

PROPOSED ANAEROBIC DIGESTION FACILITY AT THREE MAIDS HILL, WINCHESTER

Preliminary Ecological Appraisal

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Executive Summary

SLR Consulting Ltd (SLR) was commissioned by Acorn Bioenergy Ltd to undertake a Preliminary Ecological Appraisal (PEA) of a site known as Three Maids located within the administrative area of Winchester City Council (WCC).

This report assesses the potential for ecological impacts to occur, within the context of the scope of the PEA and is based upon details of the development proposals which would involve the construction and use of an anaerobic digestion facility, ancillary infrastructure, earthworks, bunding, flood compensation, landscape planting and the construction of a new access from the A272.

The application site (herein 'the Site') extends to approximately 4.5 hectares and comprises arable cropland which at the time of survey was in winter stubble state, with a margin of poor condition grassland bordered by scrub and hedgerow.

The survey, undertaken on the 17th February 2022, alongside details received from a desk top study confirmed that the Site has potential to support the following protected and priority species including:

- Low potential to support notable invertebrates;
- Low potential to support reptiles;
- Moderate potential to support foraging and commuting bats;
- Low potential to support hazel dormouse;
- Low potential to support badgers; and
- Moderate potential to support nesting birds.

No further surveys are recommended to be undertaken, however precautionary actions are recommended for priority habitats, reptiles, foraging/commuting bats, hazel dormouse, badgers and nesting birds.

The site is located within the impact risk zone for the River Itchen Special Site of Scientific Interest (SSSI) and Special Area for Conservation (SAC) and a Habitats Regulation screening assessment is being undertaken and will be submitted to WCC upon completion.

Further to these mitigation and compensation actions, it is recommended that the Site's ecological value is enhanced through the incorporation of:

- Wildlife friendly landscaping; and
- Invertebrate habitat features (e.g. bee houses, stag beetle loggery).

A Biodiversity Net Gain Assessment was undertaken by SLR and demonstrates that the development proposals will result in a net gain of 0.94 biodiversity units from area-based habitats and 1.30 units from linear based habitats should current plans be adhered to. This corresponds to a total net increase of **10%** in ecological value from area-based habitats and **29%** from linear habitats.

All the above key actions should be detailed within an Ecological Management Plan (EMP) for the Site which could be secured through planning condition. Should these recommendations be adhered to, the proposals stand to be compliant with legislation and current planning policy.

1.0 Introduction

SLR Consulting (SLR) was commissioned by Acorn Bioenergy Ltd to carry out a Preliminary Ecological Appraisal (PEA) of the application site located at Three Maids Hill, Winchester, S021 2QG in the Winchester City Council local authority area.

The PEA was requested to inform the planning process in respect of the proposed development. The proposed development would involve the construction and operation of an anaerobic digestion (AD) facility. Further details of the proposed development are provided below in Section 1.2.

1.1 Site Description

The Site extends to approximately 4.5 hectares (ha) and is centred on OS Coordinates X 446095 Y 133922. The Site and survey boundaries can be seen on **Drawing 1**.

The Site comprises arable cropland, which at the time of survey, was in winter stubble state, with a margin of poor condition grassland bordered by scrub. A hedgerow with trees lines the eastern boundary.

The Site is immediately surrounded by the A34 dual carriageway to the east, a block of deciduous woodland to the north and the A272 to the west. The wider area is predominantly agricultural land with small pockets of woodland/forestry and isolated rural properties.

To the south is an area of land that has recently been granted permission on appeal for an inert recycling facility.

1.2 Details of the Proposed Development

The proposed development consists of the construction and operation of an AD facility, ancillary infrastructure, earthworks, bunding, landscape planting and the construction of a new access road and access from the A272.

The proposed development would import and treat in the region of 80,600 tonnes of feedstock per annum from local farms, which would undergo a process of controlled decomposition (anaerobic digestion) within the AD facility. This anaerobic digestion process generates biogas which is upgraded on site into biomethane, before being removed by tanker to a central facility for injection into the national grid. The AD facility would have the capacity to produce approximately 19,864,629 Nm³ of biogas per annum.

The proposed layout can be seen at the end of this report (**Drawing 2**).

1.3 Purpose of this Report

This report presents the findings of the PEA. The report seeks to:

- Establish baseline conditions and determine the importance of ecological features present (or those that could be present), as far as is possible;
- To identify potential ecological constraints to the proposed development and make initial recommendations to avoid potential significant effects on important ecological features, where possible;
- To identify potential requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
- To establish any requirements for more detailed surveys; and
- To identify opportunities for biodiversity enhancements as part of the project.

The assessment of impacts resulting from the proposed development and the detailed development of mitigation measures, if required, are beyond the scope of this report and should be covered in a separate Ecological Impact Assessment report, once development proposals have been finalised.

1.4 Evidence of Technical Competence and Experience

Olivia Guindon, who undertook the survey and reviewed this report, has a Bachelor's degree in Ecology and Wildlife Conservation (BSc Hons) and a Master's degree in Species Identification and Survey Skills and is a Qualifying member of CIEEM. Olivia is a Senior Ecologist at SLR and has over four years' professional experience within ecological consultancy and has undertaken numerous ecological assessments of this type.

Darcey Haldar, who wrote this report, has a Master's degree in Conservation Ecology and over a years' experience working within ecological consultancy.

This report has been subject to Quality Assurance review in line with SLR's policy by Richard Arnold BSc MRes MCIEEM CEnv. Richard has 23 years of experience as a professional ecological consultant, during which time he has worked on many development projects. He has a particular interest in ecology in London and is co-author of the London Bird Atlas.

1.5 Relevant Legislation and Policy

The key wildlife legislation underpinning the conservation of habitat and species is included in Appendix 1.

There are a number of policy documents at the local level with relevance to biodiversity, which are summarised below.

1.5.1 Local Planning Policy

[Winchester Local Plan- Joint Core Strategy Adopted 2013¹](#)

Policy CP15 - Green Infrastructure

"The Local Planning Authority will support development proposals which:-

- *maintain, protect and enhance the function or the integrity of the existing green infrastructure network identified at a District and sub regional level, including strategic blue and green corridors and spaces, as illustrated on Map 9 particularly where the proposal allows for the enhancement of GI both on-site and in the immediate area;*
- *provide a net gain of well managed, multifunctional green infrastructure, in accordance with the categories and standards specified in Policy CP7 and appropriate for the scale of development, through on-site provision which :-*
- *addresses deficits in local green infrastructure provision where appropriate;*
- *integrates with the green network/grid identified at the District and sub-regional level (as illustrated on Map 9);*
- *provides a high quality public realm for the local community;*
- *encourages public access to and within the natural environment where appropriate;*
- *allows for adaptation to climate change;*
- *is well planned to allow cost effective ongoing management of the GI;*
- *links areas of biodiversity;*

¹ [Local Plan - Winchester City Council](#)

- *is provided at the earliest feasible stage. Where on-site provision is not possible financial contributions will be required for the provision and management of GI sites and will be negotiated on a site by site basis.”*

Policy CP16 – Biodiversity

*“The Local Planning Authority will support development which maintains, protects and enhances biodiversity across the District, **delivering a net gain in biodiversity**, and has regard to the following:*

- *protecting sites of international, European, and national importance, and local nature conservation sites, from inappropriate development.*
- *supporting habitats that are important to maintain the integrity of European sites.*
- *new development will be required to show how biodiversity can be retained, protected and enhanced through its design and implementation, for example by designing for wildlife, delivering BAP targets and enhancing Biodiversity Opportunity Areas.*
- *new development will be required to avoid adverse impacts, or if unavoidable ensure that impacts are appropriately mitigated, with compensation measures used only as a last resort. Development proposals will only be supported if the benefits of the development clearly outweigh the harm to the habitat and/or species.*
- *maintaining a District wide network of local wildlife sites and corridors to support the integrity of the biodiversity network, prevent fragmentation, and enable biodiversity to respond and adapt to the impacts of climate change.*
- *supporting and contributing to the targets set out in the District’s Biodiversity Action Plan (BAP) for priority habitats and species. Planning proposals that have the potential to affect priority habitats and/or species or sites of geological importance will be required to take account of evidence and relevant assessments or surveys.”*

Winchester Biodiversity Action Plan 2021²

The Winchester Biodiversity Action Plan includes key species which are representatives of the various habitat types present in the district of which the following are of relevance to the Site:

- Hazel dormouse (*Muscardinus avellanarius*);
- Bats;
- Hedgehog (*Erinaceus europaeus*);
- Skylark (*Alauda arvensis*);
- Grey partridge (*Perdix perdix*);
- Slow worm (*Anguis fragilis*);
- Common lizard (*Zootoca vivipara*); and
- Stag beetle (*Lucanus cervus*).

² [100 biodiversity action plan 2021-web.pdf](#)

2.0 Methodology

To establish the current baseline ecological conditions within the Site, a desk and field survey have been undertaken. The methods for each are described below.

2.1 Baseline Data Collection

2.1.1 Desk Study

An ecological data search was requested from Hampshire Biodiversity Information Centre (HBIC) in January 2022 to provide records of protected and otherwise notable species, and non-statutory protected sites for the Site and land within a 2km radius (the study area). The terms of use of data prevent the publication of the raw data therefore a copy of the data search has not been included within this PEA.

An internet-based desk study was also undertaken, whereby the Multi-Agency Geographic Information for the Countryside (MAGIC) website (<http://magic.gov.uk>) was searched for statutory designated sites (such as Sites of Special Scientific Interest (SSSI)) and European Protected Species (EPS) Licences granted within 2km of the Site.

2.1.2 Field Survey(s)

A UK Habitat Classification (UKHab) Survey was undertaken by Olivia Guindon on 17 February 2022. This method was extended to include preliminary checks for notable, protected, priority or rare species of both flora and fauna. Particular features of interest were recorded on a field map using Target Notes, as shown in Drawing 1.

The UK Habitat Classification (UKHab) is a comprehensive classification system for the UK that has been developed to benefit from changes in habitat categorisation, recording analysis in recent decades. The system comprises a principal hierarchy (the Primary Habitats) which includes broad habitats and priority habitats and non-hierarchical secondary codes. Habitat nomenclature and definitions have been designed to remain as close to existing systems as possible in order that data can be collected, analysed and translated without ambiguity.

This level of survey includes the documentation of habitats to a recognised standard, but also includes the recording of field evidence indicating the presence or potential presence of species that could constitute a material consideration in planning terms, such as protected or notable plant or faunal species. Notes of principle habitat types, supported by photographs, were recorded.

Whilst not a full botanical or protected species survey, the method of survey enables experienced ecologists to obtain an understanding of the ecology of a site such that it is possible either:

- to confirm the conservation significance of the site and assess the potential for impacts on habitats/species likely to represent a material consideration in planning terms, or
- to establish the scope and extent of any additional specialist ecological surveys that will be required before such confirmation can be made.

In addition, the presence of plant species included within Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) was searched for during the survey as well as the species listed on the Invasive Alien Species Order 2019³. Plants included within the schedule are considered derogated pest species that are pernicious or injurious, such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*). It is an offence under the Act to plant or cause the spread of these species in the wild.

³ [The Invasive Alien Species \(Enforcement and Permitting\) Order 2019 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

The survey area was assessed for habitats and features with potential to support protected or notable species, together with any field signs of such species including, but not limited to, badger (*Meles meles*), bats (*Chiroptera*), great crested newt (*Triturus cristatus*) and breeding birds (*Aves*).

Mammal holes were assessed for their potential to support badgers, by measuring the outer and inner dimensions.

A ground level assessment of potential bat roosting features in trees was undertaken based on the Collins 2016 Bat Roosting Potential Methodology which provides criteria for assessing the suitability of trees to support roosting bats.

Hedgerow condition and diversity were also assessed according to the Hedgerow Survey Handbook which contains criteria outlined by the Steering Group for the UK Biodiversity Action Plan for Hedgerows⁴.

2.1.3 Limitations

Desk Study

Desk study data is unlikely to be exhaustive, especially in respect of species, and is intended mainly to set a context for the study. It is therefore possible that important habitats or protected species not identified during the data search do in fact occur within the vicinity of the Site.

Interpretation of maps and aerial photography has been conducted in good faith, using recent imagery, but it has not been possible to verify the accuracy of any statements relating to land use and habitat context outside of the field study area.

Field Survey(s)

The Site was fully accessible during the survey. The survey was undertaken in February, which is considered to be a sub-optimal time for conducting vegetation surveys. However, the nature of the habitat, which includes mainly modified habitats (arable land, poor condition grassland), limits the potential for notable plant species to occur. The potential for notable species has nonetheless been considered within ecological constraints and recommendations and it is considered unlikely that the timing of the survey has impacted the reliability of the results.

The survey did not seek to identify all plant species within the study area and as such, this report does not provide an exhaustive list of flora found within the study area. However, it is considered that the survey results are representative of the habitats and flora of the Site and include the dominant and characteristic species.

Whilst it is felt unlikely that significant factors have been overlooked, due to the nature of the subjects of ecological surveys it is feasible that species that use the Site may not have been recorded by virtue of their seasonality, cryptic behaviour, habit or random chance. It should be noted that lack of evidence of any one protected species during survey visits does not necessarily preclude its presence at the Site either at this current time or in the future. It is considered that the survey was suitable for conducting protected species risk assessments based on habitat type, collected data and local knowledge.

2.2 Evaluation Approach

The ecological evaluation approach used in this report is based on Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland ('CIEEM guidelines') (CIEEM, 2018).

⁴ [Hedgerow Survey Handbook \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672222/Hedgerow-Survey-Handbook.pdf)

2.2.1 Important Ecological Features

Ecological features can be important for a variety of reasons and the rationale used to identify them is explained in the text. Importance may relate, for example, to the quality or extent of the site or habitats therein; habitat and/ or species rarity; the extent to which such habitats and/or species are threatened throughout their range, or to their rate of decline.

Determining Importance

The importance of an ecological feature should be considered within a defined geographical context. The following frame of reference has been used in this case, relying on known/ published accounts of distribution and rarity where available, and professional experience:

- International;
- National (i.e. UK/ England, etc.);
- Regional (i.e. Hampshire);
- County (i.e. Winchester district); and
- Local (i.e. within circa 5km).

The above frame of reference is applied to the ecological features identified during the desk study and surveys to inform this report.

The value of habitats has been measured against published selection criteria where available. Examples of relevant criteria include: descriptions of habitats listed on Annex 1 of the Habitats Directive; descriptions of habitats of principal importance for biodiversity under Section 41 of Natural Environment and Rural Communities (NERC) Act 2006; Local Wildlife Site Selection Criteria; and Habitat Action Plans (HAPs) contained within Local Biodiversity Action Plans. Sites of Importance for Nature Conservation (SINCs) have also been included; these are non-statutory designations identified because of their importance to wildlife on a county scale.

In assigning a level of value to a species, it is necessary to consider its distribution and status, including a consideration of trends based on available historical records. Reference has therefore been made to published lists and criteria where available. Examples of relevant lists and criteria include: species of European conservation importance (as listed on Annexes II, IV and V of the Habitats Directive or Annex 1 of the Birds Directive); species of principal importance for biodiversity under Section 41 of the NERC Act 2006 and Birds of Conservation Concern¹.

For the purposes of this report, ecological features of local, national and international importance or greater and/or subject to legal protection have been subject to detailed assessment. Effects on other ecological features are considered unlikely to be significant in legal or policy terms.

3.0 Results

The results of the desk and field survey are reported below and describe the baseline conditions at the Site and within the surrounding area. A map of designations within 2km of the Site can be found in Drawing 3 at the end of this report.

3.1 Designated Sites

3.1.1 Statutory Sites

The local biological records from HBIC and the MAGIC dataset have confirmed that there are no statutory designated sites on the Site itself, or within 2km. However, the Site falls within a SSSI Impact Risk Zone, this is due to the proximity to River Itchen SSSI which is associated with the River Itchen SAC 3.5km to the south east.

3.1.2 Non-Statutory Sites

The HBIC data search shows that there are six non statutory designated Sites of Importance for Nature Conservation (SINCs) within 2km.

Table 3-1 below gives the locations and descriptions of a selection of the nearest/most relevant local designations.

Table 3-1 Statutory and Non- Statutory Designated Sites within search radius

Site Name	Distance (m) from Site	Description
Statutory Sites		
River Itchen SSSI	3078m SE	This site is notified for classic chalk stream and river, fen meadow, flood pasture and swamp habitats, particularly formations of in-channel vegetation dominated by water crowfoot <i>Ranunculus spp</i> , riparian vegetation communities (including wet woodlands) and side channels, runnels and ditches associated with the main river and former water meadows. The site is also notified for significant populations of the nationally-rare southern damselfly <i>Coenagrion mercuriale</i> and assemblages of nationally-rare and scarce freshwater and riparian invertebrates, including the white-clawed crayfish <i>Austropotamobius pallipes</i> . This site is notified for otter <i>Lutra lutra</i> , water vole <i>Arvicola terrestris</i> , freshwater fishes including bullhead <i>Cottius gobbo</i> , brook lamprey <i>Lampetra planeri</i> and Atlantic salmon <i>Salmo salar</i> , and the assemblage of breeding birds including tufted duck <i>Aythya fuligula</i> , pochard <i>A. ferina</i> and shoveler <i>Anas clypeata</i> , the waders lapwing <i>Vanellus vanellus</i> , redshank <i>Tringa totanus</i> and snipe <i>Gallinago gallinago</i> , and wetland passerines including sedge warbler <i>Acrocephalus schoenobaenus</i> , reed warbler <i>A. scirpaceus</i> and Cetti's warbler <i>Cettia cettia</i> .
River Itchen SAC	3477m SE	The Itchen typifies the classic chalk river and shows a greater uniformity in physical characteristics along its entire length than

Site Name	Distance (m) from Site	Description
		<p>other rivers of this type. Since the river is mainly spring-fed, there is only a narrow range of seasonal variation in physical and chemical characteristics. The water is of high quality, being naturally base-rich and of great clarity; and its temperature is relatively constant, with dissolved oxygen levels at or near saturation. The river's vegetation is dominated by higher plants, and the aquatic flora is exceptionally species rich with many of the typical chalk stream plants present in abundance. The majority of species are present throughout the system and downstream changes are less than in most other rivers. The river is rich in invertebrates and supports diverse populations of aquatic molluscs. The Itchen supports one of the few populations of the native freshwater crayfish remaining in the rivers of southern England and a population of otters. The river is dominated throughout by aquatic <i>Ranunculus spp.</i> The headwaters contain pond water-crowfoot <i>Ranunculus peltatus</i>, while two <i>Ranunculus</i> species occur further downstream: stream water-crowfoot <i>R. penicillatus ssp. pseudofluitans</i>, a species especially characteristic of calcium-rich rivers, and river water-crowfoot <i>R. fluitans</i>. The fish fauna of the Itchen is typical of lowland chalk rivers. Strong populations of bullhead <i>Cottus gobio</i> and brook lamprey <i>Lampetra planeri</i> are notable elements of the natural fish fauna. The river provides good water quality, extensive beds of submerged plants that act as a refuge for the species, and coarse sediments that are vital for spawning and juvenile development. The river's runs of Atlantic salmon <i>Salmo salar</i> fluctuate markedly. The upper and mid river provides much suitable habitat for otters. A localised population of Atlantic stream crayfish <i>Austropotamobius pallipes</i> remains in a headwater of the river. The Itchen valley contains areas of fen, swamp and meadow supporting vegetation with diverse plant communities, some typically species-rich. Meadow ditches support strong populations of southern damselfly <i>Coenagrion mercuriale</i>. The numbers recorded place the site amongst the most important in Britain for this species.</p>
Non-Statutory Sites		
Northwood Park Woods SINC	1605 m SW	Designation criteria includes 'Ancient semi-natural woodlands'
Worthy Copse SINC	166m N	Designation criteria includes 'Ancient semi-natural woodlands'
The Gallops, Worthy Down SINC	993m N	Designation criteria includes 'Agriculturally unimproved grasslands which are not of recent origin' and the presence of

Site Name	Distance (m) from Site	Description
		plant species such as <i>Thesium humifusum</i> and <i>Phyteuma orbiculare</i>
Worthy Grove SINC	610m N	Designation criteria includes 'Ancient semi-natural woodlands' and 'Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland'.
Worthy Camp Grassland SINC	1239m NE	Designation criteria includes 'Semi-improved grasslands which retain a significant element of unimproved grassland'.

3.1.3 Ancient Woodland and Priority Habitat

The MAGIC website has confirmed the presence of seven ancient woodlands⁵ within 2km of the Site, comprising a total of 28.7ha. The Site itself does not include priority although it is adjacent to lowland mixed deciduous woodland (a priority habitat). A number of other priority habitats also occur within 2km, further information on these sites can be found in Table 3-2 below.

Table 3-2 Ancient Woodland and Priority Habitat within search radius

Site Name	Size (ha)	Distance (m) from Site
Ancient Woodland		
Cradle Copse North	2.53	1921m SW
Cradle Copse Central	0.5	2000m SW
Cradle Copse South	2.83	2000m SW
Long Wood	9.1	1700m SW
North Worthy Grove	3.46	1000m N
South Worthy Grove	4.98	620m N
Worthy Copse	5.26	166m N

⁵ Ancient Woodland is not a formal designation as such, but is a term applied to sites in England and Wales whose documented history shows them to have been continuously wooded since approximately 1600, and which are by extension considered likely to have been continuously wooded since the last Ice Age. Ancient Woodland sites and their mature soils are considerably more complex and biodiverse ecosystems than secondarily wooded sites, and therefore represent environmental capital that should be considered to be a finite resource, as it is not renewable in a human timescale.

Site Name	Size (ha)	Distance (m) from Site
Priority Habitat⁶		
Deciduous Woodland	113.86	Adjacent to northern boundary of Site
Traditional Orchards	0.377	1834m W
Lowland Calcareous Grassland	2.62	1140m N

3.2 Habitats

The results of the UKHab Survey are illustrated in map form in Drawing 1 at the end of this report and are described below. It has been mapped using the fine scale minimum mapping unit MMU (25m², 5m length), in accordance with the UK Habitat Classification User Manual⁷.

In summary, the following habitats were recorded within the Site, listed approximately in order of dominance:

- C1c5: Winter stubble (1012- Arable land);
- G4: Modified grassland;
- H2a: Hedgerow (47-Native);
- H3h: Scrub (47- Native); and
- U1b: Other developed land (1232- Bare ground).

3.2.1 c1c5: Winter Stubble- (1012- Arable Land)

The vast majority of habitats on the Site comprise Maize *Zea mays* which has been left as winter stubble with exposed soil (Figure 3-1).

⁶ Areas of the same priority habitat type have been combined. The list is not exhaustive and is limited by data availability, priority habitat may exist within and surrounding the site such as hedgerows which are not recorded.

⁷ The UK Habitat Classification Working Group (September 2020) The UK Habitat Classification User Manual Version 1.1.



Figure 3-1- Winter stubble on site

3.2.2 g4: Modified Grassland

The Site has a grassland margin on its western boundary and a small area is present in the north eastern corner. These comprise cock's-foot *Dactylis glomerata*, with scattered bramble *Rubus fruticosus*, sheep's sorrel *Rumex acetosella*, teasel *Dipsacus fullonum*, broadleaved plantain *Plantago major*, spear thistle *Cirsium vulgare*, nettle *Urtica dioica*, dove foot cranesbill *Geranium molle*. The majority of the grassland area is mown, with a few longer tussocky areas particularly toward the scrub boundary (Figure 3-2).



Figure 3-2 Modified grassland margin on western border of site

3.2.3 h2a: Hedgerow (47-Native)

A hedgerow bounds the eastern boundary of the Site. Species include blackthorn (*Prunus spinosa*), hawthorn (*Crataegus sp.*) and ash (*Fraxinus excelsior*)(Figure 3-3).

All hedgerows are a Priority Habitat in England. The hedgerow on Site is native and contain scattered trees some of which are mature. It is however not considered species rich with less than 5 woody species per 30m⁸; however, fits the criteria for 'favourable condition' as outlined by the Steering Group.



Figure 3-3 Hedgerow

3.2.4 h3h: Scrub (47- Native)

A small area to the west of the Site includes native scrub with self-seeded trees including species such as ash *Fraxinus excelsior*, hazel *Corylus avellana*, bramble *Rubus fruticosus*, teasel *Dipsacus fullonum*, beech *Fagus sylvatica*, thistle spp *Cirsium sp.*, dogwood *Cornus sanguinea* and ivy *Hedera sp.* (Figure 3-4)

⁸ [Hedgerow Survey Handbook \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)



Figure 3-4 Scrub margin on western boundary of Site

3.2.5 U1b: Other Developed Land (1232- Bare Ground)

The small access route leading into the Site from the A272 to the southwest mainly consists of bare ground (Figure 3-5).



Figure 3-5 Driveway in south west of Site

3.3 Species

3.3.1 Notable Plants

A number of notable plant records were returned within 2km including notable species associated with farmland such as Corn Chamomile *Anthemis arvensis*.

None of these species were observed during the site visit, since the Site comprises modified habitats including arable land and modified grassland with indicator species of high nutrient levels such as nettles and thistles, it is unlikely that notable plant species will occur. The Site is considered to have **negligible potential** for notable plant species.

No non-native Schedule 9 species or species listed on the Invasive Alien Species Order were recorded during the site visit.

3.3.2 Notable Invertebrates

Notable invertebrate records were returned including some associated with woodland edges such as silver washed fritillary *Argynnis paphia* and duke of burgundy *Hamearis lucina* butterflies, however the grassland does not support the foodplants necessary for their breeding success such as primrose *Primula vulgaris*, cowslip *Primula veris* or common dog violet *Viola riviniana*. No notable invertebrates were recorded during the survey. The Site provides some opportunity for notable invertebrates within the scrub borders and grassland, however the grassland contains a uniform sward height with low species richness rather than providing diversity in structure and plant species that would be suitable for supporting notable invertebrates. Therefore, due to current management techniques the site is considered to have **low potential** for supporting notable invertebrates.

3.3.3 Amphibians

No notable amphibian records returned. There are no water bodies within the Site itself or within 500m. The Site is therefore considered to have **negligible potential** to support amphibians.

3.3.4 Reptiles

No notable reptile records were returned. The Site offers some potential to support reptiles within the scrub boundaries. However, this is limited as the majority of the Site consists of modified grassland and cropland of a mostly uniform sward height which is not favourable for reptiles. The Site is therefore considered to have **low potential** to support reptiles.

3.3.5 Birds

A number of notable bird records were returned including many associated with farmland; Eurasian skylark (*Alauda arvensis*), Yellowhammer (*Emberiza citrinella*), Western Barn Owl (*Tyto alba*), Linnet (*Linaria cannabina*), Starling (*Sturnus vulgaris*).

Although the crop was unsuitable during the site visit, it could present opportunities later in the year during the spring/summer season to support both foraging and nesting birds, particularly notable farmland birds. The Site is therefore considered to have **moderate potential** to support nesting birds.

3.3.6 Mammals

Bats

34 records of bats were returned including Serotine (*Eptesicus serotinus*), Noctule (*Nyctalus noctule*), Natterers (*Myotis nattereri*), Myotis sp., Barbastelle (*Barbastella barbastellus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long Eared bats (*Plecotus auratus*).

The majority of the Site contains modified habitats including cropland and poor-quality grassland. These offer minimal foraging opportunity for bats as they are unlikely to support a high number of invertebrates. The scrub areas on site and hedgerow are connected to pockets of woodland and species rich grassland and the Site boundaries are likely used by commuting bats. The Site therefore has **moderate potential** for commuting and foraging bats.

The Site itself did not contain potential bat roosting features however it lies adjacent to woodland which has high potential to support roosting bats, this will be considered within the constraints due to proximity. The Site itself however is considered to have **negligible potential** for supporting roosting bats.

Badger

HBIC returned four Eurasian Badger (*Meles meles*) records from 2013-2018, one of which was found in the deciduous woodland adjacent to the north of the Site. However no signs of badger or setts were observed on Site or within the woodland to the north during the site visit. The grassland offers some opportunity for foraging badger, however this area is well managed and limited in size. The Site therefore has **low potential** to support commuting and foraging badgers.

Riparian mammals

There were no records of otters *Lutra lutra* or water vole *Arvicola amphibius* within 2km returned by HBIC, there is also no water courses within or in proximity to the site. The site is therefore considered to have **negligible potential** to support riparian mammals.

Hazel Dormouse

Two Hazel Dormouse (*Muscardinus avellanarius*) records were returned by HBIC dated 2017 and 2018 and located 2km south of the Site. Hazel dormouse are mentioned within the Local Biodiversity Action Plan as being present in the area. The Site is connected to woodland and contains suitable foraging opportunity in the scrub margins adjacent to the Site. The hedgerow to the east of the Site has low species diversity and is adjacent to the A34 and therefore prone to disturbance. The Site is therefore considered to have **low potential** to support hazel dormouse.

4.0 Ecological Constraints and Opportunities

The Site and its surroundings have potential to support the following ecological receptors of note, which could be impacted upon by the proposed development.

4.1 Designated Sites

The Site lies within a SSSI impact risk zone for the River Itchen SSSI which is associated with River Itchen SAC around 3.5km south east of the main site. It is stated that associated works likely to cause impacts include:

“Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). and General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.”

A Habitat Regulations Screening Report is therefore required to consider potential impacts on the River Itchen SAC and is provided as part of the planning application submission.

4.2 Priority Habitats

The Site lies adjacent to an area of deciduous woodland to the north. Potential direct negative impact in the form of damage to tree canopies or roots as well as indirect impacts from construction in the form of soil compaction or dust are possible. A minimum 15m buffer zone would be respected, to avoid any potential damage as determined by the root protection zone identified in the arboricultural report that accompanies the planning application.

4.3 Reptiles

The scrub edges on Site provide habitat for common and widespread reptile species such as slow worm; however, these habitats are being retained as part of the development.

Further surveys to establish the presence/likely absence of reptiles on Site are therefore not required; however, mitigation measures to ensure reptiles are not harmed during the construction works should be followed. If the grassland/dense scrub habitats are to be cleared or managed, this should be done through a precautionary staged clearance undertaken in two phases by cutting to 30cm in the first instance, with cutting removed, followed by clearance to ground level the following day. In the unlikely event that reptiles are encountered, works must stop immediately, and an ecologist should be contacted. For any vegetation removed in highly suitable areas such as overgrown arable field margins an Ecological Clerk of Work (ECoW) should be present to perform a fingertip search of the area immediately prior to any cutting following the aforementioned method of working.

4.4 Birds

The proposed development may directly impact birds through vegetation clearance during nesting season. No surveys are recommended although nesting should be considered within clearance vegetation works, as described below.

Any clearance of vegetation on Site should therefore take place outside of the nesting bird season, taken to run from March to September inclusive. If this is not possible, and as a last resort, the absence of nesting birds should be confirmed by an ecologist prior to commencement (within 48hours). Should any active nests be found the appropriate mitigation must be put in place to enable successful fledging of the chicks before the area is cleared.

4.5 Bats

The scrub on Site provides suitable foraging habitat for multiple bat species. The proposed development plans seek to retain scrub boundaries, however, increased lighting levels could reduce the site's value for foraging bats and could sever potential flight lines particularly if light spills into surrounding woodland. Any light spill onto woodland may also stand to impact roosting bats in adjacent habitat. Further landscape-scale bat surveys are unnecessary, provided that suitable habitats are left and remain unilluminated.

A sensitive lighting strategy has been implemented following best practice industry guidance produced by the Bat Conservation Trust and Institute of Lighting Professionals⁹ to ensure that hedgerows and mature trees are kept in the dark to retain dark commuting corridors for bats with no light spill to canopies of more than 1 lux.

Mitigation measures include the following:

- the siting of areas requiring a high level of illumination away from potentially light-sensitive ecological receptors;
- the erection of 2.4m high close-boarded timber fences to the eastern boundary from the storage clamps to the northern boundary of the tanker turning area and to the western boundary from the southern elevation of the manure shed to the storage clamps;
- not lighting the storage clamps and the site access road mouth.

4.6 Hazel dormouse

The hedges with trees on site provide suboptimal habitat for dormouse however they are connected to more suitable habitat especially in the woodlands to the north. No further surveys to identify the presence/likely absence of dormouse are considered necessary however a precautionary approach should be taken to any vegetation clearance. Suitable habitats should be protected, and enhancement measures should be provided to improve the hedgerows on site for dormouse.

4.7 Badger

The grassland strips surrounding the Site have limited potential to support foraging badgers and no setts were recorded on Site or within 30m. No further surveys are therefore required however, best practice protection measures should be implemented during construction to ensure badgers (and other small to medium size mammals) are protected throughout the works:

- Any trenches or deep pits within the development site that are to be left open overnight should be provided with a means of escape should a badger enter. The simplest method for this would be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.
- Any trenches/pits should be inspected each morning to ensure no badgers have become trapped overnight. Should a badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, by forming a temporary sett.
- The storage of topsoil or other 'soft' building materials on site should be given careful consideration. Badgers will occasionally adopt such mounds as setts. So as to avoid the adoption of any mounds, these should be kept to a minimum and an ecologist should be immediately notified if any significant signs of digging are identified

⁹ Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP) Guidance Note (2018) Bats and artificial lighting in the UK. Bats and the built environment series

- The storage of any chemicals/liquids on site should be well away from the boundaries, and contained in such a way that they cannot be accessed or knocked over by any roaming badgers.
- Food and litter should not be left within the working area overnight.

4.8 Hedgehog

Hedgehogs are not afforded protection under UK and European law however are protected under the Wild Mammals (Protection) Act (1996). This Act requires hedgehog and other small mammals to be protected during site works. Furthermore, given their status as a S41 species, their conservation is a material consideration in the planning process. Measures to protect hedgehog and retain suitable habitat on site for the species, allowing continued connectivity, should therefore be followed.

In order to minimise the potential for killing or injuring of hedgehogs (and other small to medium sized mammals) during site clearance, removal of dense vegetation and tall grass should be undertaken in two phases, by cutting to 30cm in the first instance, then to ground level after that. The vegetation should be checked for mammals between these two cuts. Should any hedgehogs be found, they should be moved to a suitable area of habitat that is not subject to clearance.

Further protection measures include storing any chemicals/liquids on site well away from the boundaries, and contained in such a way that they cannot be accessed or knocked over by any roaming hedgehogs.

Inclusion of dense shrub and scrub species within the soft landscaping design proposals will help to compensate for the potential loss of suitable hedgehog habitat. This will provide hedgehogs with a foraging resource, as well as shelter from predators. This type of planting would be most effective around the perimeter of the Site.

4.9 Recommendations

4.9.1 Habitat Regulations Screening Report

The Site is situated within a SSSI Impact Risk Zones (IRZ) for the nearby River Itchen SSSI and potential effects on this SSSI are considered within the Air Quality report which confirms that there is an absence of significant effects from odour, dust ammonia, traffic and bioaerosols emissions. There are no significant impacts either due to CHP combustion or ammonia.

The site is also located 3.5km northwest of the River Itchen SAC 3.5km. Special Areas of Conservation (SAC) are European sites which are protected under the Conservation of Habitats and Species Regulations 2017. Therefore, a Habitat Regulations Screening Report will be required to assess potential impacts on the SAC and is currently being prepared by SLR.

The purpose of a Screening Report is to identify whether a proposed development, both alone and in combination with other proposed developments, would be likely to have a significant effect on a European site. If a likely significant effect cannot be ruled out or mitigation is required to reduce the magnitude of an effect to not significant; a more detailed assessment, i.e. an Appropriate Assessment, would be required.

4.10 Potential Opportunities for Biodiversity Enhancements

Recommendations are listed below for ecological and biodiversity enhancements that would assist the development to meet local and national planning policy requirements, and to adhere to best practice. The list below is not exhaustive and may change depending on the detailed design of the development and any protected or notable species confirmed to be present.

Opportunities for biodiversity enhancement include:

- Wildlife friendly planting – new landscaping should provide a diverse mix of species of demonstrable value for wildlife known to be at Site/have the potential to be encouraged to the Site; and
- Invertebrate habitat features – Invertebrate habitat features should be incorporated within landscaped areas to provide features of interest as well as ecological function. Stag beetle loggeries, solitary beehives and habitat panels should be placed in suitable locations. Stag beetle loggeries should be placed in shady areas amongst trees to provide forage and shelter for saproxylic invertebrates in larval stage, whereas beehives and habitat panels should be located in sunny areas.

5.0 Conclusions and Recommendations

SLR was commissioned by Acorn Bioenergy to undertake a PEA of a site located at Three Maids Hill, in Winchester City Council local authority area.

The Site extends to approximately 4.50 hectares and comprises of arable cropland with a margin of poor-quality grassland bordered by scrub. A hedgerow runs along the eastern boundary. Adjacent to the north of the Site is an area of priority habitat deciduous woodland.

Data received from the desk top study and site visit confirmed that the Site has potential to support the following protected and priority species including:

- Low potential to support notable invertebrates;
- Low potential to support reptiles;
- Moderate potential to support nesting birds;
- Moderate potential to support foraging and commuting bats;
- Low potential to support hazel dormouse; and
- Low potential to support badgers.

Suitable measures should accordingly be embedded within the proposed construction approach to mitigate potential impacts upon the adjacent priority habitat.

Key mitigation, compensation and enhancement actions are described to enable legislative and policy compliance, aiming to achieve net gains in biodiversity for the Site.

Key actions should be included within an EMP document for the Site which could be secured through planning condition.

A Biodiversity Net Gain Assessment has also been undertaken and demonstrates that the proposed development would result in a net gain of 0.94 biodiversity units from area-based habitats and 1.30 units from linear based habitats should current plans be adhered to. This corresponds to a total net increase of **10%** in ecological value from area based habitats and **29%** from linear habitats.

Recommendations have been provided for a Habitat Regulations Screening Report, which has been undertaken and accompanies the planning application.

DRAWING 1

UKHab Survey Map



LEGEND

Site Boundary

UK Habitat Classification

c1c5 - Winter Stubble

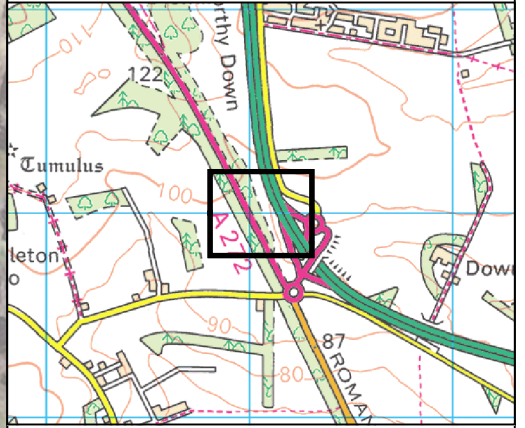
g4 - Modified Grassland

h3h - Mixed Scrub

Secondary Codes:

47 - Native

1012 - Arable Land



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THREE MAIDS, HAMPSHIRE

ECOLOGY

UK HABITAT CLASSIFICATION MAP

FIGURE 1

Scale 1:1,500 @ A3 Date SEPTEMBER 2022

11923.00002.0069.0 UK Habitat Survey Three Maids

DRAWING 2

Proposed Layout



LEGEND

	SITE BOUNDARY
	EXISTING TREES/SCRUB (To be maintained and strengthened within red line boundary.)
	EXISTING TREES/SCRUB TO BE REMOVED
	PROPOSED NATIVE TREE/SHRUB WOODLAND EDGE MIX PLANTING
	PROPOSED NATIVE HEDGEROW
	PROPOSED NATIVE HEDGEROW WITH TREES
	PROPOSED NATIVE TREES AND SHRUB GAP FILLING ALONG EASTERN BOUNDARY
	PROPOSED SPECIES RICH GRASSLAND (Emorsegate Mix EG1 or similar approved.)
	BUILDINGS
	HARDSTANDING
	GRAVEL AREA
	BREEDON AGRICULTURAL HRA BUILD UP
	CONCRETE ROAD BUILD UP
	ROAD AND CAR PARK
	TANK BUND BUILD UP
	SWALE
	LAGOON
	BIORETENTION SYSTEM

NOTES

1. SITE LAYOUT AND PAVING DETAILS TAKEN FROM DRAWING: 'GGP-29348-120-B-Three Maids-Paving'.





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THREE MAIDS

LANDSCAPE STRATEGY

TM-1

Scale 1:1000 @ A2

Date AUGUST 2022

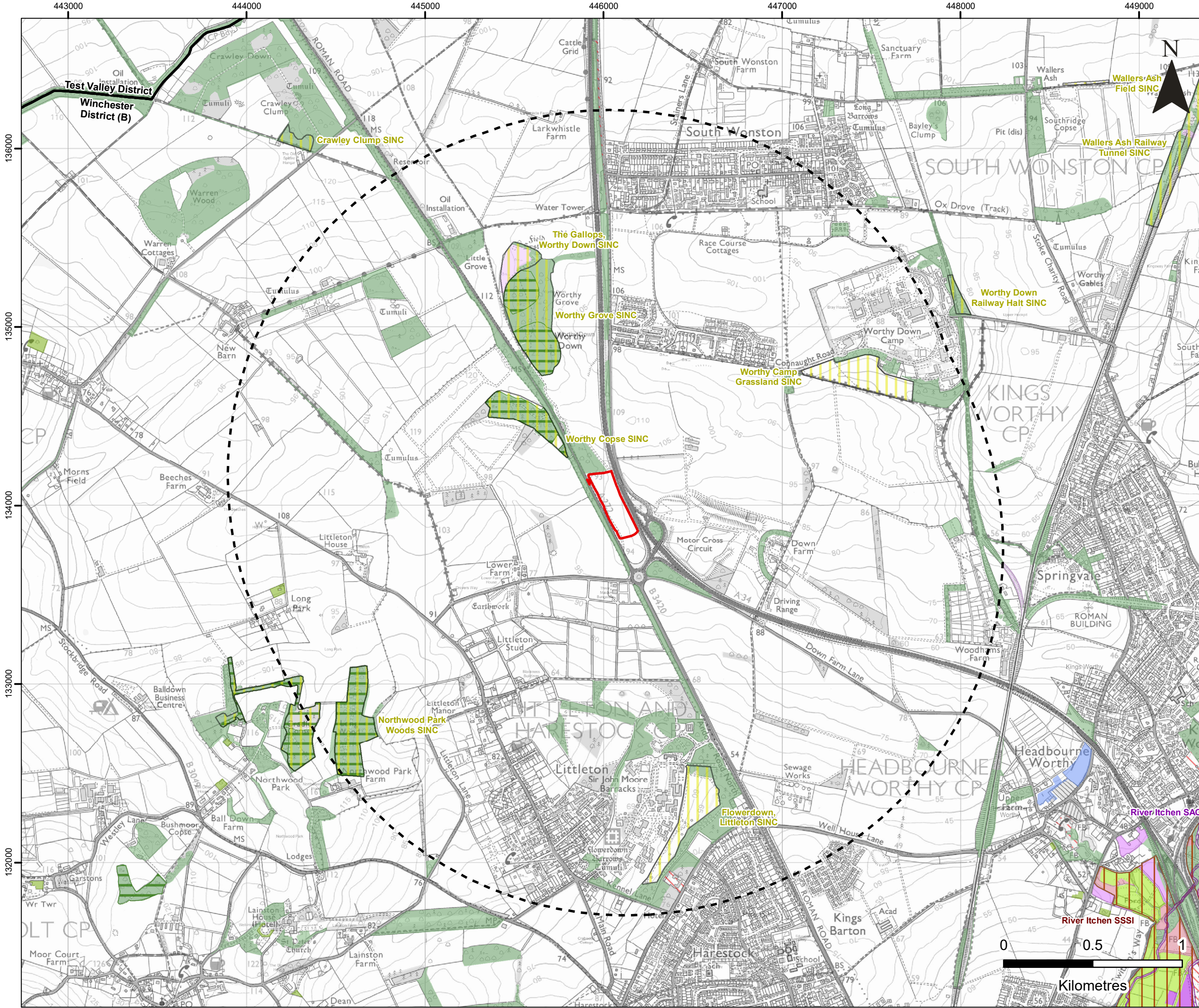
220825_Three Maids_Landscape Strategy_HD.dwg

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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DRAWING 3

Designated Sites Map

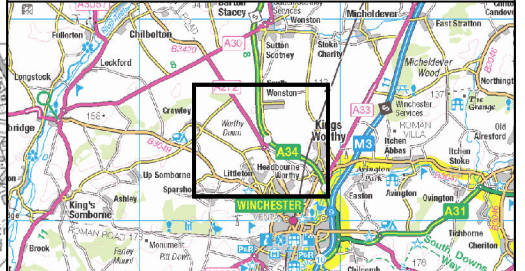


LEGEND

- Site Boundary
- 2km Site Boundary Buffer
- Special Area of Conservation (SAC)
- Site of Special Scientific Interest (SSSI)
- Site of Importance for Nature Conservation (SINC)
- Ancient Woodland

Priority Habitat Inventory

- Lowland calcareous grassland
- Coastal and Floodplain Grazing Marsh
- Deciduous Woodland
- Good Quality Semi-Improved Grassland
- Lowland Fens
- Lowland Meadows
- Purple Moor Grass and Rush Pastures
- Traditional Orchard
- No Main Habitat but Additional Habitats Present
- Local Authority Boundary



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THREE MAIDS, HAMPSHIRE

ECOLOGY

DESIGNATIONS WITHIN 2KM

DRAWING 1

Scale 1:20,000 @ A3 Date SEPTEMBER 2022

APPENDIX 1

Relevant Legislation and Planning Policy

Relevant Legislation and Planning Policy

Legislation

A summary of legislation relevant to (onshore) biodiversity in England and Wales is provided below. Note that the summary provided here is intended for general guidance only and the original legislation should be consulted for definitive information.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. Under the Habitats Regulations it is an offence to deliberately capture, kill or disturb¹ wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act 1981

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (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), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act;
- Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act;
- Intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act; or
- Plant or cause to grow in the wild any plant species listed under Schedule 9 of the Act.

Protection of Badgers Act 1992

The Protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger or to intentionally or recklessly interfere with a badger sett. Sett interference includes disturbing badgers whilst they are occupying a sett or obstructing access to it.

¹ Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

Natural Environment & Rural Communities (NERC) Act 2006

Section 40 of the NERC Act 2006 places a duty on public authorities to have regard to the purpose of conserving biodiversity to have due regard for biodiversity and nature conservation during the course of their operations. Public authorities include government departments, local authorities and statutory undertakers.

Section 41 of the Act (Section 42 in Wales) requires the publication of a list of habitats and species which are of principal importance for the purpose of conserving biodiversity. The Section 41 list is used to guide authorities in implementing their duty to have regard to the conservation of biodiversity.

Note that Sections 40 and 42 were superseded in Wales by the Environment (Wales) Act 2016 (see below).

Environment (Wales) Act 2016

The Environment (Wales) Act puts in place the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way. Part 1 Section 6 of the Act introduces a new biodiversity duty, which replaces and enhances the biodiversity duties set out in the NERC Act 2006 and requires public authorities to seek to maintain and enhance biodiversity in the exercise of their functions and in so doing promote the resilience of ecosystems.

Section 7 of the Act lists living organisms and types of habitat in Wales, considered to be of key significance to sustain and improve biodiversity in relation to Wales.

Planning Policy

A summary of national planning policy relevant to (onshore) biodiversity in England and Wales is provided below. Note that the summary provided here is intended for general guidance only and the original policy documents should be consulted for definitive information. For local planning policy relevant to biodiversity the relevant local plans should be consulted.

National Planning Policy (England)

The National Planning Policy Framework (NPPF)² sets out guidance for local planning authorities and decision-makers in how to apply planning policies when drawing up plans and making decisions about planning applications. Along with Government Circular 06/05³, the broad policy objectives in relation to the protection of biodiversity and geological conservation in England through the planning system are set out. Specific policies relating to habitats and biodiversity are set out in paragraphs 131, 174 and 179-182 of the NPPF.

Paragraph 131 states that:

“Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users”

² Ministry of Housing, Communities and Local Government. 2021. National Planning Policy Framework. July 2021.

³ Office of the Deputy Prime Minister. 2005. Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System. ODPM Circular 06/2005.

Paragraph 174 states that:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development f) should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate”.*

Paragraph 179 states that:

“To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”*

Paragraph 180 of the NPPF states that:

“When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”*

Paragraphs 181-182 relate to European sites (referred to as habitats sites) and state:

“The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

National Planning Policy (Wales)

Planning Policy Wales (PPW)⁴ sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales. Section 6.4 of PPW relates to biodiversity and ecological networks.

Paragraph 6.4.3 of PPW states that:

“The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement.”

It goes on to state that:

“Development plan strategies, policies and development proposals must consider the need to:

- *support the conservation of biodiversity, in particular the conservation of wildlife and habitats;*
- *ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;*
- *ensure statutorily and non-statutorily designated sites are properly protected and managed;*
- *safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and*
- *secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.”*

Section 6.4 goes on to set out policy in respect of:

- The Biodiversity and Resilience of Ecosystems Duty, as set out in Section 6 of the Environment (Wales) Act 2016;
- Designated Sites, including:
 - Sites of Special Scientific Interest;
 - Special Protection Areas, Special Areas of Conservation and Ramsar Sites;
 - Proposed Special Areas of Conservation, Special Protection Areas and Ramsar sites; and

⁴ Welsh Government. 2018. Planning Policy Wales. Edition 10, December 2018.

-
- Non-statutory Designations.
 - Protected Species; and
 - Trees, Woodlands and Hedgerows.

PPW is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. TAN 5⁵ deals with Nature Conservation and Planning and states in paragraph 2.4:

“When considering policies and proposals in local development plans and when deciding planning applications that may affect nature conservation, local planning authorities should:

- *Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective;*
- *Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;*
- *Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;*
- *Ensure that appropriate weight is attached to designated sites of international, national and local importance;*
- *Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;*
- *Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;*
- *Ensure that the range and population of protected species is sustained;*
- *Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered.”*

⁵ Welsh Assembly Government. 2009. Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning. September 2009.

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