harbour SSSI	National	WCA 1981 (as amended), NPPF, HBCS Policy CS11
Solent Maritime and Solent and Isle of Wight Lagoons SAC	International	CHSR, NPPF, HBCS Policy CS11
Sinah Common SSSI	National	WCA, NPPF, HBCS Policy CS11
Hayling Billy and The Kench, Hayling Island LNR	Local	National Parks and Access to the Countryside Act 1949, NPPF, HBCS Policy CS11
13 SINCS	County	NPPF, HBCS Policy CS11
Low Use Site on-Site, H34D	County to Regional	NPPF, HBCS Policy CS11, HBAP DM23
Habitats and Flora		
Cropland (arable) habitat, hardstanding, modified grassland and scattered scrub.	Negligible	NPPF
Hedgerows, scattered trees, and ditches	Local	NPPF, HBCS Policy CS11, Policy CS13, Policy DM8
Fauna		
Badger and other mammals, if present	Negligible	Protection of Badgers Act 1992 and Wild Mammals Protection Act 1996
Common and soprano pipistrelle, noctule, myotis bats and brown long-eared foraging and commuting	Local	CHSR, WCA, NPPF
Breeding birds	Negligible	WCA, Countryside and Rights of Way CROW Act 2000
Slow worm	Local	WCA, CROW, NPPF
Hedgehog, if present	Local	The NERC Act 2006, NPPF



Ecological Feature	Ecological Importance	Relevant Legislation and Planning Policy
Common toad and stag beetle, if present	Negligible	NERC, NPPF



Section 5: Potential Impacts, Mitigation and Enhancement

Proposals

- 5.1 The outline planning application (planning reference: APP/21/01351) is for residential development of up to 60 homes including affordable housing, green infrastructure landscape boundaries and Sustainable urban Drainage System (SuDS). The proposals are shown on the Illustrative Masterplan (Mosaic 2021) and the Landscape Strategy Plan (reference: **13956_P18a**) submitted with the application, although all matters are reserved except for access which will be from Saltmarsh Lane.
- 5.2 It is likely that boundary hedgerows and scattered trees will be retained and protected as well as the drainage ditches and adjacent grassland habitat. These habitats will be protected within root protection areas or exclusion zones to protect the ditches which will retain opportunities for bats and reptiles, as well as badger, nesting birds, common toad, hedgehog and stag beetles, if present. Arable habitat, amenity grassland and tall ruderal vegetation, of negligible ecological importance will be lost to facilitate the development.

Potential Impacts, Mitigation and Enhancement

Site-wide Mitigation

- 5.3 Central to the mitigation and enhancement strategy for the proposed development is:
- Production and implementation of a Construction Environmental Management Plan (CEMP) in order to ensure the protection of retained habitat features including boundary hedgerows, trees and ditches, including avoidance of lighting during construction to ensure continued opportunities for bats and an appropriate mitigation strategy to ensure the protection of badgers if present, avoidance of disturbance to over-wintering birds and protection of reptiles on-Site during construction;
 - Installation and maintenance of tree protection fencing prior to construction works commencing in order to protect retained trees and hedgerows on and immediately adjacent to the Site in accordance with BS5837:2012 Tyler Grange report reference **13956/R01**; and
 - Production and implementation of a Landscape and Ecological Management Plan (LEMP) in order to ensure appropriate management of habitats on-Site to allow successful establishment and ongoing management to maximise their biodiversity value and deliver expectations, as set out in the BNG assessment provided in **Appendix 3** as well as to continue to provide opportunities for important fauna, including foraging and commuting bats, nesting birds and slow worm.



Designated Sites

NSNSs - Functionally Linked Land

- 5.4 SPA and Ramsar sites within the Solent (hereafter referred to as 'the Solent NSNSs'), and their respective overlapping SSSIs, support internationally important wintering birds, including dark-bellied brent goose and wading bird populations, as identified in the SWBGS (Whitfield, D. *et al*, 2024).
- 5.5 In the winter period October to March, especially at high tide, brent geese and other waders utilise arable and grassland habitat beyond the boundaries of the Solent NSNSs for foraging and resting. This land is termed 'Functionally Linked Land' (FLL), which is considered important to maintain species' populations at a favourable conservation status. FLL for brent geese and waders has largely been identified and mapped as part of the SWBGS (Whitfield, D. *et al*, 2024).
- 5.6 Despite the lack of records of brent geese using the Site during wintering bird surveys, the Site is considered to have potential to be used by waders and brent geese resulting in its classification as Low Use Site, part of the network of sites of importance to over-wintering wading birds and brent geese that functionally support the Solent NSNSs. Therefore, the Site is considered to form FLL on a precautionary basis. Historic records of low numbers of lapwing were returned at the Site from 2009, although lapwing is not an Annex 17 species under the Directive on the Conservation of Wild Birds 79/409/EEC Birds Directive, meaning it is not a reason for designation of the Solent NSNSs although is a wading bird referred to within the SWBGS (Whitfield, D. *et al*, 2024).
- 5.7 Loss of the extent of arable habitat from the Site has the potential to reduce the available resource of potentially suitable habitat for foraging and resting brent geese and waders and therefore reduce the resilience of the network of FLL. However, given the number of years of wintering bird survey data gathered within the Site where brent geese have not been recorded, potential significant impacts on the conservation status of the bird populations for which the Solent SPAs are designated would not be expected at the International scale. On-Site measures for waders and brent geese would not be appropriate within the proposed residential development. Given the loss of habitats on-Site which have previously formed FLL to the Solent NSNSs, a **significant impact up to a regional scale** is assumed on a precautionary basis. The potential for a significant impact means the proposed development has potential to trigger the Habitats Regulations and a shadow Habitats Regulations Assessment (sHRA) report (reference: **13956/R08**) has been prepared which should be read alongside this report.
- 5.8 In order to offset the significant residual impact, a detailed off-Site compensation strategy has been prepared in line with the 'SWBGS Guidance on Mitigation and off-setting requirements' (SWBGS Steering Group, 2018), emerging planning policy 25 of the Building a Better Future Plan (HBC, 2025) 'Solent Wader and Brent Goose Strategy Sites' and agreed with Tristan Norton of HBC. The mitigation strategy involves the enhancement of an area which is currently subject to high levels of disturbance and not functioning as an appropriate resource for brent geese or waders. Full details of the mitigation are provided within the Brent Goose and Wader Mitigation Strategy (reference: **13956/R07i**) and the sHRA report (reference: **13956/R08**). It is expected

⁷ Annex 1 species of the Birds Directive are in danger of extinction, vulnerable to specific changes in their habitat, considered rare because of small populations or restricted local distribution and/or requiring particular attention for reasons of the specific nature of the habitat. Member States must conserve their most suitable territories in number and size as Special Protection Areas SPAs.

