

Ecological Impact Assessment Report

**Land at the Junction of Aerodrome Road and
Spitfire Way, Hawkinge**

Application reference: 23/1972/FH

Prepared by Fellgrove for Masters Knowles
Developments

Document ref: 6902
Issue date: February 2024

DOCUMENT CONTROL

This document has been prepared by Fellgrove in accordance with the Chartered Institute of Environmental Management (CIEEM) guidelines for Ecological Report Writing. This report should be read in full and detailed guidance given must be followed to avoid breaching legislation regarding protected species and Habitats.

This report is valid for two years from the date of the survey visit. Should works be delayed to later than one year after the survey then a further update survey of the site would be required as habitats change over time, along with their potential to support protected species. Planning policy and legislation may affect the timing of works and operations described in this report.

It is accepted that this is a working document and may need to be updated with more detailed information added throughout the planning and development process. The interpretations and recommendations contained within this report represent our professional opinion in addition to using accepted industry practice based on current legislation. Fellgrove accept no responsibility for any use of this document outside that of which it is intended.

VERSION	STATUS	CONDITION	REVIEWED (1)	APPROVED (2)
1.0	PLANNING	TO BE APPROVED FOR PLANNING	7000-01-24_ECO_KJ	7000-01-24_ECO_LR

REVISIONS

PAGE	DATE	DETAILS OF CHANGE MADE	CHANGE APPROVED

DETAILED EVIDENCE MAY BE GIVEN THROUGHOUT THIS REPORT PERTAINING TO THE LOCATIONS OF PROTECTED SPECIES AND THEIR HABITATS. IT IS IMPORTANT THAT THIS IS KEPT CONFIDENTIAL AND SHOULD BE REDACTED PRIOR TO PUBLIC CIRCULATION.

Acknowledgements

Fellgrove Consultancy
Innovation Centre
Canterbury
University Road
CT2 7FG

CONTENTS

1.0 EXECUTIVE SUMMARY	4
2.0 INTRODUCTION	5
Figure 1: Site Location and Boundary	
3.0 METHODS	7
Figure 1: Non-Statutory Sites	
Table 1: Evaluation Categories (CIEEM 2018) and Example Criteria	
4.0 BASELINE INFORMATION	14
Figure 2: Statutory sites	
Table 2: Important Ecological Features for Assessment	
5.0 PROPOSALS	20
6.0 ASSESSMENT OF EFFECTS: CONSTRUCTION PHASE	21
7.0 ASSESSMENT OF EFFECTS: OPERATIONAL PHASE	27
8.0 CUMULATIVE EFFECTS	28
9.0 SUMMARY OF EFFECTS	29
Table 3: Summary of Ecological Effects of the Proposal	
10.0 REFERENCES	31

APPENDICES

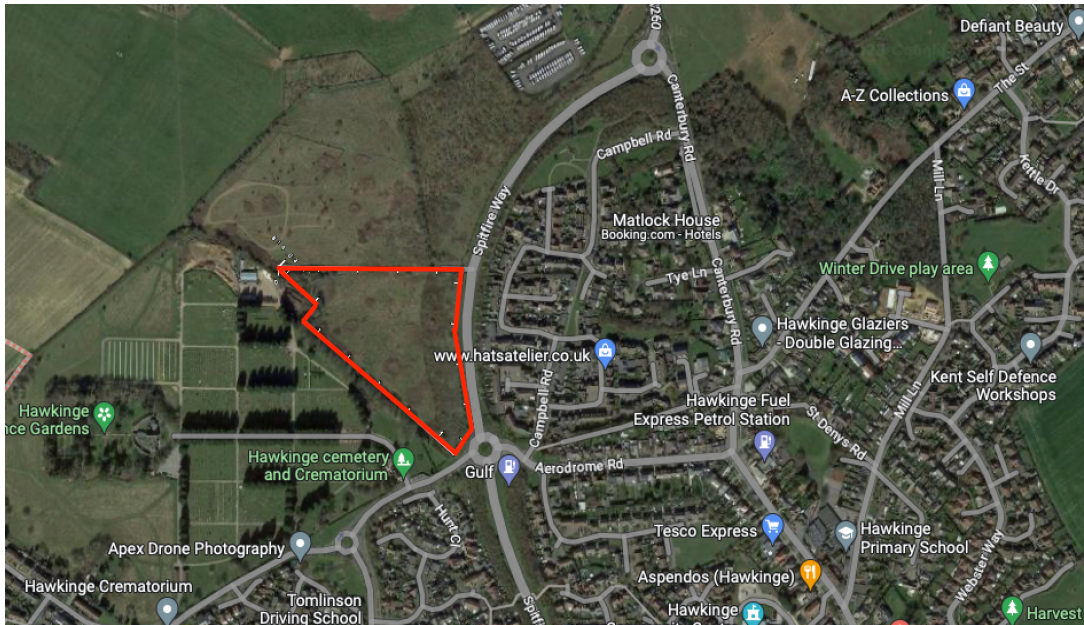
- Appendix 1: UK Habitat Classification Map
- Appendix 2: Reptile survey results
- Appendix 3: Bat survey results
- Appendix 4: Badger survey results
- Appendix 5: Landscape plan

1.0 EXECUTIVE SUMMARY

- 1.1 The Site to which this Ecological Impact Assessment (EclA) refers is situated at Land at the Junction of Aerodrome Road and Spitfire Way, Hawkinge.
- 1.2 The Site covers approximately 3.2ha. Site habitat comprises neutral grassland at varying height with short and tall grasses, scrub around the borders and in sections within the site, bare earth due to recent excavation activity, and line of trees along the site southern boundary.
- 1.3 Proposal, *“Outline planning permission, with all other matters reserved (except for access & landscaping) for a mixed use development, comprising up to 52 dwellings comprising 36 houses and 16 flats, with a provision of up to 12 self/custom-build homes, and 11 ‘affordable’ homes; together with up to 400 sq.m of convenience retail development (Class E), including access from Spitfire Way, landscaping, and new pedestrian access route”*.
- 1.4 The following important ecological features were recorded on site and/or within the Zone of Influence of the proposed development and, in the absence of mitigation, could be adversely affected by the implementation of the proposed scheme:
 - 2 statutory designated sites.
 - Neutral Grassland present on site.
- 1.5 Avoidance, mitigation, compensation, and enhancement measures are designed to minimise the significance of the potential impacts of development upon these important ecological features as provided in this report, in Table 2.
- 1.6 If the ecological avoidance, mitigation, compensation, and enhancement measures set out in this EclA are adopted and implemented, there is no known ecology related reason why planning permission cannot be granted for the proposed development scheme.
- 1.7 If these measures are effectively implemented, the proposed development is predicted to result in the following effects upon these important ecological features:
 - Negligible effects to hedgerows during the construction stage.
 - Negligible significance adverse effects to nesting birds, badger population, foraging bats and assumed hedgehog population during the construction stage.
- 1.8 The design and landscaping proposals for the site will incorporate ecological mitigation and habitat enhancement measures to benefit biodiversity on site during the occupation stage of development.
- 1.9 This report contains further detail of ecological effects, mitigation, and enhancement measures and as such it should be read in full.

2.0 INTRODUCTION

- 2.1 The proposed mixed-use development Site is to comprise up to 52 residential dwellings, with associated gardens, landscaping and access roads and additional retail development space.
- 2.2 The national grid reference for the approximate centre of the site is TR 210 401.
- 2.3 The location of the site is shown in Figure 1, with the approximate site boundary indicated in red.
- 2.4 Figure 1: Site Location and Boundary (Google Earth, 2023)



- 2.5 Neighbouring the site boundary to the west is Hawkinge Cemetery and Crematorium with remembrance gardens, to the south lies Aerodrome Road, to the east lies the A260 (Spitfire Way) and to the north is extension of the on-site habitat. Further on from these boundaries to the east and south is urban residential areas and to the west and north is arable fields.
- 2.6 1 waterbodies are present on site or within 250m of the site boundaries.
- 2.7 The proposed development will involve the creation of a new and widened access road and grading the site for creation of the proposal, which will result in the removal of the neutral grassland and dense scrub.
- 2.8 This assessment was informed by the following data, which should be referenced alongside this EclA report:
 - FEL/6902-Aerodrome Road PEA Report.pdf
 - Survey Results: Bats, Reptiles, Floral, GCN eDNA (Fellgrove, 2023)
- 2.9 Additional detail regarding the proposed scheme is provided in the documentation submitted with the planning application.

Objectives

2.10 The objectives of this assessment and report are to:

- Record the existing habitats on site and assess their levels of ecological importance;
- Confirm any presence of legally protected species and/or Species of Principal Importance for biodiversity (national priority species) on site and evaluate their levels of importance;
- Confirm any known presence of invasive, non-native plant species on site and assess the risk posed to biodiversity;
- Identify statutory and non-statutory designated sites within the Zone of Influence of the proposed scheme and assess their levels of importance;
- Assess the potential ecological effects associated with the proposed scheme;
- Identify appropriate ecological avoidance, mitigation and/or compensation measures;
- Taking into account the proposed avoidance, mitigation, and compensation measures, assess the potential residual effects upon important ecological features; and
- Identify enhancement measures that could improve the ecological importance of the site for priority habitats and species and deliver a biodiversity net gain.

Legislation and Ecology

2.11 Relevant planning policy and legislation within the United Kingdom is adhered to as follows:

- Wildlife & Countryside Act 1981 (as amended)
- Conservation of Habitats and Species Regulations 2017 (as amended) – ‘Habitats Regulations’
- National Parks and Access to the Countryside Act 1949 (as amended)
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996
- Animal Welfare Act 2006

Planning Policy

2.12 The relevant national and local planning policy is adhered to as:

- National Planning Policy Framework (NPPF) – as revised (2023)
- Folkestone & Hythe District Council local plan, – as revised

3.0 METHOD

Desk Survey

- 3.1 Recent and historic aerial images and Ordnance Survey maps were used to search for waterbodies located within 250m of the site, and to assess the connectivity of on-site habitats to wider, off-site habitat networks.
- 3.2 A biological records data search was undertaken using freely available public resource information. The data obtained through this search includes records of:
- Legally protected species;
 - Species and Habitats of Principal Importance;
 - Non-statutory designated sites.

3.3 Note: data given within this report pertaining to the described locations of protected species and their protected habitats must be redacted prior to circulation for public viewing.

- 3.4 The search radius was 1km, measured from the site boundary. This search radius was extended to 5km for bats. Records obtained within the ten-year period prior to the date of the record search are considered 'recent'. Records older than this are considered 'historic'.
- 3.5 The Multi Agency Geographic Information for the Countryside (MAGIC) website was used to obtain information regarding:
- Statutory designated sites of international, national, and local importance;
 - Proposed, possible and potential statutory designated sites of international importance;
 - Impact Risk Zones (IRZs) associated with Sites of Special Scientific Interest (SSSIs) and statutory designated sites of international importance;
 - Granted European Protected Species (EPS) mitigation licenses;
 - Great crested newt (GCN) pond survey results;
 - Ancient woodland.
- 3.6 The search radius for statutory designated sites of local importance and ancient woodland was 1km, measured from the site boundary. This search radius was extended to 2km for statutory designated sites of national importance and 2km for statutory designated sites of international importance.
- 3.7 Information published online by the Joint Nature Conservation Committee (JNCC) has been used to identify relevant threats, pressures, activities and/or factors that have the potential to result in adverse effects upon the qualifying features / selection criteria for any statutory designated sites of international importance that are located within the Zone of Influence of the proposed project.
- 3.8 Information Sheets on Ramsar Wetlands provide detail of the factors that are likely to adversely affect a given Ramsar site. These information sheets also state whether the Ramsar site is subject to adverse ecological change.
- 3.9 Natura 2000 Standard Data Forms for Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) provide detail of the threats, pressures and activities that have the potential to adversely affect the qualifying features for a given SPA / SAC site. Site Improvement Plans provide details of existing risks to such sites. The Natural England online profile for any SSSI located within the Zone of Influence of the proposed project has been reviewed - to identify relevant 'Operations likely to damage the special interest' of the relevant SSSI(s).

Field Survey (Existing Baseline)

- 3.10 A baseline habitat survey of the site was undertaken during July 2023 by Fellgrove.
- 3.11 Habitats within the site were recorded and using the UK Habitat Classification methodology (see Appendix 1) during the survey visit.
- 3.12 The likelihood of presence of legally protected, priority (national and county) or otherwise notable species was also assessed and target-noted during the baseline habitat survey. Any incidental sightings or indirect evidence of species presence was also recorded.

Field Survey (Further Survey)

- 3.13 The initial 2023 site visit identified habitats suitable for reptiles, breeding birds, badgers, bats and GCN.
- 3.14 Reptile presence / likely absence surveys were conducted by Fellgrove between May 2023 and June 2023. The survey used felt artificial cover objects, which were checked over seven survey visits.
- 3.15 A badger survey was undertaken by Fellgrove between September and October 2023. The survey methodology adopted an observational site walkover and static camera traps.
- 3.16 Bat activity surveys were conducted by Fellgrove comprising two survey visits of boundary treeline during July 2023 and August 2023. The survey adopted transect methodology.
- 3.17 A ground-level assessment of the Flora species was completed on site by Fellgrove during May 2023.

Current Assessment

- 3.18 The initial site appraisal was undertaken in broad accordance with CIEEM's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017).
- 3.19 The impact assessment set out in this report was undertaken in broad accordance with CIEEM's Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018) Version 1.1 (as revised).
- 3.20 It has also been informed by CIEEM's Ecological Impact Assessment Checklist developed in association with the Association of Local Government Ecologists. The guidelines set out the following processes for assessment: Identification of important (or 'notable') ecological features that may be affected by impacts associated with the scheme. These may be important by virtue of their rarity, threatened status and/or legal protection. These are referred to below as important ecological 'features';
 - Identification of the level of nature conservation importance of each potentially important ecological feature that is present within a site and within any adjacent off-site areas which may be affected by a development (i.e. within the ecological zone of influence of the scheme);
 - Identification of potential effects based on the nature of the construction and operation phases of a proposed scheme;
 - Determining the geographic level at which an effect will be significant, based on the interaction between the characteristics of the effect and the nature conservation importance of the feature likely to be affected;
 - Identifying avoidance, mitigation and, if required, compensation measures that are proposed to avoid, reduce, or offset significant adverse effects; and
 - Determining residual effects on features once proposed avoidance and mitigation measures have been taken into account, and any necessary compensation measures.

- 3.21 In broad terms, 'significant effects encompass impacts on the structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution)' (CIEEM, 2018).
- 3.22 In order to assess the effects of any project on flora and fauna, it is important to recognise that a scheme can affect ecological features not only within the land-take required for that scheme but also off site. As a result, for the purposes of the assessment for this scheme, each impact assessment for the differing ecological features considers a 'zone of influence.' This is the maximum spatial extent to which any element of the scheme could significantly impact on a feature as long as the link between the source of impact, an impact pathway and a feature is maintained.
- 3.23 The CIEEM (2018) guidelines advocate an approach to the assessment of the importance of ecological features using a geographical framework, where the importance or potential importance of an ecological resource or feature should be determined within a defined geographical context.
- 3.24 The guidelines suggest a range of geographical parameters and the ones chosen for this assessment are:
- International (e.g. Europe)
 - National (e.g. England)
 - Regional (e.g. Southeast region)
 - County (e.g. Kent)
 - Local (e.g. Swale District)
 - Negligible (i.e. insignificant in the context of this assessment)
- 3.25 The assigning of a geographical framework has been based on available guidance and information, professional judgement, and peer review. The evaluation categories used, and example criteria are presented in Table 1 below.

3.26 Table 1: Evaluation Categories (CIEEM 2018) and Example Criteria

Geographic Importance	Criteria
International	- Internationally significant populations of European Protected Species (Annex IV), Annex II species, or species otherwise formally deemed to be rare and threatened in Europe or globally (e.g. International Union for the Conservation of Nature (IUCN) 'red-listed'), the loss of which would significantly change the species' overall conservation status (i.e. range, abundance, population trend) at the European scale. - A population that would meet the published selection criteria as a qualifying feature for designation of a SAC. - An internationally designated site or candidate site, i.e. a SPA, proposed SPA (pSPA), SAC, candidate SAC (cSAC), Ramsar site, or an area which would meet the published selection criteria for such designation. - Other significant areas of Annex I priority habitats listed in the Habitats Directive, the loss of which would significantly change the overall range and area at the European scale in the long term.
National	- Nationally significant populations of species identified in the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 as being of principal importance for the conservation of biodiversity in England, or otherwise formally deemed to be nationally rare and threatened (e.g. 'red-listed'), the loss of which would significantly change the species' overall conservation status (i.e. range, abundance, population trend) at the national scale. - A population that would meet the published selection criteria as a qualifying feature of a SSSI. - A nationally designated site, i.e. SSSI, NNR or discrete area which would meet the published selection criteria for national designation (e.g. SSSI selection guidelines). - A significant area of a non-designated habitat type identified in the NERC Act 2006, Section 41 as being of principal importance for the conservation of biodiversity in England, the loss of which would significantly change the overall range and area of that habitat at the national scale in the long term. Such habitat should be a major component of areas that are at near- equivalence to SSSIs, meeting most of the published SSSI selection criteria.
Regional	- Regionally significant populations of species identified in the NERC Act 2006 Section 41 as being of principal importance for the conservation of biodiversity in England, or otherwise formally deemed to be nationally rare and threatened (e.g. 'red-listed'), the loss of which would significantly change the species' overall conservation status (i.e. range, abundance, population trend) at the regional scale. - A significant area of a non-designated habitat type identified in the NERC Act 2006, Section 41 as being of principal importance for the conservation of biodiversity in England, the loss of which would significantly change the overall range and area of that habitat at the regional level in the long term. - Large areas of semi-natural ancient woodland that do not meet the national importance criteria (above) should be considered at this scale due to the irreplaceable nature of such habitat.

County	- Significant populations of species identified in the NERC Act 2006 Section 41 as being of principal importance for the conservation of biodiversity in England, or otherwise formally deemed to be nationally rare and threatened (e.g. 'red-listed'), or priority species in the County Biodiversity Action Plan (BAP), the loss of which would significantly change the species' overall conservation status (i.e. range, abundance, population trend) at the County scale. - Sites formally recognised by local authorities, e.g. Local Wildlife Site (LWS) or considered to meet published ecological selection criteria for such designation. - A significant area of a non-designated habitat type identified in the NERC Act 2006, Section 41 as being of principal importance for the conservation of biodiversity in England, the loss of which would significantly change the overall range and area of that habitat at the county scale in the long term. - Small areas of semi-natural ancient woodland that do not meet the national or regional importance criteria (above) should be considered at this scale due to the irreplaceable nature of such habitat. - A significant area of key habitat identified in the County BAP.
Local	- Significant populations of species identified in the NERC Act 2006 Section 41 as being of principal importance for the conservation of biodiversity in England, or otherwise formally deemed to be nationally rare and threatened (e.g. 'red-listed'), or priority species in the County BAP the loss of which would significantly change the species' overall conservation status (i.e. range, abundance, population trend) at the district or borough scale. - Sites formally recognised by local authorities, e.g. Sites of Borough Importance for Nature Conservation (Borough/Local SINCS), LNRs, or considered to meet published ecological selection criteria for such designation. - A significant area of a non-designated habitat type identified in the NERC Act 2006, Section 41 as being of principal importance for the conservation of biodiversity in England, the loss of which would significantly change the overall range and area of that habitat at the district scale in the long term. - A significant and viable area of habitat identified in the District BAP.
Negligible	- Species populations of limited ecological importance due to their size, composition, or lack of threat/rarity. The loss of such features would have no discernible impact on the species'/habitat's overall range and conservation status at any formal administrative scale in the long term. - Areas of habitat of limited ecological importance due to their size, species composition or lack of threat/rarity. The loss of such features would have no significant impact on the habitat's overall range and conservation status at any administrative scale in the long term.

- 3.27 Only habitats and species considered to be of at least local importance will be fully assessed within this assessment. Features of negligible importance are scoped out of the assessment.
- 3.28 The only exception to this is where a habitat or species has been afforded a level of legal protection that requires it to be considered more fully, irrespective of that feature's assumed ecological importance (e.g. badger). This has been made clear whenever this occurs.
- 3.29 Once an ecological feature has been assigned a geographic level of importance, the next stage is to assess the significance of the predicted impact to that feature.
- 3.30 The CIEEM (2018) Guidelines advise that 'the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important... For example, an effect on a species which is on a national list of species of principal importance for biodiversity may not have a significant effect on its national population. Examples of other relevant scales include regional and county. It should be noted

that effects may be significant at the local scale, particularly in view of policies for no net loss of biodiversity.'

- 3.31 It is therefore sometimes possible that an effect may not be significant at the feature's given level of importance due to its low magnitude, duration, etc., but may be significant at a lower geographic scale. For example, the effects of an impact on a species of county importance may not be discernible or significant at the county scale but may be significant at the local (district) scale. Where this is the case, it is stated in the assessment.
- 3.32 Conversely, it is important to note that the level of significance of an effect upon an important ecological feature cannot be greater than the geographic level of importance attributed to that feature. For example, if a protected species population (the important ecological feature) is attributed 'local' level importance, the effect upon this population cannot be of greater than 'local' significance.
- 3.33 It is important to note that the CIEEM Guidelines do not recommend assigning any other terms to the impact significance such as 'high', 'moderate' or 'low', such as those found within other aspects of Environmental Impact Assessment (EIA) practice.
- 3.34 To determine the likely significance of an impact, the following parameters may be used:
- Impact type - direct or indirect, positive, or negative;
 - Magnitude of impact - the 'amount' or intensity of an impact. This may sometimes be synonymous with 'extent' (see below) for certain impacts, such as habitats loss. For mortality it may be the number of individuals killed;
 - Extent of impact - the area over which the impact will be felt;
 - Duration of impact - how long a period it will occur across. CIEEM Guidelines suggest that ecological impact durations should be described in terms of ecological characteristics (e.g. species lifecycles/longevity) rather than human timeframes. Therefore, for this assessment, short-term is up to one (breeding / wintering, etc.) season, medium-term is a typical reproductive lifespan (in the wild), and long-term is over several generations. A permanent impact is one where no reasonable chance of recovery/restoration is evident within the foreseeable future;
 - Timing of impact - when it will occur, taking particular note of seasonality;
 - Frequency of impact - how often it will occur; and
 - Reversibility of impact - a reversible impact is one from which spontaneous / natural recovery is possible; or for which effective mitigation is both possible and an enforceable commitment to this can be made.
- 3.35 Mitigation for identified impacts will be based on a 'hierarchy' of mitigation options starting with the most desirable approach:
- to avoid negative impacts where possible.
 - Minimise (or reduce) what cannot be avoided; and
 - Remedy (or restore) what cannot be reduced.
- 3.36 It shall be noted that compensation is regarded as separate from mitigation, with compensation being required when the above measures still result in a significant residual impact. Compensation measures are often employed off site when on-site mitigation measures are not feasible or successful.
- 3.37 Where possible, the scheme has sought to avoid ecological impacts by design. The measures described in this report, therefore, seek to reduce, remedy, or compensate for those impacts that could not be avoided through such design measures.
- 3.38 Mitigation for the site preparation and construction phase assumes that a competent contractor will be used who is familiar with, and will adhere to, industry-standard environmental safeguards. In particular, it

is assumed that industry-standard measures for reducing or eliminating noise, dust, water pollution, silt run-off, etc. will be implemented. It also assumes that robust measures and equipment for dealing with any unexpected pollution events will be in place at all times.

- 3.39 Mitigation will aim to be proportionate to impacts, but will recognise that where uncertainty of effect exists, a more precautionary approach may be required to minimise risk.

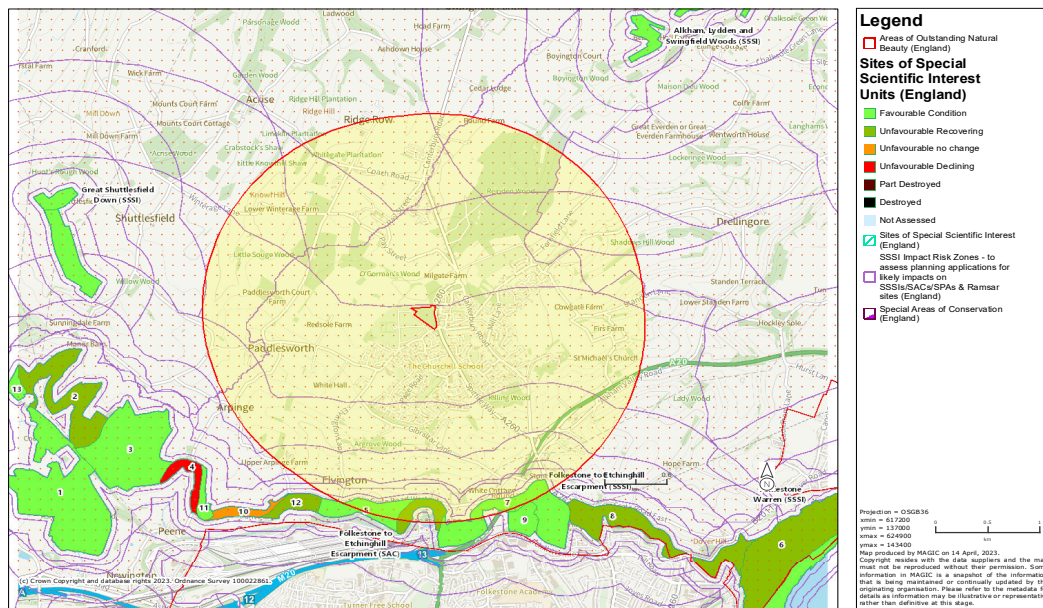
Limitations

- 3.40 Limitations relating to the Preliminary Ecological Appraisal, bat, reptile, and badger are included within the relevant survey reports found above on page 7. None of the limitations identified in these reports represent a material limitation to this assessment.
- 3.41 The list of invasive plant species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats. There may be invasive plant species present which were not recorded due to seasonality, dense vegetation, or growth form for example, but it is considered that this assessment is sufficient to identify any significant populations of invasive plants. However, it is important to note that our scope of works for this project did not include a specific invasive plant survey and any only incidental records of any invasive flora, recorded during on-site ecological survey work, are identified in this report.
- 3.42 The above limitations are not considered likely to significantly affect the conclusions drawn within this assessment. Where ecological data from surveys and desk study are limited or understanding of species' responses to impacts is less well-known, a precautionary approach has been taken in the assessment of likely significance and in the scope of mitigation.
- 3.43 This report deals with matters of legal significance but does not constitute professional legal advice. The Client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document, which is summarised in Section 2.

4.0 BASELINE INFORMATION

Statutory Designated Sites

- 4.1 2 statutory designated sites have been located within 2km of the site. To the south of the site are Folkestone to Etchinghill Escarpment SSSI + SAC (c.1.9km).
- 4.2 There are no direct hydrological impact pathways between the proposed scheme and this designated site. New residents of the proposed dwellings could access these sites via the local road network.
- 4.3 The MAGIC IRZ search tool states that: *'For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SSSI Sites. Contact Local Planning Authority'*.
- 4.4 The site is located within the outer IRZ of both Folkestone to Etchinghill Escarpment SSSI and SAC. However, the proposed scheme does fall within the planning application types identified by the MAGIC IRZ tool as requiring further assessment for potential impacts upon the SSSI and SAC.
- 4.5 Given the likely construction related activities to be undertaken to facilitate the proposed development, and the distance between the application site and the SSSIs/SAC, no impacts to statutory designated sites of national importance are predicted.
- 4.6 Figure 2: Statutory sites



Non-Designated Habitats of Principal Importance

- 4.7 Existing habitats within the site have been mapped - as presented in Appendix 1. On-site habitats and any significant habitats within the scheme's wider ecological zone of influence are described below.

PROTECTED AND NOTABLE SPECIES

FLORA

- 4.8 No further on-site habitats are likely to support notable plant species or communities.
- 4.9 No notable plants were recorded on site during the floral survey visit and have therefore been scoped out of further assessment (see Appendix 4).

INVERTEBRATES

- 4.10 The habitats present on site are all common and widespread. However, no species of principal importance were observed during any of the site survey visits conducted during 2023 and have therefore been scoped out of further assessment.

GREAT CRESTED NEWT AND OTHER AMPHIBIANS

Desk Study

- 4.11 The biological data search did return 1 record of GCN within 2km of the site.
- 4.12 A search of Natural England's MAGIC website did return 1 GCN EPSM licenses within 2km of the site.
- 4.13 There is 1 waterbody within a 250m radius of the site. The pond is divided by highway infrastructure, the site and wider area site are within the DLL green zone, eDNA results of the pond returned negative results for GCN and have therefore been scoped out of further assessment.

REPTILES

Desk Study

- 4.14 The record search returned records of common lizard, grass snake within 2km of the site.

Habitat Assessment

- 4.15 The majority of the site contains suitable habitat for reptiles within neutral grassland and scrub area and taller grass/scrub edges of the site. There is also sheltering/hibernating opportunity within the habitat that is scattered around the site. The arable field margins just outside the site boundaries also provide suitable habitat for reptiles.
- 4.16 The roads located adjacent to the site are busy roads are considered a significant barrier to reptile dispersal.

Survey Results Evaluation

- 4.17 A presence / likely absence survey for reptiles was conducted in 2023. This comprised seven visits between May and June 2023 using 45 artificial cover objects within habitat deemed suitable for reptiles. See Appendix 2.
- 4.18 During the course of the survey, a medium population of reptiles (Slow worms & Common lizards) was recorded on site.

BIRDS

Desk Study

- 4.19 The biological search returned recent and historic records of 83 bird species, 52 of which were confirmed breeding within a 5km radius of the site.

Habitat Assessment

- 4.20 The treeline present on and adjacent to site provide suitable nesting habitats for a range of common woodland and garden bird species.
- 4.21 The on-site grassland and scrub vegetation does provide suitable habitat for nesting birds.
- 4.22 No evidence of nesting birds was recorded on-site during the survey visits during 2023.
- 4.23 Based on the prevalence of similar habitats in the surrounding local landscape and the small size of the site, the site is considered to be of moderate importance for common and widespread bird species.

HAZEL DORMOUSE

Desk Study

- 4.24 The record search returned historic record of hazel dormouse within 2km of the site during 2010.
- 4.25 A search of Natural England's MAGIC website returned no recent records of granted EPSM licenses.

Habitat Assessment

- 4.26 Little suitable habitat is present on site within the scrub but this is isolated to the site and there is no connectivity to wider, more suitable habitat so presence is unlikely.
- 4.27 Given the above, hazel dormice are unlikely to be present within the proposed development site and have therefore been scoped out of further assessment.

BADGER

Desk Study

- 4.28 The desk study for the site reported recent (2019) records of badgers within 2km of the site.

Habitat Assessment

- 4.29 Suitable habitat for badger foraging and commuting (grassland and tree bases) were found on site.

Survey Results Evaluation

- 4.30 Badger surveys were conducted between September and October 2023 (inclusive) using a systematic search of the site looking for evidence of badger activity and presence on site and within a 30M buffer of the site boundary.
- 4.31 Potential entrance holes and paths were recorded, entrance hole 1 was recorded towards the southern boundary close to the tree line. Entrance hole 2 was recorded more centrally to the site on the edge of the scrub. Entrance hole 3 was recorded towards to north of the site with hole 4 recorded to the west close to the boundary vegetation.
- 4.32 During the camera surveys, no badgers and no foraging activity was recorded on site. No other evidence of feeding or foraging on or around site was recorded.
- 4.33 No dung pits or latrines were recorded within the redline boundary.
- 4.34 Given the above results the site is considered to be of low importance to any local badger populations.

BATS

Desk Study

- 4.35 The data search returned records of eight bat species located within 5km of the site.

Habitat Assessment

- 4.36 All trees with bat roost potential will be retained and protected, and the proposed scheme will not result in any reduction of the suitability of these trees for roosting bats, further assessment of these trees has been undertaken to inform of site lighting to allow dark buffers to be created.
- 4.37 Given the above, these habitats have been assessed as being of moderate suitability for foraging and commuting bats.

Survey Results Evaluation

- 4.38 Transect surveys were completed on site surveys completed on 21st July and 25th August 2023. See Appendix 3.
- 4.39 Activity from common pipistrelle and myotis were recorded on the 21st July with only common pipistrelle recorded on the 25th August.
- 4.40 In addition, activity levels were assessed as very moderate throughout the survey, common pipistrelle (*Pipistrellus pipistrellus*) were recorded using the site briefly for foraging during each survey visit.
- 4.41 Based on the above information, the site is not considered to be of local importance to any bat population.

OTHER NOTABLE WILDLIFE

- 4.42 The site provides suitable habitat for other notable mammal species, namely hedgehog. This species is a Species of Principal Importance.
- 4.43 The record search returned recent records of hedgehog, within 2km of the site.
- 4.44 The habitats across the site are suitable for hedgehogs. The grassland and scrub present on-site provide suitable foraging and nesting habitat and possible hibernation potential.
- 4.45 Hedgehogs are assumed to be present on site although no detailed hedgehog survey was undertaken.
- 4.46 Based on the frequency of occurrence of similar habitat within the surrounding local landscape (frequent, but not abundant or extensive) and the absence of a specific survey effort for this species, on a precautionary basis, the site is assessed as being of local level importance for the assumed local hedgehog population.

IMPORTANT ECOLOGICAL FEATURES

- 4.47 Based on the above evaluation of the current baseline ecological interest of the site and the scheme's zone of ecological influence, it has been possible to screen-out those features for which no significant effects are likely due to their likely absence, negligible ecological importance, or lack of any evident impact pathway.
- 4.48 Sensitive ecological features that will be considered further for the impact assessment and mitigation are those that have been assessed as being of ecological importance at the local level or above, and/or which are legally protected (or legally restricted in the case of invasive non-native species). Their levels of importance and legal and policy implications are summarised in Table 2.
- 4.49 Table 2: Important Ecological Features for Assessment

<i>Feature</i>	<i>Ecological importance</i>	<i>Legal status</i>
Statutory designated sites (SPA, SAC & Ramsar)	International	Conservation of Habitats and Species Regulations 2017 (as amended).
Slow worm population	Local	Partial (killing and injury) Wildlife and Countryside Act 1981. NERC Act Section 41 Species of Principal Importance.
Badger population	N/A	Protection of Badgers Act 1992.
Bat assemblage (foraging and potentially roosting)	Assumed Local	Full Conservation of Habitats and Species Regulations 2017. Protected under Wildlife and Countryside Act 1981 (as amended). Some are NERC Act Section 41 Species of Principal Importance.
Assumed hedgehog population	Assumed Local	All wild mammals are afforded some legal protection under the Wild Mammals (Protection) Act 1996 (as amended). NERC Act Section 41 Species of Principal Importance.

FUTURE BASELINE

- 4.50 Where there is a significant delay between an EclA and the commencement of the proposed works, the baseline ecological features can change. Therefore, it is important to account for any such delay and any known factors that may cause significant change over that period so that a reasonable prediction of the 'future baseline' can be made.
- 4.51 Based on the fact that the site is not currently within the applicants ownership and the EclA is to accompany an outline application, it is assumed that habitats will not be managed as they are and there may be change to the current baseline prior to construction of the scheme, so this assessment considers the future baseline to be as described above. It is however acknowledged that in the absence of development, areas of the site may be subject to natural succession, with an increase in woody cover in areas, but given the assumed continuation of existing site management, any such change is likely to be ecologically significant.

5.0 PROPOSALS

- 5.1 The proposed development comprises the construction of 52 residential dwellings with associated gardens, parking, access, and landscaping along with 400sqm of retail space.
- 5.2 The combination of earthworks and introduction of hardstanding and landscaped areas will result in the loss of the existing grassland (c. 0.45ha), scrub (c. 1.34ha).
- 5.3 As part of the proposals, new native species-rich hedgerow will be planted, native woodland mix, native buffer mix, flowering grass, meadow grassland and grassland tolerant to wet conditions.
- 5.4 A plan of the on-site habitats following completion of the scheme is provided within Appendix 5. The locations of the new hedgerow sections are indicated on that plan.
- 5.5 Additional detail regarding the proposed development is provided in the documentation submitted with the planning application.

6.0 ASSESSMENT OF EFFECTS: CONSTRUCTION PHASE

- 6.1 The proposed development comprises the construction of 52 residential dwellings with associated gardens, parking, access, and landscaping along with 400sqm of retail space.

NON-DESIGNATED HABITATS OF PRINCIPAL IMPORTANCE

PROTECTED AND NOTABLE SPECIES

NESTING BIRDS

- 6.2 The proposed will involve the removal of grassland and scrub which is suitable nesting and foraging habitat.

Potential Effects in the Absence of Mitigation

- 6.3 Any cutting or clearance of trees or scrub during the main bird breeding season (March to mid-September, inclusive) risks damaging active nests. The most likely impacts arising during the construction phase are killing / injury of nesting birds (including their eggs or young), damage / destruction of nests and the loss of nesting and foraging habitat when the woody vegetation on site is removed and the majority of the earthworks are taking place.
- 6.4 Construction related noise and nocturnal lighting also have potential to impact nesting birds on site or immediately adjacent to the site.
- 6.5 In the absence of mitigation, the removal of the on-site scrub, and trees within the proposed development site and potential impacts from construction noise and nocturnal lighting during the hours of operation are likely to result in adverse effects of negligible significance upon nesting birds. Direct, physical impacts upon nesting birds would be irreversible effects, whilst the effects of construction stage noise and lighting would be short-term and reversible.
- 6.6 With species using the site possibly missing the chance to breed in the year that woody vegetation is removed, and the subsequent time that will be required for new woody habitats suitable for nesting birds to establish, this would be a long-term direct negative impact of negligible significance on breeding birds.

Mitigation and Compensation Measures

- 6.7 Removal of bird nesting habitats on site will be conducted between mid-September and mid-February (inclusive), outside of the main nesting season to avoid damaging an active nest.
- 6.8 Where removal is required within the bird nesting season (mid-February to mid- September (inclusive), an ecologist will inspect suitable habitats for the presence of active bird nests within 24 hours prior to such work.
- 6.9 If active nests are found, then a protective buffer will be established around the nest (as advised by a suitably experienced ecologist) until the chicks have fledged and/or the nest is no longer assessed as active.
- 6.10 Retained trees and hedgerows will be protected by robust site fencing with wildlife signage and contractor briefings during construction phase.
- 6.11 The proposed development will deliver new nesting opportunities by integrating or affixing nest bricks / boxes to the external walls of the new buildings and trees.

- 6.12 These bricks / boxes will be positioned out of the reach of windows and doors, near the eaves or tops of walls of the new buildings, on properties located close to retained hedgerows and tree lines.
- 6.13 The recommended nest bricks / boxes include, but not be limited to, WoodStone House Sparrow Nest Box, Schwegler 1MF Swift Nest Box or the 1B Schwegler Nest Box.

Residual Effects

- 6.14 Due to the type of works, little can be done to avoid the temporary loss of habitat for foraging and nesting birds.
- 6.15 Providing the above mitigation is implemented, this would further reduce the anticipated construction-stage adverse effect on nesting birds over the short-term, by controlling the risk of killing, injury and/or damage / destruction of nests.
- 6.16 The period between the loss of suitable nesting habitat and the establishment of new vegetation would have a negligible impact on local bird populations. Suitable habitat to support nesting birds occurs within adjacent gardens and provides nesting opportunities for those common bird species that cannot nest on-site whilst the landscaping works are carried out.
- 6.17 Overall, the construction stage of the proposed scheme will result in adverse effects of negligible significance on nesting birds due to temporary loss of habitat.

BADGER

- 6.18 The proposal will involve the removal of grassland and scrub.
- 6.19 No badger setts were identified within the site or within 30m of the site boundary.
- 6.20 It is unlikely badgers are intensively foraging on site as only two snuffle holes were identified during survey works.

Potential Effects in the Absence of Mitigation

- 6.21 In the absence of mitigation, the proposed development could result in killing and / or injury of individual badgers which make their way on to site during construction.
- 6.22 Loss of individuals on site would have a short-term negative impact on the local population of negligible significance (due to the negligible conservation importance attributed to badgers).
- 6.23 However, due to the legal protection afforded to this species, mitigation to prevent these impacts is required.

Mitigation and Compensation Measures

- 6.24 During the earthworks, no steep-sided trenches or pits should be left open overnight unless they are fitted with a means of escape for mammals (e.g. a scaffold plank positioned to form a ramp) and checked in the morning. This will not alter the significance of the impacts on badger but will adequately protect this feature from site activities in line with legal requirements.

Residual Effects

- 6.25 With the above measures in place, effects upon badgers will be minimised and appropriate controls will be put in place that would otherwise constitute legal offences.

BATS

- 6.26 The proposal will involve the retention of all trees with potential roost features.
- 6.27 Bats and their places of shelter and protection (roosts) are afforded legal protection by the Conservation of Habitat and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).
- 6.28 No bats were found to be roosting within the trees on site.
- 6.29 two species of bat, common pipistrelle and myotis, were recorded using the site for foraging during each visit. Activity during each survey visit was assessed as being very low/moderate.

Potential Effects in the Absence of Mitigation

- 6.30 In the absence of mitigation, the proposed development will result in long-term loss of bat foraging habitat.
- 6.31 The trees with suitability for roosting bats are located outside the proposed works footprint. In the absence of mitigation there is a negligible risk that a bat roost, if present within the tree, could be lost, damaged, or disturbed during the construction stage.

Mitigation and Compensation Measures

- 6.32 Invasive construction activities, such as digging of foundations and ground compaction is to be located outside of the root protection areas of the trees with suitability for roosting bats. Heras fencing will be installed to ensure no invasive construction activities occur within the root protection areas of these trees.
- 6.33 Any construction-stage lighting (if required) will need to be installed away from the trees that have been identified as being suitable for roosting bats and should also avoid illumination of retained site boundary habitats and adjacent off-site habitats.
- 6.34 Only the minimum level of lighting required for site security / health and safety will be installed on site. Narrow spectrum lighting with no UV content, or 'warm white' LED lighting (ideally <2700 Kelvin, with peak wavelengths higher than 550nm) will be used.
- 6.35 All lighting will be directed to ground and light spill will be minimised through use of hoods, shields and/or cowl to maintain an upward light ratio.
- 6.36 Subject to health and safety and safe-by-design considerations, motion sensors and/or timers will be used to limit the duration of nocturnal lighting (ideally to short illuminance periods of 1 minute or less). Tall lighting columns will generally be avoided.
- 6.37 In general, lighting will follow the principles outlined bat Conservation Trust guidance note 08/23 (bats and Artificial Lighting at Night) and Institution of Lighting Professionals Guidance Note 08/18: Bats and should only be used where necessary.
- 6.38 The proposed development will deliver new roosting opportunities by integrating or affixing bat bricks / boxes to the external walls of the new buildings and existing mature trees. These will either be mounted

or integrated into new build (such as bat bricks) which have almost no visual profile on the outside and are self-cleaning.

- 6.39 Bat bricks and boxes will be positioned out of reach from windows and doors, at least 3-4m above ground level, with at least a 3m clear 'drop' below each brick / box. The bat bricks and boxes will be positioned in dark locations, away from sources of light and light spill from windows.
- 6.40 The recommended bat bricks / boxes include, but not be limited, to Schwegler 1MF or other bat boxes recommended by a suitably experienced ecologist.

Residual Effects

- 6.41 Assuming that the above mitigation and compensation measures are effectively implemented, the proposed development is predicted to have an adverse effect of negligible significance upon foraging bats in the short-term, as a result of direct loss of habitat from the site and the establishment time required for new plantings on site following the construction phase site clearance. No significant effects are predicted on roosting bats.
- 6.42 This adverse effect, incurred during the construction phase, is not likely to significantly affect the favourable conservation status of local bat populations.

REPTILES

- 6.43 The proposal will involve the removal of grassland and scrub.
- 6.44 A population of slow worm were identified during the 7 visits of the presence/ likely absence reptile surveys that were carried out between September and October 2023.
- 6.45 Using the reptile mitigation guidelines, a site with good habitat suitability and a presence returns medium population size for both common lizards and slow worms.
- 6.46 All native UK reptile species are afforded legal protection from intentional or reckless killing or injury by the Wildlife and Countryside Act 1981 (as amended).

Potential Effects in the Absence of Mitigation

- 6.47 In the absence of mitigation, the removal of the grassland would result in killing and/or injury of individual reptiles. The loss of individuals from local populations off-site that could potentially congregate on-site during development would have a long-term negative impact on the local population of assumed local level significance (resulting loss of genetic diversity within the local gene pool).

Mitigation and Compensation Measures

- 6.48 A translocation effort will need to be carried out in order to relocate the reptile population to a suitable receptor area. To be located within the same district to ensure the population maintains a local level for prominence.
- 6.49 The 2023 presence absence surveys indicated a medium population of slow worms and common lizards, 60 trapping visits (maximum two in a day) would be deemed sufficient to achieve 'reasonable effort' for translocation to a receptor site.

- 6.50 If after the recommended time period for trapping expires and reptiles are still being discovered, it may be necessary to prolong the trapping period, and/or undertake habitat manipulation (strimming and so forth) and a destructive search.
- 6.51 The translocation can take place from March to October, with spring and early autumn as optimum times. Capture and translocation effort should be restricted to periods of appropriate weather conditions with animals released the same day.
- 6.52 Prior to the trapping efforts installing exclusion fencing in areas around the perimeter of the site to ensure any reptiles off site remain outside of any construction related impacts.
- 6.53 A precautionary working method statement will be followed during vegetation clearance to avoid the killing or injuring of reptiles after the translocation efforts have been completed.
- 6.54 Prior to any works commencing, a hand search of any natural or artificial refugia will be carried out by a suitably qualified ecologist. If any reptiles are found, they are to be translocated to a pre-arranged and agreed mitigation and compensation area (receptor).
- 6.55 Clearance will take place during the reptile active season (April – October inclusive). Strimming the grassland within the site to a height of approximately 15 cm, starting in the centre of the site and moving outwards. This is followed up with a hand search of any natural refugia on site, and if any reptiles are found they are to be translocated to the receptor site.
- 6.56 The vegetation will then be cut to ground level using hand tools under the direct supervision of the retained ecologist. If any reptiles are encountered, they will be moved by hand to the mitigation and compensation area; and the area will then be checked again by the retained ecologist before removal of the tree stumps. This will be carried out by machinery under the supervision of the retained ecologist.
- 6.57 The methodology will follow the gradual site clearance and hand searches outlined above for reptiles. Hedges and trees cut should be checked by a suitably trained person prior to removal for nesting birds.

Residual Effects

- 6.58 Assuming that the above mitigation and compensation measures are effectively implemented, the proposed development is predicted to have an adverse effect of negligible significance upon local reptile population in the short-term, as a result of direct loss of habitat from the enhancements of a suitable offsite receptor area.

OTHER MAMMALS

- 6.59 General construction activities associated with any development could impact local mammal species.
- 6.60 All wild mammals receive some protection under the Wild Mammals (Protection) Act 1996 (as amended). This Act includes offences of crushing and asphyxiation of any wild mammal with intent to inflict unnecessary suffering.
- 6.61 Several common widespread mammal species are assumed to be present.

Potential Effects in the Absence of Mitigation

- 6.62 In the absence of mitigation, the on-site vegetation removal and landscaping works are likely to result in the incidental injuring or killing of more common/ widespread mammal species using the site (namely, rabbit, fox, and hedgehog).

- 6.63 The killing or injuring of a common widespread species could result in the loss of individuals or a breeding season, if a breeding female is killed; this would have a short-term negative effect on the local population of fox or rabbit (*Oryctolagus cuniculus*).

Mitigation and Compensation Measures

- 6.64 Two brush piles (using materials currently on site or untreated wood) will be created adjacent to the new native hedgerows and existing boundary. These should be positioned in sunny and shady locations. The two brush piles will provide invertebrate prey and nesting opportunities for hedgehogs in the long-term.
- 6.65 Rabbit burrows, fox (*Vulpes vulpes*) dens and any other mammal burrows (excluding badger setts) that are identified on-site and need to be removed to facilitate development, will need to be carefully excavated in a manner that allows animals (e.g. rabbits or foxes) to safely escape before works commence. All mammal burrows will need to be inspected by a suitably qualified ecologist and the excavation (if not a badger sett entrance) will also be supervised by a suitably qualified ecologist. Implementation of this approach should be sufficient to avoid an offence.
- 6.66 There is a risk of injury or mortality to hedgehogs during landscaping. Contractors will be briefed on this risk. In the event a hedgehog is found during works, it will be carefully moved to an alternative, nearby area of dense scrub cover away from the landscaping areas and roads.
- 6.67 Fencing around the site's boundaries (if required) will be hedgehog friendly, with 13cm x 13cm holes in or under boundary and garden fencing or walls for them to pass through. 'Hedgehog highway' labels should be placed above the holes to avoid them being blocked in the future.
- 6.68 To reduce the risk of harm to animals that may enter the site, the following will be implemented:
- Any holes that are excavated on-site will be covered overnight to prevent animals from falling in and becoming trapped;
 - Alternatively, a broad wooden plank or similar will be placed in the excavation as a ramp to allow animals to escape; and
 - Excavations will be checked first thing each morning, prior to the start of works that day.
 - Any animals found within excavations will be allowed to escape and move off, or carefully removed and placed within suitable habitat cover before site works commence.
- 6.69 A negligible adverse effect upon hedgehog, rabbit and fox is predicted during the construction stage.

7.0 ASSESSMENT OF EFFECTS: OPERATIONAL PHASE

DESIGNATED SITES

STATUTORY NON-STATUTORY DESIGNATIONS

- 7.1 The site is located within the outer IRZ for Folkestone to Etchinghill Escarpment SSSI and SAC. The MAGIC IRZ search tool states that 'For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on SSS sites. Contact Local Planning Authority.'
- 7.2 There is direct access to The Folkestone to Etchinghill SSSI + SAC sites via the local highway network. In the absence of mitigation, the development, in combination with other plans and projects, may contribute to increased recreational disturbance of these sites.
- 7.3 The Local Planning Authority will therefore be contacted for further guidance on the appropriate level of financial contribution. Assuming that the project is able to make a financial contribution as an acceptable mitigation solution, then a significant adverse effect upon the SSSI and SAC sites, with respect to recreational disturbance, is unlikely.

HABITATS

- 7.4 Once the landscaping has been completed, assuming that standard aftercare and habitat management is adopted and implemented, the new habitats will continue to grow and mature.
- 7.5 The retained habitat will be enhanced or subject to accelerated successional process to achieve their required target state.
- 7.6 A Landscape and Ecological Management Plan (LEMP) will be developed to help ensure that habitats are managed in a manner that benefits wildlife in the long-term.
- 7.7 Given the predicted increase in the length, quality, and condition of on-Site hedgerow throughout occupation phase (through increased planting, set back from residential fence lines), the proposed development will lead to a long-term positive effect of negligible significance upon hedgerow long-term.
- 7.8 Given the above information the site is predicted to have moderate impacts to habitats.

8.0 CUMULATIVE EFFECTS

- 8.1 The proposed development, with its incorporated mitigation and enhancements (if effectively implemented) and contribution to the Statutory Sites, will not have any residual adverse long- term ecological effects that could operate in combination with other developments in the wider area.
- 8.2 No significant development proposals were identified within 1km of the site during a search of the local planning authority online portals.

9.0 SUMMARY OF EFFECTS

- 9.1 A summary of the effects of the proposed project upon important ecological features is provided in Table 3 below. Only relevant ecological features are addressed.
- 9.2 Important ecological features that are unlikely to be present within the zone of influence of the proposed project are not included in this table. Wherever possible, area measurements have been provided in relation to impacts upon habitats.
- 9.3 Table 3: Summary of the ecological effects of the proposed project.

Ecological feature	Potential impact in the absence of mitigation	Mitigation and enhancement measures	Significance of residual effect
Designated sites	Degradation to qualifying features through increased recreational pressures.	Financial contribution. Adherence to strict pollution prevention protocol.	Negligible.
Badger	Injury, mortality and sett damage for legally protected species (negligible biodiversity importance).	Pre-construction survey for new setts and activity. Covering of steep-sided excavations at night or providing a ramp for escape. Installation of badger-proof fencing around residential curtilages wherever possible and installation of post and rail fence with stock wire to prevent residents and dogs entering woodland.	Risk of injury, mortality and effectively minimised resulting in no long-term negative effect.
Assemblage of bat species (foraging).	Lighting disturbance of individual bats present within potential roosting features would have a negative adverse effect of local significance. Medium-term loss of foraging habitats.	New plantings to include night-scented flowers to attract night-flying insects for foraging bats. Wildlife-sensitive lighting design to be implemented across the site. As a precaution, an experienced ecologist will review the detailed lighting proposals for the scheme and will provide advice on minimising light spill and illumination of boundary habitats.	Permanent adverse effect of negligible level significance.
Assumed hedgehog population	Injury, mortality and nest damage for assumed population of local importance.	Contractor watching brief. Covering of steep-sided excavations at night or providing a ramp for escape. Post development landscaping comprises c. 0.03ha of grassland and two brash piles	Risk of injury and mortality effectively avoided. Permanent adverse effect of negligible significance.
Reptiles	Loss of individuals from a population on site would have a long-term negative effect of local level significance on the local population.	Contractor watching brief. Capture and temporary translocation of animals to on site receptor area.	Risk of killing / injury of reptiles effectively minimised. Overall reduction in extent of habitat will result in a long-term

			negative effect of moderate significance.
Assemblage of nesting birds	Damage to active nests for birds of local importance during the breeding season.	Physical protection of off-site trees and habitat during construction stage. Clearance of habitat in autumn-winter or immediately following a bird nesting check.	Risk of damage to active nests effectively avoided.

10.0 REFERENCES

BCT & ILP (2023). Bats and artificial lighting in the UK: Bats and the Built Environment series. Guidance Note 08/18. Bat Conservation Trust, London and Institution of Lighting Professionals, Warwickshire.

British Standards Institute (BSI) (2012). BS 5837:2012 Trees in relation to design, demolition and construction.

British Standards Institute (BSI) (2013). BS 42020: 2013 Biodiversity - Code of practice for planning and development.

Joint Nature Conservation Committee (JNCC) (2010). Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit. Revised print, JNCC, Peterborough.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1 (Updated September 2019). Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM, Construction Industry Research and Information Association (CIRIA), Institute of Environmental Management and Assessment (IEMA) (2019). Biodiversity Net Gain: Good practice principles for development: A practical guide. CIRIA, London.

APPENDICES
AS CONTINUED BELOW



01227 806547 - info@fellgrove.co.uk - www.fellgrove.co.uk

Status

Planning

Project

Aerodrome

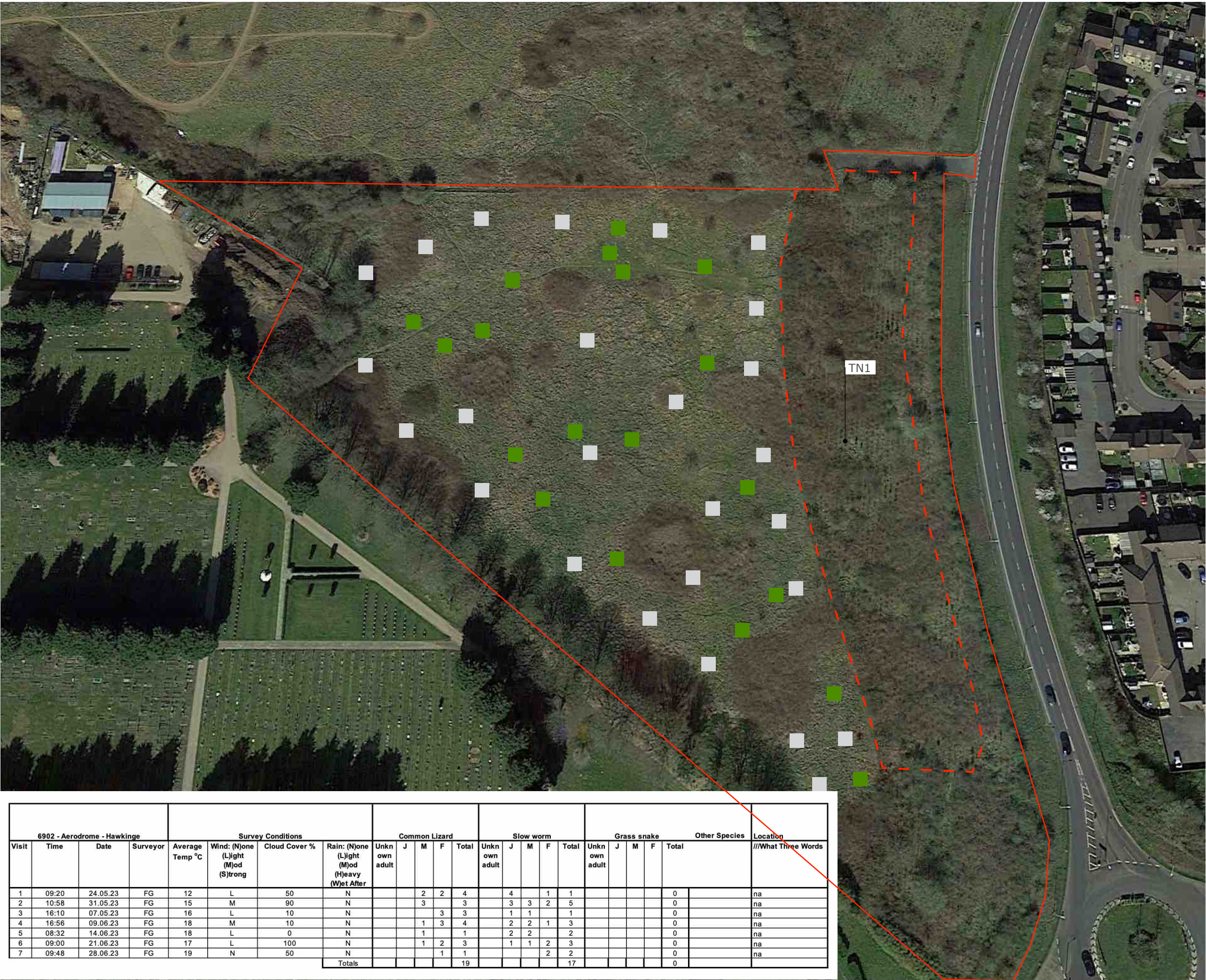
Drawing title

UKHabs Map - Appendix 1

Rev	Description	Date
-	-	-
-	-	-
-	-	-

Scale	Date	Drawing Number
NTS	24/07/23	6902_02

Key	UKHabs
	Site boundary
	Neutral Grassland g3
	Line of Trees w1g6
	Dense scrub h3
	Developed land sealed surface u1b
	Bare ground 73



Status

Planning

Project

Aerodrome

Drawing title

Reptile Survey results - Appendix 2

Rev	Description	Date
-	-	-
-	-	-
-	-	-

Scale	Date	Drawing Number
NTS	21/02/24	6902_02

Legend

- Site Boundary
- Survey Mat Location
- Survey Mat Positive Return

Target Notes

Area of cleared vegetation before
reptile survey

- 1
- 2
- 3
- 4
- 5



Site Name / Building Number:	Aerodrome Road, Hawkinge, Folkestone, CT18 7TY		Start	End
Date:	21st July 2023	Time	20:58	22:58
Surveyor Name:	Steve Stanley and Liam Hoadley		Temp °C	17
Equipment Used:	Batlogger M2		Cloud %	40%
Sunset/Sunrise Time:	20:58		Wind (BF)	1
Position Relative to Building:	NA		Rain	0

Survey Summary / Limitations / Notes

Extensive foraging and commuting along both sides of treeline from shortly after sunset, lasting the entire survey. Common pipistrelle and myotis bats observed.



E = Emergence, R = Return to roost, C = Commuting, F = Foraging, NS = Not Seen, SNH = Seen not heard

Time	Species	Activity	Notes (eg: flight direction, duration of foraging, location of roost)
21:12	Pip 45	F	Along south west side of treeline, south east end. A on map.
21:15	Pip 45	F	Along south west side of treeline, centre of treeline. B on map.
21:19	Pip 45 x2	F	Along south west side of treeline, north west end. C on map.
21:31	Myotis	C	C south east along north east side of treeline, north west end. D on map.
21:33	Pip 45	F	Along north east side of treeline, centre of treeline. E on map.
21:36	Pip 45	F	B on map.
21:38	Pip 45 x2	F	A on map.
21:42	Pip 45	F	B on map.
21:46	Pip 45	F	D on map.
21:59	Pip 45	F	E on map.
22:05	Pip 45	F	D on map.
22:08	Pip 45	F	E on map.
22:13	Pip 45	F	F on map.
22:19	Pip 45	F	D on map.
22:24	Pip 45	F	E on map.
22:30	Pip 45	F	D on map.
22:37	Pip 45	F	F on map.
22:40	Pip 45	F	E on map.
22:48	Pip 45	F	E on map.



01227 806547 - info@fellgrove.co.uk - www.fellgrove.co.uk

Status

Planning

Project

Aerodrome

Drawing title

Bat survey results - Appendix 3

Rev	Description	Date
-	-	-
-	-	-

Scale	Date	Drawing Number
NTS	21/02/24	6902_03

Legend

A Activity

Tree (s)

Flight path

Route (walked)

Species Observed

Common Pipistrelle, Myotis



Site Name / Building Number:	Aerodrome Road, Hawkinge, Folkestone, CT18 7TY		Start	End
Date:	25th August 2023	Time	19:58	21:58
Surveyor Name:	Steve Stanley and Liam Hoadley		Temp °C	17
Equipment Used:	Batlogger M2		Cloud %	30%
Sunset/Sunrise Time:	19:58		Wind (BF)	1
Position Relative to Building:	NA		Rain	0

Survey Summary / Limitations / Notes

Extensive foraging and commuting along both sides of treeline.



E = Emergence, R = Return to roost, C = Commuting, F = Foraging, NS = Not Seen, SNH = Seen not heard

Time	Species	Activity	Notes (eg: flight direction, duration of foraging, location of roost)
20:09	Pip 45	F	Along south side of treeline, north west end. A on map.
20:12	Pip 45	F	Along south side of treeline, centre of treeline. B on map.
20:17	Pip 45	F	A on map.
20:21	Pip 45	F	Along north side of treeline, south east end. C on map.
20:25	Pip 45 x2	F	Along north side of treeline, centre of treeline. D on map.
20:29	Pip 45	F	B on map.
20:31	Pip 45	F	A on map.
20:41	Pip 45	F	Along south side of treeline, south east end. E on map.
20:45	Pip 45	F	D on map.
20:56	Pip 45 x2	F	Along north side of treeline, north west end. F on map.
21:04	Pip 45	F	D on map.
21:08	Pip 45	F	E on map.
21:13	Pip 45	F	B on map.
21:19	Pip 45	F	A on map.
21:25	Pip 45	F	E on map.
21:28	Pip 45	F	D on map.
21:33	Pip 45	F	C on map.
21:36	Pip 45	F	B on map.
21:41	Pip 45	F	C on map.
21:48	Pip 45	F	A on map.



01227 806547 - info@fellgrove.co.uk - www.fellgrove.co.uk

Status

Planning

Project

Aerodrome

Drawing title

Bat survey results - Appendix 3

Rev	Description	Date
-	-	-
-	-	-

Scale	Date	Drawing Number
NTS	21/02/24	6902_03a

Legend

A Activity

Tree (s)

Flight path

Route (walked)

Species Observed
Common Pipistrelle



01227 806547 - info@fellgrove.co.uk - www.fellgrove.co.uk

Status

Planning

Project

Aerodrome

Drawing title

Badger survey results - Appendix 4

Rev	Description	Date
-	-	-
-	-	-
-	-	-

Scale	Date	Drawing Number
NTS	21/02/24	6902_04



SPECIFICATION
All works generally, to comply with the written Soft Landscape Specification.

NOTES:
DO NOT SCALE FROM DRAWING
NOT FOR CONSTRUCTION, FOR PLANNING PURPOSES ONLY

Legend

- Existing trees
- Proposed tree
- Proposed specimen shrub
- Proposed hedge
- Proposed mixed native hedge
- Proposed shrub planting
- Proposed decorative mix shrub planting
- Proposed Native woodland mix
- Proposed Native buffer mix
- Proposed grass
- Proposed flowering lawn
- Proposed meadow mix
- Proposed wet tolerant meadow mixture
- Proposed Bulbs
- Proposed Green Roof
- Tarmac to road and paths
- Block paving
- Proposed private footpaths
- Wood chippings
- Grasscrete

Scale bar: 0m to 10m

North arrow pointing up

B	18.10.23	Layout change	JH
A	23.08.23	Client comments	JH
Rev	Date	Details	Drawn

ACD ENVIRONMENTAL

HEAD OFFICE
Rodbourn Rail Business Centre, Grange Lane,
Malmesbury, SN16 0ES
Tel: 01666 825646

4 & 5 The Old Mill, Fry's Yard, Bridge Street,
Codrington, GU7 1HP
Tel: 01483 425714

Suite 6, Crescent House, Yonge Close,
Eastleigh, SO50 9SX
Tel: 02382 026300

email: mail@acdenv.co.uk
www.acdenvironmental.co.uk

scheme: Land just off Spitfire Way,
north of Aerodrome Road,
Hawkinge

client: Master Knowles Developments
South East Limited

drawing: Landscape Strategy

date: July 2023

scale: 1:500@A1

drawing no: PRI24193 10
drawn: JH checked: RH

Copyright of ACD Environmental Ltd. All rights described in Chapter IV of the Copyright, Designs and Patents Act 1988 have been generally asserted. 2011. Copyright of this plan remains with ACD until all fees have been paid in full.