

PRELIMINARY ECOLOGICAL APPRAISAL

Baldock Services

*Produced on behalf of,
GRIDSERVE Sustainable Energy Limited*



*By Hannah Brookes of Maydencroft Limited
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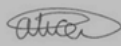
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1	Final	28.08.24	N/A
1.1	Final	13.09.24	Updated Layout Plan & Location Plan
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Document Approval

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This report has been prepared in accordance to CIEEMs 'Guidelines for Ecological Report Writing' document.

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SITE SUMMARY

Site Name	Baldock Services
Site Address	Junction 10 A1(M), Baldock, Hertfordshire, SG7 5TR
Grid Reference	TL 23542 36669
Statutory Designations	None on Site
Other Designations	None on Site

EXECUTIVE SUMMARY

Report purpose	Maydencroft Limited was commissioned by GRIDSERVE Sustainable Energy Limited to undertake a Preliminary Ecological Appraisal (PEA) of the habitats on Site at Baldock Services. The appraisal was required to assess the potential ecological constraints affecting the proposed construction of an eHGV charging hub.
Client and commission date	GRIDSERVE Sustainable Energy Limited, 8 th July 2024
Date and methods of survey	An assessment of habitats using UK Habitat Classifications system and a search for indicative signs of habitual use by protected and important species were undertaken on 19 th August 2024. Great crested newt eDNA surveys of accessible ponds within 500m of the Site were conducted on 18 th June 2024.
Key findings	Designated Sites: One Local Nature Reserve (LNR), two Local Wildlife Sites (LWS) and two County Wildlife Sites (CWS) were identified within the search area. Habitats: The habitats present on Site include other broadleaved woodland, other developed land, other neutral grassland and modified grassland. Habitats adjacent to the Site include other developed land, other neutral grassland and mixed scrub with scattered trees. Species: The habitats on and adjacent to Site have the potential to support foraging and commuting bats, reptiles, foraging and commuting badgers, nesting birds and hedgehogs.
Potential impacts (in the absence of mitigation)	Designated Sites: No ecologically significant impacts are anticipated. Habitats: Removal of introduced shrub, modified grassland and individual trees. Only removal of individual trees is considered ecologically significant at a local level. Species: Killing/injury to reptiles; killing/injury to nesting birds or damage/destruction of a nest; disturbance to foraging and commuting bats; loss of suitable foraging and commuting habitat for badger and hedgehog.

Preliminary measures to avoid and/or reduce significant impacts	• Protection of retained trees and replanting of any lost for the development • Vegetation clearance to be undertaken outside of reptile hibernation season. • Vegetation clearance to be undertaken outside of bird nesting season to avoid disturbance to nesting birds. If undertaken during bird nesting season, an ecologist must first conduct a nesting bird check. • Prior to scrub removal, the base should be inspected for evidence of sheltering hedgehog. • Installation of ramps or means of escape within any excavations for badgers and hedgehogs; Sensitive lighting for foraging and commuting bats.
Opportunities for biodiversity enhancement	• Installation of bat and bird boxes on buildings or retained trees around the services. • Creation of log piles for reptiles and insects utilising removed trees. • Removal of non-native species such as cherry laurel from landscaped areas.

1. INTRODUCTION

1.1 Background

Maydencroft Limited was commissioned by Hannah Post of GRIDSERVE Sustainable Energy Limited to undertake a Preliminary Ecological Appraisal (PEA) of the habitats on Site at Baldock Services, Hertfordshire. The appraisal was required to assess the potential ecological constraints affecting the development of six new eHGV charging bays and associated electrical infrastructure.

The PEA involved a site survey which was undertaken on 19th August 2024 by Hannah Brookes, Assistant Ecologist and Ellie Weir, Assistant Ecologist, both of Maydencroft Limited. The desk study and writing components of the report were completed by Hannah Brookes, Assistant Ecologist.

1.2 Site description

The section of land concerned in the survey (referred to as the 'Site' from hereafter) covers an area of approximately 0.18ha, and lies approximately 2.8km north of Baldock. It is surrounded by other developed land and arable fields, with the A1(M) running in a north-south direction approximately 290m to the west. Deciduous woodland and grassland are situated in the wider area.

1.3 Site proposals

The proposed development will involve the construction of 6no. eHGV charging bays within an existing area of car park to the east of the main service building. Associated electrical infrastructure, including a substation, feeder pillar and ABB Terra HP Unit will be situated on a road island south of the proposed charging bays. The electrical housing will require the removal of existing landscaping in order to create an area of hardstanding. Modified grassland will be created on the remainder of the island.

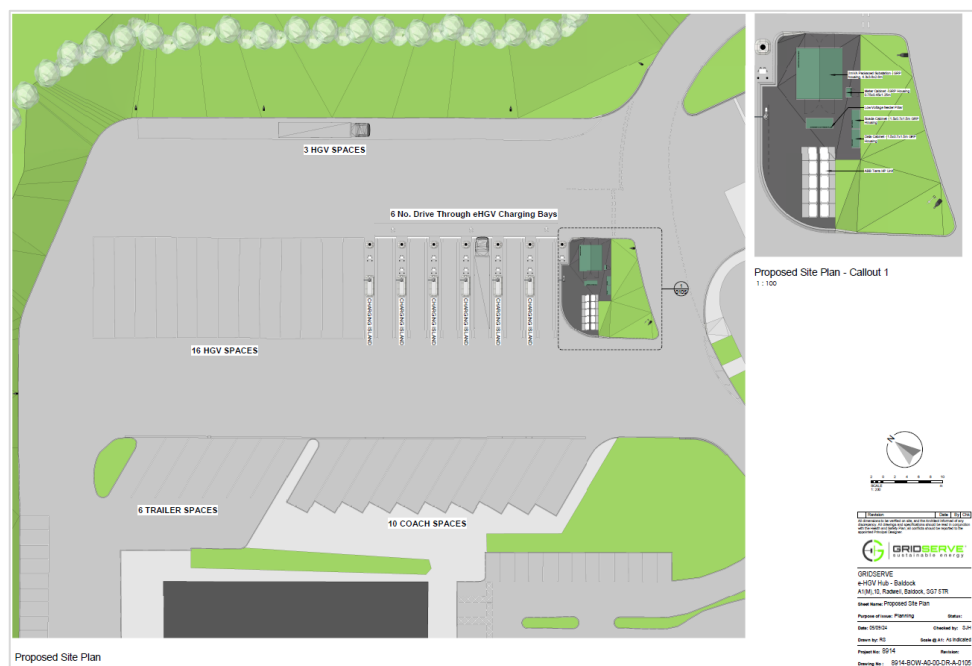


Figure 1: Proposed Site plan showing the location of the proposed new charging bays and associated infrastructure

1.4 Aims of the study

The aim of this study is to complete an ecological appraisal of the proposals. This report aims to:

- Review and summarise designated sites and biological records returned by the desk study;
- Describe the habitats and features present on Site and evaluate their potential to support protected species;
- Detail the methods and results of the surveys undertaken on Site;
- Outline the legislative and/or policy protection afforded to any habitats or species of importance likely to be associated with the Site;
- Highlight the potential impact of the development on ecological receptors, therefore identifying potential ecological constraints;
- Set out requirements for further survey, mitigation, compensation and enhancement measures.

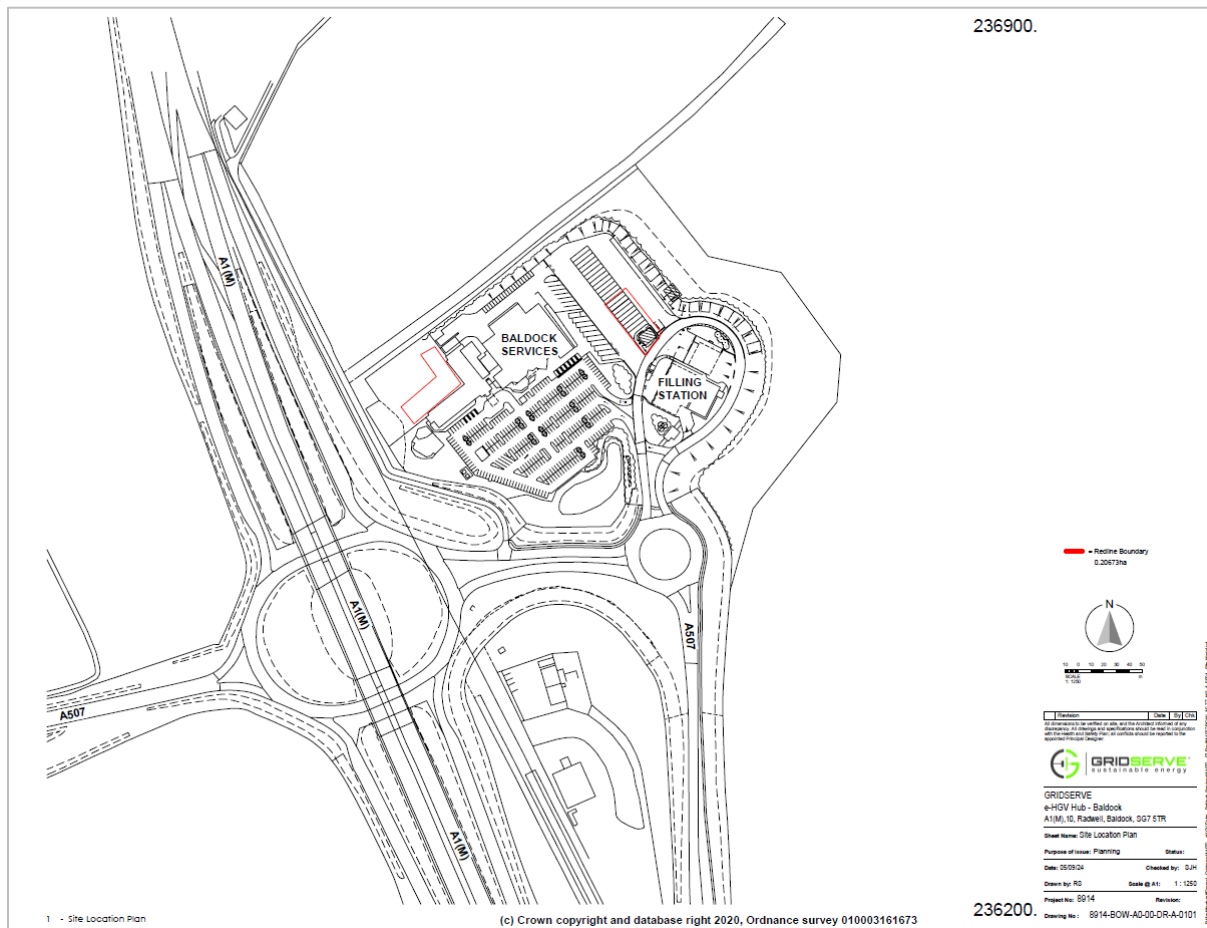


Figure 2: Site Location Plan

2. PLANNING POLICY AND LEGISLATION

2.1 National planning policy

The National Planning Policy Framework (NPPF) states that the planning system should 'contribute to and enhance' the natural and local environment by, in part;

- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.

Other key principles of the NPPF which relate to biodiversity are;

- The conservation of international and national statutorily designated sites;
- Protection of ancient woodland and veteran trees;
- The creation, protection, enhancement and management of networks of biodiversity and green infrastructure;
- The preservation, restoration and recreation of priority habitats and ecological networks, and;
- The recovery of priority species populations.

The NPPF provides information relating to the approach to be taken within the planning system, including the production of Local Development Plans and the determination of planning applications for Local Planning Authorities. The principles set out within this framework should be reflected at a local level in Local Development Frameworks and other planning policy documents for that area.

2.2 Local plan policies

2.2.1 *District council local plan*

North Hertfordshire Local Plan 2011-2031 contains planning policies which relate to ecology, biodiversity and/or nature conservation. Those which are considered potentially relevant to the Site are listed below:

Policy SP12: Green infrastructure, landscape and biodiversity

We will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhanced. We will:

- a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;
- b) Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;
- c) Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:
 - Internationally designated sites
 - Nationally designated sites
 - Locally designated sites;
 - Non-designated sites that include important habitats and species
- d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local

Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity; and

- e) Protect other open spaces and support provision of new and improved open space.

Policy NE2: Landscape

Planning permission will be granted for development proposals that:

- a) Respect the sensitivities of the relevant landscape character area and have regard to the guidelines identified for built development and landscape management;
- b) Do not cause unacceptable harm to the character and appearance of the surrounding area or the landscape character area in which the site is located, taking account of any suitable mitigation measures necessary to achieve this;
- c) Are designed and located to ensure the health and future retention of important landscape features; and
- d) Have considered the long-term management and maintenance of any existing and proposed landscaping.

Policy NE4: Biodiversity and geological sites

Planning permission will only be granted for development proposals that appropriately protect, enhance and manage biodiversity in accordance with the hierarchy and status of designations and features listed in Policy SP12. All development should deliver measurable net gains for biodiversity and geodiversity, contribute to ecological networks and the water environment, and/or restore degraded or isolated habitats where possible. Applicants should, having regard to the status of any affected site(s) or feature(s):

- a) Submit an ecological survey that is commensurate to the scale and location of the development and the likely impact on biodiversity, the legal protection or other status of the site;
- b) Demonstrate that adverse effects can be avoided and / or satisfactorily minimised having regard to the hierarchy of protection below:
 - i. locating on an alternative site with a less harmful impact;
 - ii. providing adequate mitigation measures; or
 - iii. as a last resort compensated for.

The acceptability of approach(es) to avoidance, mitigation and compensation will be commensurate with the status of the asset(s) likely to be affected by the application; Compensation is unlikely to be an appropriate solution for proposals affecting nationally or internationally designated sites other than in the most exceptional circumstances.

- c) Include appropriate measures to manage construction impacts by demonstrating how existing wildlife habitats supporting protected or priority species will be retained, safeguarded and managed during construction;
- d) Integrate appropriate buffers of complimentary habitat for designated sites and other connective features, wildlife habitats, priority habitats and species into the ecological mitigation and design. The appropriateness of any buffers will be considered having regard to the status of the relevant habitat. 12 metres of complimentary habitat should be provided around wildlife sites (locally designated sites and above), trees and hedgerows. It may be necessary to

exceed this distance for fragile habitats such as ancient woodland or to provide appropriate root protection for mature trees; and

- e) Provide a long-term management and monitoring plan including mitigation measures as necessary. Local Geological Sites are ratified by the Herts & Middlesex Wildlife Trust (HMWT) and are afforded the same protection as Local Wildlife Sites.

Policy NE12: Renewable and low carbon energy development

Proposals for solar farms involving the best and most versatile agricultural land and proposals for wind turbines will be determined in accordance with national policy. Proposals for other renewable and low carbon energy development which would contribute towards reducing greenhouse gas emissions will be permitted subject to an assessment of the impacts upon:

- i. Landscape quality, landscape character and visual amenity, including consideration of cumulative impacts of development;
- ii. Environmental assets;
- iii. The historic environment, including the impact on the setting of historic assets ;
- iv. The transport network;
- v. Air quality;
- vi. Aviation interests; and
- vii. The amenity of residents.

In assessing renewable and low carbon energy proposals against the above criteria the Council will give significant weight to their local and wider benefits, particularly the potential to reduce greenhouse gas and other harmful emissions, and the social benefits of community owned schemes where this is relevant.

Proposals for decentralised energy schemes associated with development of the strategic sites allocated in the Plan will be encouraged subject to an assessment of the impacts.

In all cases, end of life/redundant plant, buildings, apparatus, and infrastructure must be removed and the site restored to its former state or a condition agreed with the Council.

2.2.3 Local Biodiversity Action Plan

Habitats and species of principle importance (Priority Habitats) in the UK are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Actions that need to be undertaken in order to maintain and/or enhance the nature conservation status of these habitats and species are implemented at a local level in the County Local Biodiversity Action Plan (LBAP), the Hertfordshire Environmental Forum (2006) A Biodiversity Action Plan for Hertfordshire.

Habitats of importance:

- Woodland
- Wetlands
- Heathland and acid grassland

- Neutral grassland
- Chalk grassland
- Farmland
- Urban

Species of importance

- Water vole (*Arvicola amphibius*)
- Common dormouse (*Muscardinus avellanarius*)
- Natterer's bat (*Myotis nattereri*)
- Otter (*Lutra lutra*)
- Tree sparrow (*Passer montanus*)
- Bittern (*Botaurus stellaris*)
- Stone-curlew (*Burhinus oedicnemus*)
- Song thrush (*Turdus philomelos*)
- Great crested newt (*Triturus cristatus*)
- Chalkhill blue (*Polyommatus coridon*)
- Grizzled skipper (*Pyrgus malvae*)
- Stag beetle (*Lucanus cervus*)
- White-clawed crayfish (*Austropotamobius pallipes*)
- Great pignut (*Conopodium majus*)
- Cornflower (*Centaurea cyanus*)
- River water-dropwort (*Oenanthe fluviatilis*)
- Pasqueflower (*Pulsatilla vulgaris*)

2.3 Legislation

2.3.1 European legislation

The Bern Convention (The Convention on the Conservation of European Wildlife and Natural Habitats) was adopted in 1979 and came into force in 1982. To implement this agreement, the European Community adopted the EC Habitats Directive.

The EC habitats directive has been transposed into UK legislation by the Wildlife and Countryside Act (WCA) 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2017. The Countryside and Rights of Way Act (CRoW) 2000 strengthened the existing wildlife legislation in the UK.

The UK has also signed The Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animals) and is therefore party to various agreements.

2.3.2 National legislation

The WCA 1981, as amended by the CRoW 2000 and NERC Act 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive).

The WCA gives protection to native species (especially those under threat), controls the release of non-native species, enhances the protection of SSSIs and builds upon the rights of way rules in the National Parks and Access to the Countryside Act 1949.

The NERC Act places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations. Please see [Appendix C](#) for protected species legislation relevant to the Site.

3. METHODOLOGY

3.1 Guidelines for Preliminary Ecological Appraisal

This report has been produced based on the *Guidelines for Preliminary Ecological Appraisal* (Chartered Institute of Ecology and Environmental Management, 2017). It includes an assessment of the Site's habitats as to their likely importance for protected or notably important species, as identified under the following legislation; The Conservation of Habitats & Species Regulations 2017, the Wildlife & Countryside Act (as amended) 1981, the Protection of Badgers Act 1992 and the NERC Act 2006.

3.2 Desk study

To provide contextual background to this project, a desk study has been undertaken to search for the following:

- International statutory designated sites within 5km;
- National statutory sites within 2km;
- Non-statutory sites within 1km;
- Protected and important species and habitats within a 2km radius of the Site.

These 'study areas' were considered appropriate for the scale of the proposed works and follow best practice guidance. The desk study was conducted using online sources such as Magic Map alongside data on protected/notable species and local sites from Herts Environmental Records Centre and Bedfordshire and Luton Biodiversity Recording & Monitoring Centre. The data was returned on 11th July 2024.

3.3 Site survey

The site survey was undertaken on 19th August 2024 by Assistant Ecologist Hannah Brookes and Assistant Ecologist Ellie Weir of Maydencroft Limited. The weather during the survey was mild and overcast. The survey involved an assessment of the habitats and a search for indicative evidence of habitual use by protected and important species

3.3.1 Surveyor qualifications

- Hannah Brookes- Assistant Ecologist, BSc (Hons) *Qualifying CIEEM*
Hannah has over one year of experience carrying out ecological surveys
- Ellie Weir – Assistant Ecologist, BSc (Hons) *Qualifying CIEEM*
Ellie has over one year of experience carrying out ecological surveys

3.4 Environmental DNA surveys

Great crested newt eDNA surveys of accessible ponds within 500m of the Site were conducted on 18th June 2024 by Field Ecologists Jasper Carnell and Daniel Willits of Maydencroft Limited. The surveys were conducted following ADAS Technical Advice.

3.5 Limitations

3.5.1 General

As to the reliability of the assessment for protected and important species, it must be acknowledged that this assessment is based on the presence of suitable habitat to

support such species and not on qualitative species-specific surveys. Where the potential for protected or important species has been identified, further species-specific surveys are necessary to be confident of either a positive or negative conclusion as to the presence of protected or important species on Site, and to conclude the significance of any impacts to such species. It is not intended that this report should be submitted with a planning application for development of the site, unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development.

4. RESULTS

4.1 Supporting documents

The results of the Ecological Appraisal on the Site are summarised in the sections below and supported by a habitat map in [Appendix A](#), and Site photographs in [Appendix B](#).

4.2 Designated sites

4.2.1 International statutory sites

No statutory sites of designated international importance were identified in the search area.

4.2.2 National statutory sites

There is one statutory site within 2km of the Site. Stotfold Mill Meadows is a Local Nature Reserve (LNR) located 980m west of the Site, covering an area of 3.36ha. Stotfold Mill Meadows LNR consists of wildflower meadows, wetlands with interconnected ponds, and a small woodland. It was designated as an LNR in 2010. The southern-most meadow (Meadow 3) has been recognized as a County Wildlife Site (CWS), Stotfold Watermill Wetland, and is designated due to its population of water voles (*Arvicola amphibius*) and occasional otter (*Lutra lutra*) presence within the interconnecting network of ponds.

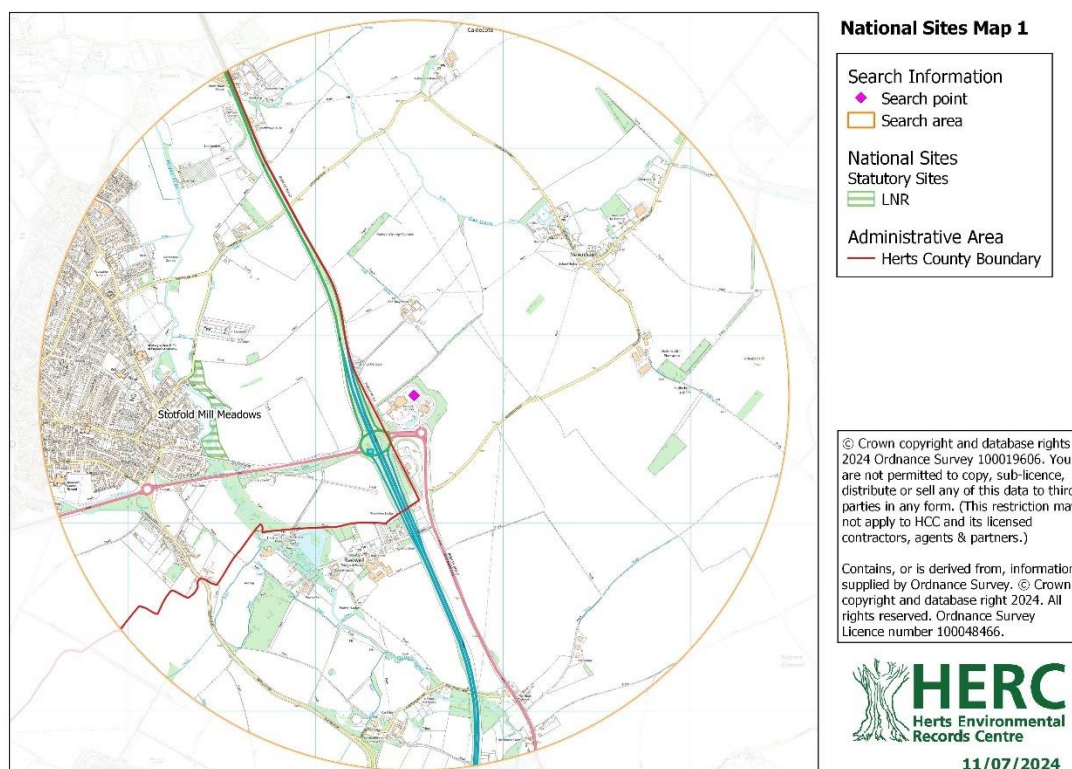


Figure 3: Location of national statutory sites within 2km of the Site.

4.2.3 Non-statutory sites

A total of four non-statutory sites are located within 1km of the Site, including two Local Wildlife Sites (LWS) and two CWS. The closest LWS is Radwell (A507) Road Banks LWS and the closest CWS is the Rivers Ivel and Hiz CWS.

Radwell (A507) Road Banks LWS is 190m south from the Site, extending 1.72ha and is designated due to the presence of rare grassland indicators. This LWS consists of road verges supporting areas of species-rich calcareous grassland with records of several orchids including bee orchid (*Ophrys apifera*) and pyramidal orchid (*Anacamptis pyramidalis*) and a good colony of common broomrape (*Orobanche minor*).

The Rivers Ivel and Hiz CWS is located 100m west of the site, and extends across 48.89ha of the river corridor. The rivers were recognised as a CWS on account of their water vole population and their adjacent priority habitats including fen, marsh and swamp.

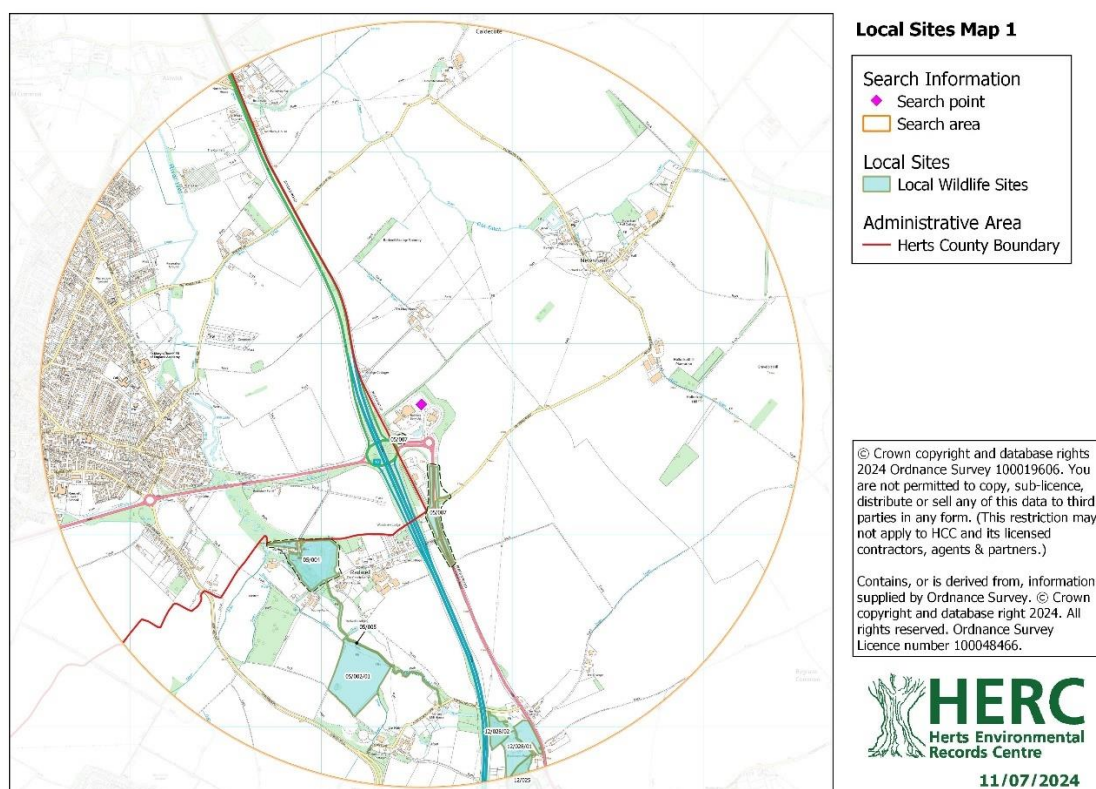


Figure 4: Location of non-statutory sites surrounding the Site.

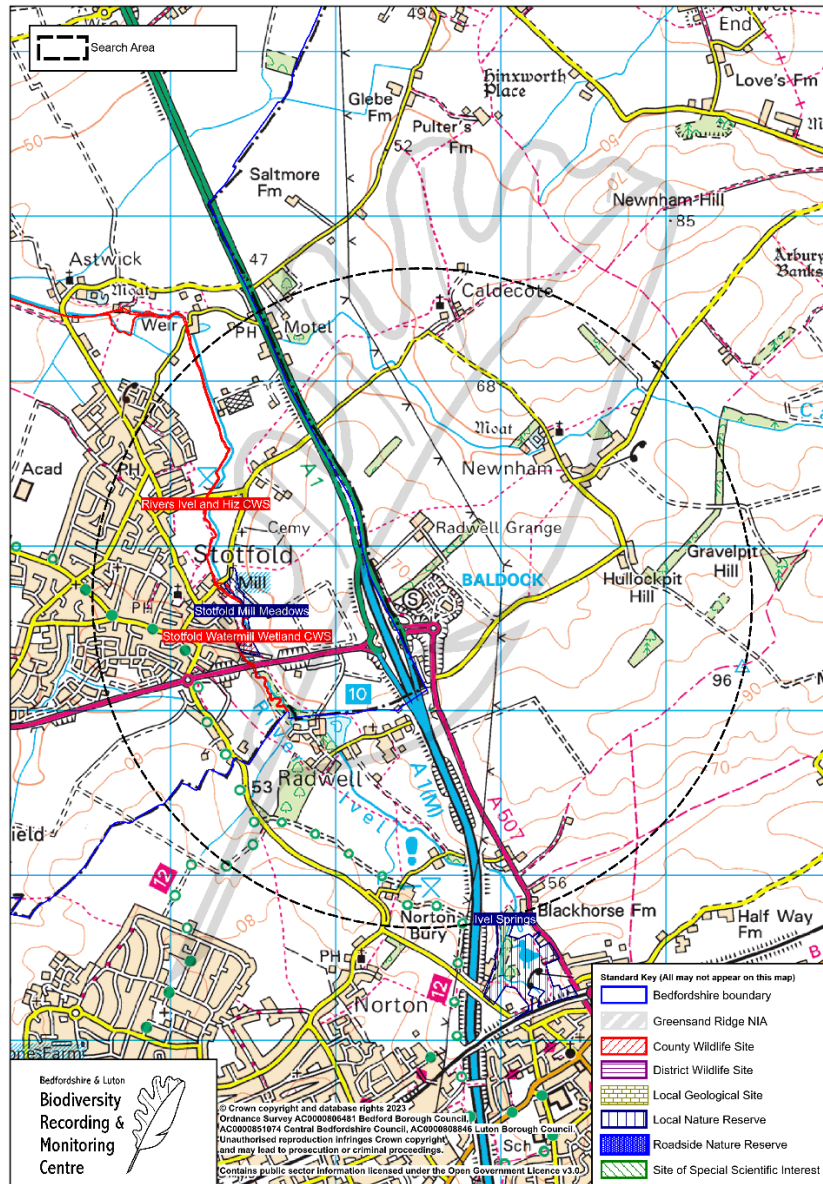


Figure 5: Location of non-statutory sites surrounding the Site.

4.3 Habitats

4.3.1 Developed land; sealed surface (u1b6, 804)

Reference 1

The majority of the Site is comprised of sealed tarmac hardstanding. The Site includes existing eHGV parking bays within the service station car park, and a small pedestrian footpath along the western and northern edges of a landscaped road island. This habitat does not qualify as a Habitat of Principle Importance (HPI) and is not considered ecologically significant.

4.3.2 Modified grassland, frequently mown, road verge or island (g4, 108, 801)

Reference 2

A narrow margin of modified grassland was present on the road island, surrounding an area of introduced shrub and small trees. The grassland was dominated by

perennial rye (*Lolium perenne*) with ribwort plantain (*Plantago lanceolata*), smooth hawksbeard (*Crepis capillaris*), white clover (*Trifolium repens*) and black medick (*Medicago lupulina*) also present. The grassland was frequently managed with a low sward height throughout, and provided little value as a buffer between the shrub and surrounding car park. This habitat does not qualify as a HPI and is not considered ecologically significant.

4.3.3 *Rhododendron scrub, road verge or island (h3g, 801)*

Reference 3

The majority of the road island contained dense rhododendron scrub, dominated by cherry laurel (*Prunus laurocerasus*). Portuguese laurel (*Prunus lusitanica*) and boxleaf honeysuckle (*Lonicera pileate*) were also present, and the scrub had been cut back at the edges, creating a clear boundary with the adjacent grassland. No buffer vegetation was present. A number of small trees provided heavy shading at the centre of the scrub, and areas of bare ground were evident. This habitat does not qualify as a HPI and is not considered ecologically significant.

4.3.4 *Individual trees (h3g, 200)*

Reference T1-7

A number of small individual trees were situated within the rhododendron scrub. This includes four semi-mature beech (*Fagus sylvatica*), one semi-mature goat willow (*Salix caprea*) and two semi-mature grey willow (*Salix cinerea*), one of which was dead. The trees varied between approximately 6m and 9m tall, and T1-6 appeared healthy, with no signs of physical damage or decay. This habitat does not qualify as a HPI but is considered ecologically significant at a local level due to the native tree species present.

4.3.5 *Habitats adjacent Site*

Habitats adjacent to the Site includes other developed land, other neutral grassland, and mixed scrub with scattered trees. Priority habitats within the wider area include deciduous woodland, lowland meadow, chalk river and traditional orchards although none are found adjacent to or within close proximity of the Site.

4.4 *Species*

4.4.1 *Amphibians*

A total of three common frog (*Rana temporaria*) records were returned in the data search. The closest and most recent record was 1084m west of the Site in 2016. Three records of common toad (*Bufo bufo*) were also returned. The closest and most recent recording was in 2016, 1106m west from the Site. A singular record of great crested newt (*Triturus cristatus*) was returned from 1997, 1422m south west from the Site.

The introduced shrub with trees on Site is considered suitable terrestrial habitat for great crested newt (GCN) should suitable waterbodies be present within the surrounding area. As such an eDNA survey was conducted of a single pond approximately 75m to the south of the Site. The pond is situated surrounded by willow scrub and other neutral grassland, and was heavily overgrown by bullrushes at the time of survey. A second pond was situated 165m west of the Site, but was completely dry at the time of survey. Grassland species had colonised the former balancing pond

indicating that it had been dry for some time and is therefore considered unsuitable for breeding amphibians. The results of the eDNA were negative for GCN. There are no other known ponds within 500m of the Site, significantly reducing the likelihood of GCN being present on Site.

It is possible that common amphibians may utilise the suitable habitats on Site, but the distance from the suitable pond and constant car park traffic may pose a barrier to migration. As such, amphibian presence is considered unlikely.

4.4.2 Bats

No records of bat species were returned in the data search. The trees on Site are considered generally unsuitable for roosting bats due to their lack of Potential Roost Features (PRF). Most trees were semi-mature and appeared healthy, with no PRF. A single dead tree was noted, but no opportunities for roosting bats were identified due to its small size and narrow branches. The midsection of the main stems were obscured by dense cherry laurel scrub, preventing further inspection, but it is reasonable to assume that such dense scrub would also pose a physical barrier to bats entering a roost. As such, it is considered likely that roosting bats are considered absent from the habitats on and adjacent to Site.

The scrub to the east of the Site is considered to be of moderate suitability for foraging and commuting bats due to its connectivity to other suitable habitats in the form of treelines and woodland belts. The pond to the south of the Site may also be of importance to foraging bats due to the invertebrate population it likely supports. As such, foraging and commuting bats cannot be considered absent from habitats adjacent to Site.

4.4.3 Badgers

18 records of Eurasian badger (*Meles meles*) were returned in the data search. The closest record was 211m south west from the site in 2007. The most recent record was in 2021, 1973m north of the site.

The scrub and grassland habitats on Site are considered unsuitable to support a badger sett due to their small size, regular disturbance and lack of sufficient shelter. Furthermore, no evidence of badger activity was observed in the form of latrines, burrows, tracks or snuffle holes. Suitable habitat for badger is present in the surrounding area in the form of dense scrub and woodland belts, and so it is possible that foraging and commuting badgers may utilise the habitats on Site. As such, an active badger sett is considered absent from Site, but badgers may still occasionally utilise the Site for foraging and commuting.

4.4.4 Birds

5,394 records of 101 bird species were returned in the data search. The closest record was of a kestrel (*Falco tinnunculus*) in 2022, 59m south of the Site. The most recent record was a black-headed gull (*Chroicocephalus ridibundus*) in 2022, 930m west of the Site.

338 records were of 15 species listed on Schedule 1 of the WCA were returned in the data search. The most recent occurrence was a red kite (*Milvus milvus*) recorded in 2022, 1503m north west of the Site. The closest record was also of a red kite, recorded in 2016, 542m north of the site.

394 records were of 14 bird species of principle importance, as named in Section 41 of the NERC Act were returned. The most recent record was of a yellowhammer (*Emberiza citrinella*), 1571m south west of the site in 2022. The closest record was of a yellowhammer and a ring ouzel (*Turdus torquatus*) 1314m north west of the site in 2008.

The rhododendron scrub and semi-mature trees on Site provide some suitable habitat for nesting birds. However, due to the general small size, regular disturbance and abundance of introduced species, any rare or specialist bird species are considered likely absent. As such, it is considered likely that common bird species may utilise the scrub and trees during the breeding season.

4.4.5 Hazel dormouse

No records of hazel dormouse (*Muscardinus avellanarius*) were returned in the data search. The scrub habitat on Site is considered unsuitable for hazel dormouse due to the lack of hazel and bramble, both of which are important food sources, and the regular disturbance from passing traffic. Due to the lack of records and of suitable habitat, hazel dormouse are considered likely absent from Site.

4.4.6 Invertebrates

274 records of 53 invertebrate species were returned in the data search, of which 260 records of 46 species were listed on Section 41 of the NERC Act. The closest record was of a small weevil (*Isochnus sequensi*) 1103m north west of the Site in 2014. The most recent record was of a dot moth (*Melanchra persicariae*), 1412m south west of the Site. Both these species are listed on Section 41 of the NERC Act.

The modified grassland, rhododendron scrub and semi-mature trees present on Site may support some common invertebrate species. Due to the regular disturbance and poor species diversity, any ecologically significant species assemblage is considered likely absent.

4.4.7 Hedgehog

A total of eight Western European hedgehog (*Erinaceus europaeus*) records were returned in the data search. The closest record was 1012m west of the Site in 2005. The most recent record was 2km west of the Site in 2021.

The area of scrub and individual trees on Site is considered suboptimal habitat for sheltering and hibernating hedgehogs due to the regular noise and light disturbance it receives. The dense scrub may provide some shelter for foraging and commuting hedgehogs passing through the Site, but is unlikely to support a nest or any regularly used shelter.

4.4.8 Reptiles

Two reptile records were returned, both of grass snake (*Natrix helvetica*). These recordings were from 1999, approximately 1406m south west from the Site.

The dense scrub on Site is considered suitable habitat for sheltering and hibernating reptiles should suitable basking habitat be present in close proximity. An area of other neutral grassland of varied sward height is located approximately 20m north east of the road island. Suitable reptile hibernacula in the form of large rocks and debris were also present within the grassland. This habitat is considered suitable for basking

reptiles, and although it is not directly adjacent to the scrub, it is considered possible that reptiles could migrate between the two habitats. As such, sheltering and hibernating reptiles cannot be considered absent from the scrub on Site.

4.4.9 Water voles

15 records of water vole (*Arvicola amphibius*) were returned in the data search. The closest and most recent record was in 2021, 1018m west of the site. There is no suitable habitat for water vole in the form of watercourses or riparian habitats on Site. As such, water voles are considered likely absent.

4.4.10 Otter

A total of 22 Eurasian otter (*Lutra lutra*) records were returned in the data search. The most recent record was in 2021 at Stotfold Mill Meadows LNR approximately 1079m west of the Site. The closest record was also from 2021 approximately 1029m west of the Site. There is no suitable habitat for otter in the form of watercourses, lakes or riparian habitats on Site. As such, otters are considered likely absent from Site.

5. POTENTIAL IMPACTS

5.1 Designated sites

5.1.1 *International statutory sites*

There are no international statutory Sites within the search area. As such, no impacts are anticipated.

5.1.2 *National statutory sites*

The proposed development is a substantial distance from the only LNR identified in the data search. The proposed works would have no effect on the habitats or species that the area is designated for. As such, no impacts to national statutory sites are anticipated.

5.1.3 *Non-statutory sites*

The proposed development will have no effect on any of the LWS or CWS in the surrounding area given the nature of the works and the distance from any designated Site. As such, no impacts area anticipated.

5.2 Habitats

5.2.1 *Developed land; sealed surface, car park (u1b6, 804)*

A number of existing HGV parking bays will be converted to eHGV charging bays as part of the proposed development. This impact is not considered ecologically significant.

5.2.2 *Modified grassland, frequently mown, road verge or island (g4, 108, 801)*

The modified grassland at the margin of the road island will be removed as part of the development, and will be partially reinstated following the works. Due to the small scale and temporary nature of the effect, no ecologically significant impacts are anticipated.

5.2.3 *Rhododendron scrub, road verge or island (h3g, 801)*

The dense scrub dominated by cherry laurel in the centre of the road island will be removed to allow the installation of electrical infrastructure. This impact is not considered ecologically significant due to the presence of ornamental scrub species.

5.2.4 *Individual trees (h3g, 200)*

A total of 6 semi mature trees and one dead tree will be removed from the road island to facilitate the installation of electrical infrastructure. This impact is considered ecologically significant at a local level due to the loss of native tree species.

5.3 Species

5.3.1 *European protected species*

Bats

Roosting

Likely absent, therefore no impacts anticipated.

Foraging/commuting

Potential for disturbance to foraging and commuting bats in adjacent habitats. This impact is considered ecologically significant at a local level.

Great crested newt

Likely absent and therefore, no impacts are anticipated.

Hazel dormouse

Likely absent and therefore, no impacts are anticipated.

Otter

Likely absent and therefore, no impacts are anticipated.

5.3.2 Nationally protected species***Reptiles***

Killing/injury to reptiles resulting in a contravention of the law.

Badgers

Loss of suitable foraging and commuting habitat. Due to the extremely small scale of habitat loss, this is not considered ecologically significant.

Birds

Killing/injury of nesting birds or damage/destruction of a nest, resulting in a contravention of the law.

Invertebrates

Significant species assemblage likely absent therefore, no impacts anticipated.

Hedgehog

Loss of suitable foraging and commuting habitat. Due to the extremely small scale of habitat loss, this is not considered ecologically significant.

Water vole

Likely absent and therefore, no impacts are anticipated.

6. RECOMMENDATIONS FOR MITIGATION

Where potential impacts can be predicted at this stage without further survey, the following measures have been recommended.

6.1 Habitats

Where potential significant impacts on habitats have been identified in [Section 5.2](#), mitigation and/or precautionary measures have been recommended below.

6.1.1 Individual trees (h3g, 200)

All mitigation measures to offset tree losses and protect retained trees on Site will be detailed within a *BS5837 Tree Protection Plan* and *Arboricultural Method Statement*. This must be adhered to at all times throughout the works.

6.2 Species

Where potential significant impacts on protected or important species have been identified in [Section 5.3](#), mitigation and/or precautionary measures have been recommended below.

6.2.1 Bats

No impacts to roosting bats are anticipated. The following mitigation is recommended to minimise disturbance to foraging and commuting bats in adjacent habitats.

During the construction phase, the following mitigation should be followed:

- All works should be undertaken during normal working daylight hours. Any artificial lighting (if absolutely required) should not illuminate the boundary habitats;
- Where security lighting is required, it is recommended that these are motion activated with hooded luminaires and directed away from the boundaries, particularly the southern or eastern boundary;
- No lighting should fall or be directed on to the boundary vegetation.

Any new temporary or permanent lighting should be designed to avoid light-spill onto the Site boundaries and boundary vegetation. If permanent lighting is to be installed it must follow the principles of mitigation as outlined within the Bat Conservation Trust and Institution of Lighting Professionals Guidance Note.

Mitigation measures for external street lighting will include:

- Only luminaires with an upward light ratio of 0% should be used;
- All external luminaires used on site should lack UV elements and be warm white coloured (ideally < 2700 Kelvin) to reduce blue-light components;
- LED luminaires should be used due to their sharp cut-off, lower intensity, good colour retention and dimming capability;
- Where security lighting is installed, this should be motion-activated;
- Lights should not be directed at boundary vegetation. Where required, lights can be fitted with hoods, baffles or louvres to reduce back-spill.

6.2.2 Reptiles

Removal of dense scrub and individual trees should be undertaken outside of the reptile hibernation season i.e. during the period April to September (inclusive - as a guide) to avoid harm to reptiles hibernating within the scrub area. Should works be undertaken outside of this period, an Ecological Clerk of Works may be required to oversee the removal of scrub and tree felling.

6.2.3 Badgers

Any trenches on Site must be covered over night or a means of escape provided for any badgers which may become trapped within the excavation. The trenches, if left open will need to be inspected daily prior to works commencing. An Ecological Method Statement should be followed by operatives on Site.

If any equipment or materials are to be stored on site overnight, all possible entrances must be blocked and checked for wildlife the following morning prior to work commencing. If present, the Ecologist should be contacted for advice.

6.2.4 Birds

All tree works and shrub removal should be undertaken outside bird nesting season i.e. during the period September to February (inclusive – as a guide). If this is not possible, all areas impacted should first be checked for active nests by an Ecologist or other suitably qualified individual. In the event that nesting activity is identified, certain aspects of the work in the vicinity of the nest will need to cease until the birds have finished nesting and the young have fledged.

6.2.5 Hedgehog

Prior to scrub removal, the base should be checked for sheltering hedgehog and any hibernacula should be dismantled and checked prior to clearing.

Any trenches on Site must be covered over night or a means of escape provided for any hedgehogs which may become trapped within the excavation. The trenches, if left open will need to be inspected daily prior to works commencing. An Ecological Method Statement should be followed by operatives on Site.

If any equipment or materials are to be stored on site overnight, all possible entrances must be blocked and checked for wildlife the following morning prior to work commencing. If present, the Ecologist should be contacted for advice.

7. BIODIVERSITY NET GAIN

As of February 2024, Biodiversity Net Gain is now mandatory under Section 7A of the Town and Country Planning Act 1990, as amended by the Environment Act 2021. Developments must compensate for habitat lost and deliver a gain of 10% in biodiversity units by creating more or better-quality habitats. Biodiversity units are calculated using the national statutory biodiversity metric. A full baseline assessment and net gain calculation may be carried out once the full impacts of the project are known.

Biodiversity net gain is distinguished from other forms of ecological compensation by the requirement for measurable outcomes. Losses from development and gains from an 'offset' are calculated using a single biodiversity metric, which quantifies habitats against fixed units of biodiversity.

Biodiversity offsets can be both on-site and off-site, and can involve creation, enhancement or accelerated succession of habitats. The amount of biodiversity units an offset is worth must exceed the amount of biodiversity units that will be lost as a result of development.

A Biodiversity Net Gain Assessment of the current proposal has been completed, the results of which are provided separately.

8. ECOLOGICAL ENHANCEMENTS

8.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) requires local planning authorities to request the preservation, restoration, and recreation of priority habitats and ecological networks and the recovery of priority species populations. In addition, the works should result in no net loss of biodiversity.

8.2 Recommendations

The following list is the recommended ecological enhancement opportunities for the Site. They are not required for mitigation but would allow a greater increase in biodiversity at the Site in line with the NPPF requirements:

- Installation of bat and bird boxes on buildings or retained trees around the services.
- Creation of log piles for reptiles and insects utilising removed trees.
- Remove non-native species such as cherry laurel from landscaped areas.

9. CONCLUSIONS

The proposed works on Site are not considered likely to impact any internationally, nationally or locally designated sites. The habitats on Site include; modified grassland, rhododendron scrub, developed land; sealed surface, and individual trees and have the potential to support; foraging and commuting bats, reptiles, birds, hedgehogs, and badgers. A great crested newt eDNA survey was carried out on suitable waterbodies within 500m, and found that great crested newts are likely absent.

Mitigation measures for the proposed development include;

- Protection of retained trees and replanting of any lost for the development
- Vegetation clearance to be undertaken outside of reptile hibernation season.
- Vegetation clearance to be undertaken outside of bird nesting season to avoid disturbance to nesting birds. If undertaken during bird nesting season, an ecologist must first conduct a nesting bird check.
- Prior to scrub removal, the base should be inspected for evidence of sheltering hedgehog.
- Installation of ramps or means of escape within any excavations for badgers and hedgehogs;
- Sensitive lighting for foraging and commuting bats;

A Biodiversity Net Gain assessment has been carried out and the results will be supplied separately. No further reporting is required.

10. REFERENCES

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Disclaimer

Every effort has been made to ensure that the content of this report accurately identifies the potential ecological constraints to operations, its overall ecological value, and considered the possibility of the presence or absence of all Protected Species and the need for further surveys or ecological works. External factors such as weather conditions, time of day, seasons, disturbance by others, can all affect the use of the site by such species, and this report should therefore not be viewed as definitive. No liability can be accepted for omissions or changes within the status of wildlife after the production of this report.

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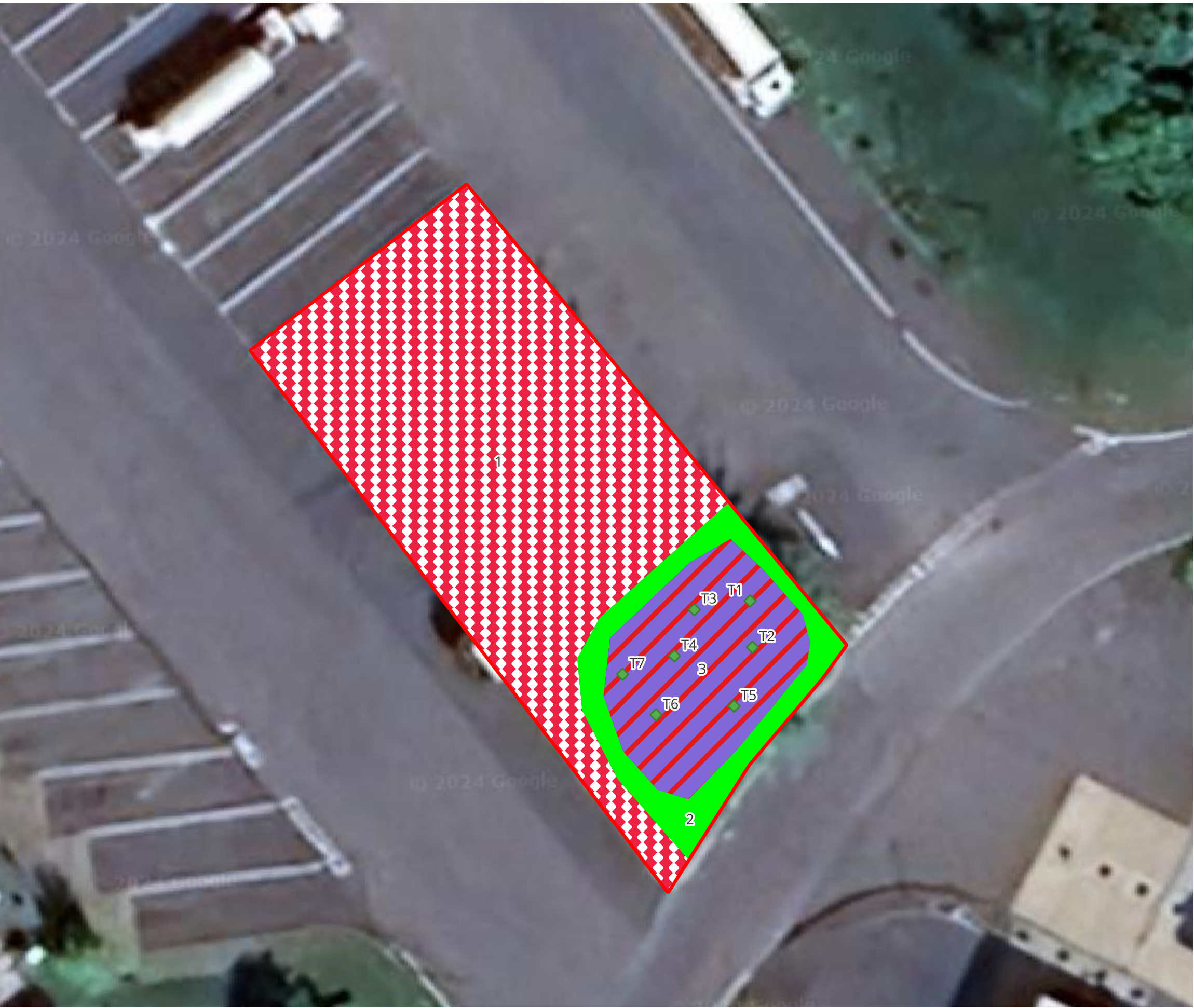
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11. APPENDICES



- Key**
- Site boundary
 - Modified grassland (g4)
 - Rhododendron scrub (h3g)
 - Developed land; sealed surface (u1b6)
 - Individual tree (h3g, 200)

Client GRIDSERVE Sustainable Energy Ltd.		
Project Baldock Services Preliminary Ecological Appraisal		
Title Habitat Map		
Drawn HB	Checked JC	Date 17.09.2024
Drawing No. Appendix A		Revision Issue
This drawing is confidential and the property of MAYDENCROFT LIMITED and must not be reproduced without written permission		
Scale 1:250		Original Size A3
Licensing Contains OS data ©Crown copyright Google Maps (2019)		Orientation

APPENDIX B. SURVEY PICTURES



Plate 1: MR 3 Dense ornamental scrub with individual trees (T1-3) on Site



Plate 2: MR 3 Dense ornamental scrub and individual trees (T4-7)



Plate 3: MR 2 Narrow modified grassland strip surrounding other broadleaved woodland. Managed cherry laurel scrub also pictured



Plate 4: Other neutral grassland to the north east of the Site. Large stones shown bottom left.



Plate 5: Access road to the east of the Site.



Plate 6: MR 1 Existing HGV parking areas on Site

APPENDIX C. RELEVANT PROTECTED SPECIES LEGISLATION

Summary

Species	Protection	Details
Bats (All)	Conservation of Habitats and Species Regulations 2017 – Sch 2	Works likely to impact on the species or its habitat requires a European Protected Species License issued by Natural England
	Wildlife and Countryside Act – Sch 5 Section 9 (full protection)	Prohibits killing, injuring or taking by any method; Prohibits sale or advertising for sale; Prohibits damage, destruction or obstruction of access to any structure or place which is used for shelter or protection; Prohibits disturbance whilst occupying a structure used for shelter or protection
	Wildlife and Countryside Act – Sch 6	Prohibits killing or taking by certain methods under Section 11 (1)
Birds	Wildlife and Countryside Act – Sch 1	Prohibits the taking, damaging or destruction of active bird nests; killing, injuring or taking of any wild bird; taking or destruction of the eggs of any wild bird
	Wildlife and Countryside Act – Sch 1 (pt.1)	Prohibits any form of intentional or reckless disturbance to bird species as listed under Schedule 1 part 1 whilst they are nesting or rearing young
Badger	Protection of Badgers Act 1992	Prohibits killing, injuring or taking a badger or cruelly ill-treating a badger
	Wildlife and Countryside Act – Sch 6	Prohibits killing or taking by certain methods under Section 11 (1)
Reptiles (Common species)	Wildlife and Countryside Act – Sch 5 Section 9 (pts. 1 & 5 only)	Prohibits killing, injuring, taking by any method; Prohibits sale or advertising for sale

European Protected Species

The Bern Convention (The Convention on the Conservation of European Wildlife and Natural Habitats) was adopted in 1979 and came into force in 1982. To implement this agreement, the European Community adopted the EC Habitats Directive.

The EC habitats directive has been transposed into UK legislation by the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2017. The Countryside and Rights of Way Act (CROW), 2000 strengthened the existing wildlife legislation in the UK.

The UK has also signed The Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animals) and is therefore party to various agreements.

Bats

All 17 species of bats are protected under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (and as amended) and are also protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are listed under Appendix II of the Bern Convention (with the exception of common pipistrelle (*Pipistrellus pipistrellus*) which is listed under Appendix III) and Annex IV of the EC Habitats Directive, 1992. Certain species of bat are additionally listed under Annex II of the Habitats Directive, which means that sites of key importance to populations may be afforded statutory protection as a Special Area of Conservation (SAC). Bats and their habitats are also listed under Appendix II of The Bonn Convention and therefore the UK has an obligation to protect their habitat, including links to important feeding areas.

Other Protected Species

Birds

All wild birds are protected under Schedule 1 of the Wildlife and Countryside Act, 1981. Therefore, in the

UK it is an offence to:

- take, damage or destroy the nest of any wild bird whilst it is being built or in use;
- kill, injure or take any wild bird; and
- take or destroy the eggs of any wild bird.

To avoid committing an offence no works should be carried out on a structure/ feature that is being used by nesting birds. Nesting is deemed to be over when the young have fully fledged.

Certain species which are listed in Schedule 1 Part 1 of the Wildlife and Countryside Act receive special protection. In these cases any form of intentional or reckless disturbance when they are nesting or rearing dependant young, constitutes an offence.

Badger

Badgers are fully protected in the UK by the Protection of Badgers Act, 1992 and by Schedule 6 of the Wildlife and Countryside Act, 1981(as amended). This makes it an offence to:

- wilfully kill, injure, take, possess or cruelly treat a badger;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett; and
- disturb a badger while it is occupying a sett. Disturbance could include digging or scrub clearance within 30m of the sett, and therefore advice should be sought before carrying out such activities.

Badgers are mainly protected due to persecution in the past and are not rare.

Reptiles

All native reptiles are protected from intentional killing and injury under Schedules 5 of the Wildlife and Countryside Act 1981 (and as amended). They are listed under Appendix III of the Bern Convention as species which are in need of protection.

Sand lizard and smooth snake, along with their habitats, are further protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Species of Principal Importance

Species of principal importance for the purpose of conserving biodiversity, covered under Section 41 (England) of the NERC Act (2006). Species of principal importance must be treated as a material consideration by a public body when performing any of its functions with a view to maintaining the favourable conservation status. Those such species which are considered to have potential to be encountered on Site and are not aforementioned as a result of a higher level of protection in the sections above are listed below:

- *West European Hedgehog (Erinaceus europaeus)*