Ecological Impact Assessment

North of Oysters, Hayling Island

16th July 2025

Tyler Grange

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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 (EcIA) of a parcel of land known as 'Land North of Oysters', Ordnance Survey Grid Reference SZ711998, hereinafter referred to as the 'Site', to inform an outline planning application for residential development (planning reference: APP/21/01350). 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 a single arable field, a habitat of negligible ecological importance. The arable field is bound by a hedgerow on the southern boundary of local ecological importance and a series of ditches of local ecological importance on all boundaries. The Hayling Billy Trail Local Nature Reserve (LNR) is adjacent to the Site, to the west, residential development is located to the south and east and further arable land is located to the north.

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 west 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 as a 'Secondary Support Area' within the SWBGS. Secondary support areas "*offer a supporting function to the Core and Primary Support ecological network*" (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 the hedgerow 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), subject to planning control. Habitat creation and enhancement of retained habitats will include Sustainable 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 would achieve +2.22 % in Habitat Units and a gain of +7.95 % in River Units.

S.6. In terms of fauna, retention and enhancement of the boundary habitats such as the hedgerow, 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

Introduction

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 (EcIA) of a parcel of land known as 'Land North of Oysters', West Town, Hayling Island, centred on Ordnance Survey (OS) Grid Reference SZ711998, to inform an outline planning application for residential development of up to 29 homes (planning reference: APP/21/01350). This land, defined by the Site boundary, illustrated on the Habitat Features Plan **13956/P22a** 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 part of H34E within the SWBGS, 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 immediately to the south of the Site. 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 adjacent to the north of field H34E but not adjacent to the proposed Site boundary, 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 WYG 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 EcIA 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 HBC, to describe and evaluate the ecological features present within the likely Zone of Influence (ZoI)[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, namely:
    - 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; and
- 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 **13956/P22a**.

3.2 The scope of the EcIA was determined by undertaking a data search and initial Site visit to undertake habitat surveys.

3.3 Consideration of the potential ZoI for different ecological features as a result of the proposed development informed the search areas for the data search, described below. Subsequently the ZoI 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 ZoI 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 completed 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

Activity Surveys

3.20 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).

3.21 Following assessment, the Site was considered to have low suitability to be used by foraging and commuting bats given its relatively isolated nature and the arable habitat present, surrounded by existing residential and light industrial development to the south and east, and further arable habitat to the north Given the proposed retention of the western boundary tree line, therefore avoiding potential impacts to this feature providing potential connectivity beyond the Site, along the Hayling Billy Trail, and the small size of the Site it was considered static detector surveys would provide more useful data than walked transects.

3.22 Seasonal static detector 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**.

3.23 Static Anabat Express and Anabat Swift detectors were placed in two locations, as illustrated on Fauna Results Plan **13956/P24a** for a minimum of five consecutive nights on each survey visit. The number of detectors deployed on-Site was increased from best practice, in line with habitats of moderate suitability, in the absence of walked transects.

Wintering Bird Surveys

3.24 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 H34E 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

3.25 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 north.

3.26 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/P24a**.

3.27 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.

3.28 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

3.29 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.

3.30 Twenty water samples were taken from on-Site ditch D3 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

3.31 A reptile survey was undertaken within areas of the Site with potential to support reptile species, which included grassland habitat around the northern and eastern field margins.

3.32 The surveys were conducted in line with Froglife's Advice Sheet 10 (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 18 artificial refugia were set out on 5th July 2021 at a density of 14.5 refuges per hectare based on the total Site area 1.24 ha.

3.33 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 A2.14**. and results are shown in **Table A2.15** 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

3.34 A water vole *Arvicola amphibius* survey was undertaken of on-Site ditches D1, D2, D3 and D4 on 28th June 2021 by Christian Cairns and Oliver Kippax-Chui.

3.35 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.

3.36 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

3.37 **Table 3.2** below summarises the ecology surveys undertaken at the Site, together with dates. **Appendices 2** and **5** should be referred to for further details concerning protected species 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 Activity survey	28.06.2021	2	Ground level preliminary bat roost assessment of trees within or adjacent to Site boundary.
	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 two 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	HSI assessment survey of on-Site watercourses D1-D4 and off-Site ponds P1 and P2.
	28.06.2021		eDNA survey of D3 and off-Site waterbodies P1 and P2 considered to have potential for GCN.
Reptile survey	26.07.2021 – 28.08.2021	2	Reptile survey within suitable grassland habitat within the northern and eastern field margins.
Water vole survey	28.06.2021	2	Habitat suitability and presence likely absence survey of on-Site watercourses D1 – D4.

Evaluation

3.38 The evaluation of habitats and species is defined in accordance with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018).

3.39 The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county and local[2].

3.40 Consideration was 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.

Impact Assessment

3.41 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.

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

3.42 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.

3.43 Assessment of the significance[3] 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_P21a**) or can be guaranteed with the use of available planning controls.

3.44 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.

3.45 The assessment then identifies appropriate compensation measures to offset significant residual impacts[4]. Finally, opportunities for ecological enhancement are identified.

Application of Mitigation Hierarchy

3.46 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 impacts[5], 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.

Limitations and Assumptions

3.47 The species data collated during the data search are only those records submitted to HBIC 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] For the purpose of EcIA, a 'significant impact' is an impact 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. Impacts 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 impacts on ecological features.

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

3.48 On visit one of the bat activity surveys, the static detectors did not record for the full five nights. This is thought to be caused by faulty memory cards in the devices not allowing sound files to be recorded, although they did both record for two nights. On visit three the detector in location two, in the east of the Site, didn't record for five nights. Despite this the number of species recorded was consistent with the second visit. 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 South of Saltmarsh Lane, Hayling Island Site Tyler Grange report reference **13956/R06a**.

3.49 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 one was undertaken when the air temperature was 20°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.

3.50 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.

3.51 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 voles and great crested newts are likely absent from Hayling Island and therefore repeat water vole survey, 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.

3.52 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

3.53 This report has been through a technical review process, with the final review 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.

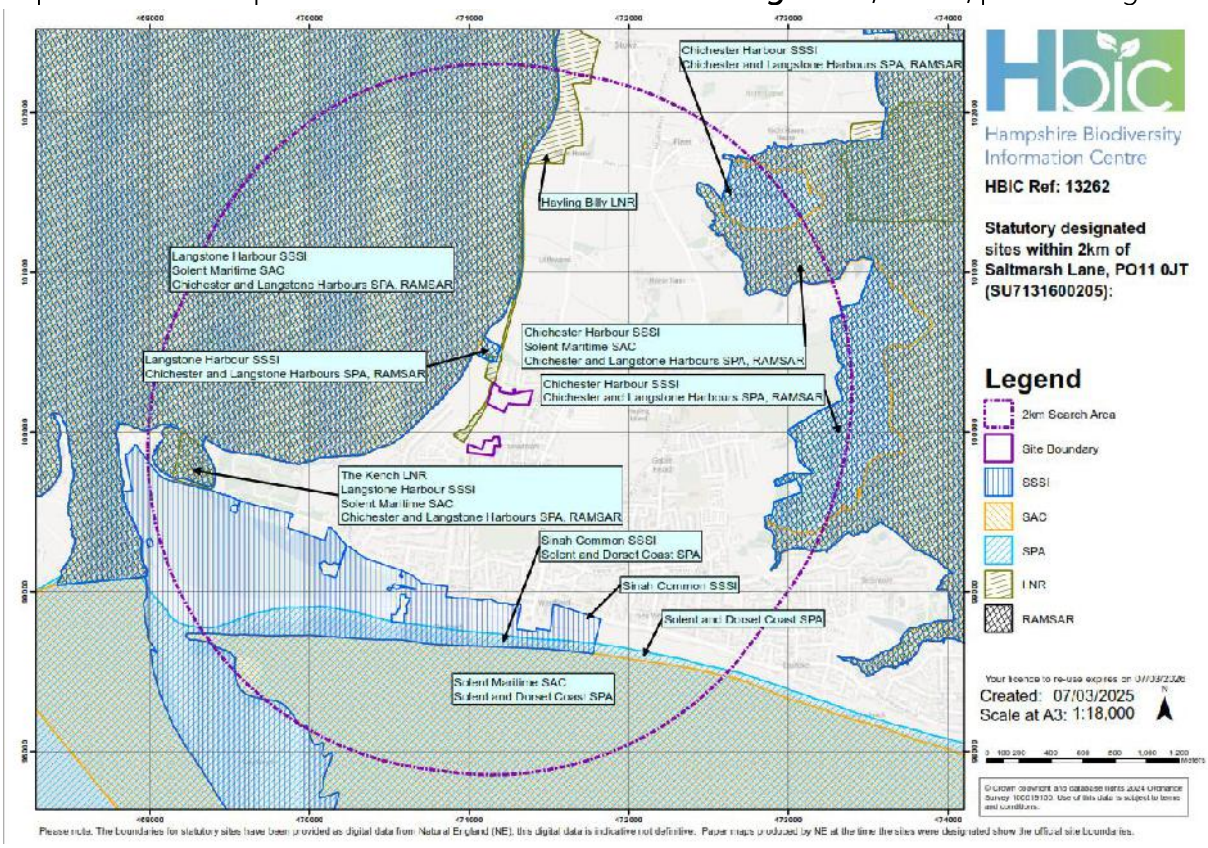

Figure 4.1: Statutory designated sites within 2 km of the Site. NB: Site boundary shown includes the Land South of Saltmarsh Lane Site (see report **13956/R06a** for the EcIA for this application)

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	Approximate distance from the Site	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	Approximate distance from the Site	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 *Sternula albifrons* and sandwich tern *Sterna sandvicensis*; on passage and over-wintering little egret *Egretta garzetta* and overwintering bar-tailed godwit *Limosa lapponica*. The site also supports migratory ringed plover *Charadrius hiaticula*, black-tailed godwit *Limosa limosa islandica*, dark-bellied brent goose *Branta bernicla bernicla*, dunlin *Calidris alpina*, grey plover *Pluvialis squatarola*, redshank *Tringa totanus* and ringed plover *Charadrius hiaticula*. 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 *Zostera* spp. and *Enteromorpha* species.	International
Solent Maritime Special Area of Conservation (SAC)	c. 0.32 km west	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 *Zostera* 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 *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour. The site is also designated as it is the only site for smooth cord-grass *Spartina alterniflora* in the UK and is one of only two sites where significant amounts of small cord-grass *S. maritima* are found. It is also one of the few remaining sites for Townsend's cord-grass *S. x townsendii* and holds extensive areas of common cord-grass *Spartina anglica*, all four taxa thus occurring here in close proximity. It has additional historical and scientific interest as the site where *S. alterniflora* was first recorded in the UK and where *S. x townsendii* and, later, *S. anglica* first occurred. 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	International

Site name and Designation	Approximate distance from the Site	Description and reason for designation	Ecological Importance
		saltmarsh and support a different range of communities dominated by sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and thrift *Armeria maritima*. 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. 1.1 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 *Sterna sandvicensi;* common tern *Sterna Hirundo* and little tern *Sternula albifrons*.	International
Solent & Isle of Wight Lagoons SAC	c. 4.9 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 *Lamprothamnium papulosum*, the nationally scarce lagoon sand shrimp *Gammarus insensibilis*, and the nationally scarce starlet sea anemone *Nematostella vectensis*.	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 *Mergus serrator*.	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. 0.3 km west.	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 *Zostera* 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	National

Site name and Designation	Approximate distance from the Site	Description and reason for designation	Ecological Importance
		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 supported in excess of 5,000 wintering dark-bellied geese, or 5-10% of the world population.	
Sinah Common SSSI	c. 0.9 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 *Petrorhagia nanteuilii* as well as supporting other nationally scarce plants.	National
Chichester Harbour SSSI	c. 1.7 km east	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. 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 *Calidris alba*, curlew *Numenius arquata* and greenshank *Tringa nebularia* (the latter two in autumn particularly). Bar-tailed godwit numbers are of European importance. Amongst the wildfowl, shelduck, teal *Anas crecca* 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.	National
Hayling Billy Local Nature Reserve (LNR)	c. 0.02 km north-west	Contains coastal footpath, bridlepath and cycleway along shoreline of Langstone Harbour, following former Hayling Billy railway route.	Local
The Kench, Hayling Island LNR	c. 1.5 km west	The site is a saltmarsh and tidal inlet of Langstone Harbour which provides sheltered feeding areas for birds.	Local

Non-Statutory Designated Sites

4.3 A total of ten 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 0.8 km west 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 SINCs 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	0.6 km south west	Designated for presence of sea wormwood *Seriphidium maritimum* and golden samphire *Inula crithmoides.*
Gun Site Car Park and Open Space SINC	1.2 km south west	Designated for presence of one of Hampshire's rarer wildflowers, little robin *Geranium purpureum forsteri.*
Beachlands East SINC	1.2 km south east	Designated for presence of sand couch *Elytrigia juncea, burr medic Medicago polymorpha,* bulbous bluegrass *Poa bulbosa,* suffocated clover *Trifolium suffocatum* and burr chervil *Anthriscus caucalis.*
Hayling Billy Line SINC	1.4 km north	Designated for presence of notable species, divided sedge.
The Kench Scrubs SINC	1.6 km south west	Designated for presence of purple glasswort *Salicornia ramosissima,* English scurvy grass *Cochlearia anglica, beetle Cercyon Cercyon depressus,* golden samphire, *beetle Cyclodinus salinus* and sea radish *Raphanus raphanistrum subsp. Maritimus.*
The Kench Beach East SINC	1.6 km south west	Designated for sea radish, European marram grass *Ammophila arenaria* and golden samphire.
Hayling Island Beach SINC	1.7 km south east	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.
Mill Rythe Lane Saltmarsh SINC	1.8 km north east	Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.

Designation	Approximate distance from the Site	Reason for designation
Long Marsh SINC	1.8 km north	Designated for presence of divided sedge *Carex divisa*, common glasswort *Salicornia europaea* and sea wormwood.
Pill Box Field SINC	1.9 km north	Designated for semi-improved grasslands which retain a significant element of unimproved grassland and presence of notable species, divided sedge.

4.5 The Hayling Island South Policies Map Havant Borough Local Plan Allocations adopted July 2014 illustrates the Site as DM23 "Uncertain Sites Brent Geese and/or Waders". This classification has subsequently been updated and, within the current SWBGS 2024 (Whitfield, D. *et al*, 2024) the Site is classified as a "Secondary Support Area", illustrated by the red area labelled 'H34E' on **Figure 1.2**.

4.6 Secondary Support Areas are considered 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/P22a** 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 a single field 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 in the south-west of the Site as 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*.

Photograph 4.2: Modified grassland adjacent to ditch D1.

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**.

Other Neutral Grassland G3c

4.13 Other neutral grassland was present along the western Site boundary between Site, see **Photograph 4.3** below. There was no evidence of recent management, meaning the sward was tussocky with varying sward heights. Species present included Yorkshire fog, ribwort plantain, broad-leaved dock, creeping buttercup, cock's foot, pendulous sedge *Carex pendula*, dandelion. and common nettle. Rubble and fly tipping is present along the margin, some scrub encroachment from bramble *Rubus fruticosus* and blackthorn *Prunus spinosa* is also present from the adjacent scrub patches

Photograph 4.3: Other neutral grassland along the east Site boundary.

4.14 Grassland on-Site was species poor and limited in extent. Evidence of disturbance and enrichment of the soil from adjacent farming practices is 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**.

Mixed Scrub H3h

4.15 Mixed scrub was present along the western Site boundary between Site between other neutral grassland and ditch D1, see **Photograph 4.4** below. Species included blackthorn, hawthorn *Crataegus monogyna*, and bramble, hawthorn, cock's foot and pendulous sedge. Rubble and fly tipping was present within the scrub.

Photograph 4.4: Mixed scrub along the east Site boundary.

4.16 The mixed scrub on-Site was species poor and limited in extent, confined to the west boundary. These habitats are not considered to represent a HoPI, nor would they qualify under SINC criteria in Hampshire. As a result, they are considered to be of **negligible ecological importance**.

Other Native Hedgerows H2a6

4.17 An area of habitat which was recorded as 'Introduced Shrub' during the extended Phase I habitat survey in 2021 has now developed and, during the update UKHab suvey in 2025, has been classified as defunct hedgerow, hereafter referred to as 'Hedgerow H1'. The hedgerow was composed of goat willow *Salix caprea*, cherry *Prunus sp.*, holly *Ilex sp.* and dogwood *Cornus sp.* Although the presence of at least one woody UK species means they comprise A HoPI. Trees present are young and not mature, as such they are replaceable in the short term. Although defunct and not species-rich, 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, this hedgerow is considered to be of **local ecological importance**.

4.18 Previous hedgerows and trees which were recorded along the north and west Site boundaries in 2021 were reviewed during the update UKHab survey 2025. During this review, these hedgerows and trees were considered outside of the Site boundary and are therefore not included here as they are off-Site and unaffected by the proposed development.

Wet Ditches

4.19 A series of drainage ditches are present around the margins of the Site. At the time of the Phase 1 habitat survey ditches D2 and D4 were dry.

4.20 Ditch D1 comprises a dry drainage ditch with bare earth and gravel substrate at the western end. The ditch is approximately 1-3 m deep and 1 m wide. It was holding water at the eastern end at the time of the Phase 1 habitat survey, approximately 10-20cm with a turbidity score of 1 (ARG UK, 2010). Vegetation within the channel at the eastern end includes sedge (*Carex* sp.), rush (*Juncus* sp.), bulrush (*Typha latifolia*) and willow saplings.

4.21 Ditch D2 is overgrown with nettle, bramble and blackthorn. The ditch is approximately 0.5-3 m deep in places and 1 m wide. This ditch flows off-Site to the south, this section of the ditch contained 10 cm of flowing water at the time of the water vole survey in 2021. Several sections of the ditch abut residential gardens and are reinforced with concrete slabs, brick and wooden stakes to prevent erosion. Ditch D3 was holding water at the time of the UKHab survey , up to approximately 5 cm deep likely modified to perform its drainage function, with some algae growth, but relatively clear turbidity score of two[Error! Bookmark not defined.] (ARG UK, 2010) . At the eastern end the ditch is culverted beneath the farm access to further arable land to the north and extends beyond the Site boundary to the west. Steep, grassy banks were covered with species-poor semi-improved grassland, as described above around the field margins. Other species present within the banks of the ditch include hemlock *Conium maculatum*, primrose *Primula vulgaris*, wood avens *Geum urbanum*, teasel *Dipsacus fullonum*, meadowsweet *Filipendula ulmaria* and stitchwort *Stellaria* sp. Ditch D3 is connected to ditch D2 by a culvert running under a section of farm access.

4.22 Ditch D4 is a short section of ditch along the west Site boundary, connected to ditch D3 via an open section of channel and flowing off-Site to the south. D4 had fallen leaves in the base at the time of the survey and was dominated by terrestrial vegetation, with lords and ladies *Arum maculatum* and common ivy *Hedera helix* present within the ditch itself, adjacent to the grassy field margin. D4 had fallen leaves in the base at the time of the survey and was dominated by terrestrial vegetation, with lords and ladies *Arum maculatum* and ivy *Hedera helix* present within the ditch itself, adjacent to the grassy field margin.

4.23 Owing to their drainage function the ditches on-Site hold varying levels of water, with some found to be dry at the time of the UK Hab survey, although likely to hold water at times of heavy rainfall. Submerged and emergent vegetation is largely absent, except for within small section of D1, at its eastern end. 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.**

Photograph 4.5: Ditch D1 running along the south Site boundary

Photograph 4.6: Ditch D2 running along the northern Site boundary, photographed off-Site.

Photograph 4.7: Ditch D3 running along the northern Site boundary

Ponds

4.24 Two off-Site ponds are present beyond the south-east of the Site. Pond P1 (as shown in **Photograph 4.8** 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.

4.25 Pond P2 (as shown in **Photograph 4.9** 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.

Photograph 4.8: Balancing Pond P1 connected to Ditch D1 via a culvert, east of the Site boundary

Photograph 4.9: Balancing Pond P2, east of the Site boundary

Fauna

4.26 Details of protected species and those of principal importance 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/P24a**.

Badger

4.27 No badger *Meles meles* records were returned by the data search. No signs of badger were recorded within the Site during any surveys at the Site.

4.28 Badger are therefore considered likely absent from the Site. However, badger are a dynamic species that may utilise the Site at any time. However, 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 in future, would be of **negligible ecological importance**.

Bats

4.29 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*.

4.30 According to the MAGIC website (MAGIC, 2025), the closest European Protected Species licence return for bats was 0.88 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

4.31 No trees were identified within or immediately adjacent to the Site boundary that possessed suitable Potential Roosts Features PRF's either during PBRA in 2021 or during the update GLTA in 2025. No structures were identified on-Site. Therefore, **roosting bats are considered likely absent from the Site.**

Bat Activity Survey

4.32 Following static deployment at the Site in 2021, bat activity was dominated by common and soprano pipistrelle species, with noctule and *Myotis* sp. bats also recorded. The results for both static locations shown on Fauna Survey Results Plan **13956/P24a** are similar, suggesting both the western and eastern boundary features are used by foraging and commuting bats. Detailed results are provided in **Tables A2.2 – A2.7** in **Appendix 2**.

4.33 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).

4.34 Based on the 'Bat Mitigation Guidelines' (CIEEM, 2023) common and soprano pipistrelle are both considered abundant and widespread within southern England, with noctule and the majority of *Myotis* bat species, with the exceptions of Alcathoe and Bechstein's bat, recorded as less

abundant. Based on this guidance and the results of the bat activity survey work, each species population at the Site 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**.

4.35 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. Given this, and the updated desk study records, it is considered highly unlikely that the bat assemblage or populations utilising the Site for foraging and commuting has significantly changed since 2021. above bat activity survey work is considered valid for the purpose of this impact assessment.

Birds

4.36 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. The data search data provided for H34E, which includes the Site and further arable land to the north, confirmed three historic records of brent goose, with a count of 70 recorded in December 2007 and 200 recorded December 2011 and January 2012.

4.37 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*, 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*; and

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

4.38 A single skylark *Alauda arvensis* was observed within the Site during the Phase 1 habitat survey in 2021. Skylark is not expected to nest on the Site given the relatively small size of the Site, with boundary trees and surrounding residential and light industrial development reducing suitable sightlines. No evidence of nesting birds was recorded on-Site.

4.39 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.

4.40 Although there are opportunities for breeding birds on the Site within boundary hedgerows, tree lines and scattered 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**.

4.41 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 NSNSs 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 NSNSs identified in the data search although are a wading bird listed within the SWBGS (Whitfield, D. *et al*, 2024).

4.42 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

4.43 No records of GCN have been returned from HBIC in the last 10 years. The most recent and closest record was 1.96 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

4.44 HSI calculations for on-Site ditches D1 – D4 and off-Site ponds P1 and P2 are provided in **Tables A2.8 – A2.13** in **Appendix 2.**

4.45 On-Site ditches, D2 and D4 were scoped out of further assessment by the Phase 1 habitat survey in 2021, as they were considered to be unsuitable for GCN, due to being predominantly dry, and given a lack of suitable submerged or emergent vegetation for egg-laying/shelter.

4.46 Based on their HSI scores, overall, ditch D1 was determined to have below average suitability to be used by GCN. Ditch D3 was determined to have poor suitability, and off-Site ponds P1 and P2 were both recorded to have below average suitability to be used by GCN.

eDNA Survey

4.47 At the time of the eDNA survey, ditch D1 was found to be dry, so unsuitable for survey. As it is connected to P1, beneath a culvert, it was expected that the results for D1 and P1 would be the same, in any case.

4.48 eDNA survey results were negative for ditch D3, P1 and P2, confirming the likely absence of GCN from these waterbodies.

4.49 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.

4.50 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

4.51 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 adder[6] in 2021 which was c.0.8 km south west of the Site.

4.52 Surveys confirmed the presence of a high population of slow worm, based on a peak count of 39 adults recorded within approximately 0.13 ha of suitable habitat within the Site margins and medium population of common lizard *Zootoca vivipara*, based on a peak count of 4 adults (HGBI, 1998). Detailed results are provided in **Table A2.15** in **Appendix 2**. Given the availability of connected, suitable habitats beyond the Site boundary, including in adjacent residential gardens to the east, reptiles present on the Site would be expected to be part of a wider population, present locally.

4.53 The Site could be considered as a 'key reptile site' (Froglife, 1999) as the assemblage of species scores four and the slow worm population itself could be considered 'exceptional', given the peak count of over 20 adults. Slow worm and common lizard are both species of principal importance. Given the presence of 'one or more notable species' could be used as criterion for allocating a SINC, in Hampshire (HBC, 2019), the assemblage of reptiles utilising the Site is considered to be of **local ecological importance**.

4.54 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.

Water Vole

4.55 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.

4.56 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.

4.57 No evidence of water vole was recorded during the survey. Consultation with Tristan Norton, Senior Ecologist, Hampshire County 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

4.58 Two records of common toad *Bufo bufo* have been returned by HBIC with the closest being approximately 0.3 km north-east of the Site from 2014. There is potential for toads to be present

[6] Note – A 1 km^2 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.

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. However, toads could breed in off-Site ponds P1 and P2. If present on the Site, given the limited areas of suitable terrestrial habitat, any toad population would be considered to be of **negligible ecological importance**. Although, as common toad is a SoPI, consideration of this species to ensure avoidance of harm, will be combined within the reptile mitigation strategy on a precautionary basis, see **Section 5**.

4.59 Eighteen records of west European hedgehog *Erinaceus europaeus* have been returned from HBIC with the closest being approximately 0.07 km south-east 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 SoPI 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**.

4.60 Ninety-five records of stag beetle *Lucanus cervus* have been returned from HBIC with the closest being adjacent to the Site to the east from 2017. There is potential for stag beetle to be present within hedgerows or tree lines 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

4.61 A summary of ecological features present on the Site or within the ZoI 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 Ecological Features Considered Within The Impact Assessment

Ecological Feature	Ecological Importance	Relevant Legislation and Planning Policy
Designated Sites		
Solent NSNSs - 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

Ecological Feature	Ecological Importance	Relevant Legislation and Planning Policy
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
Seven SINCs	County	NPPF, HBCS Policy CS11
Secondary Support Area on-Site, H34E	County to Regional	NPPF, HBCS Policy CS11, HBAP DM23
Habitats and Flora		
Arable habitat, amenity and species-poor semi-improved grassland, introduced and scattered scrub	Negligible	NPPF
Hedgerows 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, *Myotis* sp. and noctule foraging and commuting	Local	CHSR, WCA, NPPF
Breeding birds	Negligible	WCA, Countryside and Rights of Way (CRoW) Act 2000
Assemblage of slow worm and common lizard	Local	WCA, CRoW, NPPF
Hedgehog, if present	Local	The NERC Act 2006, NPPF
Common toad and stag beetle, if present	Negligible	The NERC Act 2006, NPPF

Section 5: Potential Impacts, Mitigation and Enhancement

Proposals

5.1 The outline planning application (planning reference: APP/21/01350) is for residential development of up to 29 homes including affordable housing, green infrastructure landscape boundaries and Sustainable Drainage System (SuDS). The proposals are shown on Illustrative Masterplan (Mosaic 2021) and the Landscape Strategy Plan (reference: **13956_P21a**) submitted with the application, although all matters are reserved except for access which will be from Billy Road.

5.2 It is likely that boundary hedgerows and trees will be retained and protected as well as the majority of ditches with the exception of ditch D1 and adjacent grassland habitat along the western, northern and eastern boundaries of the Site which will retain opportunities for bats and reptiles. Arable habitat, amenity grassland and introduced shrub planting of negligible ecological importance will be lost to facilitate the development, as well as D1, of local ecological importance.

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 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/R02**;

- 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 a BNG assessment (see **Appendix 3**) as well as to continue to provide opportunities for important fauna, including foraging and commuting bats, nesting birds, slow worm and common lizard.

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, a maximum count of 200 'waders or brent geese recorded at any one count' was returned by the data search from December 2011 and January 2012 for H34E, which includes the Site itself and further arable habitat to the north. As a result of this historic usage, the Site is classified as a secondary support area, of importance to over-wintering wading birds and brent geese within the SWBGS. Therefore, the Site is considered to form FLL on a precautionary basis.

5.7 Loss of the extent of arable habitat from the Site has the potential to reduce the available resource of 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 implementation of this strategy would be controlled by S106, with funding provided to ensure appropriate management, in perpetuity.

5.9 Furthermore, a fence will be installed along the northern boundary of the Site to ensure no increased public access can occur on the field to the north, which forms the remainder of H34E. Therefore, increased disturbance to this area is not considered likely to occur as a result of the proposed development.

5.10 It is considered that the implementation of the above measures will ensure that sufficient feeding and roosting resources are made permanently available, therefore maintaining the network of FLL associated with NSNSs within the Solent and therefore no adverse impact on the integrity of any NSNS is considered to occur as a result of the proposed development.

NSNSs - Other Impacts

5.11 The Bird Aware Solent Revised Mitigation Strategy (Bird Aware, 2024) identifies the potential for residential development within 5.6 km of the Solent SPAs and Ramsars to cause increased recreational disturbance. The Mitigation Strategy allows for strategic, Solent-wide, mitigation to address potential in-combination impacts of increased recreational pressure on the Solent SPAs arising from new residential development. Financial contributions collected by HBC, expected to be controlled by S106, will be transferred to the Solent Recreation Mitigation Partnership to implement agreed measures, as set out in the strategy, including raising awareness and education to manage visitors and provide secure habitats for birds as well as enhanced greenspaces for recreation in less sensitive areas. This payment is therefore considered to provide sufficient mitigation to avoid adverse impacts on integrity of the Solent NSNSs. Full details are provided within the sHRA report (reference: **13956/R08**).

5.12 Nutrient enrichment can arise from wastewater treatment required in support of new development. Emerging Policy 23 of the Building a Better Future Plan (HBC, 2025), 'Water Quality Effects on International Sites' sets out the requirement for a Nutrient Budget to be submitted with each application resulting in a net gain in overnight accommodation. A nitrogen balancing assessment was undertaken by Tetra Tech, 2021. An updated Nutrient Neutrality Report has since been produced by Omnia Environmental Consulting (south) Ltd (Omnia, 2025). This updated assessment confirmed the proposed development would result in a nitrate surplus of 5.00 Kg/TN/yr. Therefore, purchase of credits from mitigation providers was recommended to ensure appropriate mitigation is achieved. Credits will be purchased as part of the development, expected to be controlled by S106, and it is considered this will provide sufficient mitigation to ensure an adverse effect on integrity of the Solent NSNSs can be avoided. Full details are provided within the sHRA report (reference: **13956/R08**).

5.13 It is concluded that, providing the aforementioned mitigation measures are fully implemented and secured via appropriately-worded planning conditions **no significant adverse impact** on the Solent NSNSs will occur as a result of the proposed development, as set out within the sHRA report (reference: **13956/R08**).

Other Designated Sites

5.14 The SSSI impact risk zone the Site is located within requires the Local Planning Authority (LPA) to consult with Natural England on likely risks from all planning applications except householder applications although the risks are considered to be the same as those for the NSNSs discussed above which are considered to be fully mitigated.

5.15 Owing to the nature of the proposed development, the distance between the Site and other designated Sites within the study area not described above, no impacts to the other designated Sites is expected as a result of the proposals.

5.16 The Hayling Billy Trail LNR is managed to provide recreational access, so additional recreational pressure likely to result from residents associated with the proposed development would not be expected to result in adverse impacts to the features for which the Site is designated.

5.17 As a result, no specific mitigation measures for designated sites other than those detailed above and set out within the sHRA report, are required. Site wide mitigation, including production and implementation of a CEMP would avoid the potential for pollution impacts to other designated Sites. Therefore, **no significant impacts** to other designated sites are anticipated.

Habitats and Flora

5.18 Habitats of most ecological importance on the Site, namely a boundary hedgerow and ditches, will be predominantly retained as shown on Illustrative Masterplan (Mosaic 2021) and Landscape Strategy Plan (reference: **13956_P21a**). There is potential for accidental damage to these retained features during construction as a result of construction machinery and/or storage of materials impacting root protection areas.

5.17 In order to avoid these potential impacts, retained features will be protected during construction by the production and implementation of a CEMP to ensure appropriate protection/exclusion zones and protective measures such as tree protection fencing and pollution control measures. As a result, there will be **no significant adverse impact** on retained habitat features.

5.18 The proposed development will result in the loss of the entire area of arable habitat from the Site as well as areas of amenity grassland and introduced scrub. **No significant adverse impact** is anticipated, as a result of their loss given these habitats are of negligible ecological importance. However, in accordance with the National Planning Policy Framework NPPF 2024, enhancement measures to provide net gains for biodiversity have been included within the proposals.

Habitat Creation and Enhancement

5.19 The habitats that will be present at the Site post-development will comprise urban-developed land comprising buildings, roads and hardstanding, vegetated gardens, sustainable urban drainage features SuDS, neutral/wildflower grassland, modified grassland, trees and reedbeds.

5.20 The new development and associated hardstanding areas will comprise urban built form and as such no condition assessment is required. The vegetated gardens will be of poor condition, which is the maximum condition which can be achieved for these habitats within the BNG Panks et al, 2021.

5.21 Two new SuDS basins will be created and these features will be maintained at moderate condition with at least 50% of the basin designed to be permanently wet so as to maintain the water table at the surface throughout the year. A quarter of the SuDS will be planted with reedbed and aquatic, native vegetation of at least moderate condition.

5.22 New areas of neutral/wildflower grassland will be created within the development and will be sown with a wildflower and grass species mix to maximise species diversity and managed to achieve moderate condition. To achieve this condition this grassland will be managed to have a varied sward height with at least 20% taller than 7cm, with coverage of bare ground, scrub and undesirable species less than 5% and with no bracken or non-native species present.

5.23 Areas of new modified grassland will also be created and managed for amenity purposes. This modified grassland will be managed to good condition with at least 6-8 species present per m2, coverage of scrub and bracken are both below 20%, and with physical damage, undesirable species and bare ground cover all below 5% of the habitat area.

5.24 Extensive new tree planting (at least 40 trees) will occur across the Site achieving a gain in trees post-development. These trees will comprise a mix of native and ornamental species of known value to wildlife. Post-development these trees will achieve at least poor condition with at least 70% to be native species and with trees sensitively managed to encourage wildlife and minimise adverse management impacts.

5.25 Areas of retained modified grassland on the margins of the Site will be enhanced as neutral/wildflower meadow and will be oversown with an appropriate wildflower and grass seed mix in order to improve species diversity. This habitat will be managed to achieve moderate condition, with a varied sward height with at least 20% of the sward taller than 7cm, with coverage of bare ground, scrub and undesirable species less than 5% and with no bracken or non-native species present.

5.26 The retained ditches on the margins of the Site will be enhanced to good condition with planting of emergent and submerged plants used to improve the species diversity of these features. An appropriate fringe of vegetation will also be maintained.

5.27 The existing hedgerows within the Site are to be retained and will remain unaffected by the proposals and as such no impacts to any hedgerows will occur.

5.28 The creation of new habitats within the Site, such as wildflower grassland and trees, will not only increase the floristic diversity and quality of the habitats present on-Site, but will also significantly increase the opportunities available to wildlife such as birds, invertebrates and bats, therefore attracting a more diverse species assemblage to the Site post-development.

5.29 The proposed habitat retention, creation and enhancement measures summarised above were quantified within the BNG assessment completed in 2021, as summarised in **Appendix 3** and detailed within 13965_Land north of Oysters_Biodiversity Metric 3.0. The BNG assessment resulted in a +2.33% gain in Habitat Units and +7.95% gain in River Units. There is a 0% change in Hedgerow Units. Owing to the outline nature of the proposals, assumptions were made based on the Illustrative Masterplan (Mosaic 2021), set out in **Appendix 3**. It is expected that detailed soft landscape proposals would be conditioned as part of the reserved matters application to build on the principles set out in this assessment. The BNG assessment would be updated at this time.

5.30 Management to ensure the successful establishment of habitat planting/ creation and ongoing management measures to maximise the ecological value of retained and created habitats on-Site will be controlled through production and implementation of a LEMP, expected to be conditioned.

5.31 Additional compensation and enhancement measures to deliver biodiversity net gain, which cannot be quantified within the Defra 3.0 metric are described within the Fauna section, below. Off-Site habitat compensation for brent geese and other waders is detailed within the sHRA (reference: **13596/R08**) and Brent Goose and Wader Mitigation Strategy (reference: **13596/R07i**) which is likely to benefit other faunal species. The brent goose and wader mitigation area has not been included within the BNG assessment, to avoid double counting.

Fauna

Badger

5.32 No evidence of badger has been recorded on the Site and no evidence of badger was identified during update habitat surveys in 2025. As a result, badger are considered likely absent from the Site.

5.33 Habitat on the Site could be used by foraging badger, if present in future. Retained grassland, as well as proposed wildflower grassland around the Site boundaries and central area of public open space will continue to provide foraging opportunities for badger following the proposed development.

5.34 Although not considered an important ecological feature on the Site, potential impacts to badger have been considered to ensure legal compliance. **No significant adverse impact** to badger is anticipated. The legislation protecting badgers, the Protection of Badgers Act, 1992, protects them against killing, injury and cruel ill-treatment as well as preventing damage, destruction or obstruction to an active badger sett, or from disturbing a badger when it is occupying such a sett.

5.35 As badgers can readily excavate new setts or return to disused or partially used setts, an update badger survey, to record sett locations and any signs of recent activity would be undertaken prior to commencement of construction work on the Site. In the event that active setts are identified which could be subject to disturbance as a result of the proposed development, a mitigation strategy would be devised prior to commencement of works, and if necessary, a licence obtained from Natural England, in order to avoid triggering the legislation protecting badgers.

5.36 A method statement would be prepared within the CEMP to establish a safe method of work for badgers to include covering of trenches at night, for example, and the management of habitats on the Site to allow continued use by foraging badgers, if present.

Bats

5.37 The retention and enhancement of the existing hedgerow and ditches will retain linear habitat features for foraging and commuting bats within the proposed development. Physical protection of these features during construction activities will avoid potential direct impacts. In order to avoid potential disturbance to bats utilising these features as a result of construction lighting, measures to avoid construction phase lighting at night or where necessary to direct it away from retained boundary features will be incorporated within the CEMP, to be conditioned.

5.38 During occupation of the Site, indirect impacts could similarly occur as a result of increased lighting from street lighting and/or residential properties causing disturbance to foraging and commuting bats. However, the majority of bat activity recorded on the Site during bat activity surveys comprised common and soprano pipistrelle and noctule, all known to be fairly light-tolerant species and have been recorded to forage around street lighting (ILP, 2023). *Myotis* species are known to be more light averse (ILP, 2023).

5.39 Detailed lighting design is expected to be subject to planning condition. This will be based on the following principles, set out in 'Bats and artificial lighting' guidance (ILP, 2023). Provided implementation of the CEMP and detailed lighting design as described, there will be **no significant adverse impacts** to foraging and commuting bats on the Site.

- Retention of the western and eastern Site boundaries as commuting routes avoiding direct light spill, as far as possible;

- Siting of lighting columns to avoid upward light spill mounted on the horizontal or onto habitat features beyond where lighting is required; and

- Use of luminaires lacking UV elements. Ideally LED luminaires with a warm white spectrum <2700 Kelvin and peak wavelength higher than 550nm.

5.40 Habitat creation on-Site, including additional tree planting and SuDS, will increase species diversity and create additional opportunities for invertebrates prey and improve foraging opportunities and connectivity for bats. To increase roosting opportunities for bats, integrated bat boxes will be installed within proposed buildings. Locations and specifications for these boxes will be confirmed within the LEMP, expected to be conditioned. These measures will provide ecological enhancements for bats.

Birds

5.41 The retention and enhancement of existing hedgerows, tree lines and scattered scrub will retain opportunities for breeding birds within the proposed development. Although not considered an important ecological feature on the Site, potential impacts to breeding birds has been considered to ensure legal compliance. **No significant adverse impacts** to breeding birds are anticipated.

5.42 All nesting birds, their nests and eggs are afforded protection under the WCA 1981 as amended. As such the removal of woody vegetation, suitable for nesting, could potentially trigger this legislation. In order to avoid this, any suitable vegetation removal should be undertaken outside of the recognised core breeding bird season (typically March to August inclusive). Should this not be possible, a detailed search of the vegetation would need to be undertaken by a suitably qualified ecologist immediately prior to the removal to check for signs of active nests. If any active nests are found to be present a suitable buffer would need to be retained until the young have fledged and the nest is no longer active. Such measures would be included in the CEMP.

5.43 Habitat creation and enhancement measures proposed will enhance the Site's importance for breeding birds, providing additional nesting and foraging opportunities, as well as offering additional shelter from potential disturbance as a result of residential development and domestic cats. To further increase nesting opportunities for birds, bird boxes will be installed within proposed buildings and on retained trees along the western boundary of the Site. Locations and specifications for these boxes will be confirmed within the LEMP, expected to be conditioned.

5.44 Consideration of potential impacts to wintering birds, namely dark-bellied brent goose and wading bird species, is included within the Designated Sites section above and detailed within the sHRA report (reference: **13956/R08**). Potential impacts on wintering birds are fully mitigated for via provision of a specifically-managed mitigation area, as detailed within the sHRA report. Therefore, following implementation of this in accordance with the Brent Goose and Wader Mitigation Strategy (reference: **13956/R07i**), no residual adverse significant impact is considered to occur on wintering birds. The mitigation area is likely to offer an enhancement in terms of suitable habitat for brent geese and waders when compared to the current habitat availability on-Site and within the mitigation area.

Reptiles

5.45 High and medium populations of slow worm and common lizard have been recorded within suitable habitat around the boundaries of the Site, respectively. The nature of arable habitat within the majority of the Site means the majority of the Site is considered to be unsuitable for reptile species.

5.46 Due to the retention of the majority of suitable reptile habitat located around the boundaries of the Site as part of the scheme design, namely hedgerows and ditches (with the exception of ditch D1), it is considered that it will be possible to retain reptiles in-situ, within root protection areas and exclusion zones along the ditches, to be retained and protected during the construction phase of the proposed development. These measures would be incorporated into the CEMP.

5.47 If the scheme design were to change at the Reserved Matters stage such that retention of suitable habitat around the boundaries of the site was not possible, a full and detailed reptile mitigation strategy would be provided, as part of the CEMP, to be conditioned. This mitigation strategy would provide details of the appropriate methods and timings of work to avoid killing and injuring reptiles present on the Site, and therefore allow the proposed development to proceed lawfully, with respect to common reptiles.

5.48 A precautionary method of working will be followed during construction, to be included within the CEMP, in combination with habitat manipulation, to displace slow worm and common lizard from discrete areas to be affected during construction works into adjacent, suitable habitats.

5.49 Should common toad be found during implementation of the above measures, they would also carefully be moved out of harm's way, into a suitable receptor area, to be identified and protected as part of the CEMP.

5.50 There will be opportunities on the Site to implement either of the proposed mitigation strategies, as required, following detailed design. The creation and enhancement of new and retained habitats, such as the creation of areas of wildflower grassland and SuDS will further enhance the Site's importance for reptiles. Log piles or other hibernacula features will be placed in suitable locations, outside of residential gardens, to be confirmed within the LEMP, expected to be conditioned at the reserved matters stage.

5.51 Implementation of the measures listed above to avoid the killing and injury of reptile species present and retain opportunities for these species as well as common toad, through appropriate management of suitable habitats, to be detailed within the LEMP, to be conditioned, will ensure there is **no significant adverse impact** to the reptile assemblage present, nor a population of common toad, if present.

Other Species

5.52 The retention of and enhancement of the existing hedgerow and scattered scrub will retain opportunities for hedgehog within the proposed development. Vegetation clearance prior to construction activities has potential to cause harm to hedgehog, if present. In order to protect the conservation status of hedgehog during this phase, should any be encountered during vegetation clearance or other works on-Site they would be carefully moved by hand out of harm's way, to other areas of retained suitable habitat, such as the base of the eastern boundary hedgerow. A precautionary method of working would be required, to be provided within the CEMP, to ensure