

Local Plan Preferred Site Options

Biodiversity Study



Blaby District Council

13th November 2017

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Document Control

Project: Local Plan Preferred Site Options
 Client: Blaby District Council
 Job Number: A081175-95
 File Origin: \\lds-dc-vm-002\Projects\Projects A081000 on\A081175-95
 Blaby DC - 5 sites\REPORTS

Issue 1	22.09.17	Issue 01 (Draft)
Prepared by:		Principal Ecologist and GIS Consultant
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Verified By:		Associate Ecologist

Issue 2		13.11.17		Issue 02	
Prepared by:			Principal Ecologist and GIS Consultant		
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Verified By:			Associate Ecologist		
Rev:	Date:	Updated by:	Verified by:	Description of changes:	

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Executive Summary

Contents	Summary
Report Purpose	<p>This report provides an assessment of the biodiversity value of twenty-one Preferred Site Options for inclusion in Blaby District Councils emerging Local Plan.</p> <p>The Study will identify the significance of the habitats and species within these sites and make recommendations as to;</p> <ul style="list-style-type: none"> • The level of protection that should be afforded to them in seeking land for future development and/or; • The mitigation required to ensure that significant habitats and species are satisfactorily conserved as part of any development proposals.
District Designated Sites	<p>The District has six Sites of Special Scientific Interest (SSSI), three Local Nature Reserves and 934 Local Wildlife Sites (LWS) designated by the District Council and Leicestershire County Council. There are no National Nature Reserves or any ancient and ancient re-planted woodlands in Blaby District at the time of writing (October 2017).</p>
Assessment of Preferred Site Options	<p>Twenty-one Preferred Site Options have been assessed as part of the Biodiversity Study. The assessment identified :</p> <ul style="list-style-type: none"> • Five sites of relatively high ecological value with significant ecological constraints; • Seven sites of moderate ecological value with some potential ecological constraints; and, • Six sites of relatively low ecological value with limited ecological constraints. • In addition, three sites have been assessed in more detail and show different habitats of high, moderate and low ecological value. <p>These are described in Appendix B.</p>
Recommendations	<p>Further advice to assist the council's decision process for planning applications at each site has been provided in Appendix B. Advice includes the potential need for further surveys / assessment for specific ecological features and identifies areas recommended to be protected and enhanced within or adjacent to the sites.</p>



Glossary

Badger Act	Protection of Badgers Act 1994
BRP	Bat Roost Potential
BCT	Bat Conservation Trust
BoCC	Bird(s) of Conservation Concern
BTO	British Trust for Ornithology
CEco	Chartered Ecologist
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
EcIA	Ecological Impact Assessment
EIA	Environmental Impact Assessment
EMP	Ecological Management Plan
EPS	European Protected Species
EPSL	European Protected Species Licence
GCN	Great crested newt
Habitat Regulations	Conservation of Habitats and Species Regulations 2010 (as amended)
HAP	Habitat Action Plan
Hedgerow Regulations	Hedgerow Regulations 1997
HPI	Habitat(s) of Principal Importance
HSI	Habitat Suitability Index Assessment (for Great Crested Newts)
HRA	Habitats Regulations Assessment
JNCC	Join Nature Conservancy Council
LERC	Local Ecological Record Centre
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
LPA	Local Planning Authority
LWS	Local Wildlife Site
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NE	Natural England
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAP	Species Action Plan
SNCO	Statutory Nature Conservation Organisations
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981



1.0 Introduction

1.1 Background

WYG was commissioned by Blaby District Council to complete a Biodiversity Study including an Extended Phase 1 Habitat Survey of twenty-one Preferred Site Options to inform development proposals within the District.

This report has been prepared by WYG's Principal Ecologist Victoria Thomas with maps prepared by Principal Consultant Ben Blowers.

This report will form part of the evidence base for the Local Plan and will be used to inform the decision about future development in Blaby District.

1.2 Site Location

The District of Blaby is located in the county of Leicestershire, to the south and west of Leicester City Centre, and covers an area of 13,047ha. The northern section of the District is predominantly urban while the southern part is more rural and agricultural and includes a number of villages and Blaby town.

An ecological appraisal of twenty-one Preferred Site Options within seven of the District's settlements (Kirby Muxloe, Leicester Forest East, Enderby, Braunstone Town, Narborough, Sapcote and Stoney Stanton) were included within this study.

1.3 Purpose of the Study

The purpose of the study is to evaluate sites with the potential to accommodate opportunities for development within the District up to 2029. A desk-based study and Extended Phase 1 habitat Survey have been carried out to identify the significance and likely value of biodiversity features within each site.

The objectives of the biodiversity study are:

- To provide a proportionate, up to date and robust ecological evidence base to underpin the Council's emerging Local Plan;
- To appraise and refresh the findings of the 2008 Phase 1 Habitat Surveys (WYG) for the broad ecological characteristics of the District.
- To provide evidence in relation to Preferred Site Options that have been identified in the emerging Local Plan;
- To identify European, National and Locally designated sites including SSSIs, LWS, , and Ancient Woodlands;
- To meet the requirements of the National Planning Policy Framework (paragraph 117), to "*identify and map components of the local 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 for habitat restoration or creation*".



- To identify other areas that warrant protection as a result of direct and indirect development pressures including “candidate” and “potential” Local Wildlife Sites;
- To identify where there are habitats that could be improved and / or linked together to form wildlife corridors and stepping stones;
- To set a framework for the future assessment of specific sites should any further sites be put forward for consideration through the emerging Local Plan preparation;
- To make objective recommendations to assist the Sustainability Appraisal and decision-making process by identifying the least ecologically sensitive locations for new development;
- To promote the connectivity of habitats across Blaby District and its neighbouring local authority districts, including locally important wildlife corridors and habitat networks.

1.4 Survey & Reporting outputs

The assessment sites have been grouped by settlement. A District-wide map showing the location of the Preferred Site Options is provided in Appendix A. The findings of the Extended Phase 1 Habitat Survey and desk-based study for each of the Preferred Site Options has been provided in a table format, see Appendix C.

The principal output is a set of three maps covering each of the preferred sites and showing the following information:

- Figure Ax: Existing information regarding protected species and designated sites by settlement;
- Figure Bx: The results of the Extended Phase 1 Habitat Survey of the assessment sites, including target notes as appropriate;
- Figure Cx: Areas that may have potential to qualify as Local Wildlife Sites, and key wildlife corridors within and around settlements. Assessment sites are also coloured coded on this plan as to whether they are considered likely to be of relatively low, moderate or higher ecological value.

The definitions for the habitat’s ecological value classifications are provided in Section 2.4.

2.0 Methodology

2.1 Desk Study

2.1.1 Existing Information

Background information for this study has been supplied by Blaby District Council. A previous survey on several of the areas was carried out in 2008 by WYG and has been used for reference, while up-to date information has been gathered during 2017 to provide a robust assessment.

2.1.2 Local Ecological Records Centre

Information for this study was supplied by Leicestershire and Rutland Environmental Record Centre (LRERC), who were consulted to supply details of any nature conservation designations and protected or notable species records within 1 km of the Preferred Site Options.

The data search covers:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely LWS;
- Legally protected species, such as great crested newts, bats and badger;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance; and,
- Priority habitats or species within the Leicester, Leicestershire and Rutland Biodiversity Action Plan (LLRBAP) 2016-2026.

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

2.1.3 Online Resources

A search for relevant information was also made of the following website:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any EPSL applications that have been granted in the local area.

2.1.4 GIS Analysis

Base maps and aerial photographs provided by the District Council were incorporated with biological records obtained from the LRERC. Other information sources used include data gathered to inform previous local plans, and the Local Biodiversity Action Plan (BAP), together with the consultant ecologists' local knowledge. All GIS analysis was undertaken using ArcGIS 10.2.2.



Using the information gathered during this study (including the data search, the Extended Phase 1 habitat Survey results and aerial images), potential wildlife corridors have been identified and mapped on Figures C1-C9. These corridors include rivers, brooks, active and disused railways, hedgerows, ponds, woodlands and grasslands, and attempt to connect designated sites of conservation interest throughout Blaby District.

2.2 Field Surveys

The survey was undertaken with reference to the nationally recognised methodology set out in the Institute of Ecology and Environmental Management's guidance on survey methodology (CIEEM, 2013), and the Department for Communities and Local Government 'Planning for Biodiversity and Geological Conservation: A Guide to Good Practice' (ODPM, 2006). Surveys were also in accordance with the standard published Phase 1 Survey methodology (Joint Nature Conservation Committee, 2010).

Note that, where possible, common names for flora and fauna have been used throughout this report for ease of reading.

2.2.1 Habitats

An Extended Phase 1 habitat Survey was undertaken on the sites between the 9th August and 8th September 2017 by WYG ecologists Amy Dowers, Victoria Thomas and Ian Stephens.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee, 2010). Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2010). Each site was also appraised for its suitability to support notable flora, with regard to the CIEEM Guidelines for Preliminary Ecological Appraisal (2013).

The extended survey also identified significant habitats, species and other features which are priority habitats or species or which may act to support or function as habitats, wildlife corridors or stepping stones within the wider landscape and particularly those which may support priority species.

Access was provided to all of the Preferred Site Options but not all of the site was accessible for health and safety reasons or only partial access was granted by landowners / residents. Further details for the survey limitations are provided in Section 2.3.2.

2.2.2 Target Notes

Target notes are shown on the Extended Phase 1 habitat Survey result plans (Figure Bx); these relate to particular features such as invasive species, evidence of protected species, mature trees with bat roost potential and potential veteran trees. A full description of each target note including a grid reference is provided in Appendix C. Where no target notes appear on the plans, it can be assumed that no target note-worthy features were recorded at the time the survey took place.



2.2.3 Local Wildlife Sites Assessment

LWS may only be designated if they meet the criteria set out in the 'Guidelines for the selection of Local Wildlife Sites in Leicester, Leicestershire and Rutland' published by Leicestershire County Council on behalf of the Local Wildlife Sites Panel. These guidelines are revised periodically and the most up-to-date version is from 2011. The criteria are based on the LLRBAP and the current list of UK Biodiversity Conservation Priority habitats and species and have been largely determined by the Panel. The designation is therefore a material consideration in the planning process (see Chapter 2). Local Wildlife Sites are (by definition) of County-wide value for wildlife.

Candidate Local Wildlife Sites

Local Wildlife Sites must have the consent of the landowner before designation, in line with national guidance. This means that some sites that are known to meet the Local Wildlife Site criteria are not designated as Local Wildlife Sites, for example because the landowner does not wish it; or because the landowner has not been approached for permission or is unknown; or because formal designation is pending. These sites are known as Candidate Local Wildlife Sites, and have the same status in planning terms as designated Local Wildlife Sites; the Local Wildlife Site criteria underpin a robust system that stands up to legal challenge, giving a more easily understood basis for site selection that can be readily defended at public inquiries (LL&R LWS Panel 2011)..

Potential Local Wildlife Sites

These are sites where survey data indicates that it is likely that the site will meet the Local Wildlife Site criteria but for which further survey data is needed to be sure. All Potential Local Wildlife Sites are important in the context of the Local BAP, since they all support priority habitats and/or priority species and are therefore a material consideration in the planning system. These include species rich hedgerows as detailed in Section 5.2 for the Preferred Site Options and the results table Appendix B.

Hedgerows

A species-rich hedgerow is defined in the Leicester, Leicestershire and Rutland selection criteria (LL&R LWS Panel 2011).as having 5 or more native woody species on average in any given 30 metre length. The number of different woody species within a 30m section of the hedge was recorded to determine if the hedge would qualify as a Local Wildlife Site.

A hedge was considered to be species-rich if it qualified under the primary or secondary criteria (explained below – lists of species can be found in Leicester, Leicestershire and Rutland selection criteria (LL&R LWS Panel 2011):

Primary criteria

The hedge must be at least 1.3m (4ft) high and continuous (breaks only at gateways or equivalent) **AND** have:

- *6 locally native trees or shrubs from list A1 per 30 metres averaged out over length of hedge OR



- *5 locally native trees or shrubs from list A1 per 30 metres average plus two associated habitat features from list A2.

Secondary criteria

The hedge fails to meet the primary criteria by one species of native tree or shrub. The hedge qualified under the secondary criteria if it contains two additional habitat features of value :

- a ditch or stream (dry, damp or wet) along one or both sides for half-length of hedge;
- standard trees or pollards at average of two/100m of at least 15cm girth;
- bank supporting the hedge, along one or both sides for half-length of hedge;
- stone wall supporting the hedge, along one or both sides for half-length of hedge;
- dead wood/old layers along at least 10% of the hedge;
- a parallel hedge within 15m.

Veteran trees

Generally, veteran trees have not been designated as Local Wildlife Sites, except where they contribute to habitats which meet the Local Wildlife Site criteria in their own right such as water courses or species-rich hedgerows. There are however a few individual veteran trees which have recently been identified as candidate or potential Local Wildlife Sites in the years preceding this survey. Previously unrecorded potential veteran trees were also found during the current survey and the locations of these have been target noted. Such trees often provide roosting features for bats, habitat for hole-nesting birds and support numerous invertebrates (including saproxylic insects) and occasionally other epiphytic plants too (such as ferns, mosses or lichens).

Locations of veteran trees have been mapped where identified although no further survey work has been carried out other than to list the tree species. Veteran trees are defined by Natural England (Guidance - Ancient woodland and veteran trees: protecting them from development) as '*trees which, because of their age, size or condition are of cultural, historical, landscape and nature conservation value. They can be found as individuals or groups within ancient wood pastures, historic parkland, hedgerows, orchards, parks or other areas*'.

Mature and veteran trees are a priority habitat within the Leicester, Leicestershire & Rutland Biodiversity Action Plan. Concentrations of mature trees are particularly valuable. The Local Wildlife Site selection criteria for mature trees was used to determine which trees were likely to fall within this category (LL&R LWS Panel 2011).

The criteria include evidence of heart-rot, in the form of visible rot hollows or bracket fungi or dead branches. Characteristics included: very large girth, measured at 1.3m above ground level although the qualifying girth varies between tree species. A minimum girth of 3.77m would be required for native oak trees, beech, sweet chestnut, horse chestnut, all limes, poplars and willow species; whereas a minimum of 3m would be required for ash and elm species. Designated trees may be living, dead or even fallen. Stumps should be at least 2m high.

2.2.4 Protected & Notable Species

Each site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRow Act, those given extra protection under the NERC Act, and species included in the Local Biodiversity Action Plan (LLRBAP, 2016); further details provided in Section 4.5.

A general list of protected / notable species typically found in different habitats types is provided in Table 1 below.

Table 1 Species typically found in different habitat types.

Habitat	Species potentially present
Arable fields	Farmland birds, plants of arable margins, brown hare
Allotments	May support reptiles, birds, amphibians and notable invertebrates (particularly moths).
Grassland	Notable plants, reptiles, amphibians, foraging bats, fungi and invertebrates, particularly butterflies and moths.
Tall ruderal	Invertebrates, reptiles, amphibians, nesting birds, harvest mice.
Hedgerows	Bats, badgers, birds, dormice, reptiles, amphibians, invertebrates, hedgehogs
Woodland	Bats, badgers, birds, amphibians, invertebrates, fungi and woodland plant.
Scrub	Badgers, invertebrates, reptiles, amphibians, birds, harvest mice.
Rivers and brooks	Otters, water vole, birds, white-clawed crayfish, bullhead, brook lamprey, aquatic invertebrates and aquatic plants.
Ponds	Amphibians, birds, water vole, red data book aquatic beetles and other aquatic invertebrates and aquatic plants.

A detailed search for evidence of protected species was not completed, but an assessment was made of their potential to use the site, any incidental evidence encountered on site was recorded.

The following species in particular were considered:

Great Crested Newt

Each site was appraised for its suitability to support great crested newt (GCN). The assessment was based on Guidance outlined in the Joint Nature Conservation Committees'



published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

Bats

Roosting bats – Buildings/structures/trees

Potentially suitable buildings, structures or trees where noted on each site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd ed, 2016) – hereafter referred to as the 'BCT Guidelines'. These assessments took place from public rights of way using binoculars. Where visible, trees with potential features suitable to support roosting bats were target noted.

Foraging/commuting bats

Habitats and features with potential value for use by foraging and commuting bats were assessed within each site, based on the characteristics referenced in the BCT guidelines. The most valuable being along wildlife corridors (rivers, streams, hedgerows, lines of trees and woodland edge) well connected to the wider landscape.

Reptiles

Each site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003).

Badgers

An assessment of the sites suitability to support badgers was carried out. A detailed badger survey was not completed, however where present, evidence of badger setts or other badger activity such as paths, latrines or signs of foraging were recorded. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989). Information for badger evidence has been treated as confidential and has only been provided in a confidential report to Blaby District Council and the Local Record Centre.

Other Species

Each site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to CIEEM's *Guidelines for Preliminary Ecological Appraisal* (2013) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development*. Evidence of any current or historical presence of such species was recorded.

2.2.5 Invasive species

Where noted, invasive plant species were recorded, and mainly comprised species such as Himalayan balsam and water-fern although, if noted, other invasive species such as Japanese knotweed would also have been recorded.



2.3 Limitations

2.3.1 Desk Study Limitations

Species records returned from LRERC in August 2017 did not include records made in late 2016 and 2017 for some species/groups (e.g. birds). Species older than 20 years old were also excluded from the desk study as the information is no longer considered to be up to date.

Species records obtained from LRERC were predominantly supplied with a six figure ordnance survey national grid reference (OSNGR), a small proportion had a four figure reference. Consequently, species records appear at the south-western corner of the grid square (100 m or 1 km) within which the actual observation was made.

At locations where numerous species records have been made, a number of records may occur on top of one another and therefore were superimposed on the map. Thus an icon indicating notable birds could have represented one record or multiple records. Where records for multiple species/groups (e.g. notable birds and reptiles) occurred at the same grid reference, we therefore manually adjusted the records a small distance (to the north-east) that permitted all recorded species/groups to be clearly seen on the map.

2.3.2 Survey Limitations

The surveys were completed during the optimal period to undertake an extended Phase 1 habitat survey (April-September).

The results and recommendations within this report are specific to the extent of the Preferred Site Options i.e. their red line boundary. The results provided in this report do not contain enough ecological information to inform a planning application for an assessment site. However, they do provide an indication of a site's likely ecological value, and allow a broad assessment of sites.

Access was granted to survey the Preferred Site Options. However full access was not granted by some landowners / residential properties within or adjacent to the site. Some of the areas within the sites could not be accessed due to health and safety reasons e.g. livestock and dense vegetation. Where the survey work was largely restricted binoculars were used by the surveyor during the site visit or aerial interpretation has been used. Where no assessment has been made for a particular area not visible during the survey of a Preferred Site Option 'not accessed' has been highlighted on the Extended Phase 1 habitat Survey plans, Bx plans.

Visibility from public rights of way and other open access land was restricted in three of the assessment sites; direct access to these sites was also unavailable at the times that the survey took place. Therefore areas not accessed have not been fully assessed or have been assessed based on aerial interpretation only, this includes parts of the following sites: KMU015 (mostly residential) NAR015 and END013.



2.4 Assessment Overview

Using the information obtained during the data search, aerial interpretation and site visits, a preliminary ecological assessment has been completed for each site. This classification is indicative, as sites detailed species surveys have not been completed to confirm the presence or absence of notable species.

Each Preferred Site Option has been given an indicative classification as yellow, amber or red, this colouring is illustrated on the Figures C1-C9. Further detail has been provided for the assessment defining the features in the amber classification, referenced 1-6 (see below), these references have also been provided on the Figures C1-C9.

- **Yellow:** Site appears to be of relatively low ecological value. Further surveys may still be required to inform mitigation, e.g. for great crested newts, bats or badgers, but it is considered unlikely that there will be significant ecological constraints to future development of the site.
- **Amber:** Site of moderate ecological value. Ecological constraints on these sites may typically include:
 1. existing non-statutory designated site of conservation value within or immediately adjacent to the site;
 2. adjacent river/brook corridor;
 3. an area of woodland or adjacent to woodland;
 4. notable grassland, including road verges;
 5. 'important' hedgerows (assessed against Leicestershire's Local Wildlife Site Criteria, LL&RLWS Panel, 2011);
 6. areas where records of notable and protected species have been identified during the desk study.

We would recommend these habitats be retained where possible. However, it is likely that further surveys and ecological input to the detailed site proposals could potentially allow development over at least some of the site.

- **Red:** Significant ecological constraints are present within or adjacent to the site, e.g. statutory designated site of conservation value within or immediately adjacent to the site or a combination of more than one of the items listed under the Amber definition present. Significant mitigation and/or compensation / enhancement measures are likely to be required to allow development on these sites.

3.0 Results

This section provides the results of the desk study and considers the statutory designated biodiversity resources with the District and then focuses on the non-statutory sites and protected species to a distance of 1km around the Preferred Site Options.

Figures for the District and Preferred Site Options are provided in the Figure section of this report and are labelled as follows:

- The relevant data search information is provided in **Figures A0-A9** and, which show the designated statutory, non-statutory sites, green wedges, green spaces in the surrounding areas, as well as protected and notable species records.
- The extended phase one habitat maps for each Preferred Site Option can be found in **Figures B1-B21**.
- Key features considered likely to be used as wildlife corridors within and adjacent to Preferred Site Options areas are illustrated in **Figures C0-C9**. These maps also show the assessment of each Preferred Site Options potential ecological value and is based on the criteria set out in Section 2.4.

3.1 Statutory Designated Sites

There are no internationally designated sites of conservation importance within Blaby District. The following designated sites of nature conservation importance have been identified within Blaby District, they include six SSSIs (two of geological importance) and three LNRs.

Table 2 Statutory Designated Sites within Blaby District

Designation	Site Name	Grid Ref.	Summary of features
SSSI	Enderby Warren Quarry	SK 542001	Nationally important geological site It is the only British locality where it can be demonstrated that the palygorskite originated through the action of the post-Triassic groundwaters on the underlying beds.
SSSI	Croft and Huncocte Quarry	SP 512963	Site of geological importance for exposures of tonalitic igneous rocks of Ordovician age together with attendant zeolite mineralisation and much younger manganese mineralisation of Triassic age
SSSI	Croft Hill	SP 510967	The site supports a nationally rare type of herb-rich grassland of a predominantly southern distribution and which is rare in the Midlands. The nutrient poor soil derived from the granitic soil has produced open grassland of acidic character, supporting short grasses such as sheep's fescue, common bent and crested hair-grass. Ephemeral, spring-growing annual plants are a feature of this site, including several species on the county



			Rare Plant Register (RPR), such as upright chickweed and small mouse-ear. Mosses and lichens are characteristic of open areas where rocks are close to the surface and these include several notable species.
SSSI	Croft Pasture	SP 510958	Includes acidic mixed grassland which is unusual in Leicestershire. The thin turf has developed on sandy soils associated with outcrops of igneous syenite. A total of 15 plant species on the county RPR have been recorded on the site, including annual knawel at its only known location in the county. Other RPR species include hoary cinquefoil upright chickweed, subterranean clover, slender trefoil, wild onion wild clary and bird's-foot. Additional interest is provided by the River Soar which flows through the site, this section having escaped the engineering works that took place over the majority of its length during the 1970s. This section of river is moderately fast flowing, possessing characteristic marginal vegetation, which includes the RPR listed river water-dropwort. There are records of water voles and a locally notable dragonfly assemblage.
SSSI	Narborough Bog	SP 549979	This site contains one of the largest natural reedbeds in Leicestershire and has an adjacent section of wet woodland dominated by crack willow. A further area of wet meadowland retains a characteristic grazed-marsh flora including two species on the county rare plant register: tawny sedge and hound's-tongue. Other, locally notable species include southern marsh orchid marsh valerian and fen bedstraw. A large number of butterfly and moth (Lepidoptera) species have been recorded from the site, including at least two county-rare wainscot moth species associated with the reedbed.
SSSI	Burbage Common and Ashton Firs	SP 449 948	The site is located on the District boundary with the Borough of Hinkley and Bosworth and is primarily designated for its ash-oak-maple semi-natural woodland on clay soils. The site supports a diverse ground vegetation community including some ancient woodland indicators. The common and woodland both include a range of habitats which support a diverse wildlife, especially invertebrate, community. Grassland habitat to the north of the railway line supports a

			diverse lowland dry acid grassland. The site forms part of the
LNR	Aylestone Meadows	SK 571015	The site is located adjacent to the River Soar. Species rich grass fields are located south of Braunstone Lane East and are grazed by traditional Leicestershire rare breed Long Horn Cattle. Several protected and notable mammals and birds have been recorded at the site.
LNR	Burbage Common and Woods	SP 449 948	The common and woodland support many wildflower, numerous invertebrates including over twenty species of butterflies, over one hundred species of fungi, twenty five species of mammals and a range of birds including nuthatches, jays and great spotted woodpeckers.
LNR	Glen Hill	SP 5699	The mosaic of habitats and traditionally managed wildflower meadows are home to arrange of flora and fauna such as woodpeckers, dragon flies, butterflies and bats. This site is adjacent to the Grand Union Canal.

Other SSSIs present within 2km of the Blaby District include Groby Pools & Woods SSSI and Sheet Hedges Wood SSSI (Charnwood Borough), Burbage Wood & Aston Firs SSSI (Hinckley and Bosworth), Kilby Foxton Canal SSSI (Harborough, Oadby & Wigston) and Kirby Frith LNR. However none of these are located within 1km of the Preferred Site Options.

In addition to the above designations, the nearest Natura 2000 site is Ensor's Pools SAC in Nuneaton, located 10km to the east of Blaby.

3.2 Local Wildlife Sites (LWS)

The lack of internationally designated sites and relatively low number of nationally designated sites in the counties of Leicestershire and Rutland means that those sites of local importance assume increased local significance (quote from Evans, D. 1989, Leicester County Ecologist and LWS Panel Member, in Draft Guidelines for the selection of Local Wildlife Sites (LWS) in Leicester, Leicestershire & Rutland, 2011 update).

Current planning guidance requires that Local Development Frameworks indicate the location of designated sites, including locally designated sites.

A total of 934 LWS (notified, candidate and potential) have been identified in Blaby District, 40 of these (10 LWS, 23 pLWS and 7 cLWS) are within or adjacent to the Preferred Site Options. Table 2 lists any LWS within or immediately adjacent to a Preferred Site Option.

Table 3 LWS within or immediately adjacent of the Preferred Sites Options

Designation	Site Name	Preferred Site Option Ref.	Summary of features
pLWS	91148 Enderby Lodge	END013	Wet grassland (SP548990)
LWS	25219 Kirby Muxloe Park	KMU007	Mesotrophic grassland (SK521041)
cLWS	58798 Kirby Muxloe Castle Grounds	KMU007	Mesotrophic grassland (SK523046)
pLWS	90616 Kirby Muxloe wet grassland	KMU007	Wet grassland (SK530035)
pLWS	90617 Kirby Brook , adj to Castle	KMU007	Small river or stream (SK524045)
pLWS	90618 Kirby Brook Crack Willow	KMU007	Mature tree (SK525048)
pLWS	90619 Ash tree at end of The Fairway, Kirby Muxloe	KMU007	Mature tree (SK527040)
pLWS	90620 Pedunculate Oak at rear of Moel Llys, Kirby Muxloe	KMU007	Mature tree (SK528038)
pLWS	90621 Pedunculate Oak, rear of Walton Close Kirby Muxloe	KMU007	Mature tree (SK528036)
pLWS	10053 Kirby Muxloe, Stream between Ratby Lane and M1	KMU007	Small river or stream (SK526048)
pLWS	10054 Kirby Muxloe Bloods Hill hedgerows	KMU007	Hedgerow SK532037
LWS	23274 Hedgerow	KMU015	Species Rich Hedgerow (SK506030)
LWS	25224 Willow Wood	KMU015	Wet Wood (SK522034)
LWS	50393 Links grassland	KMU015	Mesotrophic grassland (SK521033)
LWS	65910 Oaks Fm Woodland Willow	KMU015	Mature Tree (SK513032)
LWS	65911 Oaks Fm Woodland Ash	KMU015	Mature Tree (SK512033)
LWS	65912 Oaks Fm Stream Woodland Ash	KMU015	Mature Tree (SK511026)



cLWS	58796 Oaks Fm wet woodland	KMU015	Wet woodland (SK512033)
cLWS	58797 Oaks Fm stream and woodland	KMU015	Small River or Stream (SK510028)
pLWS	90622 LFE hedgerow 1	KMU015	Hedgerow (SK509025)
pLWS	90623 LFE hedgerow 2	KMU015	Hedgerow (SK508027)
pLWS	90624 Kirby Brook Golf course section	KMU015	Small river or stream (SK515035)
pLWS	90625 unnamed brook, adj Lawn Fm, LFE	KMU015	Small river or stream (SK519017)
pLWS	90626 The Oaks, Pedunculate Oak	KMU015	Mature Tree (SK510032)
cLWS	90627 LFE Golf-course Road ash	KMU015	Mature Tree (SK522021)
cLWS	91177 LFE golf course pond	KMU015	Pond (SK518024)
pLWS	10056 Kirby Muxloe Pond by Forest Farm	KMU015	Pond (SK5198030)
LWS	Tree	LFE016	Mature tree
cLWS	90637 LFE brook & hedge	LFE017/018	Small river or stream SK535025
pLWS	10008 Braunstone, Wood Close Plantation	BRA009	Woodland (SK547016)
cLWS	90041 Mossdale Meadows	BRA009	Mesotrophic grassland (SK551015)
pLWS	10027 River Soar and adj Willow wood and grassland	NAR008	Woodland (SP548981)
pLWS	10065 Narborough Dismantled mineral line	NAR015	(SP530971) No details.
LWS	80075 Mill on the Soar, Broughton Astley	STO004	Large River (SP508936)
LWS	80103 The Grange, Broughton Astley	STO004	Wet grassland (SP508934)
pLWS	10072 Stoney Stanton, Coventry Rd Hedgerow	STO004	Hedgerow (SP506935) Note: on west of B4114
pLWS	91520 Stoney Stanton hedges west of Huncote Rd	STO019	Hedgerow (SP487957)
pLWS	90990 Hedgerow Ash	SAP002	Mature Tree (SP48409388)
pLWS	90990 Hedgerow Ash	SAP002	Mature Tree (SP48369356)
pLWS	90979 Leicester Rd Ash	SAP005	Mature tree (SP49429339)



3.3 Other classifications

3.3.1 Leicestershire Biodiversity Action Plan Habitats

The LLRBAP habitats of relevance to the District include: semi-natural broad-leaved woodland, eutrophic standing water, rivers, field margins, floodplain wetlands, hedgerows, mature trees, mesotrophic lakes, neutral grassland, roadside verges, rocks and built structures, springs and flushes, urban habitat and wet woodland.

3.3.2 Green Network

Green networks were defined by Barker (1997) as ‘natural or permanently vegetated, physically connected spaces, situated in areas otherwise built up or used for intensive agriculture, industrial purposes or other intrusive human activities. They may include land to which there is no general access, such as private gardens and estates’. Features such as these can be used as corridors to allow species to travel between rural and urban areas. Narrow strips of habitat may be vulnerable to edge effects and consequently the wider corridor can be, the better for many species.

Green Wedges

A strategic green wedge assessment was carried out for the District of Blaby in 2016. There are six broad areas designated as Green Wedges in the District and they are:

- a. Between Blaby and Glen Parva (Sence Valley);
- b. Between Whetstone, Blaby and Countesthorpe;
- c. Between Whetstone, Enderby, Glen Parva, Braunstone, Blaby, Littlethorpe, Narborough and Cosby (Soar Valley South);
- d. Between Glenfield, Kirby Muxloe, Kirby Fields and towards Ratby, Groby and Leicester;
- e. Between Glenfield towards Beaumont Leys, Anstey and Groby;
- f. From Elmhurst towards Barwell and Earl Shilton.

As well as protecting strategically important gaps between settlement and influencing the form and direction of urban development through Policy CS16: Green Wedges. One of the purposes, and qualifying criteria, for a green wedge in Leicester is to provide a ‘green lung into urban areas’ and as such is considered to contain a biodiversity asset that should be retained.

The majority of the green wedges have no additional biodiversity protection, however there is some overlap with LWSs, LNRs (i.e. Aylestone Meadows, Glen Hills and Kirby Frith) and SSSIs (Narborough Bog) in Blaby District.

Table 4 includes a list of the green wedges which pass through or are located adjacent to the Preferred Site Options. Green Networks within Blaby District are presented on Figures Cx.

Table 4 Green wedges within or immediately adjacent of the Preferred Sites Options.

Classification	Plan C0 Reference	Site Reference	Summary of features
Green wedge	D	KMU001 KMU009 KMU007	Between Glenfield, Kirby Muxloe, Kirby Fields and towards Ratby, Groby and Leicester;
	C	END013 NAR002 NAR003 NAR008	Between Whetstone, Enderby, Glen Parva, Braunstone, Blaby, Littlethorpe, Narborough and Cosby (Soar Valley South);

Wildlife Corridors

Several ecological features considered likely to be of importance for the ecological functionality of the landscape have been recorded during the interpretation of aerial photographs and field surveys carried out during this study. These are illustrated on Figures C0-C9 and include railway lines (both active and disused), rivers, brooks and drains, hedgerows, road verges and other grasslands. Some of these are considered likely to qualify as Local Wildlife Sites or fall within the definition of LBAP habitats.

Table 5 includes a list of the wildlife corridors which pass through or are located adjacent to the Preferred Site Options. Green Networks within Blaby District are presented on Figures Cx.

Table 5 Green wedges within or immediately adjacent of the Preferred Sites Options.

Classification	Plan C0 Reference	Site Reference	Summary of features
Wildlife Corridor	South Leicestershire railway line (LNWR)	NAR003	Disused railway line located along northern boundary of the site
	Beggars Lane	KMU015	Line of local wildlife sites which run parallel and then crosses Beggars Lane between Leicester Forest East and M1 corridor.
	M1 Corridor	LFE016 LFE017 LFE018 NAR003	Predominately plantation woodland located either side of the M1 motorway corridor.

Classification	Plan C0 Reference	Site Reference	Summary of features
	River Soar	NAR003 NAR008	River passes through several important wildlife areas in Leicester.
	Whistle Way	NAR015	Former disused railway line, now footpath, is located along the western boundary of the site
	Braunstone to Ratby	LFE016 KMU007	Tributary between the River Sour and Rothley Brook which passes through/adjacent to LWS and green spaces.
	Ivanhoe Railway	NAR003 KMU007	Railway line located along southern boundary of the site
	Mill on Soar	STO004	River Soar and tributaries to east of the site.
	South Leicestershire railway line (LNWR)	STO019	Disused railway line located along northern boundary of the site

3.3.3 Biodiversity Enhancement Sites (BES)

The District contains several designated sites which have their own biodiversity management aimed at enhancing / maintaining the conservation status of the site. Leicester City Council has identified several BES's within the city which would benefit from biodiversity management and enhancement and are considered suitable sites for biodiversity offsetting for future development within the city. Similarly Blaby District Council would like to identify potential BES's within the Preferred Sites Options. Opportunities for Biodiversity enhancement have been discussed in Appendix B and Section 5.

3.4 Habitats

The location, site size, desk study results, survey results, ecological value assessment and recommendations for further surveys and enhancements for each site are provided in table format in Appendix B. The results table should be read in conjunction with the relevant Figures and target notes supplied in Appendix C.

3.4.1 Mixed Plantation Woodland

Mixed plantation woodland was identified within the Preferred Site Options. The coniferous component of the woodland varied from site to site and included native Scot's Pine (*Pinus sylvestris*) and non-native species such as Corsican pine. Broad-leaved species included ash, beech, oak, sycamore and willow.

Photo 1 Mixed Plantation Woodland (NAR002)



3.4.2 Broad-leaved Semi-natural Woodland

Only secondary growth semi-natural woodland was identified within the Preferred Site Options, which had developed on previously non-wooded land. It is considered that there is no semi-natural ancient woodland within any of the Preferred Site Options areas. Individual planted trees have been mapped as such.

This woodland type was dominated by sycamore with some wych elm, alder, oak and ash with a shrub layer of hawthorn, blackthorn and bramble. The herb layer was species-poor and dominated by stinging nettles and ivy. Other ground flora species included lords-and-ladies red campion and wood avens.

Photo 2 Broad-leaved woodland along the Kirby Brook (KMU007)



3.4.3 Plantation Woodland.

The plantation woodland included broad-leaved, mixed and coniferous woodland, with the largest combined area being of broad-leaved woodland. Species commonly planted include horse chestnut sycamore, ash, pedunculate oak, common lime, rowan, beech, black poplar hybrids, Lombardy poplar and common whitebeam. Coniferous species recorded in the mixed woodland included Scots pine, Leyland cypress, European larch and Japanese larch. Some of the purely coniferous woodland appeared to be commercial Christmas tree plantations of Norway spruce.

In all cases and even where the trees were mature (i.e. trunk girths over 1m circumference), the ground flora was species-poor and in some cases did not differ markedly from adjacent grassland or ruderal habitats.

This habitat was limited to boundary edges around the Preferred Site Options with more established plantations recorded in KMU015 and NAR002. Young plantation woodland was recorded in KMU015 (golf course)

Photo 3 Young Plantation Woodland (KMU015)



3.4.4 Dense Continuous Scrub

Dense scrub had colonised railway embankments, both active and disused, and former grassland areas adjacent to such features. Hawthorn and blackthorn dominated most areas of dense scrub but there were also several areas of dense brambles. Flora species were generally absent from this habitat, where present, ivy appeared to be the dominant ground flora species. Other ground flora included, ground-ivy and common nettle were also widespread in this habitat type.

Small areas of scrub were noted throughout several of the Preferred Site Options. The most extensive area of scrub was recorded at BRA009. Other sites with areas of dense continuous scrub included KMU015, LFE016, BRA003 and STO004.

Photo 4 Dense Scrub (BRA009)



3.4.5 Tree lines and scattered trees

Individual trees in hedges, in fields, and lines of mature trees were recorded at several of the sites. The most dominant tree species was ash, with frequent oak along historical boundaries, such as KMU007 western boundary and occasionally covered in ivy. Other species frequently recorded included sycamore, horse chestnut and crack willow.

A line of hybrid *Poplar* sp. was recorded at KMU 015 and provided a windbreak across the adjacent playing fields.

Photo 5 Lines of trees (KMU015)



3.4.6 Hedgerows

Species-rich hedgerows were defined as those with six or more locally native woody species (List A1: LL&R LWS Panel 2011) along their lengths or any hedge with five native trees or shrubs and two associated habitat features (List A2: LL&R LWS Panel 2011). These were typically located alongside watercourses, green lanes, tracks and minor roads, and established farmland. They also sometimes contained large examples of slow-growing species such as field maple and mature oak and ash trees. Species present which were usually absent from species-poor hedgerows included hazel, crack willow (*Salix fragilis*) and holly.

All those hedgerows with five or fewer locally native woody species and absent of habitat features from list A2 were classed as being species-poor. The majority of the hedgerows within the Preferred Site Options were considered to be enclosure act hedgerows, usually dominated by just two species: hawthorn or blackthorn, and sometimes a mixture of the two although there were a few hedgerows where wych elm predominated. Other species present tended to be those which are distributed by birds such as elder and dog rose. Occasional tree species were recorded within the hedgerows which were dominated by ash trees.

Table 6 Summary of Species-Rich Hedgerows

Species rich Hedgerows			
Site	Species (JNCC 2010)	Features	Grid Reference
KMU007	Cm, Ps, Fe, Sn, Ag, Rosc Ac, Sxf	Standard trees	SK 52866 04195 - SK 53067 04013
	Cm, Ps, Fe, Sn, Rosc, Qr	N/A	SK 52784 04023 - SK 52937 04357
	Cm, Ps, Sn, Ac, Ia, Rosc, Ms	Standard trees	SK 53169 04087 - SK 52857 03841
	Cm, Ps, Fe, Sn, Ia, Rosc, Sxf, Cla*, Qr	Standard trees	SK 52907 03686 - SK 53246 03945
	Cm, Ps, Fe, Sn, Ac, Ia, Rosc, Sxf, Cla*	Standard trees	SK 52931 03590 - SK 53302 03799
KMU009	Cm, Ps, Sn, Ac, Ca, Ia,	Ditch and standard trees	SK 51536 04555 - SK 51934 04616
	Cm, Ps, Fe, Sn, Ca, Ia, Ms	Standard trees	SK 51440 04749 - SK 51536 04555
	Cm, Ps, Ac, Ag, Ms, 2 x Sx sp.	Standard trees	SK 51709 04777 - SK 51798 04814
KMU015	Ac, Fe, Ps, Ros, Qr, Sx, Sn	N/A	SK 51098 02615- SK 50841 02640
	Ac, Ca, Cm, Fe, Ros, Ps, Um, Sn	N/A	SK 51892 02499- SK 51376 02345

	Cm, Ps, Fe, Ac, Rosa, Ms,	Dry ditch	SK 51842 02782 - SK 51642 03100
	Cm, Ps, Fe, Sn, Um, Rosa, Ms,	Dry ditch + standard trees	SK 51909 02527 - SK 51357 02385
	Cm, Ps, Fe, Sn, Ac, Rosa, Um,	Dry ditch + standard trees	SK 51577 02422 - SK 51489 02658
LFE018	Cm, Ps, Qr, Fe, Sn, Um, Ac, Sx.	Ditch and running water stream.	SK5366202968 SK5360302571
BRA003	Um, Cm, Sn, Ca, Fe, Ps.	N/A	SP5458699404 SP5479199339
NAR008	Ag, Ca, Ac, Bpe, Cm, Sn, Fe.	Running water stream.	SP5455098074 SP5473498036
STO005	Ps, Cm, Sn, Um, Ac, Fe, Ac, Pa.	Dry ditch	SP4843494619 SP4834194408
STO008	Cm, Fe, Sn, Um, Ros, Ac.	N/A	SP4838594327 SP4828494232
	Cm, Ps, Sd, Sn, Um, Ros.	Dry ditch	SP4839094137 SP4850694201
STO019	Cm, Ps, Um, Ac, Ros, Pop.	N/A	SP4897095727 SP4896295627
SAP001	Sn, Ps, Fe, Qr, Ia, Pa, Um, Ca.	N/A	SP4787793578 SP4782393489
	Ac, Fe, Cm, Ps, Hh, Sn, Ca, Ros, Um, Bpe, Psyl.	Dry ditch	SP4782393489 SP4795193455
	Fe, Ca, Ps, Ac, Cm, Hh, Um.	N/A	SP4795193455 SP4798793563
SAP005	Cm, Sn, Fe, Ia, Ca, Ros..	N/A	SP4929593226 SP4929593226
	Oak, Fe, Cm, Ca, Um, Ps.	N/A	SP4938793388 SP4953093323
	Fe, Cm, Hh, Ia, Sn, Ros.	N/A	SP4953093323 SP4944493097

*Cla = Midlands hawthorn

Hedgerows bordering gardens often included various non-native (locally) species such as lilac (*Syringa vulgaris*), garden privet and beech as well as locally native species. These hedgerows have been classified as species-poor no matter how many species occur as only locally native species count towards determination of species-rich hedgerows.

Climbing species encountered included bramble, honeysuckle at NAR003, white bryony and bittersweet.

Photo 6 Hedgerows (KMU009)



3.4.7 Grassland

Neutral grassland

Kirby Muxloe wet grassland pLWS lies within the southern site boundary of KMU007. The habitat contains semi-improved grassland containing neutral grassland species such as red clover and sorrel (the latter recorded in the west of the field) and wet grassland species such as compact rush and reed canary grass located throughout the field. The grassland species recorded in the grasses included cocksfoot, creeping bent, Timothy, Yorkshire fog, perennial ryegrass and false oat-grass. Typical species included stinging nettle, creeping thistle, spear thistle, broad-leaved dock, curled dock, common ragwort, rosebay willowherb, great willowherb, ribwort plantain bristly ox-tongue and hogweed .

Poor Semi-improved

This is the most abundant (in terms of area) grassland within the Preferred Site Options. This habitat contained array of grasses not usually associated with significant agricultural improvement or high fertiliser levels such as false oat-grass, cock's-foot, perennial ryegrass, crested dog's-tail, black-grass, Timothy, Yorkshire fog, rough meadow-grass, tufted hair-grass and meadow foxtail.

Herbs were generally few in both number of species and numbers of individuals but typically included white clover, red clover, meadow cranesbill, mouse-ear chickweed, field bindweed, poppy, creeping buttercup, lesser hawkbit and ribwort plantain. Ruderal herbs were also evident, including common ragwort, stinging nettles, docks and thistles.

Photo 7 Poor Semi-improved Grassland (END013)



Some of the fields in the Kirby Muxloe (KMU009) and Sapcote (SAP002) showed strong ridge and furrow features indicating that they had not been ploughed. Both sites were heavily grazed and as a result lacked a diverse forb community.

Photo 8 Ridge and Furrow (KMU009)



Improved Grassland

The improved grassland was dominated by perennial rye-grass and crested dog's-tail with some white clover. Other herbs were restricted to odd ruderal species such as docks thistles and ragwort. These grasslands were all bright green, indicating high fertiliser input. Most had been cut for silage prior to the survey as cut grass or the bales had been left in the field. Other areas of this grassland type were grazed by cattle or sheep at the time of the survey.

Photo 9 Improved Grassland (KMU007)



Amenity Grassland

This grassland type occurred on playing fields, the golf course and within the residential area (gardens) and also as narrow strips alongside roads within the urban fringes; the two latter features were too small to show on the extended phase one habitat plans. This grassland did not appear to differ in composition from the average garden lawn, being dominated by commercially available strains of fescue and bent grasses. Herbs were restricted to species such as daisy dandelion species and plantains. It was all subject to intensive mowing regimes. The bright green appearance indicates a high level of management and potential fertiliser input.

Photo 10 Amenity Grassland (NAR002)



3.4.8 Tall Ruderal

The largest areas of this habitat were within the LFE017 where there were extensive stands of tall ruderal throughout the site. Only small patches of this habitat were recorded within the other Preferred Site Options. Typical species included stinging nettle, creeping thistle, spear thistle, broad-leaved dock, curled dock common ragwort, rosebay willowherb, great willowherb, bristly ox-tongue and mugwort .

Small areas of tall ruderal were noted throughout several of the Preferred Sites Options. The most extensive area of tall ruderal were recorded at BRA003, KMU001 and NAR002.

Photo 11 Tall Ruderal (LFE017)



3.4.9 Open water

There are several standing waterbodies throughout the Preferred Site Options. The majority are considered to be artificial, for example on the golf course, as reservoirs within farmland, fishing lakes, providing flood defence on the margins of urban areas, and to provide drinking water within grazed grassland. Some of these were extensively surrounded and shaded by mature trees and not all of them were. Marginal vegetation was not visible on some of these waterbodies, even those where good views could be obtained.

Emergent vegetation included bulrush (*Typha latifolia*) and compact rush (*Juncus conglomeratus*), noted within several of the ponds. Most static waterbodies contained some water following a wet summer.

Small ponds were noted at END013 and a larger pond, associated with running waterbody, was noted at SAP002. Several standing waterbodies were recorded at KMU015 at the golf course (one of which contained broad-leaved pondweed (*Potamogeton natans*), and associated with development or farmland. Several of the Preferred Site Options including KMU009, STO019 and NAR003 did not support standing waterbodies but several were noted on adjacent land.

Photo 12 Standing Water (KMU015)



3.4.10 Running Water and Dry Ditches

The majority of sites with hedgerows also contained ditches beneath them, most of which were dry at the time of the survey. Running water was recorded at three sites, KMU015, SAP002 and STO019 through woodlands, semi-improved grasslands and an area of unmanaged tall ruderal next to arable land.

3.4.11 Arable

Arable land dominated the rural Preferred Site Options. The majority of the arable land was either ploughed or had been recently harvested with grass cuttings or stubble remaining. Horticultural land such as the allotment at NAR003, were also included within the definition of arable. Arable margin plants comprised largely of common and widespread species across all Preferred Site Options where this habitat was recorded.

Photo 13 Ploughed Arable Land (NAR008)



3.4.12 Bare Ground and Hardstanding

Hardstanding was recorded around urban sites as road, path and car parking areas associated with development. Bare ground was recorded on previously cleared land, trampled ground such as footpaths and areas of crushed stone used instead of hardstanding. Most the areas of bare ground recorded were too small to map and only larger areas are shown, such as those on site KMU015.

3.4.13 Buildings

There were various built structures within the Preferred Site Options, including wooden huts providing shelter for horses (KMU001), occupied or disused residential dwellings (SAP001) and farm buildings (LFE016 and KMU015), commercial buildings (NAR002 and BRA003), flat and pitched roof leisure facility buildings (KMU015), and temporary storage units (NAR003). These structures were assessed for their potential to support nesting birds and roosting bats and have been noted in the Appendix B results table where appropriate.

Photo 14 Disused Building (LFE016)



3.4.14 Other

Two sites were noted to include orchards; a newly planted area at NAR003 and an established orchard in gardens of SAP001. Target notes have been provided for their locations.

Photo 15 Orchard (SAP001)



Where access was unavailable and visibility limited the habitats have been mapped based on aerial images and have been labelled as 'not accessed'.

3.5 Protected & Notable Species

A summary of each Preferred Site Options suitability to support protected and notable species has been provided in Appendix B.

3.5.1 Great Crested Newts & Amphibians

Great crested newts have been recorded from the environs of Braunstone, Kirby Muxloe and Sapcote with a cluster of records located within and around SAP001. Other species of amphibian, including common frog, common toad and smooth newt, have been recorded widely within the district.

Amphibians require access to standing water to breed in the spring but may be found some distance from water at other times of the year. Terrestrial habitats including features where the animals can forage, shelter and hibernate such as rough grassland, woodland, dense scrub and hedgerows and brash or rubble piles are valuable to amphibian species. Locations where standing water and suitable terrestrial habitat are in close proximity are therefore most likely to support populations of amphibian species. Amphibians may be present in suburban locations where they have access to features such as ornamental ponds and gardens.

Photo 16 Male and Female GCN



3.5.2 Reptiles

Records of reptiles (grass snake and slow worm) occur only in the Narborough area. Reptiles favour similar terrestrial habitats and features to those used by amphibians (see Section 3.5.1 above), but do not require access to standing water (although grass snakes may forage in water).

Photo 17 Log pile refuge suitable for reptiles, amphibians and small mammals (KMJ009)



3.5.3 Bats

The species of bats recorded within the District include, brown long-eared bat, common pipistrelle, Daubenton's bat, noctule bat and unidentified pipistrelle species. Bat have been

recorded within the environs of all the settlements with individual records (not roosts) within KMU015 and NAR015.

Bats are likely to be present throughout Blaby District and may use buildings and trees within urban and sub-urban environments in which to roost as well as more rural locations.

3.5.4 Badger

Records of badger are found within the environs of all of the settlements. Badgers are a common and widespread species that is able to adapt to many habitats including suburban locations and is likely to be present throughout Blaby District.

3.5.5 Water Vole

Water vole records occur within the environs of Enderby and Stoney Stanton on the River Soar. Water vole are locally largely restricted to habitats adjacent to water and are most likely to be found on the banks of rivers, streams, wet ditches and ponds.

Photo 18 Water vole



3.5.6 Otter

No records of otter were found within Blaby District. Otters are generally associated with aquatic habitats and may use small streams and ditches as commuting routes between larger waterbodies.

3.5.7 Birds

Protected and notable birds have been recorded within the environs of all settlements.

- Barn owl have been recorded around Enderby, Leicester Forest East, Sapcote and Stoney Stanton.
- Kingfisher have been recorded around Enderby and Narborough.
- Peregrine and black redstart were recorded at Stoney Stanton.

Protected and notable birds include species that are associated with urban and sub-urban environments (e.g. house sparrow, song thrush and starling) as well as those which inhabit farmland and semi-natural habitats.

3.5.8 White-clawed Crayfish

White-clawed crayfish records occur within the environs of Kirby Muxloe, Sapcote and Stoney Stanton.

White-clawed crayfish habitat requirements tend to be clear, well oxygenated water, usually fast flowing rivers typically rich in calcite (calcium carbonate, CaCO_3), which is essential for the hard outer shell of the animal. As a chasmophite, it lives under rocks and stones in the river bed or holes burrowed in to the river banks below the water line.

3.5.9 Other Invertebrates

Blood-vein moth and dot moth have been recorded in the Enderby area. Record of cinnabar moth, latticed heath moth, oak-hook tip moth and small heath moth occur within and around Narborough. At Sapcote there are records of nine species of notable moths.

Invertebrates can be associated with a wide range of habitats, depending upon the species and their varying habitat requirements. The basic requirements for all invertebrates are for a food resource and a safe place to overwinter in the appropriate life stage and a location for eggs to be laid adjacent to the food source.

Photo 19 Common darter (KMU009)



The more important habitats for invertebrates within the Preferred Site Options include hedgerows, scrub (including bramble), field boundaries, woodland, road verges and grasslands which contain a range of flowering plants and trees (especially older ones that may have some deadwood, peeling bark and rot holes, as they provide specific habitats for a range of specialist beetles and flies).

Photo 20 Box bug *Gonocerus acuteangulatus* (KMU007)



3.5.10 Vascular Plants

Notable vascular plants have been recorded within the environs of all of the settlements. Individual records occur within END013, KMU015 and SAP002.

3.5.11 Invasive and non-native species

No records of invasive species were provided by LRERC.

Invasive species which are likely to be present within Blaby District include Himalayan balsam and Japanese knotweed. Non-native species which are likely to be present within Blaby District include muntjac deer and signal crayfish. Appendix A includes a list of Schedule 9 W&CA 1981 invasive plant species

3.5.12 Other species

Other species for which there are records within Blaby District include brown hare and harvest mouse both of which inhabit grassland habitats and arable fields. Neither species have been recorded within any of the Preferred Site Options; however both species occupy arable land and grassland where present within the sites.



4.0 Relevant Planning Policy & Legislation

4.1 National Planning Policy Framework

The NPPF was adopted in March 2012. Section 11 of the NPPF, *Conserving and Enhancing the Natural Environment* replaces *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*. However, government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that ‘*planning policies should promote the protection of priority species populations linked to national and local targets*’.

Furthermore, central and local government policy now points towards ecological enhancement on development sites. The NPPF considers enhancement in the statement ‘*The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes....and minimising impacts on biodiversity and providing net gains in biodiversity*’.

Paragraph 117 of the NPPF states that ‘*To minimise impacts on biodiversity and geodiversity, planning policies should:*

- *plan for biodiversity at a landscape-scale across local authority boundaries;*
- *identify and map components of the local 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 local partnerships for habitat restoration or creation;*
- *promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan.*

4.2 Biodiversity 2020: A strategy for England’s wildlife & ecosystem services

Biodiversity 2020 replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix A for further details).



4.3 Regional Plan

It is recognised in the East Midlands Regional Plans (March 2009) that *'only 2% of the Region's surface is covered by legally designated nature conservation or geological sites, compared to the national average of 7.5%.'* The Region has also lost the majority of several notable habitat types including unimproved chalk grassland, hay meadows, wet grassland and other wet land habitats. The Regional plan also states that *'Wildlife habitat that remain are becoming increasingly small, isolated and fragmented'* and provides seven measures to *'increase the level of biodiversity across the East Midlands'*.

Policy 29 identifies the *Priorities for Enhancement the Region's Biodiversity* which puts an emphasis on local authorities, statutory environmental bodies and developers working with local communities and landowners to implement the *Regional Biodiversity Strategy* (adopted 15th May 2006). The Regional Biodiversity strategy aims *'to promote the creation of the policy, strategic and communications framework within which conservation and enhancement of biodiversity can best be achieved'* through the strategies 26 objectives.

4.4 Local Plan

The Core Strategy, adopted by Blaby District Council 21st February 2013, is the Local Plan which guides the District's Vision , Strategy and Objectives for development and adopts the measures set out in the East Midlands Regional Strategy.

The relevant planning policies in the Core Strategy which are currently still relevant to biodiversity are

- Policies CS14 Green Infrastructure
- Policy CS 16 Green Wedges
- Policy CS19 Biodiversity and Geodiversity

Relevant objective for biodiversity aim: *To protect the important areas of the District's natural environment (species and habitats), landscape and geology and to improve biodiversity, wildlife habitats and corridors through the design of new developments and the management of existing areas by working with partners;*

4.5 Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016 - 2026 is the relevant document and it contains the following Habitat & Species Action Plans:

Table 7 LBAP SAPs

Species Action Plans	
Barn Owl	Purple Small-reed
Bats	Redstart
Black Hairstreak butterfly	Sand Martin
Black Poplar	Violet Helleborine
Dingy and Grizzled Skipper butterflies	Water vole
Dormouse	White-clawed Crayfish
Nightingale	Wood Vetch
Otter	Swifts, Swallows and House Martins

Photo 21 Dingy Skipper (LBAP)



Table 8 LBAP HAPs

Habitats Action Plans	
Broad-leaved Woodland	Sphagnum ponds
Wet Woodland	Springs and flushes
Lowland wood-pasture and Parkland	Neutral grassland
Hedgerows	Heath grassland
Mature trees	Calcareous grassland
Eutrophic Standing Water: Field Ponds, Lakes, Canals and Reservoirs	Roadside verges
Mesotrophic lakes	Field margins



Habitats Action Plans	
Floodplain wetland	Rocks and built structures
Reedbed	Urban habitats
Fast-flowing streams	

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats/species, rather than to protect a county-scarce feature (for example).

5.0 Mitigation and Enhancement Opportunities

5.1 Designated Sites

Natura 2000 Sites

The HRA assessment for the District (Blaby District Council 2016) found ‘that the emerging Blaby District Local Plan alone, or in combination with other plans, is unlikely to have a significant detrimental impact on any European sites within approximately 25 miles (40km) of the boundary of the District. The main reasons for this are:

- there are no Natura 2000 Sites within Blaby District, the nearest site is circa 10 km from Blaby District.
- there are management measures already in place to adequately mitigate against any potential impacts resulting from an increase in visitors to Rutland Water / Ensor’s Pool arising from the amount of new housing and other development allocated to the District;
- the river network in Blaby District is not directly connected to the River Mease SAC drainage basin and no other hydrological connectivity is likely to result in adverse impacts; and
- the Local Plan Delivery DPD policies seek to prevent pollution arising from new developments or other adverse impacts on air quality.

Therefore, it is considered highly unlikely the Nature 2000 sites or their designating features would be affected by residential or commercial development proposed at any of the Preferred Site Options..

Sites of Special Scientific Interest

There are no statutory designated sites location within any of the Preferred Site Options. The Narborough Bog SSSI is located within 60m of the NAR008. This 60m buffer between the SSSI and NAR008 is considered likely to be sufficient to protect the wet woodland and marsh grassland from direct construction impacts (e.g. incidental damage or pollutants) from any future development of the Preferred Site Options. Narborough Bog SSSI designation includes rare moths. Sympathetic low level lighting is recommended to be used in the development of NAR008. The main aim of the lighting scheme should be to illuminate the areas that need the lighting and to avoid illuminating areas above 90° from the ground and habitat outside the site. For further information please consult *Guidance Notes for the Reduction of Obtrusive Light GN01:2011* produced by the Institute of Lighting Professionals in 2011 and *Artificial lighting and wildlife: Interim Guidance: Recommendations to help minimise the impact artificial lighting* produced by the Bat Conservation Trust in 2014.

Further measures may need to be considered to avoid any adverse effects on the SSSI features of interest as a result of anthropogenic impacts (e.g. trampling vegetation, soil erosion, littering), during the operational phase of the development e.g. to avoid public from NAR008 accessing the Narborough Bog SSSI.



Local Wildlife Sites

The following twelve of the Preferred Site Options are located adjacent to, or have designated LWS within them: END013, KMU007, KMU015 LFE016, LFE017, LFE018, BRA009, NAR008, NAR015, STO004, ST00019, SAP002.

It is recommended that LWS habitat is retained wherever possible, and that a protection zone is established between the LWS and any future development to avoid direct impacts on these locally designated sites. The protection zone will depend on the reason for the LWS designation, e.g. 5m-10m for hedgerows and 20m-30m from large watercourses. Where possible the LWS should be incorporated within the green infrastructure of the development to enhance the green network within Blaby District.

5.2 Habitat Protection and Creation

There are many simple and inexpensive measures that can be incorporated into final designs that will benefit local biodiversity. To maximise the habitat potential of development sites in the future it is recommended that areas of landscaping and ornamental beds around buildings could be planted with native trees, shrubs and wildflowers in preference to purely ornamental species to provide additional feeding and nesting opportunities. A suggested species list appropriate to Blaby District is provided in Appendix D.

Hedgerows

As well as potentially qualifying as species-rich hedgerows under the LL&R LWS site criteria, hedgerows also provide important corridors for species such as birds, bats, badgers, reptiles, amphibians and hedgehogs through the landscape. It is recommended wherever possible to retain hedgerows within site designs, and where appropriate to enhance them through additional hedgerow planting or improved management.

Planting hedgerows within developments helps to provide connectivity through the green networks. Wherever possible species used should be native species, ideally from local seed stock.

Woodland

As well as protecting Leicestershire and Rutland's 2% of ancient woodland, there is an aim to 'increase land covered with trees or scrub – either planted or naturally regenerating', especially in areas of current high wildlife value e.g. along the Soar Valley to increase landscape connectivity..

For the greatest benefit to wildlife small woodlands are best located near to existing woodland. Broadleaf tree and shrub species of local or UK provenance – should be sourced. The woodland should be sustainable and should include a network of paths and open areas for larger woodland areas. Fencing may also be needed to protect young trees from browsing e.g. deer and rabbits. Further advice can be found in the LL&R BAP 2016.



Watercourses & Ponds

Where watercourses are present on or adjacent to a site, it is recommended that the bank side vegetation is retained intact, and increases in disturbance and human access are avoided where possible. A standard recommended buffer is 8-10m although a larger buffer of $\geq 20\text{m}$ may be recommended where watercourses are particularly important for biodiversity i.e. the River Soar.

Ponds and wetland areas always increase habitat diversity and can be incorporated into developments of any size.

Grassland

Existing grassland habitats can be managed to achieve a more diverse forb composite through an annual cut once the plants have shed their seeds in August and a reduction of intense mowing or grazing regimes. There are various methods of increasing the seedbank including scarification and re-sowing a desired herb-rich locally sourced seed or spreading a hay cut from another species-diverse site within the county.

It may be necessary to remove undesirable ruderals and scrub which will dominate this habitat if not managed appropriately.

Invasive species

The Wildlife and Countryside Act 1981 (as amended) includes a list of invasive plant species in Schedule 9 (see Appendix A Table B2).

Invasive species should be appropriately controlled prior to any development to ensure they are not spread into the wider environment during any building works or habitat management, as this would be an offence under the W&CA.

Additionally, under the Environmental Protection Act 1990, soil contaminated with Japanese knotweed and giant hogweed could be classed as controlled waste and must be disposed of safely at an appropriately licensed landfill site.

5.3 Further Surveys

It is likely that all of the Preferred Site Options would require an updated and detailed Ecological Appraisal to inform any future planning application.

Site specific recommendations for further survey(s) are made in Appendix B to inform a detailed planning application for any of the sites where;

- Features suitable to support protected species exist, for example:
 - Trees or buildings that could support roosting bats;
 - Ponds and terrestrial habitat suitable for GCN (either on the site, or within 500m to the site);
 - Woodland and / or hedgerow suitable for birds, badgers, invertebrates etc.;



- Grassland and edge (e.g. woodland and hedgerow) habitat suitable for reptiles;
- Water courses that could support species such as water vole, otter or white-clawed crayfish.
- Grassland habitat is present that has potential support notable species, in this instance detailed vegetation surveys would be recommended to take place between May and July.
- Habitat with potential to support notable fungi species (KMU007), in this instance detailed fungal surveys are recommended to take place on multiple survey occasions between September and the end of November (weather dependant).

Further surveys may be restricted as to when they can take place during the year. A guide to ecological survey seasons is included in Appendix E.

Recommendation

A broad recommendation is that complex habitats and linear features should be surveyed in detail to inform future enhancement and management. These landscape features should be retained within any development and suitably buffered from direct and indirect impacts (such as increases in lighting and disturbance). Where high ecological value is determined, careful consideration should be used in determining an appropriate level of stand-off for any development.

Retention and enhancement of an integrated complex of wildlife corridors and green wedges at the local and landscape scale is essential to allow species dispersal, given that climate change is already affecting the population and range of many UK species.

A mixture of habitats, including dry and wet habitats, is required crossing the landscape to provide migration routes and foraging habitats for wildlife. These are necessary at a range of scales and will require different vegetation and different types of management. Planning comments from Natural England have suggested that green corridors for incorporation within large scale developments (such as Sustainable Urban Extensions) should generally not be less than 500m (0.5km) long and be a minimum of 25m wide consisting of green habitat (i.e. excluding hard surfacing, close mown amenity grassland etc.). However, any retention and enhancement of existing features should be considered to potentially benefit biodiversity.

5.4 Biodiversity Enhancement Site (BES) Opportunities

It is recommended that BESs are located within parts of the larger Preferred Site Options (i.e. KMU007, KMU0015 and END013).

No BESs have been recommended in the smaller Preferred Site Options, however opportunities to enhance the habitats within the smaller Preferred Site Options should be considered at the outline planning application stage, and should be informed by the recommended further ecological surveys, See Appendix B.



BES opportunities should include areas of existing notable habitats and Local Wildlife Sites or candidate Local Wildlife Sites which have been identified as being of value to wildlife and which would further benefit from improvement to their quality.

Plans Cx for Sites KMU007, KMU0015 and END013 show the most valuable habitats within the sites which should be protected (high ecological value). The habitats of value in these sites include connecting species rich hedgerows, semi-improved neutral grassland, open and running water including marginal aquatic vegetation and mature woodland.

For example within the southern field at Blood Hill in Kirby Muxloe (Site Reference KMU 007) there is a designated LWS for neutral grassland. It is recommended that this habitat be further extended and /or its quality enhanced. Opportunities for enhancement in this section of the site could include:

- targeted grassland management to improve the habitats forb community;
- retention of the scrub in the west (seasonally dry pond) and the creation of a new pond to provide open water habitat for wildlife;
- installation of public education notice boards detailing the plants and animals found within this habitat;
- clear footpath signs, to minimise habitat degradation and soil erosion;
- creation of natural refugia piles and hibernacula for wildlife; and,
- hay-spreading of cut grassland to other areas of new grassland within the site.

The National (NPPF) and Regional (EMBF 2006) Biodiversity Strategies encourage local authorities to focus on the protection and enhancement of habitats which provide key linking habitat corridors through the District. Important wildlife corridors, which contribute to Blaby District's green network are shown on Plan C0. Several of the sites are located adjacent to wildlife corridors (e.g. South Leicestershire Railway and M1 corridor are located adjacent to NAR003) and some sites may have a wildlife corridor within them (e.g. the Beggar Lane to Ivanhoe Railway corridor passes through KMU015).

This report identifies opportunities for habitat enhancement which should be further detailed for each development at the outline planning stage. It is recommended that where possible habitat creation should target the creation of priority habitats in reference to the Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016.

It is assumed that provisions will be made for bats and bird species (e.g. boxes) within the green infrastructure plans for the larger Preferred Site Options. The suggested enhancements in Appendix B: Results Table aim to create or improve habitats (as discussed in Section 5.2) that will benefit other species that may be present on, or in the vicinity of, the Preferred Site Options based on the current habitats and historical records.

5.5 Monitoring

This study provides a snap-shot of habitats present in the District and their condition at the time of the survey. The GIS layers obtained during the desk study and field work have been provided to Blaby District Council and should provide baseline information for comparison with future more detailed surveys.



6.0 Summary

Twenty-one Preferred Site Options have been assessed as part of the Biodiversity Study.: The information supporting the robust evidence based assessment of these sites is presented in in Appendix B and the series of Figures

In summary the assessment identified

The ecological appraisal of the Preferred Site Options within Blaby District's identified;

- Five sites of relatively high ecological value with significant ecological constraints;
- Seven sites of moderate ecological value with some potential ecological constraints; and,
- Six sites of relatively low ecological value with limited ecological constraints.
- In addition, three sites have been assessed in more detail and show different habitats of high, moderate and low ecological value.

Further surveys and recommendations in order to protection the most valuable habitats and the species they support have been presented in this report along with advice for the enhancement of the habitats.



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Appendix A – Wildlife Legislation



Bern Convention

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2010 (as amended) in England and Wales, and via the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2010 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. Amendments made in 2012 stipulated that public bodies help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:

Schedule 2 – European Protected Species of Animals	Schedule 5 – European Protected Species of Plants
Horseshoe bats <i>Rhinolophidae</i> - all species	Shore dock <i>Rumex rupestris</i>
Common bats <i>Vespertilionidae</i> - all species	Killarney fern <i>Trichomanes speciosum</i>
Wild cat <i>Felis silvestris</i>	Early gentian <i>Gentianella anglica</i>
Dolphins, porpoises and whales <i>Cetacea</i> – all sp.	Lady's-slipper <i>Cypripedium calceolus</i>
Dormouse <i>Muscardinus avellanarius</i>	Creeping marshwort <i>Apium repens</i>
Pool frog <i>Rana lessonae</i>	Slender naiad <i>Najas flexilis</i>
Sand lizard <i>Lacerta agilis</i>	Fen orchid <i>Liparis loeselii</i>
Fisher's estuarine moth <i>Gortyna borellii lunata</i>	Floating-leaved water plantain <i>Luronium natans</i>
Great crested newt <i>Triturus cristatus</i>	Yellow marsh saxifrage <i>Saxifraga hirculus</i>
Otter <i>Lutra lutra</i>	
Lesser whirlpool ram's-horn snail <i>Anisus vorticulus</i>	
Smooth snake <i>Coronella austriaca</i>	
Sturgeon <i>Acipenser sturio</i>	
Natterjack toad <i>Epidalea calamita</i>	
Marine turtles <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> , <i>Dermochelys coriacea</i>	

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or

- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant;
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates – see below for the full list. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9. It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Schedule 1 - Birds which are protected by special penalties

Avocet	<i>Recurvirostra avosetta</i>	Osprey	<i>Pandion haliaetus</i>
Bee-eater	<i>Merops apiaster</i>	Owl, Barn	<i>Tyto alba</i>
Bittern	<i>Botaurus stellaris</i>	Owl, Snowy	<i>Nyctea scandiaca</i>
Bittern, Little	<i>Ixobrychus minutus</i>	Peregrine	<i>Falco peregrinus</i>
Bluethroat	<i>Luscinia svecica</i>	Petrel, Leach's	<i>Oceanodroma leucorhoa</i>
Brambling	<i>Fringilla montifringilla</i>	Phalarope, Red-necked	<i>Phalaropus lobatus</i>
Bunting, Cirl	<i>Emberiza cirlus</i>	Plover, Kentish	<i>Charadrius alexandrinus</i>
Bunting, Lapland	<i>Calcarius lapponicus</i>	Plover, Little Ringed	<i>Charadrius dubius</i>
Bunting, Snow	<i>Plectrophenax nivalis</i>	Quail, Common	<i>Coturnix coturnix</i>
Buzzard, Honey	<i>Pernis apivorus</i>	Redstart, Black	<i>Phoenicurus ochruros</i>
Capercaillie	<i>Tetrao urogallus</i>	Redwing	<i>Turdus iliacus</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>	Rosefinch, Scarlet	<i>Carpodacus erythrurus</i>
Corncrake	<i>Crex crex</i>	Ruff	<i>Philomachus pugnax</i>
Crake, Spotted	<i>Porzana porzana</i>	Sandpiper, Green	<i>Tringa ochropus</i>
Crossbills (all species)	<i>Loxia</i>	Sandpiper, Purple	<i>Calidris maritima</i>
Curlew, Stone	<i>Burhinus oedipnemus</i>	Sandpiper, Wood	<i>Tringa glareola</i>
Divers (all species)	<i>Gavia</i>	Scaup	<i>Aythya marila</i>
Dotterel	<i>Charadrius morinellus</i>	Scoter, Common	<i>Melanitta nigra</i>
Duck, Long-tailed	<i>Clangula hyemalis</i>	Scoter, Velvet	<i>Melanitta fusca</i>
Eagle, Golden	<i>Aquila chrysaetos</i>	Serpin	<i>Serinus serinus</i>
Eagle, White-tailed	<i>Haliaeetus albicilla</i>	Shorelark	<i>Eremophila alpestris</i>

Falcon, Gyr	<i>Falco rusticolus</i>	Shrike, Red-backed	<i>Lanius collurio</i>
Fieldfare	<i>Turdus pilaris</i>	Spoonbill	<i>Platalea leucorodia</i>
Firecrest	<i>Regulus ignicapillus</i>	Stilt, Black-winged	<i>Himantopus himantopus</i>
Garganey	<i>Anas querquedula</i>	Stint, Temminck's	<i>Calidris temminckii</i>
Godwit, Black-tailed	<i>Limosa limosa</i>	Swan, Bewick's	<i>Cygnus bewickii</i>
Goshawk	<i>Accipiter gentilis</i>	Swan, Whooper	<i>Cygnus cygnus</i>
Grebe, Black-necked	<i>Podiceps nigricollis</i>	Tern, Black	<i>Chlidonias niger</i>
Grebe, Slavonian	<i>Podiceps auritus</i>	Tern, Little	<i>Sterna albifrons</i>
Greenshank	<i>Tringa nebularia</i>	Tern, Roseate	<i>Sterna dougallii</i>
Gull, Little	<i>Larus minutus</i>	Tit, Bearded	<i>Panurus biarmicus</i>
Gull, Mediterranean	<i>Larus melanocephalus</i>	Tit, Crested	<i>Parus cristatus</i>
Harriers (all species)	<i>Circus</i>	Treecreeper, Short-toed	<i>Certhia brachydactyla</i>
Heron, Purple	<i>Ardea purpurea</i>	Warbler, Cetti's	<i>Cettia cetti</i>
Hobby	<i>Falco subbuteo</i>	Warbler, Dartford	<i>Sylvia undata</i>
Hoopoe	<i>Upupa epops</i>	Warbler, Marsh	<i>Acrocephalus palustris</i>
Kingfisher	<i>Alcedo atthis</i>	Warbler, Savi's	<i>Locustella luscinioides</i>
Kite, Red	<i>Milvus milvus</i>	Whimbrel	<i>Numenius phaeopus</i>
Merlin	<i>Falco columbarius</i>	Woodlark	<i>Lullula arborea</i>
Oriole, Golden	<i>Oriolus oriolus</i>	Wryneck	<i>Jynx torquilla</i>
Schedule 5- Animals which are protected			
Adder (re: S.9(5) only) <i>Vipera berus</i>	Lagoon Worm, Tentacled (re: S.9(4)(a) only) <i>Alkmaria romijni</i>		
Allis Shad (re: S.9(1) & (4)(a) only) <i>Alosa alosa</i>	Leech, Medicinal <i>Hirudo medicinalis</i>		
Anemone, Ivell's Sea <i>Edwardsia ivelli</i>	Lizard, Sand (re: S.9(4)(b) & (c) & (5) only) <i>Lacerta agilis</i>		
Anemone, Startlet Sea <i>Nematosella vectensis</i>	Lizard, Viviparous (re: S.9(5) only) <i>Lacerta vivipara</i>		
Apus <i>Triops cancriformis</i>	Marten, Pine <i>Martes martes</i>		
Bats, Horseshoe (all sp. but re: S.9(4)(b) & (c) & (5) only) <i>Rhinolophidae</i>	Mat. Trembling Sea <i>Victorella pavidia</i>		
Bats, Typical (all sp. but re: S.9(4)(b) & (c) & (5) only) <i>Vespertilionidae</i>	Moth, Barberry Carpet <i>Pareulype berberata</i>		
Beetle <i>Graphoderus zonatus</i>	Moth, Black-veined <i>Siona lineata</i> / <i>Idaea lineata</i>		
Beetle <i>Hypebaeus flavipes</i>	Moth, Fiery Clearwing <i>Bembecia chrysidiformis</i>		
Beetle <i>Paracymus aeneus</i>	Moth, Fisher's Estuarine (re: S.9(4)(b) & (c) & (5) only) <i>Gortyna borelii</i>		
Beetle, Lesser Silver Water <i>Hydrochara caraboides</i>	Moth, New Forest Burnet <i>Zygaena viciae</i>		
Beetle, Mire Pill (re: S.9(4)(a) only) <i>Curimopsis nigrita</i>	Moth, Reddish Buff <i>Acosmetia caliginosa</i>		
Beetle, Rainbow Leaf <i>Chrysolina cerealis</i>	Moth, Slender Scotch Burnet (re: S.9(5) only) <i>Zygaena loti subspecies scotica</i>		
Beetle, Stag (re: S.9(5) only) <i>Lucanus cervus</i>	Moth, Sussex Emerald <i>Thalera fimbrialis</i>		
Beetle, Violet Click <i>Limoniscus violaceus</i>	Moth, Talisker Burnet (re: S.9(5) only) <i>Zygaena lonicerae subspecies jocelynae</i>		
Burbot <i>Lota lota</i>	Mussel, Fan (re: S.9(1), (2) & (5) only) <i>Atrina fragilis</i>		
Butterfly, Northern Brown Argus <i>Aricia artaxerxes</i>	Mussel, Freshwater Pearl <i>Margaritifera margaritifera</i>		
Butterfly, Adonis Blue <i>Lysandra bellargus</i>	Newt, Great Crested or Warty (re: S.9(4)(b) & (c) & (5) only) <i>Triturus cristatus</i>		
Butterfly, Chalkhill Blue <i>Lysandra coridon</i>	Newt, Palmate (re: S.9(5) only) <i>Triturus helveticus</i>		
Butterfly, Silver-studded Blue <i>Plebejus argus</i>	Newt, Smooth (re: S.9(5) only) <i>Triturus vulgaris</i>		
Butterfly, Small Blue <i>Cupido minimus</i>	Otter, Common (re: S.9(4)(b) & (c) & (5) only) <i>Lutra lutra</i>		
Butterfly, Large Copper <i>Lycaena dispar</i>	Porpoises (all species but re: S.9(5) only) <i>Cetacea</i>		
Butterfly, Purple Emperor <i>Apatura iris</i>	Sandworm, Lagoon <i>Armandia cirrhosa</i>		
Butterfly, Duke of Burgandy Fritillary <i>Hamearis lucina</i>	Sea Fan, Pink (re: S.9(1), 9(2) & 9(5) only) <i>Eunicella verrucosa</i>		

Butterfly, Glanville Fritillary <i>Melitaea cinxia</i>	Seahorse, Short Snouted (re: England & Wales only) <i>Hippocampus hippocampus</i>
Butterfly, Heath Fritillary <i>Melicta athalia</i> / <i>Melitaea athalia</i>	Seahorse, Spiny (re: England & Wales only) <i>Hippocampus guttulatus</i>
Butterfly, High Brown Fritillary <i>Argynnis adippe</i>	Sea Slug, Lagoon <i>Tenellia adspersa</i>
Butterfly, Marsh Fritillary <i>Eurodryas aurinia</i>	Shad, Twaite (re: S.9(1) & (4)(a) only) <i>Alosa fallax</i>
Butterfly, Pearl-bordered Fritillary <i>Boloria euphrosyne</i>	Shark, Angel (re: S.9(1), (2) & (5) only) <i>Squatina squatina</i>
Butterfly, Black Hairstreak <i>Strymonidia pruni</i>	Shark, Basking <i>Cetorhinus maximus</i>
Butterfly, Brown Hairstreak <i>Thecla betulae</i>	Shrimp, Fairy <i>Chirocephalus diaphanus</i>
Butterfly, White Letter Hairstreak <i>Stymonida w-album</i>	Shrimp, Lagoon Sand (re: S.9(4)(a) only) <i>Gammarus insensibilis</i>
Butterfly, Large Heath <i>Coenonympha tullia</i>	Skate, White (re: S.9(1), (2) & (5) only) <i>Rostroraja alba</i>
Butterfly, Large Blue (re: S.9(4)(b) & (c) & (5) only) <i>Maculinea arion</i>	Slow-worm (re: S.9(5) only) <i>Anguis fragilis</i>
Butterfly, Mountain Ringlet <i>Erebia epiphron</i>	Snail, Glutinous <i>Myxas glutinosa</i>
Butterfly, Chequered Skipper <i>Carterocephalus palaemon</i>	Snail, Roman (in re: S.9(1), (2) & (5) only & in England & Wales only) <i>Helix pomatia</i>
Butterfly, Lulworth Skipper <i>Thymelicus acteon</i>	Snail, Sandbowl <i>Catinella arenaria</i>
Butterfly, Silver Spotted Skipper <i>Hesperia comma</i>	Snake, Grass (re: S.9(5) only) <i>Natrix helvetica</i> / <i>Natrix natrix</i>
Butterfly, Swallowtail <i>Papilio machaon</i>	Snake, Smooth (re: S.9(4)(b) & (c) & (5) only) <i>Coronella austriaca</i>
Butterfly, Large tortoiseshell <i>Nymphalis polychloros</i>	Spider, Fen Raft <i>Dolomedes plantarius</i>
Butterfly, Wood White <i>Leptidea sinapis</i>	Spider, Ladybird <i>Eresus niger</i>
Cat, Wild (re: S.9(4)(b) & (c) & (5) only) <i>Felis silverstris</i>	Squirrel, Red <i>Sciurus vulgaris</i>
Cicada, New Forest <i>Cicadetta montana</i>	Sturgeon (re: S.9(4)(b) & (c) & (5) only) <i>Acipenser sturio</i>
Crayfish, Atlantic Stream or White-clawed <i>Austropotamobius pallipes</i>	Toad, Common (re: S.9(5) only) <i>Bufo bufo</i>
Cricket, Field <i>Gryllus campestris</i>	Toad, Natterjack (re: S.9(4)(b) & (c) & (5) only) <i>Bufo calamita</i>
Cricket, Mole <i>Gryllotalpa gryllotalpa</i>	Turtle, Flatback <i>Natator depressus</i>
Damselfly, Southern <i>Coenagrion mercuriale</i>	Turtle, Green Sea (re: S.9(4)(b) & (c) & (5) only) <i>Chelonia mydas</i>
Dolphins (re: S.9(4A) & (5) only) <i>Cetacea</i>	Turtle, Hawksbill (re: S.9(4)(b) & (c) & (5) only) <i>Eretmochelys imbricata</i>
Dormouse (re: S.9(4)(b) & (c) & (5) only) <i>Muscardinus avellanarius</i>	Turtle, Kemp's Ridley Sea (re: S.9(4)(b) & (c) & (5) only) <i>Lepidochelys kempii</i>
Dragonfly, Norfolk Aeshna <i>Aeshna isosceles</i>	Turtle, Leatherback Sea (re: S.9(4)(b) & (c) & (5) only) <i>Dermochelys coriacea</i>
Frog, Common (re: S.9(5) only) <i>Rana temporaria</i>	Turtle, Loggerhead Sea (re: S.9(4)(b) & (c) & (5) only) <i>Caretta caretta</i>
Frog, Pool (Northern Clade) (re: S.9(4)(b) & (c)(1) & in England only) <i>Pelophylax lessonae</i>	Turtle, Olive Ridley <i>Lepidochelys olivacea</i>
Goby, Couch's <i>Gobius couchii</i>	Vendace <i>Coregonus albula</i>
Goby, Giant <i>Gobius cobitis</i>	Vole, Water <i>Arvicola terrestris</i> / <i>Arvicola terrestris</i>
Grasshopper, Wart-biter <i>Decticus verrucivorus</i>	Walrus <i>Odebenus rosmarus</i>
Hatchet Shell, Northern <i>Thyasira gouldi</i>	Whale (all sp. but re: S.9(4A) & (5) only) <i>Cetacea</i>
Hydroid, Marine <i>Clavopsella navis</i>	Whitefish <i>Coregonus lavaretus</i>
Lagoon Snail, De Folin's <i>Caecum armoricum</i>	Lagoon Worm, Tentacled (re: S.9(4)(a) only) <i>Alkmaria romijni</i>
Adder (re: S.9(5) only) <i>Vipera berus</i>	
Schedule 9 – List of Invasive plant species	
Australian swamp stonecrop or New Zealand pygmyweed <i>Crassula helmsii</i>	Japanese rose <i>Rosa rugosa</i>

Californian red seaweed	<i>Pikea californica</i>	Japanese seaweed	<i>Sargassum muticum</i>
Curly waterweed	<i>Lagarosiphon major</i>	Laver seaweeds (except native species)	<i>Porphyra</i> spp
Duck potato	<i>Sagittaria latifolia</i>	Parrot's-feather	<i>Myriophyllum aquaticum</i>
Entire-leaved cotoneaster	<i>Cotoneaster integrifolius</i>	Perfoliate alexanders	<i>Smyrnum perfoliatum</i>
False Virginia creeper	<i>Parthenocissus inserta</i>	Pontic rhododendron	<i>Rhododendron ponticum</i>
Fanwort or Carolina water-shield	<i>Cabomba caroliniana</i>	Purple dewplant	<i>Disphyma crassifolium</i>
Few-flowered garlic	<i>Allium paradoxum</i>	Red algae	<i>Grateloupia luxurians</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>	Rhododendron	<i>Rhododendron ponticum</i> × <i>Rhododendron maximum</i>
Floating water primrose	<i>Ludwigia peploides</i>	Small-leaved cotoneaster	<i>Cotoneaster microphyllus</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>	Three-cornered garlic	<i>Allium triquetrum</i>
Giant kelp	<i>Macrocystis</i> spp.	Variegated yellow archangel	<i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>
Giant knotweed	<i>Fallopia sachalinensis</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Giant rhubarb	<i>Gunnera tinctoria</i>	Wakame	<i>Undaria pinnatifida</i>
Giant salvinia	<i>Salvinia molesta</i>	Wall cotoneaster	<i>Cotoneaster horizontalis</i>
Green seafingers	<i>Codium fragile</i>	Water fern	<i>Azolla filiculoides</i>
Himalayan cotoneaster	<i>Cotoneaster simonsii</i>	Water hyacinth	<i>Eichhornia crassipes</i>
Hollyberry cotoneaster	<i>Cotoneaster bullatus</i>	Water lettuce	<i>Pistia stratiotes</i>
Hooked asparagus seaweed	<i>Asparagopsis armata</i>	Water primrose	<i>Ludwigia grandiflora</i>
Hottentot fig	<i>Carpobrotus edulis</i>	Water primrose	<i>Ludwigia uruguayensis</i>
Hybrid knotweed	<i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i>	Waterweeds	<i>Elodea</i> spp.
Indian (Himalayan) balsam	<i>Impatiens glandulifera</i>	Yellow azalea	<i>Rhododendron luteum</i>
Japanese knotweed	<i>Fallopia japonica</i>		

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.



Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.



Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.



Appendix B – Preferred Site Option Survey Results



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
KMU001 Land at Ratby Lane	Kirby Muxloe	A1 B1 C1	1.5	Full access	KMU001_1	N/A	Pasture field grazed by horses, mature trees, tall ruderal, with line of trees and species poor boundaries. Outbuildings including stable and sheds to the north-western corner of the site.	<p>Potential for roosting bats within outbuildings and mature oak tree.</p> <p>Potential for nesting/foraging birds, badgers, reptiles, barn owl, amphibians, commuting /foraging bats.</p> <p>Records of pipistrelle bat roosts within 100m to the south of the site.</p> <p>GCN EPSL Located 0.8 km south-east.</p> <p>Bat EPSL located 0.9 km south-west.</p>	<p>GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required.</p> <p>Reptile surveys in areas of suitable habitat.</p> <p>Badger surveys.</p> <p>Daytime assessment and nocturnal bat survey of outbuilding and oak tree.</p> <p>Breeding bird surveys.</p> <p>Barn owl surveys of outbuilding and oak tree</p>	Habitat management to enhance diversity e.g. pond creation, creation of log/brush piles, scrub areas. Opportunity to enhance and manage the hedgerows, tall ruderal and line of trees to maintain connectivity to the wider landscape.	Site of relatively low ecological value.	None.
KMU007 Bloods Hill	Kirby Muxloe	A1 B2 C1	52.8	Full access	KMU007_1 to KMU007_12	<p>Kirby Brook pLWS lies on the northern site boundary</p> <p>Kirby Muxloe wet grassland pLWS lies within the southern site boundary</p>	<p>Arable fields with several species rich hedgerow (pLWS)</p> <p>Three small poor semi-improved grassland fields in the north of the</p>	<p>Records of white-clawed crayfish in the brook to the north of the site and roosting bats within 200m to the west of the site.</p> <p>Records of other protected /</p>	<p>GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required.</p> <p>Reptile surveys (where appropriate habitat is present)</p>	<p>Maintain the grasslands in the north and south of the site.</p> <p>Provide protection buffer along the woodland and brook in the north of the site.</p>	Site of high / moderate and low ecological value habitat as mapped on Figure C1.	Several species rich hedgerows and mature trees already identified as pLWS.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
						<p>Blood hill hedgerows pLWS lies within the site.</p> <p>Three mature trees (pLWS) lie on the western site boundary</p>	<p>site (horse paddocks).</p> <p>Semi-improved neutral / wet grassland in the south of the site (LWS).</p> <p>Linear broad-leaved woodland on the northern boundary and within the site to the west.</p> <p>Mature trees, several with bat roost potential, along the western boundary</p>	<p>notable species include hedgehog, GCN pond, badger evidence, records of four bat species and seven bird species within 1km of the site.</p> <p>Two GCN EPSL located 0.3 km east and one located 0.8 km north.</p> <p>EPSL for Bats located 1 km west and 1.9 km north-west.</p>	<p>Badger Survey</p> <p>Update hedgerow Assessment</p> <p>Daytime assessment and nocturnal bat survey of trees</p> <p>Bat Activity Survey across the entire site.</p> <p>Invertebrates Survey (butterfly and moth)</p>	<p>Low management regime for grassland to enhance the site for small mammals.</p> <p>Install bat , bird and owl boxes on mature trees throughout the site.</p> <p>Fill in gaps along line of trees on western boundary.</p> <p>Retain hedges, with fruit bearing species, along hedges in the north of the site</p> <p>Creation of new pond.</p>	<p>Ecological features of value:</p> <ul style="list-style-type: none"> • adjacent Kirby brook corridor, • notable grassland LWS, • several important hedgerows, • adjacent woodland 	
KMU009 Land north of Desford Road	Kirby Muxloe	A1 B3 C1	8.6	Full access	KMU009_1 To KMU009_9	N/A	<p>Three fields heavily grazed (semi-improved and improved grassland) with hedgerows (some species rich) and mature trees. Evidence of a ridge and furrow agricultural practice in the largest field.</p> <p>A pond lies 100m to the north of the site</p>	<p>Historical records of bat roosts within 150m to the south of the site.</p> <p>Large white and painted lady butterfly & common darter dragonfly recorded during survey.</p> <p>Potential to support reptile, amphibians</p>	<p>GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required.</p> <p>Reptile surveys (where appropriate habitat is present)</p> <p>Badger Survey</p> <p>Update hedgerow Assessment</p> <p>Daytime assessment and nocturnal bat survey of trees</p>	<p>Retention of species rich hedgerows and mature trees.</p> <p>Retention and management (to achieve mesotrophic grassland) of some grassland areas within the site.</p> <p>Installation of bat and bird boxes on trees.</p> <p>Creation of new ponds and features of terrestrial and aquatic inverts.</p>	<p>Site of moderate ecological value.</p> <p>Ecological features of value:</p> <ul style="list-style-type: none"> • several important hedgerow, • potential to support protected and notable species (GCN). 	<p>pLWS mature ash tree see TN 5</p> <p>Several species rich hedgerows and mature trees already present.</p>



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
								roosting bats and other fauna. GCN EPSL located 1.3 km east and 1.1 km north-east. Bat EPSL located 0.4 km south and 1.3 km north-west.	Bat Activity Survey across the entire site.			
KMU015 Land North and South of the A47	Kirby Muxloe	A2 B4 C2	117.2	Buildings east of the site not accessed	KMU015_1 to KMU015_8	Oaks Farm Stream and Woodland cLWS Leicester Forest East Hedgerow 2 cLWS Leicester Forest East, golf-course pond adj A47 cLWS Oaks Farm wet woodland cLWS Oaks Farm Stream Woodland Ash LWS Oaks Farm Woodland Willow LWS Oaks Farm Woodland Ash LWS	The accessible land south of the A47 is a disused golf-course dominated by amenity grassland and immature plantation broad-leaved woodland. Three ponds (holding water) and buildings are also present. North of the A47 improved grassland and arable fields with hedgerow boundaries and amenity grassland playing fields dominate with areas of woodland and	Potential for amphibians, reptiles, badgers, roosting/foraging/commuting bats, protected/notable birds. Previous records of common pipistrelle bat roost and swallow in the north-east of the site and common frog, common toad and smooth newts in the golf course. Bullfinch and great crested newt have also been recorded to the east of the site. Bat EPSL located 0.8 km north.	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys (where appropriate habitat is present) Badger surveys. Nocturnal bat emergence/return surveys. Bat activity surveys. Breeding bird survey.	Retention of areas of woodland, scrub and ponds enhancement by appropriate management and additional planting. Retention of hedgerows and enhancement by 'gapping up' and appropriate management.	Site of high, moderate and low habitat value as mapped on Figure C2 Ecological features of value: <ul style="list-style-type: none"> • Oak Farm Stream corridor, • several LWS with and adjacent to site, • several important hedgerows, • adjacent woodland • potential to support protected and notable species. 	Species rich hedgerows and ponds may qualify under LWS criteria.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
						Kirkby Brook, golf-course section pLWS Designated sites about the site : Links grassland LWS Un-named brook, adj Lawn Farm pLWS	scrub also present. Bluebell has previously been recorded in Oak Farm Stream Woodland	GCN EPSL located 1.5 km north-east and 2 km north-east.				
LFE016 Land at Grange Farm, off Baines Lane	Leicester Forest East	A3 B5 C3	2.2	The bungalow and gardens to the east of the site could not be accessed	LFE016_1	N/A	The south of the site is dominated by poor semi-improved grassland fields with tussocky grassland within which some areas are becoming dominated by ruderal species. Semi-mature trees and hedgerows are also present. The north of the site is dominated by disused farm buildings and surrounded by scrub and former gardens. An occupied bungalow and gardens are	Potential for amphibians (terrestrial only), reptiles, badgers (within 30m of the site boundary), roosting/foraging/commuting bats and protected/notable birds Bat record from South Avenue (50m from site)	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Badger surveys (adjacent land to the west). Nocturnal (emergence/return) bat surveys on buildings.	Retain trees and hedgerow on northern boundary along the road. Otherwise dependent on the outcome of species surveys.	Site of relatively low ecological value.	None



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
							located to the north-east of the site.					
LFE017 Land south of Webb Close	Leicester Forest East	A3 B6 C3	0.6	Full Access	LFE017_1 LFE017_2 LFE017_3	N/A	Tall ruderal field with a species rich hedgerow on the eastern boundary, species poor hedgerows and fencing on the other boundaries. A new housing estate is currently under construction to the west and south-west.	Potential for Breeding birds including ground nesting birds.	Breeding bird surveys.	Retain hedgerows and enhance species as well as planting hedgerow to connect existing hedgerow on the southern boundary. Removed and treat invasive cotoneaster.	Site of relatively low ecological value.	None
LFE018 Land at Baines Lane	Leicester Forest East	A3 B7 C3	2.6	Full Access	N/A	LWS on and adjacent to the southern boundary of the site. Record of buckshorn plantation to the south-east	Pasture field grazed by cows with species rich hedgerows line of with mature trees along the eastern boundary. One building located on site on the western boundary which is open and used by the cows for shelter. Record of Hobby to the north.	Potential for roosting bats within the mature trees and nesting birds within the hedgerows.	Daytime bat assessment of the trees identified as having potential for roosting bats. Further nocturnal surveys may be required dependent upon the outcome of the assessment. Breeding bird surveys.	Retention and enhancement of the hedgerows and the LWS to maintain the green networks. Increase the width / plant up field corners with locally sourced native tree and shrub species.	Site of relatively high ecological value. Ecological features of value: <ul style="list-style-type: none">• LWS on southern boundary• two important hedgerows,• adjacent line of trees provides connectivity along M1 corridor	Adjacent to existing LWS. Species rich hedgerows may qualify under LWS criteria .



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
BRA003 Parkers Depot, Braunstone Lane	Braunstone	A4 B8 C4	0.5	Full Access	BRA003_1	N/A	Buildings, hardstanding, amenity grassland, tall ruderal, linear area of scrub with trees set within.	One building with potential for roosting bats. Potential for nesting/foraging birds, badgers, and notable plants.	Daytime internal/external bat assessment of one building identified as having potential for roosting bats. Further nocturnal surveys may be required dependent upon the outcome of the assessment.	Appropriate mitigation/enhancement dependent upon the outcome of the bat assessment and any subsequent surveys. Retain scrub/trees on the south-west boundary.	Site of relatively low ecological value.	N/A
BRA009 Land west of Brockenhurst Drive	Braunstone	A4 B9 C4	1.9	Limited access due to dense scrub	BRA009-1	Mosssdale meadows cLWS adjoins the site to the south	A line of mature/semi-mature trees stands on the northern boundary of the site. The remainder of the site is dominated by dense scrub with some immature trees set within. Lubbesthorpe Brook lies on the eastern boundary and a dry pond is located to the north-east of the site.	Potential for nesting/foraging birds, badgers, reptiles, amphibians, commuting /foraging bats	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Daytime bat assessments of any trees to be removed followed by climbed/nocturnal surveys if required. Bat activity surveys Badger surveys Breeding bird survey Invertebrate habitat assessment, followed by terrestrial surveys	Appropriate management to enhance habitat diversity e.g selective scrub clearance to create open areas, retention of standing/fallen deadwood, pond creation, creation of log/brush piles.	Site of relatively high ecological value Ecological features of value: <ul style="list-style-type: none">• adjacent cLWS Mosssdale meadows,• adjacent Lubbersthorpe brook,• a pLWS• potential to support notable and protected species	Entire site could qualify as a pLWS - dominated by native scrub of >1ha.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
END013 Land at St Johns	Enderby	A5 B10 C5	37.9	Limited access to south-east of site.	N/A	Enderby Lodge pLWS occupies part of the site to the south-west.	<p>Arable fields with three poor semi-improved grassland fields two of which are grazed by cows.</p> <p>The field and site boundaries comprise species-rich, species-poor hedgerows and line of trees. Wet and dry ditches, two ponds and broad-leaved woodland to the south of the site.</p> <p>Notable species recorded in the desk study include bee orchid and pansy.</p>	<p>Potential for GCN within the ponds on the south-eastern and northern areas of the site.</p> <p>Potential for roosting bats within some of the mature trees and woodland.</p> <p>Potential for nesting/foraging birds, badgers, barn owl, commuting /foraging bats.</p> <p>Historical records of lapwing and skylark on and adjacent to the site.</p>	<p>GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required.</p> <p>Reptile surveys in areas of suitable habitat.</p> <p>Daytime bat assessments of any trees to be removed followed by climbed/nocturnal surveys if required.</p> <p>Bat activity surveys.</p> <p>Badger surveys of the woodland.</p> <p>Barn owl survey.</p> <p>Breeding bird surveys.</p>	<p>Appropriate mitigation/enhancement dependent upon the outcome of the surveys</p> <p>Appropriate management to enhance wildlife corridors, including the plantation of hedgerows and trees along the middle of the site along Fosse Way and the western boundary to create wildlife corridors.</p>	<p>Site of high and moderate ecological value.</p> <p>Ecological features of value:</p> <ul style="list-style-type: none"> • pLWS within site; • broad-leaved woodland present, • supports notable and protected species (including notable plants and birds) 	<p>Qualifies as a LWS.</p> <p>One hedgerow is assessed as an important hedgerow under the Leicestershire LWS Criteria.</p>



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
NAR002 Land at Ambulance Station, off Forest Road	Narborough	A6 B11 C6	2.4	Limited access to east of site.	NAR002_1 NAR002_2	No designated sites. Located within green wedge.	Plantation mixed woodland, amenity grassland, scrub, poor semi-improved grassland, tall ruderal vegetation, introduced shrubs and early and late 20 th century buildings.	Amphibians, reptiles, badgers, roosting/foraging/commuting bats and protected/notable birds. Previous records of bat roosts to south and slow worms to the north of the site. Bat EPSL located 1.2 km north, 0.2 km south-west and 0.3 km south-west.	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Badger surveys. Nocturnal bat emergence/return surveys.	Retain woodland. Enhance boundary features (e.g. hedgerow and tree planting).	Site of moderate ecological value. Ecological features of value: <ul style="list-style-type: none">• woodland within site• potential to support various notable and protected species	N/A
NAR003 Land east of Regent Street	Narborough	A6 B12 C6		Full access via Regent Street	NAR003_1 NAR003_2	Within Green Wedge C and adjacent M1 and Ivanhoe Railway to wildlife corridors	Poor semi improved grassland with a good number of common forb species. Plantation woodland and species rich hedgerow located on three boundaries.	Common birds recorded around the site boundary. The site has potential to support small mammals and amphibians. Some foraging and refuge opportunities for reptiles, badger bat and barn owl. Bat EPSL located 1 km north-west and 1.1 km north-west.	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Badger, Nesting bird, reptile and bat activity surveys. Method Statement to include consideration for nesting birds, reptile/amphibians and mammals (such as badger and hedgehog) during vegetation clearance and soil stripping.	Protection of trees and woodland in south , along the east (M1 corridor) and the species rich hedgerow on the northern boundary (Ivanhoe railway). Opportunity to enhance the southern extent of the site with meadow grassland seed mix or an extension of the newly planted orchard.	Site of moderate ecological value. Ecological features of value: <ul style="list-style-type: none">• adjacent broad-leaved woodland present,• potential to support various notable and protected species	Scrub along northern boundary could qualify as a pLWS - dominated by native scrub of >1ha.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
NAR008 Land off Leicester Road	Narborough	A6 B13 C6	3.2	Limited access to the stream due to dense tall ruderals	N/A	LWS River Soar adjacent to the north-east corner of the site. Narborough Bog SSSI 60m east of the site. records of notable inverts, birds and herpetofauna.	Ploughed arable field with species rich and species poor intact hedgerows, scrub and tall ruderal with a running stream along the southern and eastern boundaries.	Potential for breeding birds, foraging and commuting bats. Potential for roosting bats within the hedgerow trees. Potential for White-clawed crayfish within the stream. Potential for notable amphibians to be present (e.g. toads and frogs). Bat EPSL located 1 km south-west and 1.1 km south-west.	Breeding bird surveys. Daytime bat assessment of the trees identified as having potential for roosting bats. Further nocturnal surveys may be required dependent upon the outcome of the assessment. Bat activity surveys. White clawed crayfish surveys.	Retain and enhance hedgerows. Hedgerow on the eastern boundary can be enhanced and planted into a woodland corridor using native species. Sympathetic lighting to avoid impacting the night flying animals using the Narborough Bog SSSI and the River Soar.	Site of relatively high ecological value Ecological features of value: <ul style="list-style-type: none"> • Narborough Bog SSSI nearby • LWS adjacent to the site • potential to support protected and notable species • pLWS hedgerow 	One hedgerow is assessed as an important hedgerow under the Leicestershire LWS Criteria.
NAR015	Narborough	A5 B14 C5	9.7	Limited access to the north of the site.	NAR015_1	Adjacent to the pLWS Narborough dismantled railway line and whistle Way wildlife Corridor on eastern boundary.	Pasture fields grazed by cows, a defunct hedgerow, species poor hedgerows, mature trees and broadleaved woodland boundary to the east and north-east.	Potential for breeding birds and foraging / commuting bats. Potential for roosting bats within the hedgerow trees. Potential for badgers. Existing BLE and Common	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Badger surveys. Nocturnal bat emergence/return surveys.	Enhancement of the current hedgerows on site to include more diverse native species. Further mitigation, enhancement and recommendations are dependent on the results of the further surveys.	Site of moderate ecological value. Ecological features of value <ul style="list-style-type: none"> • EPS bat licence (until 2025) adjacent to the site, • adjacent woodland • potential to support 	An existing pLWS is located along southern the boundary



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
								Pipistrelle Licence at adjacent buildings 2015 – 2025.	Bat activity surveys. Breeding bird assessment		protected species • adjacent to pLWS.	
STO004 Land at the Mill on the Soar	Stoney Stanton	A7 B15 C7	1.2	Full access	N/A	The Mill on the Soar LWS (notified) lies on the south-eastern site boundary The Grange LWS (notified) and Coventry Road Hedgerow pLWS lie close to the south and north-west of the site respectively.	Semi-improved grassland, amenity grassland, tall ruderal, scrub, some mature trees, defunct hedgerows, species poor hedgerows, hardstanding and one derelict single-storey building to the north of the site and a container to the north-east of the site.	Potential for reptiles, breeding birds, badgers, amphibians and invertebrates. Water vole adjacent to the site. Potential for roosting bats within the mature trees Adjacent to the River Soar Wildlife Corridor.	GCN HSI surveys of the ponds connected ponds within 500m of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Breeding bird assessment Badger surveys. Invertebrate surveys. Water vole and otter surveys of River Soar (where appropriate) Daytime bat assessment of mature trees and further bat emergence / return surveys following the subsequent results.	Recommended protection zone of circa 10m from the River Soar along the eastern boundary of the site. Retention and enhancement of the hedgerows. Retention of mature trees. Retention, enhancement and management of grassland, tall ruderal and scrub areas. Further mitigation, enhancement and recommendations are dependent on the results of the further surveys.	Site of moderate ecological value. Ecological features of value • adjacent River Soar LWS, an important wildlife corridor • pLWS hedge • potential to support protected and notable species.	One hedgerow is assessed as an important hedgerow under the Leicestershire LWS Criteria.
STO005 Land at Hinckley Road	Stoney Stanton	A8 B16 C8	9.6	Full access	STO005_1	N/A	Arable fields with species rich and species poor hedges, mature trees, and a dry ditch running along the south-	Potential for breeding birds and foraging / commuting bats within hedgerows / trees.	Breeding bird assessment and subsequent surveys where appropriate. Daytime bat assessment and subsequent bat surveys to identify potential	Retention and management of hedgerows on site. Retention, management and enhancement of eastern boundary of	Site of low ecological value. Ecological features of value • pLWS hedge	Hedgerows could qualify as a LWS under the Leicestershire LWS Criteria.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
							eastern boundary.	Potential for roosting bats within the mature trees. GCN EPSL licence located 0.9 km south-west.	roosts on site within the trees.	the site to form wildlife corridor and connectivity to wider landscape.	<ul style="list-style-type: none"> potential to support protected and notable species (bats and farmland birds) 	
STO008 Land South of Hinckley Road	Stoney Stanton	A8 B17 C8	2.2	Full access	STO008_1	N/A	Arable field with species rich and species poor hedgerows. One mature tree within the northern boundary. A dry ditch along the southern boundary as well as an area of dense scrub and amenity grassland.	Potential for breeding birds and foraging / commuting bats within hedgerows / trees. Potential for roosting bats within the mature trees. GCN EPSL licence located 0.9 km south-west.	Breeding bird assessment Daytime bat assessment and subsequent bat surveys to identify potential roosts on site within the trees.	Retention and management of hedgerows and mature trees on site. Retention, management and enhancement of eastern and southern boundaries to form wildlife corridor and connectivity to wider landscape. Pond creation and management.	Site of low ecological value. Ecological features of value <ul style="list-style-type: none"> 2 x pLWS hedge potential to support protected and notable species (bats and farmland birds) 	Hedgerows could qualify as a LWS under the Leicestershire LWS Criteria.
STO019 Land north of Highfields Farm	Stoney Stanton	A8 B18 C8	5.3	Full access	N/A	Hedgerows (LWS) south of the access track	Arable fields with species poor and species rich hedgerows as well as lines of trees. A dry ditch runs along the north-eastern boundary as well as an area of tall ruderal. South Leicestershire	Potential for breeding birds and foraging / commuting bats within hedgerows / trees. Potential for roosting bats within the mature trees. Potential for badgers within	GCN HSI surveys of the ponds connected ponds within 500m (to the east) of the site and then presence / absence surveys if required. Reptile surveys in areas of suitable habitat. Breeding bird assessment. Daytime bat assessment and subsequent bat	Retention and management of hedgerows and mature trees on site. Appropriate mitigation and management, depending on the results of the survey. Protect, manage and enhance the northern boundary to improve the wildlife corridor	Site of moderate ecological value Ecological features of value <ul style="list-style-type: none"> pLWS hedge potential to support protected and notable species LWS hedgerows to south of site 	Hedgerows could qualify as a LWS under the Leicestershire LWS Criteria.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
							Railway wildlife corridor along northern boundary.	the northern boundary of the site. GCN EPSL licence located 0.8 km and 0.9 km south-west.	surveys to identify potential roosts on site within the trees. Badger surveys.	and connectivity to wider landscape.		
SAP001 Land at Strawberry Cottage	Sapcote	A9 B19 C9	1.3	Full access	SAP001_1 SAP001_2 SAP001_3 SAP001_4	No designated sites.	Amenity grassland with scattered trees, species poor and species rich hedgerows, blackthorn spinney and an orchard comprising apple, pear and walnut. Buildings include a main house built and three outbuildings including two barns and an old shed.	Potential for roosting bats and barn owl within the buildings and trees. Barn owl boxes on site. Potential for breeding birds within the hedgerows and trees. Previous record of GCN on and adjacent to the site. Potential for GCN within the terrestrial habitat. Potential foraging / commuting habitat for bats. GCN EPSL licence located adjacent to the south.	Daytime bat assessment of the trees and buildings. Further surveys dependant on the results. Breeding bird surveys. GCN Risk Assessment . Bat activity surveys. Barn owl surveys.	Further mitigation, enhancement and recommendations are dependent on the results of the breeding bird, daytime bat assessment, GCN, bat activity and barn owl surveys. Creation of log / brash / suitable hibernacula for amphibians . Method Statement for the protection of Protected species (including GCN) recommended. Opportunity to further enhance the orchard (traditionally managed orchards are a priority habitat under S41 NERC Act 2006)	Site of relatively high ecological value. Ecological features of value <ul style="list-style-type: none"> • pLWS hedge • adjacent site supports protected and notable species • pLWS traditional orchard onsite • small woodland onsite 	Hedgerows could qualify as a LWS under the Leicestershire LWS Criteria. Known population of GCN in ponds adjacent to the site.



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
								Bat EPSL licence located 1.6 km south.				
SAP002 Land north of Hinckley Road	Sapcote	A9 B20 C9	8.2	Full access	SAP002_1	No designated sites.	<p>Pasture fields grazed by cows, species poor and defunct hedgerows, line of trees, stream, pond, marshy grassland, tall ruderal and scrub.</p> <p>Corn spurrey previously recorded onsite.</p>	<p>Potential for GCN, water vole, breeding birds, invertebrates, barn owl, notable / red listed plants, roosting bats within the trees and foraging / commuting bats.</p> <p>Common frog previously recorded onsite.</p> <p>EPS GCN licence and known GCN population to the south of the site.</p> <p>GCN EPSL licence located 0.2 km south-west.</p> <p>Bat EPSL licence located 1.6 km south.</p>	<p>GCN HSI surveys of the ponds connected ponds within 500m (to the east) of the site and then presence / absence surveys .</p> <p>Reptile surveys in areas of suitable habitat.</p> <p>NVC botanical survey of pond and grassland.</p> <p>Water vole surveys of the stream.</p> <p>Daytime bat and barn owl assessment of the trees.</p> <p>Invertebrate surveys.</p> <p>Bat activity surveys.</p> <p>Breeding bird assessment and surveys where appropriate .</p>	<p>Retain and enhance the pond area / terrestrial habitat on site; including creation of suitable hibernacula and terrestrial habitat.</p> <p>Retain hedgerows as wildlife corridors and appropriate enhancement and management.</p> <p>Retain stream and enhance to form wildlife corridor including planting of native species.</p>	<p>Site of relatively high ecological value.</p> <p>Ecological features of value</p> <ul style="list-style-type: none"> • pLWS hedge • adjacent site supports protected and notable species • pLWS standing body water and wet grassland • notable plant recorded onsite • stream passes through the site 	pLWS - open water habitat onsite with marshy grassland



Preferred Site Option reference	Settlement	Map No.	Area (Ha)	Access	Target Notes	Designated Sites	Habitats and Flora	Potential Protected & Notable Fauna	Further Survey Recommendations	Enhancement Recommendations	Ecological Assessment (see Section 2.4)	pLWS Description
SAP005 Land at London Leys Farm	Sapcote	A9 B21 C9	6.1	Full access	SAP005_1 SAP005_2 SAP005_3	Veteran tree (LWS) to the north of the site.	Arable fields with species rich and species poor hedgerow boundaries with some mature trees and farm buildings with amenity grassland at the southern boundary of the site.	Potential for roosting bats, foraging / commuting bats and breeding birds. Swallow previously recorded foraging on the site. House martin and hedgehog recorded to the west. GCN EPSL licence located 1.2 km west. Bat EPSL licence located 1.5 km south-west.	Daytime internal / external bat and barn owl survey of the mature trees and farm buildings on site. Bat activity surveys, Breeding bird surveys, Veteran tree survey of the mature oak on the northern side of the site.	Retention and enhancement of the hedgerows as part of the green infrastructure including management and planting of native species. Protection of mature trees on site during construction. Removal and management of the invasive and non-native species on the western boundary of the site bordering the residential gardens.	Site of moderate ecological value. Ecological features of value <ul style="list-style-type: none"> • pLWS hedge • adjacent site supports protected and notable species • pLWS standing body water and wet grassland • notable plant recorded onsite. • stream passes through the site 	Hedgerows could qualify as a LWS under the Leicestershire LWS Criteria.



Appendix C – Target Notes



Target Note	Site Reference	Grid Reference	Description
KMU001_1	KMU001	SK5218204914	Fallen dead ash tree
KMU001_2	KMU001	SK5224504964	Two oak trees with BRP
KMU007_1	KMU007	SK5277404579	Area of tall ruderal covering rubble. Hibernation and refugia for various fauna.
KMU007_2	KMU007	SK5251304632	Large soil mound partially vegetated with garden waste and rubble – potential to support amphibians and reptiles. Risk of non-natives and invasive species being present.
KMU007_3	KMU007	SK5242904340	Mature ash tree (almost dead) with high BRP
KMU007_4	KMU007	SK5246104320	Mature ash tree and with a girth of approximately 3m pLWS.
KMU007_5	KMU007	SK5258804253	Mature crack willow and horse chestnut (on site boundary) with low BRP.
KMU007_6	KMU007	SK5271904087	A dead tree with low BRP and three other mature trees with low – moderate BRP
KMU007_7	KMU007	SK5286104180	Mature oak tree with high BRP and with a girth of approx. 3.77m pLWS.
KMU007_8	KMU007	SK5287904221	Mature oak tree with low BRP
KMU007_9	KMU007	SK5289204252	Mature oak tree with moderate BRP
KMU007_10	KMU007	SK5305104259	Mature oak tree with low BRP
KMU007_11	KMU007	SK 5320503911	Mature oak tree with moderate BRP
KMU007_12	KMU007	SK5292003609	Two mature ash trees with moderate BRP
KMU007_13	KMU007	SK 5323103934	Mature oak tree with low BRP
KMU009_1	KMU009	SK5175004576 SK5170004757	Two log pile – provides refugia for reptiles, amphibians, small mammals and saproxylic inverts.
KMU009_2	KMU009	SK5164204555	Mature ash tree with low BRP
KMU009_3	KMU009	SK5147104663	Gap in the hedge with patch of forbs including bird's-foot trefoil. Large white butterfly and painted lady seen foraging along the hedge.
KMU009_4	KMU009	SK 5184704706	Mature tree with moderate BRP
KMU009_5	KMU009	SK 5186704679	Mature ash tree with Low BRP and with a girth of approx.3m pLWS.
KMU009_6	KMU009	SK5175404795	Pond seasonally dry



Target Note	Site Reference	Grid Reference	Description
KMU009_7	KMU009	SK5159104837	Wet pond with potential to support amphibians and other aquatic species. Common darter dragonfly recorded
KMU009_8	KMU009	SK5185804916	Mature oak tree with low BRP
KMU009_9	KMU009	SK5191804814	Mature ash tree with low BRP
KMU009_10	KMU009	SK 5146504674	Gap in the hedge with patch of forbs including bird's-foot trefoil. Large white butterfly and painted lady seen foraging along the hedge.
KMU015_1	KMU015	SK5178802139	Dry pond. May hold water seasonally
KMU015_2	KMU015	SK5167602113	Dry pond. May hold water seasonally
KMU015_3	KMU015	SK5155202159	Pond (lined) holding water
KMU015_4	KMU015	SK5154002210	Pond (lined). Very shallow water. Floating-leaved aquatic plant <i>Potamogeton natans</i> present.
KMU015_5	KMU015	SK5190002476	Pond holding water
KMU015_6	KMU015	SK5183502189	Dry pond. May hold water seasonally
KMU015_7	KMU015	SK5140402396	2 x mature ash trees with BRP
KMU015_8	KMU015	SK5106102728	Mature ash tree with two main stems. Possible veteran.
KMU015_9	KMU015	SK5105302874	Oaks Farm Stream. Almost dry at time of survey (SK5106003078 SK5109202664)
KMU015_10	KMU015	SK5145002403	Mature tree with high BRP
KMU015_11	KMU015	SK5153502442	Two mature tree with moderate BRP and large log pile with potential to support reptiles.
KMU015_12	KMU015	SK5175302910	Mature tree with moderate BRP
KMU015_13	KMU015	SK5134903003	Mature tree with low BRP
KMU015_14	KMU015	SK5144002890	Badger latrine
KMU015_15	KMU015	SK5155503046	Mature tree with moderate BRP
KMU015_16	KMU015	SK5163303113	Mature tree with low BRP
KMU015_17	KMU015	SK5186603016	Badger hair
LFE016_1	LFE016	SK5376003357	Late 19 th /early 20 th C farm house and out buildings with suitability for supporting roosting bats
LFE017_1	LFE017	SK5356502882	Allotment – mainly raspberry.
LFE017_2	LFE017	SK5362302870	Invasive species - Horizontal cotoneaster



Target Note	Site Reference	Grid Reference	Description
LFE017_3	LFE017	SK5359102806	Mature sycamore with BRP
BRA003_1	BRA003	SK5543402694	Early 20 th C building with high suitability for roosting bats.
BRA009_1	BRA009	SK5516901727	Dry pond. Likely to be permanently dry.
END013_1	END013	SP5464899013	Tree with bat roost potential
NAR002_1	NAR002	SP5373898151	Early 20 th C house with high suitability to support roosting bats.
NAR002_2	NAR002	SP5376298189	Early 20 th C garage with moderate/high BRP.
NAR002_3	NAR002	SP5370298066	Late 20 th C building with low BRP
NAR003_1	NAR003	SP 5466997475	Dead tree with low BRP and potential to support saproxylic species.
NAR003_2	NAR003	SP5466397466	Badger Latrine
NAR003_3	NAR003	SP5457497509	Area planted with vegetables and fruit trees
NAR003_4	NAR003	SP5456997461	Range of recently planted trees, including fruit bearing trees.
NAR008_1	NAR008	SP5479998127	Oak with BRP
NAR008_2	NAR008	SP5474998061	Ash with BRP
NAR015_1	NAR015	SP5282299347	Tree with BRP
SAP001_1	SAP001	SP4796193559	Orchard
SAP001_2	SAP001	SP4794593562	Vegetable garden
SAP001_3	SAP001	SP4785293528	Barn owl box
SAP001_4	SAP001	SP4786893478	Barn owl box
SAP001_5	SAP001	SP4790593568	Stored wood
SAP002_1	SAP002	SP4802593577	Ash with BRP
SAP002_2	SAP002	SP4847793597	Ash with BRP
SAP005_1	SAP005	SP4947793254	Possible veteran Oak
SAP005_2	SAP005	SP4932593278	Invasive species – Russian vine
SAP005_3	SAP005	SP4931593208	Ash with BRP
SAP005_4	SAP005	SP4943993304	X 3 ash with BRP
STO005_1	STO005	SP4818194719	Oak with BRP
STO008_1	STO008	SP4835694299	Ash with BRP



Appendix D – Planting Species List

Locally Native Tree and Shrub Species		Non native Tree and Shrub Species	
Common Name	Scientific Name	Common Name	Scientific Name
Alder	<i>Alnus glutinosa</i>	Beech	<i>Fagus sylvatica</i>
Ash	<i>Fraxinus excelsior</i>	Bird cherry	<i>Prunus padus</i>
Blackthorn	<i>Prunus spinosa</i>	Buddleja	<i>Buddleia davidii</i>
Broom	<i>Cytisus scoparius</i>	Cedar of Lebanon	<i>Cedrus libani</i>
Bullace	<i>Prunus domestica ssp instititia</i>	Cherry-laurel	<i>Prunus laurocerasus</i>
Crack willow	<i>Salix fragilis</i>	Cherry-plum	<i>Prunus cerasifera</i>
Dog rose	<i>Rosa canina</i>	Common lime	<i>Tilia x europaea</i>
Dogwood	<i>Cornus sanguinea</i>	Common whitebeam	<i>Sorbus aria</i>
Eared willow	<i>Salix aurita</i>	Deodar	<i>Cedrus deodara</i>
English elm	<i>Ulmus procera</i>	Domestic apple	<i>Malus pumila (domestica)</i>
Field maple	<i>Acer campestre</i>	Duke of Argyll's tea-plant	<i>Lycium barbarum</i>
Field rose	<i>Rosa arvensis</i>	European larch	<i>Larix decidua</i>
Goat willow	<i>Salix caprea</i>	False acacia	<i>Pseudacacia robinia</i>
Gorse	<i>Ulex europaeus</i>	Garden privet	<i>Ligustrum ovalifolium</i>
Grey sallow	<i>Salix cinerea</i>	Grey alder	<i>Alnus incana</i>
Guelder-rose	<i>Viburnum opulus</i>	Grey poplar	<i>Populus x canescens</i>
Hawthorn	<i>Crataegus monogyna</i>	Hornbeam	<i>Carpinus betulus</i>
Hazel	<i>Corylus avellana</i>	Horse chestnut	<i>Aesculus hippocastanum</i>
Holly	<i>Ilex aquifolium</i>	Hybrid black poplar	<i>Populus x canadensis</i>
Pedunculate oak	<i>Quercus robur</i>	Lawson's cypress	<i>Chamaecyparis lawsoniana</i>
Purging buckthorn	<i>Rhamnus catharticus</i>	Leyland cypress	<i>X Cupressocyparis leylandii</i>
Rowan	<i>Sorbus aucuparia</i>	Lilac	<i>Syringa vulgaris</i>
Silver birch	<i>Betula pendula</i>	Norway spruce	<i>Picea abies</i>
White willow	<i>Salix alba</i>	Red horse chestnut	<i>Aesculus carnea</i>
Wild (crab) apple	<i>Malus sylvestris</i>	Scot's pine	<i>Pinus sylvestris</i>

Locally Native Tree and Shrub Species		Non native Tree and Shrub Species	
Wild cherry	<i>Prunus avium</i>	Spindle	<i>Euonymus europaeus</i>
Wild privet	<i>Ligustrum vulgare</i>	Swedish whitebeam	<i>Sorbus intermedia</i>
Wych elm	<i>Ulmus glabra</i>	Sweet chestnut	<i>Castanea sativa</i>
Yew	<i>Taxus baccata</i>	Sycamore	<i>Acer pseudoplatanus</i>
		Wayfaring tree	<i>Viburnum lantana</i>
		Western hemlock-spruce	<i>Tsuga heterophylla</i>
		White poplar	<i>Populus alba</i>
		Wild plum	<i>Prunus domestica</i>

Gardening for bats

Aim at having flowers in bloom throughout the year, including both annuals and herbaceous perennials. Below are some suggestions, but this is not an exhaustive list. Flowering times are approximate, varying dependent on region. Regular dead-heading extends flowering period in many flowers.

A=annual, HA= hardy, annual, HHA=half-hardy annual, P=perennial, W=wild flower.

Flowers for borders			
St. John's Wort	<i>Hypericum</i>	P	March
Marigolds	<i>Calendula</i>	H/A	March-October
Aubrietia	<i>Aubrietia deltoidea</i>	P	March-June
Honesty	<i>Lunaria rediviva</i>	HB	March
Forget-me-not	<i>Myosotis</i> sp.	A/P	March-May
Elephant ears	<i>Bergenia</i>	P	April
Wallflowers	<i>Erysimum</i>	B	April-June
Cranesbills	<i>Geranium</i> sp.	P	May-September
Yarrow	<i>Achillea</i>	P	May-
Poppies	<i>Papaver</i> sp.	A	May- July
Dames violet	<i>Hesperis matronalis</i>	P	May-August
Red Valerian	<i>Centranthus ruber</i>	P	May-Sept
Poached egg plant	<i>Limnanthes douglasii</i>	HA	June-August
Knapweed	<i>Centaurea nigra</i>	P	June-September

Phacelia	<i>Phacelia tanacetifolia</i>	HA	June-September
Ox-eye daisy	<i>Leucanthemum vulgare</i>	P	June-August
Evening primrose	<i>Oenothera biennis</i>	B	June-September
Candytuft	<i>Iberis amara</i>	HA	June-September
Sweet William	<i>Dianthus barbatus</i>	B	June-July
Blanket flowers	<i>Gaillardia</i>	P	June -
Argentine Vervain	<i>Verbena bonariensis</i>	HHA	June-October
Scabious	<i>Knautia arvensis</i>	P	July-August
Night-scented stock	<i>Mattiola bicornia</i>	HA	July-August
Pincushion flower	<i>Scabious</i> sp.	A/P	July-September
Cherry pie	<i>Heliotrope</i>	HHA	July-October
Mexican aster	<i>Cosmos</i> sp.	A/P	July-October
Cone flower	<i>Rudbeckia</i> sp.	A/P	August-November
Mallow	<i>Lavatera</i> sp.	P	August-October
Michaelmas daisy	<i>Aster</i> sp.	P	August-September
Ice plant 'Pink lady'	<i>Sedum spectabile</i>	P	September
Herbs both leaves and flowers are fragrant			
Fennel	<i>Foeniculum vulgare</i>		July-September
Bergamont	<i>Monarda didyma</i>		June-September
Sweet Cicely	<i>Myrrhis odorata</i>		April-June
Hyssop	<i>Hyssopus officinalis</i>		July-September
Feverfew	<i>Tanacetum parthenium</i>		June-September
Borage	<i>Borago officinalis</i>		May-September
Rosemary	<i>Rosmarinus officinalis</i>		March-May
Lemon balm	<i>Melissa officinalis</i>		June-July
Coriander	<i>Coprianrum sativum</i>		June-August
Lavenders	<i>Lavendula</i> sp.		June -August
Marjoram	<i>Origanum</i> sp.		July-September
Trees, shrubs and climbers important to insects			
Oak	<i>Quercus</i> sp.		large gardens only

Silver birch	<i>Betula pendula</i>	
Common alder	<i>Alnus glutinosa</i>	Suitable for coppicing
Hazel	<i>Corylus avellana</i>	Suitable for coppicing
Elder	<i>Sambucus nigra</i>	Small
Goat willow	<i>Salix caprea</i>	Suitable for coppicing
Hawthorn	<i>Crataegus monogyna</i>	Suitable for coppicing
Honeysuckle	<i>Lonicera</i> sp.	Grow a variety for succession
Dog rose	<i>Rosa canina</i>	Climber
Bramble	<i>Rubus fruticosus</i>	Climber
Ivy	<i>Hedera helix</i>	Climber
Buddleia	<i>Buddleja davidii</i>	Shrub
Guelder rose	<i>Viburnum opulus</i>	Shrub
Gorse	<i>Ulex</i> sp.	Shrub

Plants for pond edges and marshy areas

Purple loosestrife	<i>Lythrum salicaria</i>	W	June-August
Meadow sweet	<i>Filipendula ulmaria</i>	W	June-September
Lady's smock	<i>Cardamine pratensis</i>	W	April-June
Water mint	<i>Mentha aquatica</i>	W	July-September
Angelica	<i>Angelica sylvestris</i>	W	July-September
Hemp agrimony	<i>Eupatorium cannabinum</i>	W	March-May
Marsh marigold	<i>Caltha palustris</i>	W	June-September
Creeping Jenny	<i>Lysimachia nummularium</i>	W	May-August
Fringed water lily	<i>Nymphoides peltata</i>	W	June-September
Water forget-me-not	<i>Myosotis scorpioides</i>	W	June-September

Allow part lawns to grow long in summer and cut in autumn, removing the clippings. Avoid using fertilisers. Compost heaps are food producers of insects too.

(Source: 'Gardening for bats', Bat Conservation Trust, 2004)



Appendix E – Ecological Survey Season Calendar

Ecology Survey Calendar



This calendar is a guide to the typical seasonal survey windows within which we usually have to work – it reflects best practice guidance. A number of visits may be required throughout the survey period with factors such as weather and geography potentially impacting dates. We pride ourselves on our innovative approaches and ability to find solutions so please speak to our ecologists before scheduling any work.

Optimal
 Sub-optimal
 No Survey

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Extended Phase 1 Habitat Survey													
Botanical Surveys	Lower plants only (mosses & liverworts)			Detailed botanical surveys						Lower plants only (mosses & liverworts)			
Fungi			Early species only					All fungi including waxcaps					
Breeding Birds			4 x surveys										
Wintering Birds	4 x visits												
Migratory Birds													
Badgers	Survey methods are possible throughout the year, vegetation can obscure					evidence in the summer							
							Licensable period for disturbance						
Bat Roost Assessment	Buildings												
	Trees												
Bats – Emergence and Activity	Hibernation surveys only			Activity & emergence surveys						Hibernation surveys only			
Dormice				Tube surveys are carried out between Apr to Nov Nut searches between Aug and Dec							Nut search only		
Red Squirrels	Visual surveys Dec to Mar			Hair tube surveys throughout the year									
Invertebrates					Optimal period varies between species, consult our team before scheduling								
Otters	Surveys are possible all year round, weather and vegetation cover can be limiting factors.												
Water Voles	Burrow survey only	Habitat suitability assessment		Two surveys required: the first Apr to end Jun, the second Jul to Sep (to identify breeding territories and latrines)						Habitat suitability assessment		Burrow survey only	
Reptiles				Optimal survey period Apr to Jun									
Great Crested Newts	Habitat suitability assessment only			eDNA survey season mid Apr to end Jun		Habitat suitability assessment only							
			4-6 aquatic surveys between mid-March & mid-Jun (including 2-3 between mid-Apr to mid-May)										
White-Clawed Crayfish	Habitat suitability assessment only				No survey - females release offspring							Habitat suitability assessment only	

Ecology Through The Seasons



SPRING

- The start of the 'typical' ecological survey season – consult us for forthcoming sites to make sure these windows are met.
- Spring is a great time to complete initial Phase 1 habitat surveys
- Key surveys: great crested newts and breeding birds. A good time to carry out reptile surveys – they like the sun after April showers, and dormouse surveys should be set up by the end of Spring to allow completion within the calendar year
- Hedgerow and scrub clearance will require pre-works checks for nesting birds
- Reptile and amphibian translocation and mitigation works can start as animals come out of hibernation

SUMMER

- Key surveys: bats, plants and invertebrates
- Although bat surveys during Spring and Autumn are possible, the presence of maternity roosts can only be confirmed in Summer
- Early summer marks the end of the great crested newt and breeding bird survey seasons
- Dormouse surveys set up in Spring will take place throughout Summer
- Summer is also the start of the period when works affecting badger setts may take place under licence

AUTUMN

- Autumn is the end of most survey periods including bats, reptiles and dormice
- Final survey dates can be hampered by poor weather so allow a buffer in the programme
- Late autumn is also the end of the period in which mitigation for many species may take place as animals become increasingly less active on the approach to hibernation
- Some wintering bird surveys, such as those for SPA qualifying species, commence in Autumn

WINTER

- Although most survey windows are closed through the winter, many surveys may still take place such as nut searches for dormice and baseline scoping surveys
- Winter is the key season for carrying out hibernation surveys for bats and surveys for wintering birds
- It is the optimum season for completing above-ground vegetation clearance works for hedgerows, woodland and scrub, when birds won't be nesting
- Winter is the perfect time to complete desk studies and constraints assessments so there is plenty of time to discuss options before the start of the survey and mitigation seasons


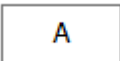
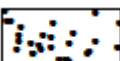




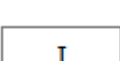



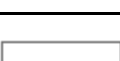



For more information, please contact Claire Wilmer, Director of Ecology, on 0207 250 7500 or email ecology@wyg.com





Appendix F – Phase 1 Habitat Survey Codes

Based on: Joint Nature Conservation Committee (JNCC) (2003). Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC: Peterborough.

Symbol	Habitat	Description
	Target notes	Used to provide supplementary information on features of ecological interest
	Scattered scrub	Occasional scrubby plants such as bramble
	Mature tree	Mature trees such as pine and Oak
	Species-rich hedge with trees	Continuous hedgerow containing many species of plants with trees
	Species-rich hedge	Continuous hedgerow containing many species of plants
	Species-poor hedge	Continuous hedgerow containing few species of plants
	Species-poor hedge with trees	Continuous hedgerow containing trees.
	Defunct hedge	Broken hedgerow containing few species of plants
	Line of trees	A line of trees, not considered to be a hedgerow.
	Running water	Water course, with arrow denoting direction of flow
	Dry ditch	Ditch feature lacking water
	Earth bank	An area of raised ground supported by bare soil and very few plant species
	Fence	Man-made boundary feature, such as barbed wire fencing
	Path	A public footpath

	Amenity grassland	Heavily managed grassland, such as garden lawn
	Arable	Farmed land, such as crops (including allotments)
	Bare ground	Bare soil not supporting vegetation
	Broad-leaved plantation	Planted woodland containing deciduous trees, such as oak
	Broad-leaved woodland	Stands of trees, not obviously planted, containing deciduous trees, such as oak
	Buildings	Man-made structures, such as houses
	Hardstanding	Man-made surface, such as car park
	Improved grassland	Farmed grassland treated with herbicide with few species of common forbs, Usually $\geq 50\%$ <i>Lolium perenne</i> , <i>Trifolium repens</i>
	Introduced shrub	Non-native shrubs, often planted, such as laurel
	Marshy Grassland	An area of wet grassland where broadleaved herbs, rather than grasses, predominate.
	Mixed woodland	Planted woodland containing evergreen and deciduous trees, such as pine and oak plantation
	Poor semi-improved grassland	Grassland with few species of plants
	Scrub	Blocks of scrubby plants, such as bramble
	Semi-improved neutral grassland	Grassland with many species of plants
	Standing water	Standing water such as ponds, lakes and canals



	Tall ruderal	Tall weedy vegetation, such as nettles
	Not accessed	An area of land not accessed during the survey due to health and safety reasons or permission was not granted



FIGURES

Figure A0 – A9 Designated Sites and Protected Species Plans

Figure B0 – B21 Phase 1 Habitat Survey Result Plan

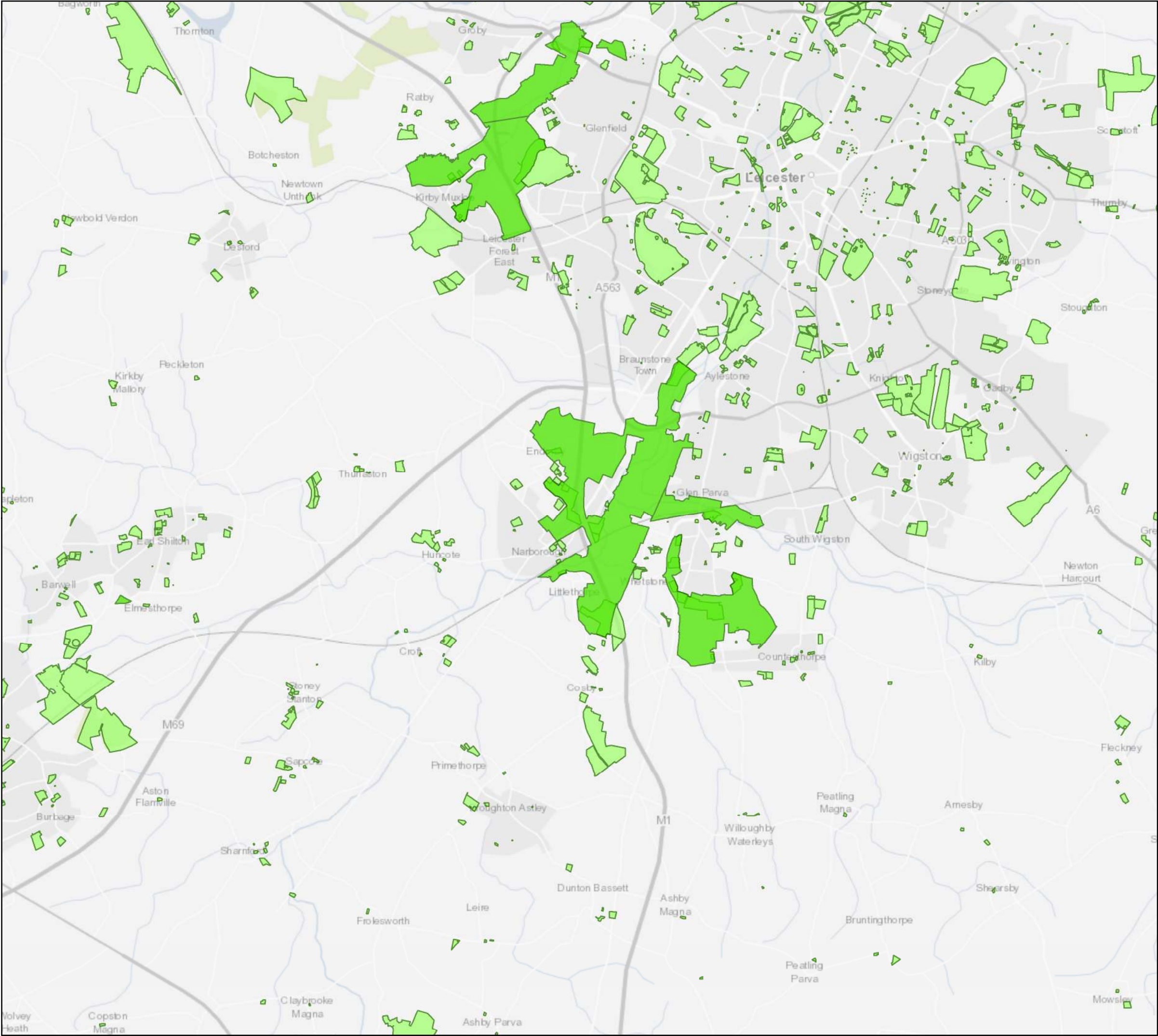
Figure C0 – C9 Biodiversity Value Assessment, Wildlife Corridors and Green Wedges



Figure	Settlement Name	Preferred Site Options Reference	Figure Title
A	Designated Wildlife Sites and Protected / Notable Species		
A0	Blaby District	All Sites	District Map A
A1	Kirby Muxloe	KMU001, KMU007, KMU009	Kirby Muxloe North Map A
A2	Kirby Muxloe	KMU015	Kirby Muxloe South Map A
A3	Leicester Forest East	LFE016, LFE017, LFE018	LFE (South) Map A
A4	Braunstone Town	BRA003, BRA009	BRA Map A
A5	Enderby & Narborough	END013, NAR015	END Map A
A6	Narborough	NAR002, NAR003, NAR008	NAR Map A
A7	Stoney Stanton	STO005, STO008, STO019	STO (East) Map A
A8	Stoney Stanton	STO004	STO (South) Map A
A9	Sapcote	SAP001, SAP002, SAP005	SAP Map A
B	Extended Phase 1 Habitat		
B1	Kirby Muxloe	KMU001	KMU001 Map B
B2	Kirby Muxloe	KMU007	KMU007 Map B
B3	Kirby Muxloe	KMU009	KMU009 Map B
B4	Kirby Muxloe	KMU015	KMU015 Map B
B5	Leicester Forest East	LFE016	LFE016 Map B
B6	Leicester Forest East	LFE017	LFE017 Map B
B7	Leicester Forest East	LFE018	LFE018 Map B
B8	Braunstone Town	BRA003	BRA003 Map B
B9	Braunstone Town	BRA009	BRA009 Map B
B10	Enderby	END013	END013 Map B
B11	Narborough	NAR002	NAR002 Map B
B12	Narborough	NAR003	NAR003 Map B
B13	Narborough	NAR008	NAR008 Map B
B14	Narborough	NAR015	NAR015 Map B
B15	Stoney Stanton	STO004	STO004 Map B
B16	Stoney Stanton	STO005	STO005 Map B
B17	Stoney Stanton	STO008	STO008 Map B
B18	Stoney Stanton	STO019	STO019 Map B
B19	Sapcote	SAP001	SAP001 Map B
B20	Sapcote	SAP002	SAP002 Map B



Figure	Settlement Name	Preferred Site Options Reference	Figure Title
B21	Sapcote	SAP005	SAP005 Map B
C	Biodiversity Value Assessment, Wildlife Corridors and Green Wedges		
C0	Blaby District	All Sites	District Map C
C1	Kirby Muxloe	KMU001, KMU007, KMU009	Kirby Muxloe North Map C
C2	Kirby Muxloe	KMU015	Kirby Muxloe South Map C
C3	Leicester Forest East	LFE016, LFE017, LFE018	LFE (South) Map C
C4	Braunstone Town	BRA003, BRA009	BRA Map C
C5	Enderby & Narborough	END013, NAR015	END Map C
C6	Narborough	NAR002, NAR003, NAR008	NAR Map C
C7	Stoney Stanton	STO005, STO008, STO019	STO (East) Map C
C8	Stoney Stanton	STO004	STO (South) Map C
C9	Sapcote	SAP001, SAP002, SAP005	SAP Map C



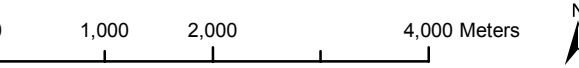
Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- Blaby District boundary
- Site of Special Scientific Interest (SSSI)
- Local Nature Reserve (LNR)
- Local Wildlife Site (LWS)
- Greenspace Site
- Green Wedge

- A** Between Blaby and Glen Parva (Sence Valley);
- B** Between Whetstone, Blaby and Countesthorpe;
- C** Between Whetstone, Enderby, Glen Parva, Braunstone, Blaby, Littlethorpe, Narborough and Cosby (Soar Valley South);
- D** Between Glenfield, Kirby Muxloe, Kirby Fields and towards Ratby, Groby and Leicester;
- E** Between Glenfield towards Beaumont Leys, Anstey and Groby;
- F** From Elmhurst towards Barwell and Earl Shilton.

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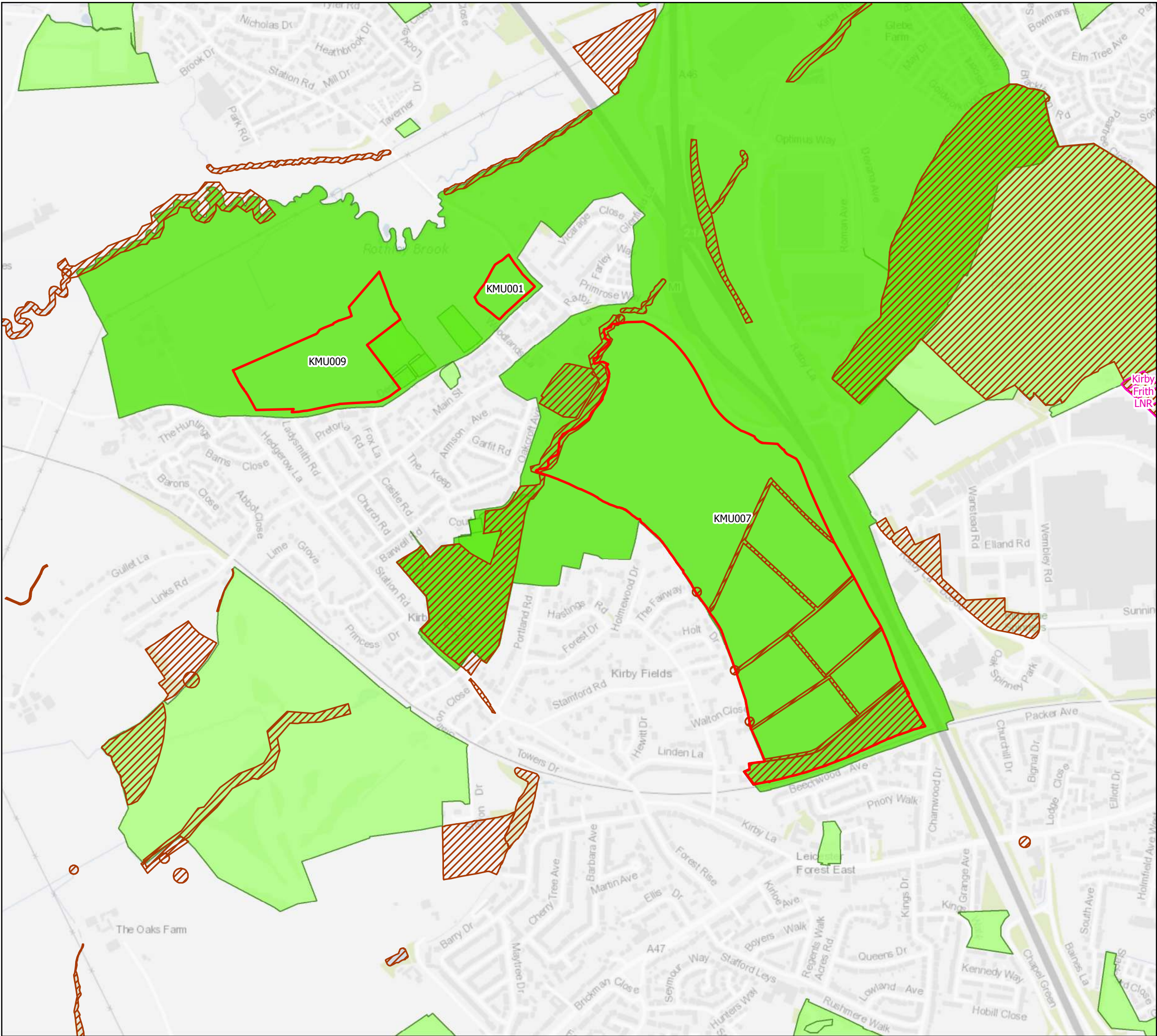


District Map A

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:70,000	Project No: A081175-95	Drawing No: Figure A0	Revision: B
Drawn by: Ben Blowers	Drawn date: 13/10/2017	Approved by: Vicki Thomas	

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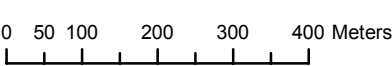


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Options
-  Local Nature Reserve (LNR)
-  Local Wildlife Site (LWS)
-  Green Wedge
-  Greenspace Site

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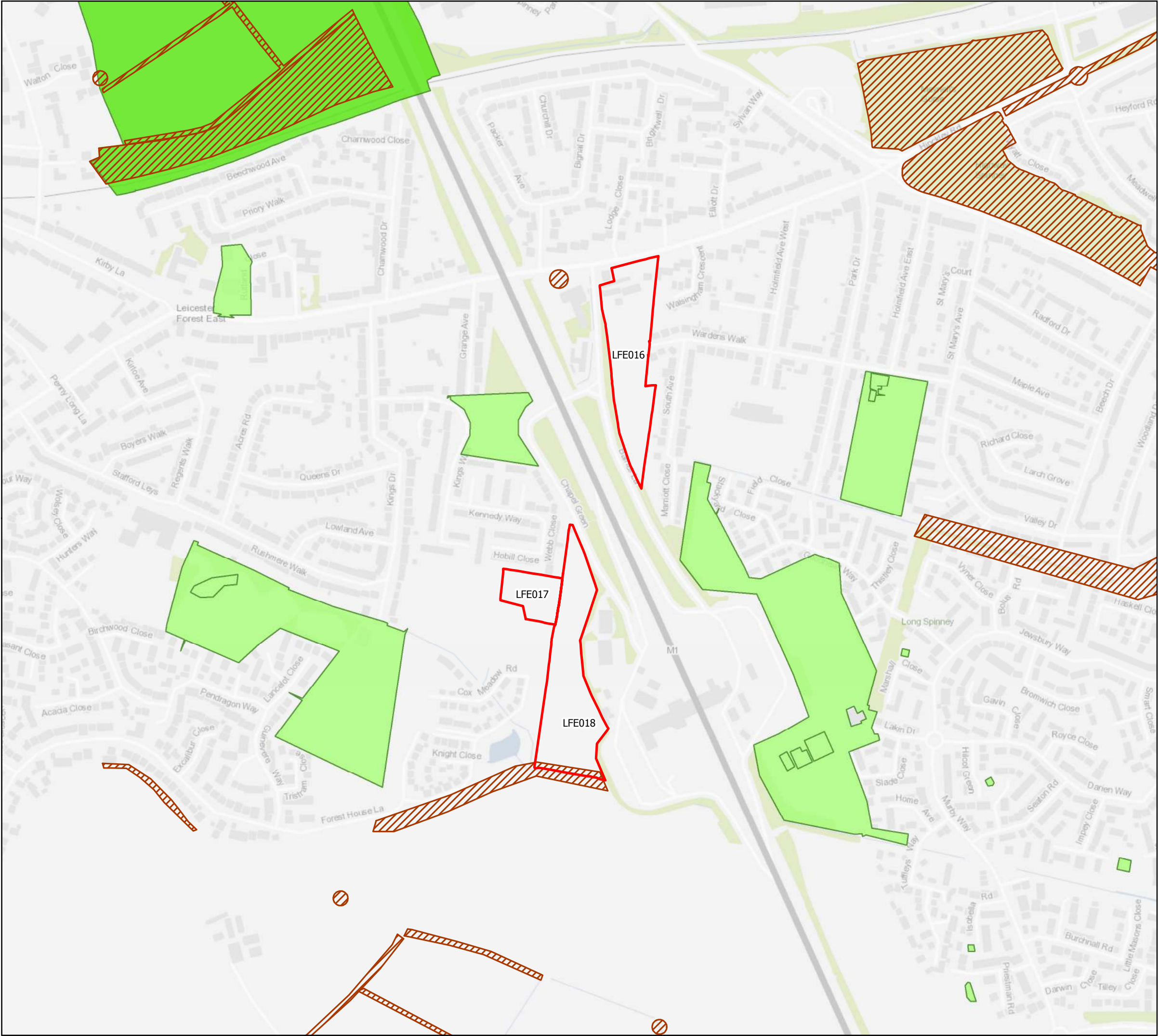


Kirby Muxloe North Map A

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:10,000	Project No: A081175-95	Drawing No: Figure A1	Revision: B
Drawn by: Ben Blowers	Drawn date: 17/10/2017	Approved by: Vicki Thomas	

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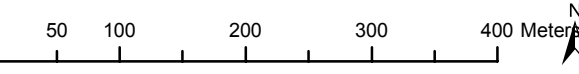


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- Local Wildlife Site (LWS)
- Green Wedge
- Greenspace Site

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LFE (South) Map A

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:6,000	Project No: A081175-95	Drawing No: Figure A3	Revision: B
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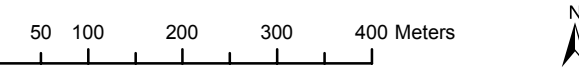


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- Local Nature Reserve (LNR)
- Local Wildlife Site (LWS)
- Green Wedge
- Greenspace Site

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BRA Map A

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:8,000	Project No: A081175-95	Drawing No: Figure A4	Revision: B
Drawn by: Ben Blowers	Drawn date: 17/10/2017	Approved by: Vicki Thomas	

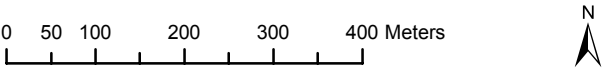
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Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

- Legend**
- Preferred Site Options
 - Site of Special Scientific Interest (SSSI)
 - Local Wildlife Site (LWS)
 - Local Wildlife Site
 - Green Wedge
 - Greenspace Site

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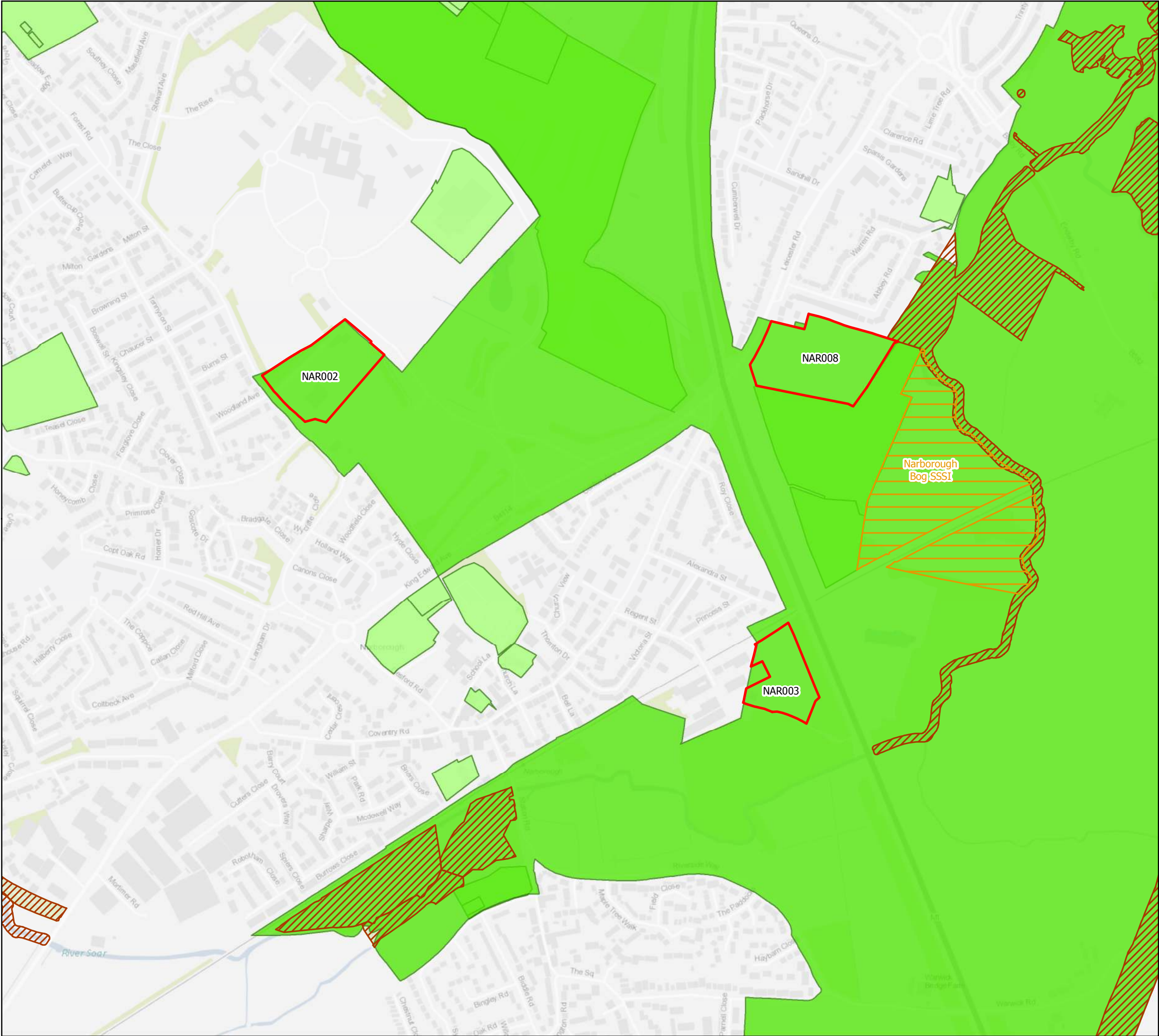


END Map A

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:8,500	Project No: A081175-95	Drawing No: Figure A5	Revision: B
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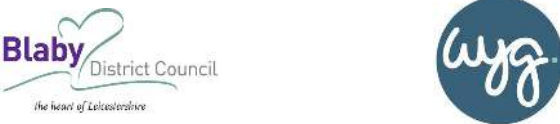
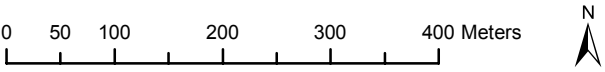


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- Site of Special Scientific Interest (SSSI)
- Local Wildlife Site (LWS)
- Green Wedge
- Greenspace Site

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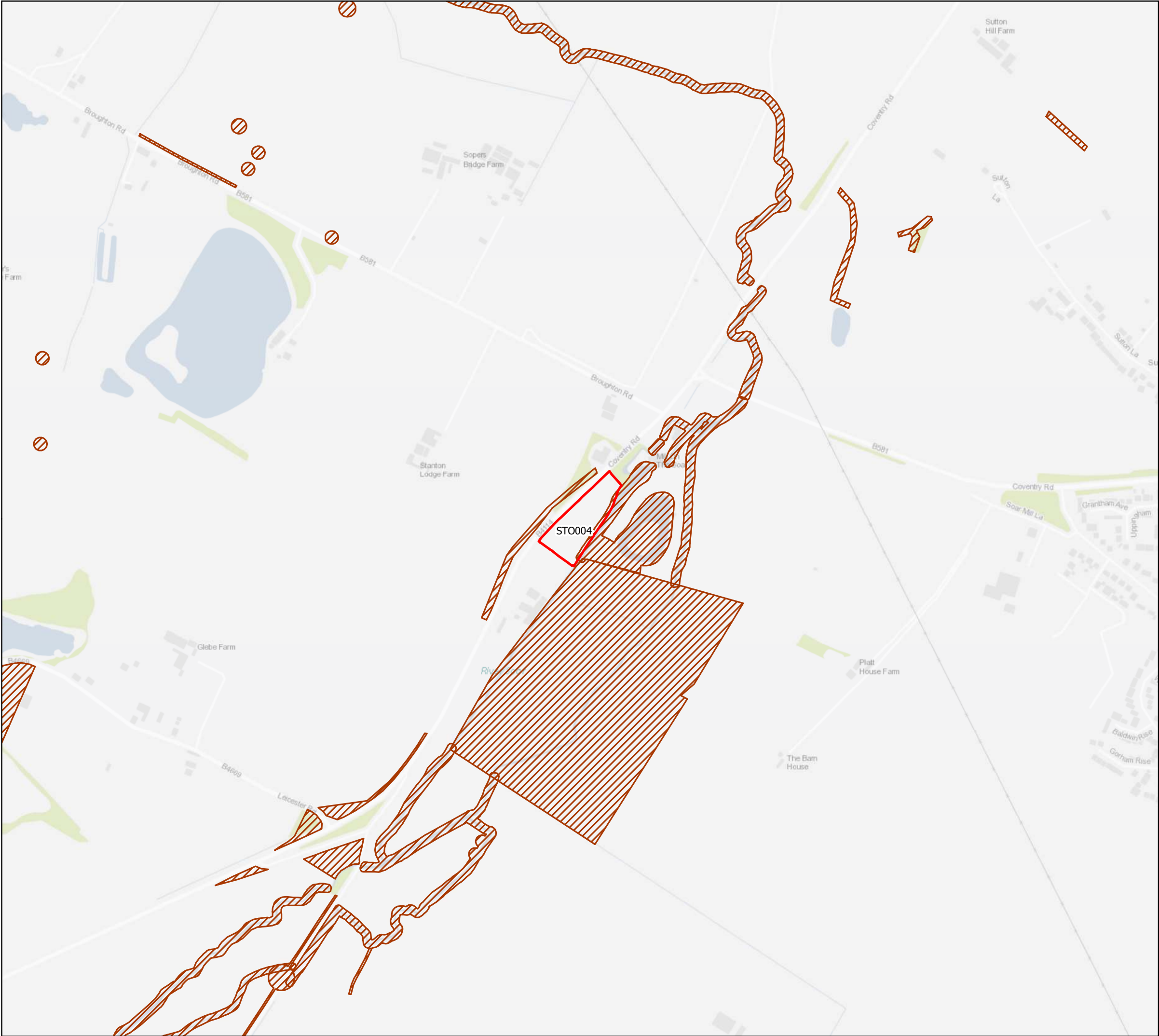


NAR Map A

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure A6	Revision: B
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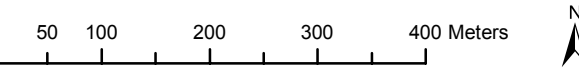


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- Local Wildlife Site (LWS)

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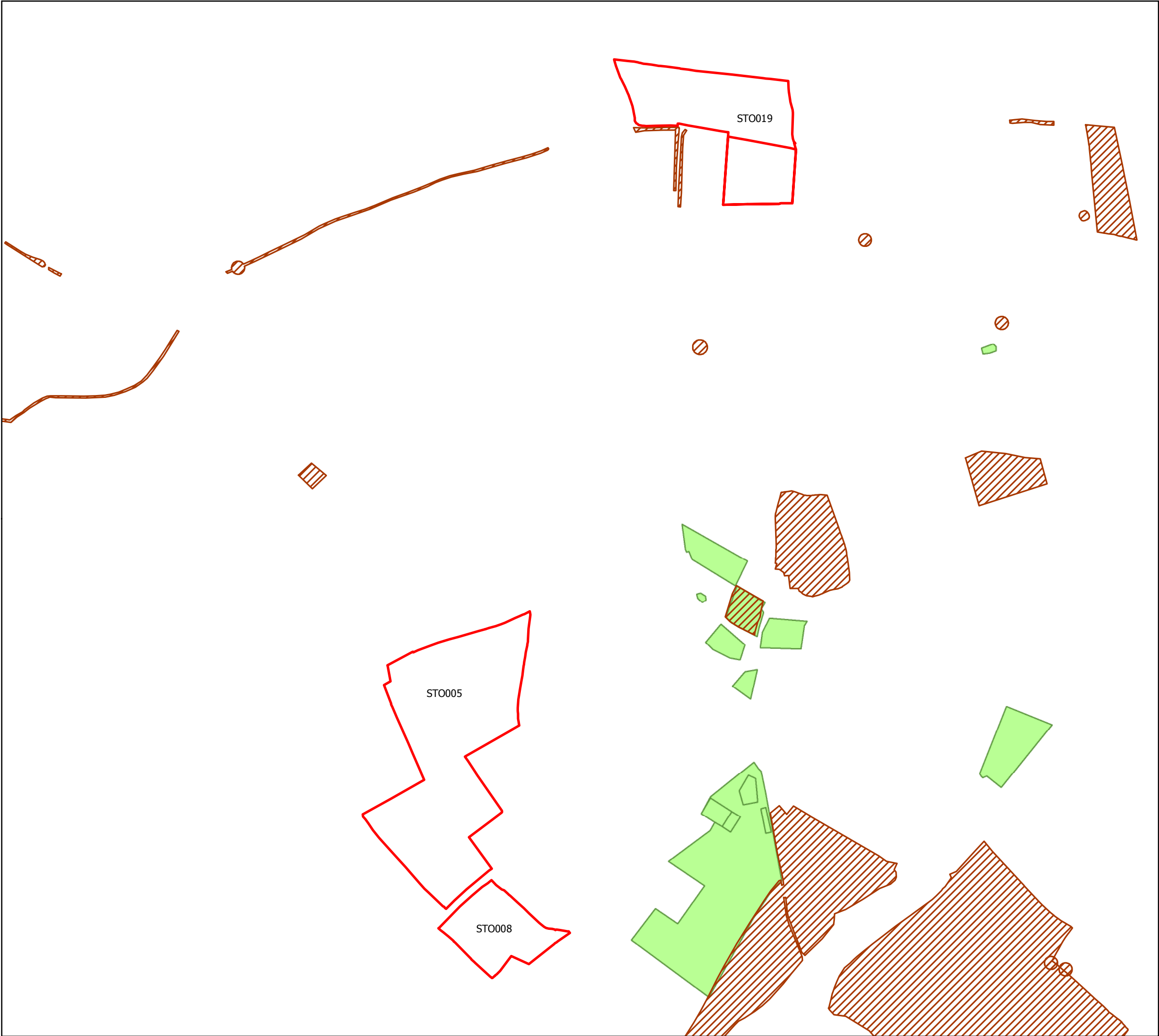


STO (East) Map A

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council




Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure A7	Revision: B
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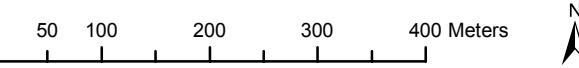


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Options
-  Local Wildlife Site (LWS)
-  Greenspace Site

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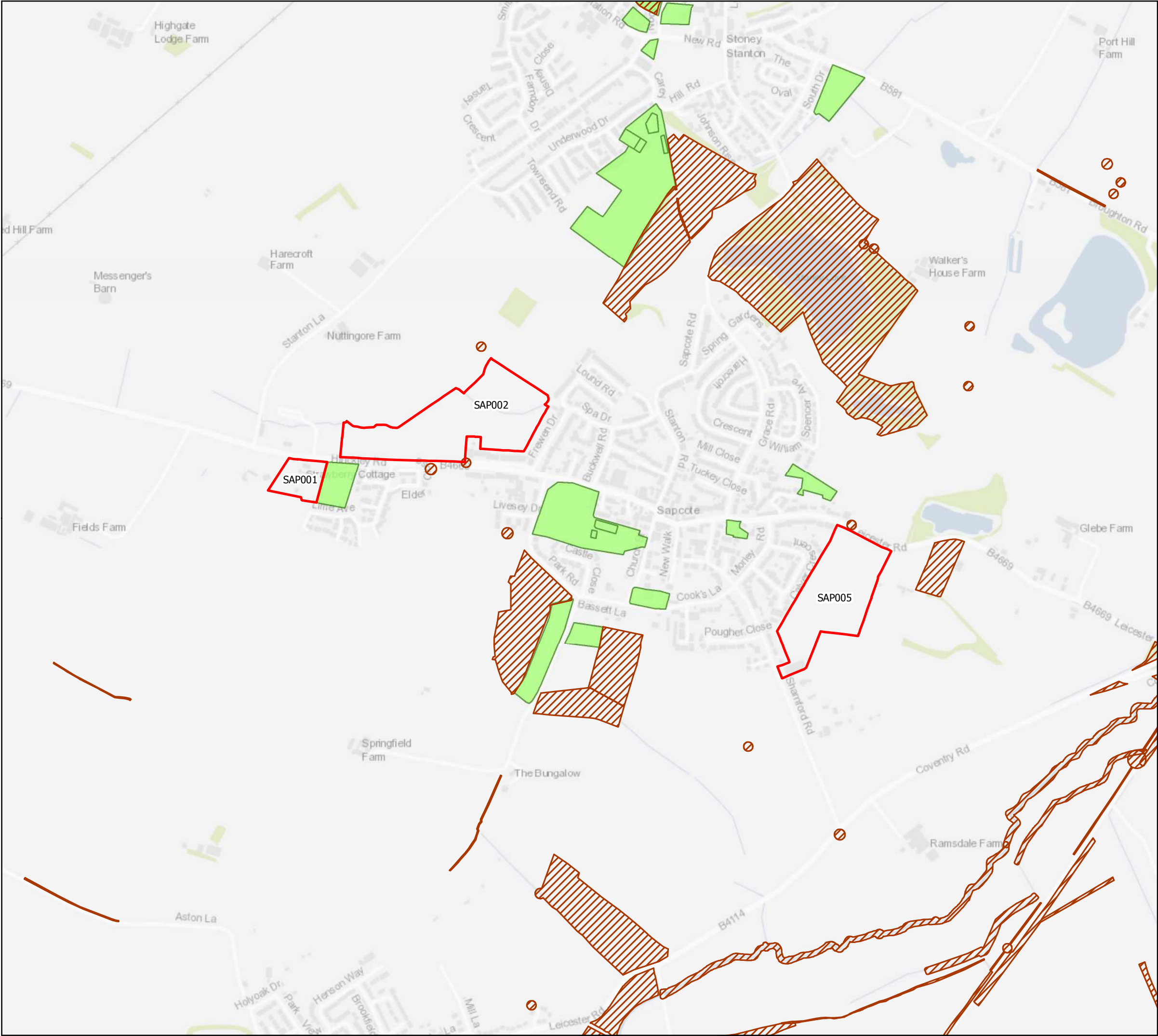


STO (South) Map A

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure A8	Revision: B
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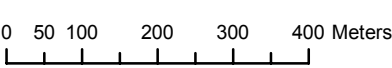


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- Local Wildlife Site (LWS)
- Greenspace Site

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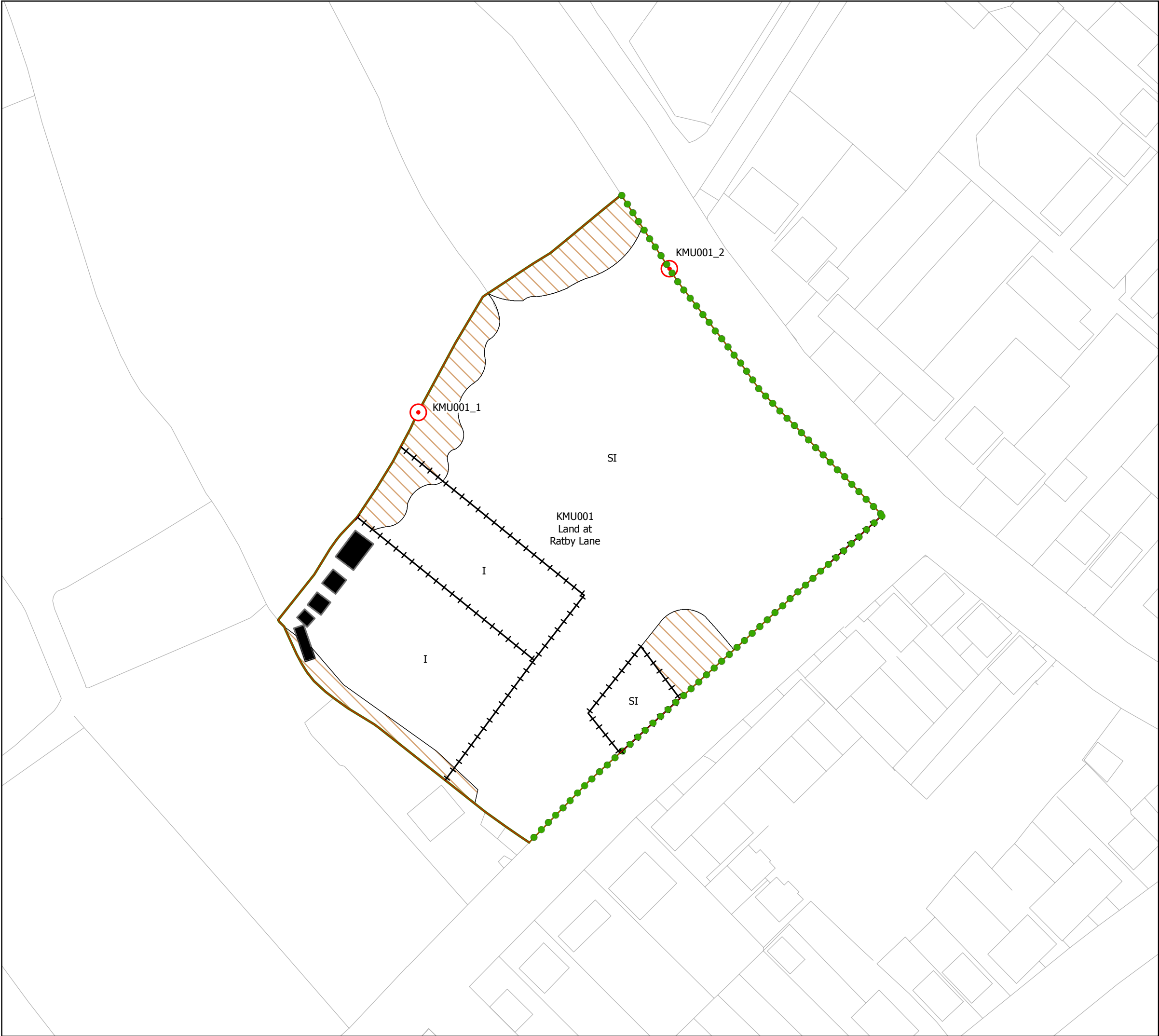


SAP Map A

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:10,000	Project No: A081175-95	Drawing No: Figure A9	Revision: B
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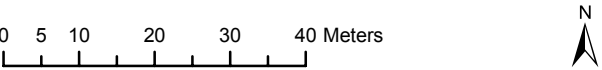


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- Building
- I Improved grassland
- SI Poor semi-improved grassland
- Tall ruderal
- Species-poor hedge
- Line of trees
- Fence
- Target note

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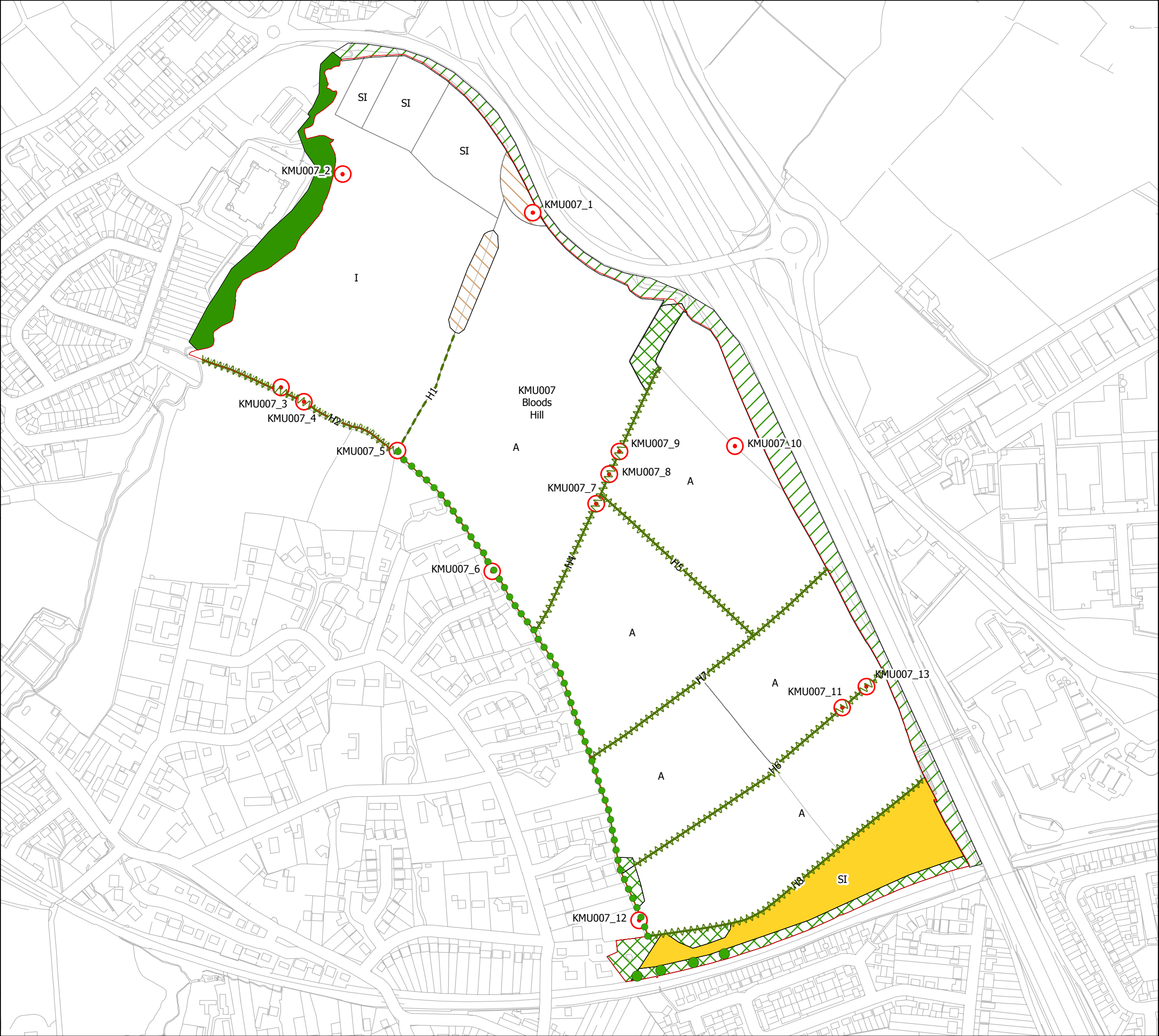


KMU001 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,000	Project No: A081175-95	Drawing No: Figure B1	Revision: B
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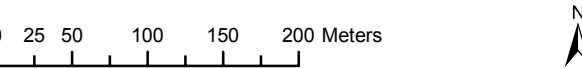


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Site boundary
- A Arable
- Broad-leaved plantation
- Broad-leaved semi-natural woodland
- I Improved grassland
- SI Poor semi-improved grassland
- Scrub
- SI Semi-improved neutral grassland
- Tall ruderal
- Hedge with trees
- Species-rich hedge
- Defunct hedge
- Line of trees
- Mature tree
- Target note

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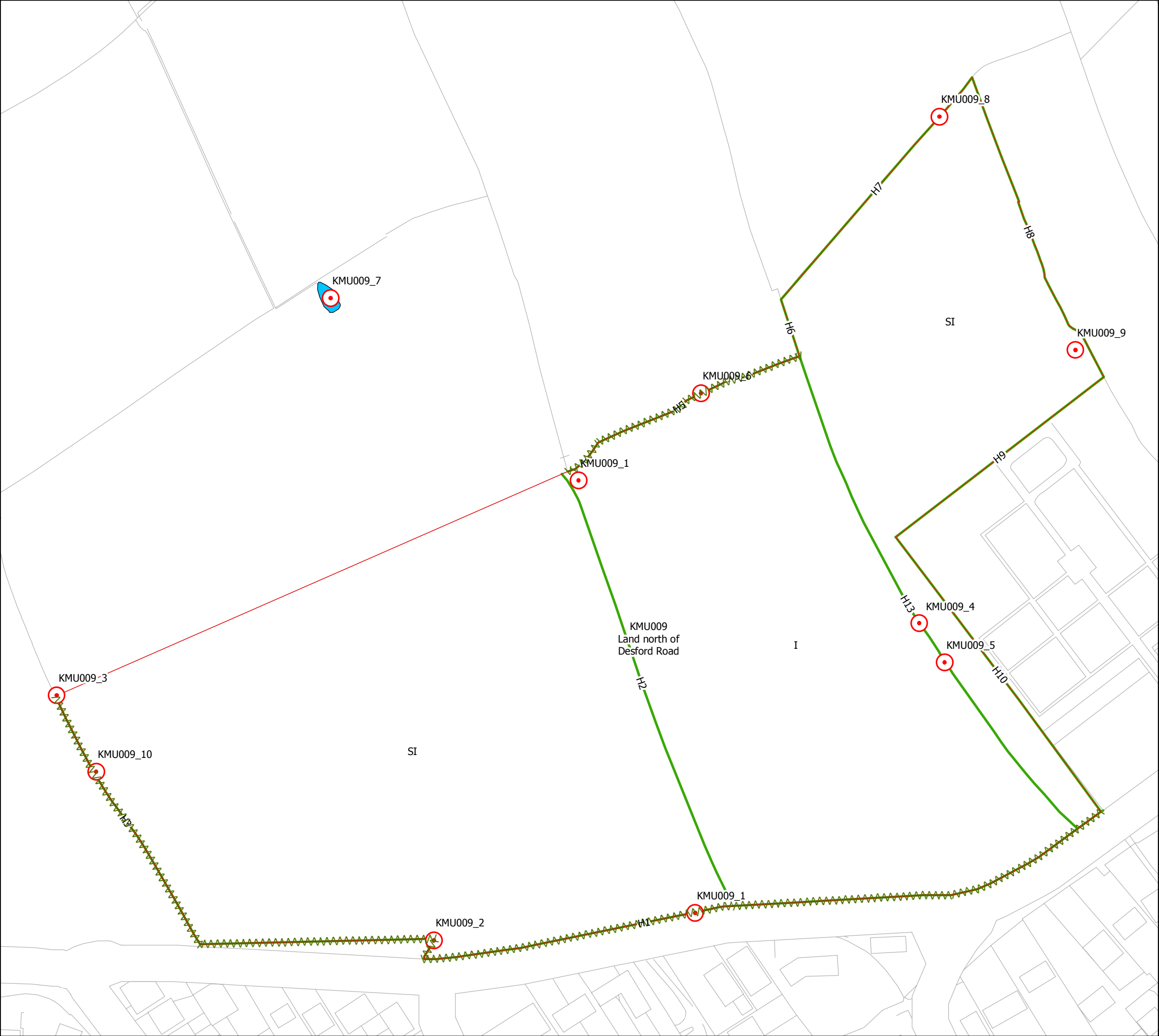


KMU007 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:5,000	Project No: A081175-95	Drawing No: Figure B2	Revision: B
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Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- I Improved grassland
- SI Poor semi-improved grassland
- Standing water
- Hedge
- Species-rich hedge
- Target note

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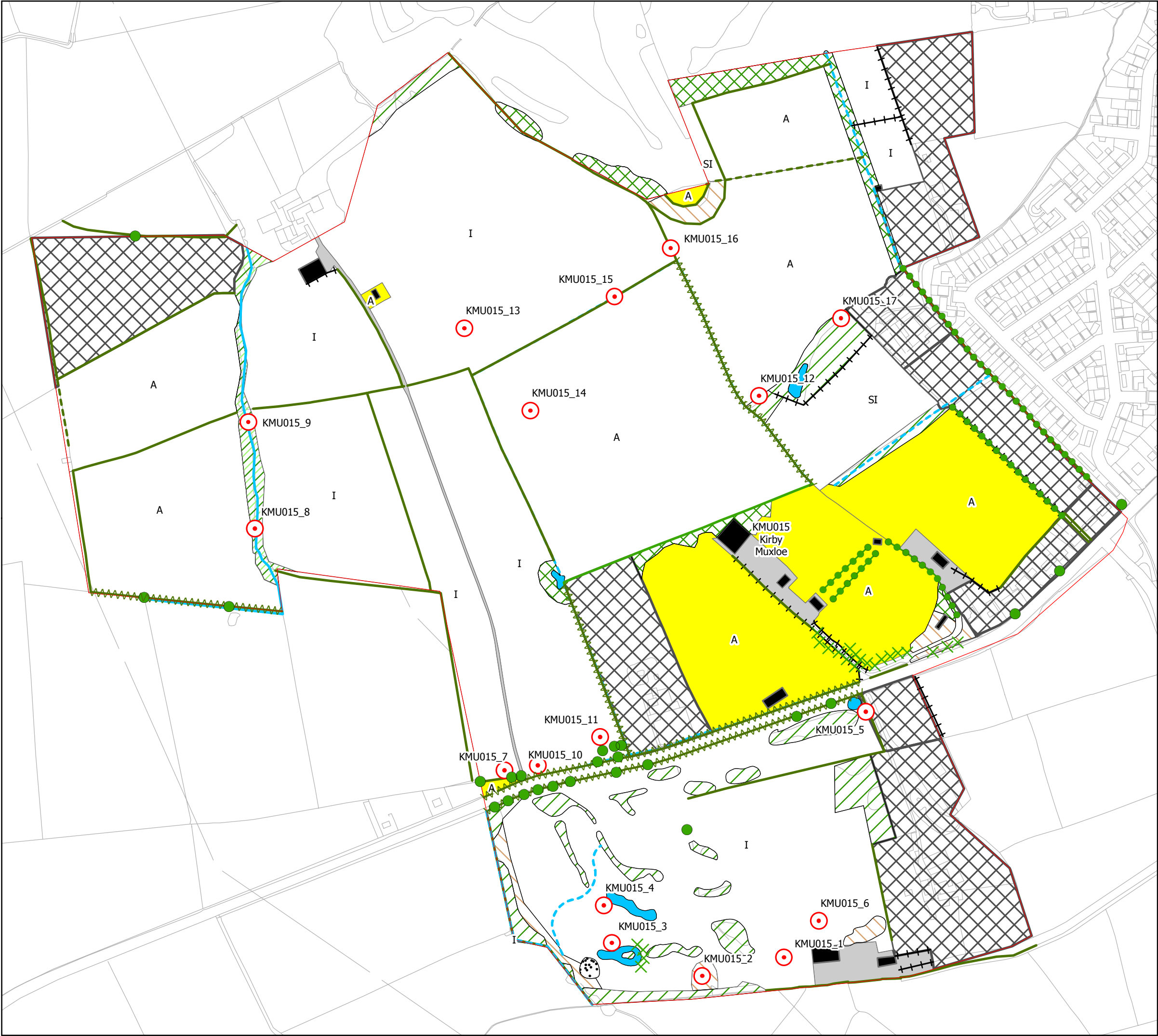


KMU009 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,600	Project No: A081175-95	Drawing No: Figure B3	Revision: B
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Rev	Date	Notes
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B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- A Arable
- Bare ground
- Broad-leaved plantation
- Building
- Hardstanding
- I Improved grassland
- Mixed woodland
- Not accessed
- SI Poor semi-improved grassland
- Scrub
- Standing water
- Tall ruderal
- Hedge
- Species-rich hedge
- Species-poor hedge
- Defunct hedge
- Line of trees
- Running water
- Dry ditch
- Fence
- Mature tree
- Scrub
- Target note

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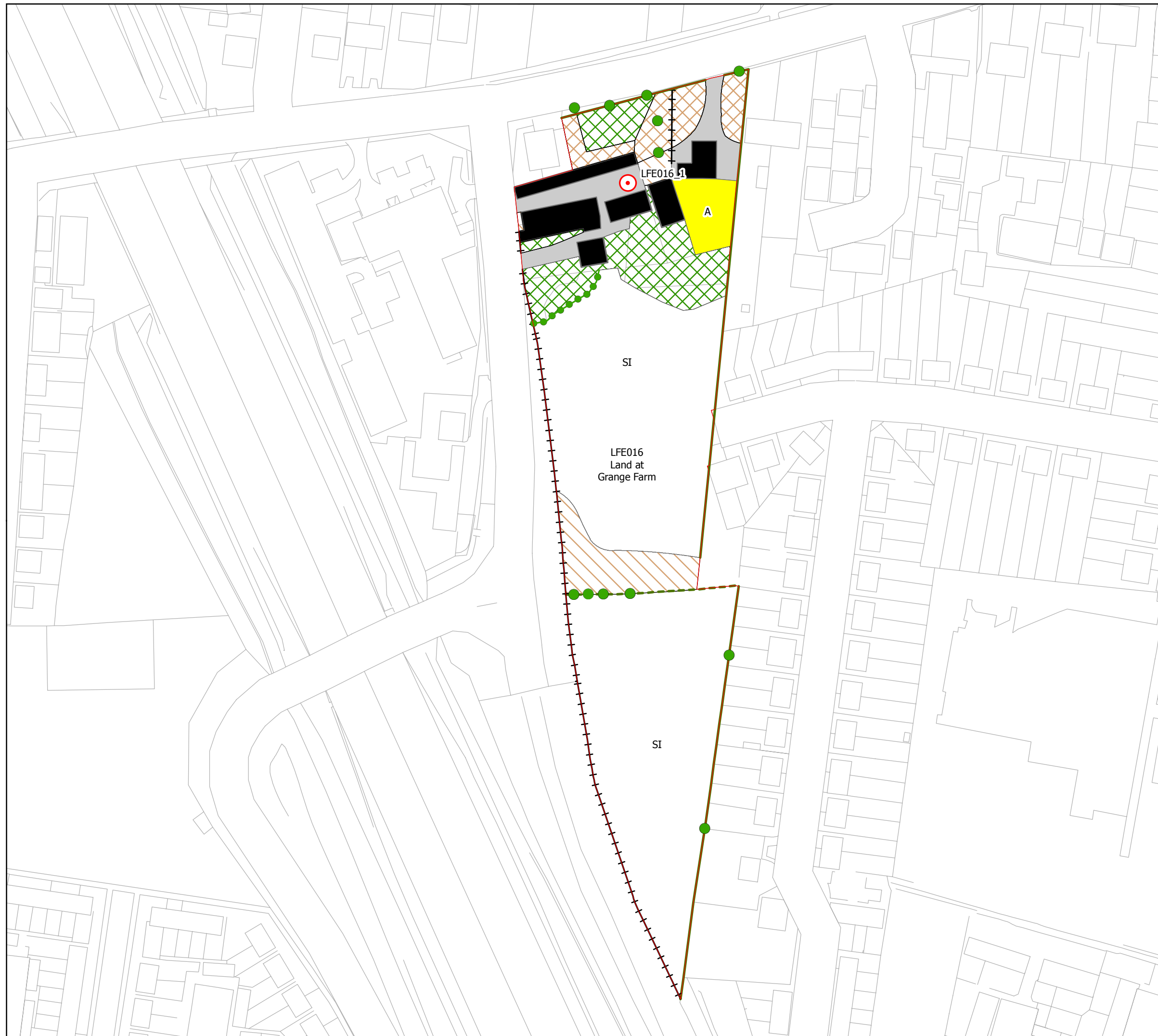


KMU015 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council















Scale at A3: 1:5,000	Project No: A081175-95	Drawing No: Figure B4	Revision: B
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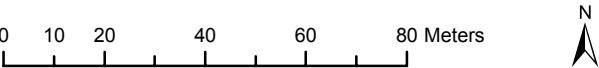


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-
-  Preferred Site Option
 A Amenity grassland
 Building
 Hardstanding
 Introduced shrub
 SI Poor semi-improved grassland
 Scrub
 Tall ruderal
 Species-poor hedge
 Defunct hedge
 Line of trees
 Fence
 Mature tree
 Target note

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LFE016 Map B

Local Plan Preferred Site Options: Biodiversity Study - Blaby District Council






Scale at A3: 1:1,500	Project No: A081175-95	Drawing No: Figure B5	Revision: B
Drawn by: ben.blowers	Drawn date: 04/10/2017	Approved by: vicki.thomas	

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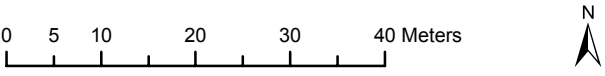


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Option
-  Tall ruderal
-  Species-poor hedge
-  Fence
-  Target note

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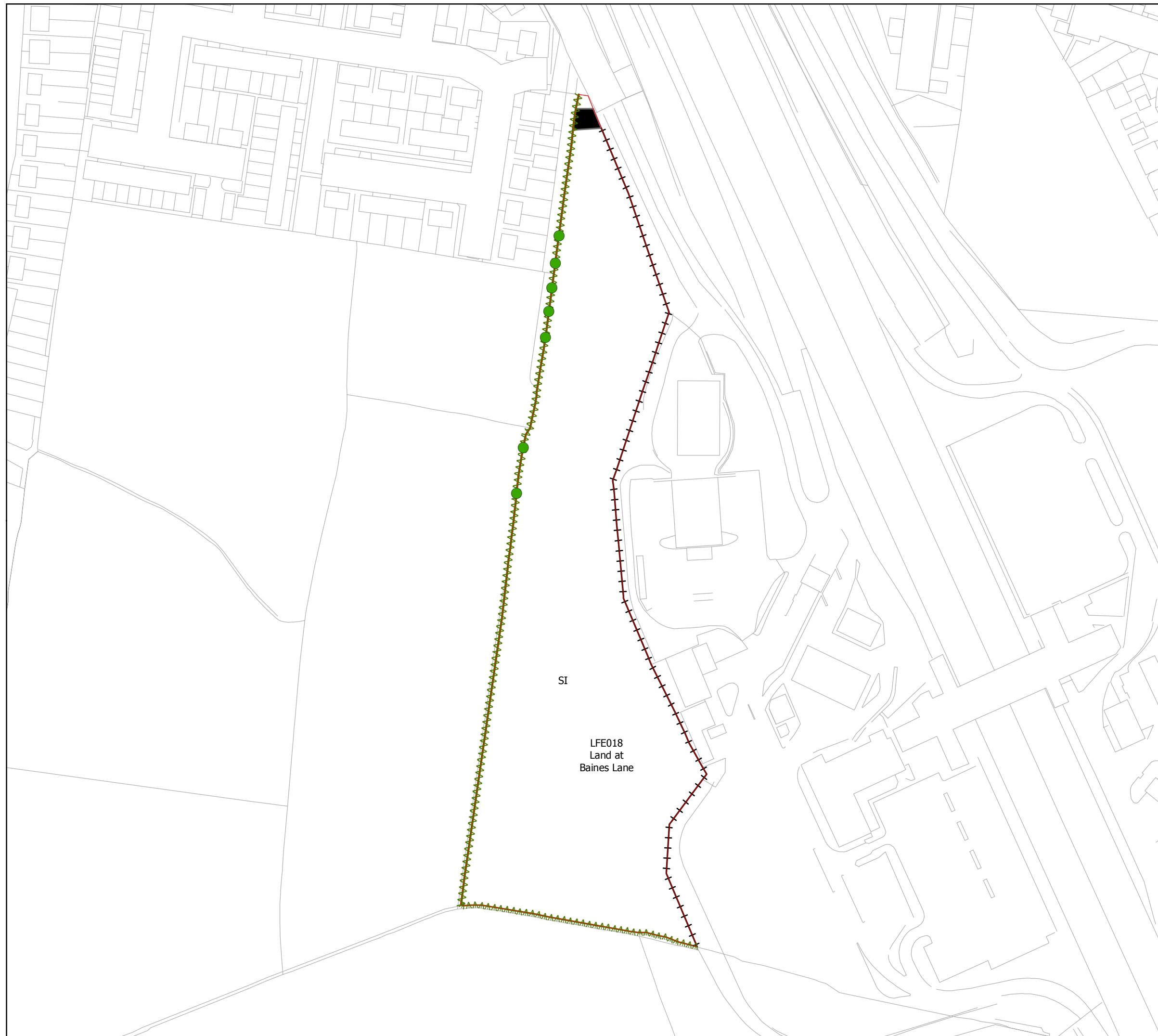


LFE017 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council








Scale at A3: 1:800	Project No: A081175-95	Drawing No: Figure B6	Revision: B
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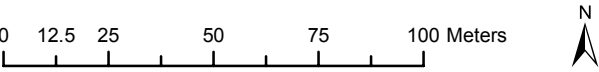
Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

 Preferred Site Option
 Building
 SI Poor semi-improved grassland
 Mature tree
 Species-rich hedge with trees
 Species-rich hedge
 Fence

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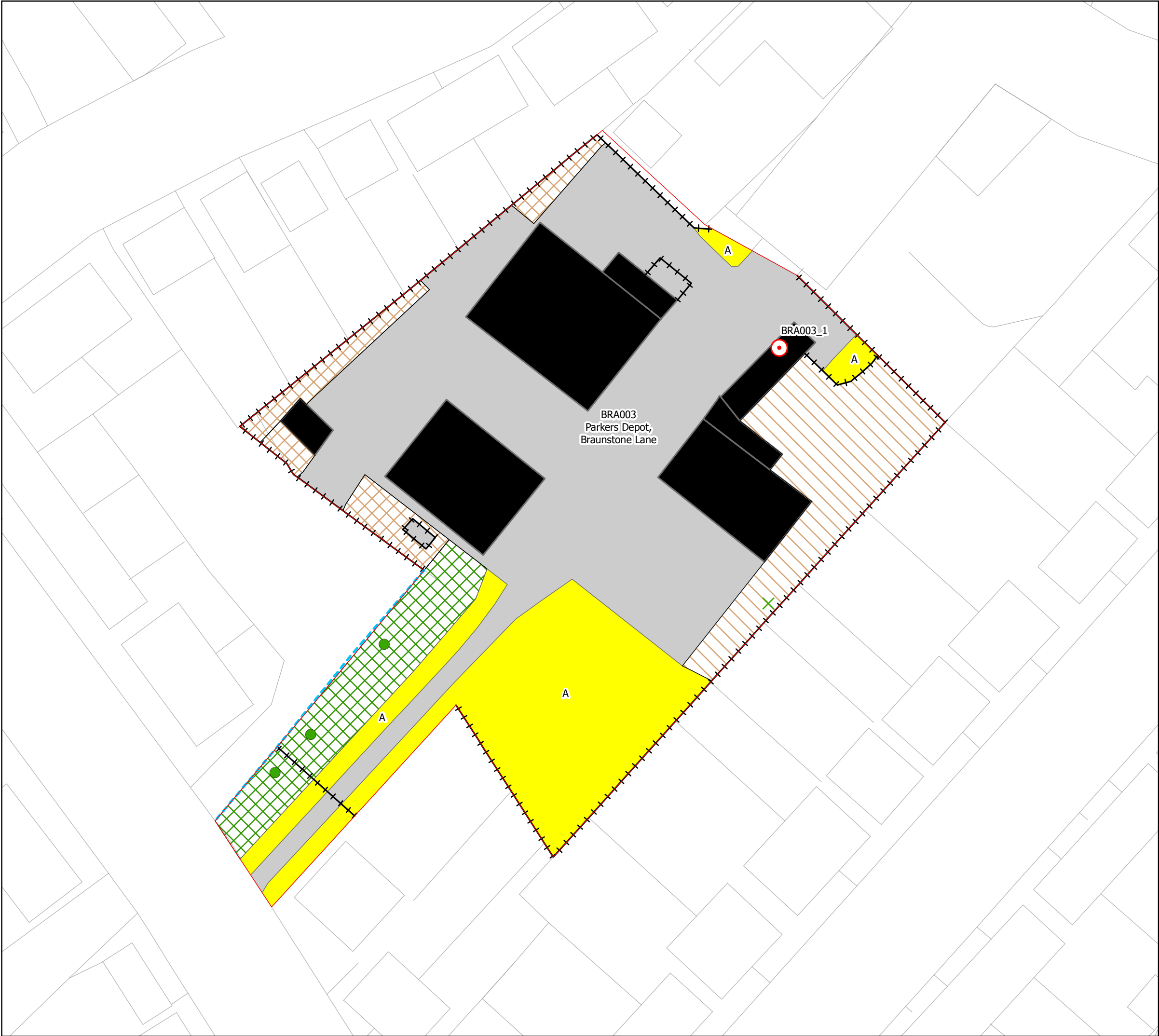


LFE018 Map B

Local Plan Preferred Site Options: Biodiversity Study - Blaby District Council

Scale at A3: 1:1,800	Project No: A081175-95	Drawing No: Figure B7	Revision: B
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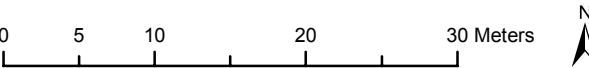


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- Building
- Hardstanding
- Introduced shrub
- Scrub
- Tall ruderal
- Dry ditch
- Fence
- Mature tree
- Scrub
- Target note

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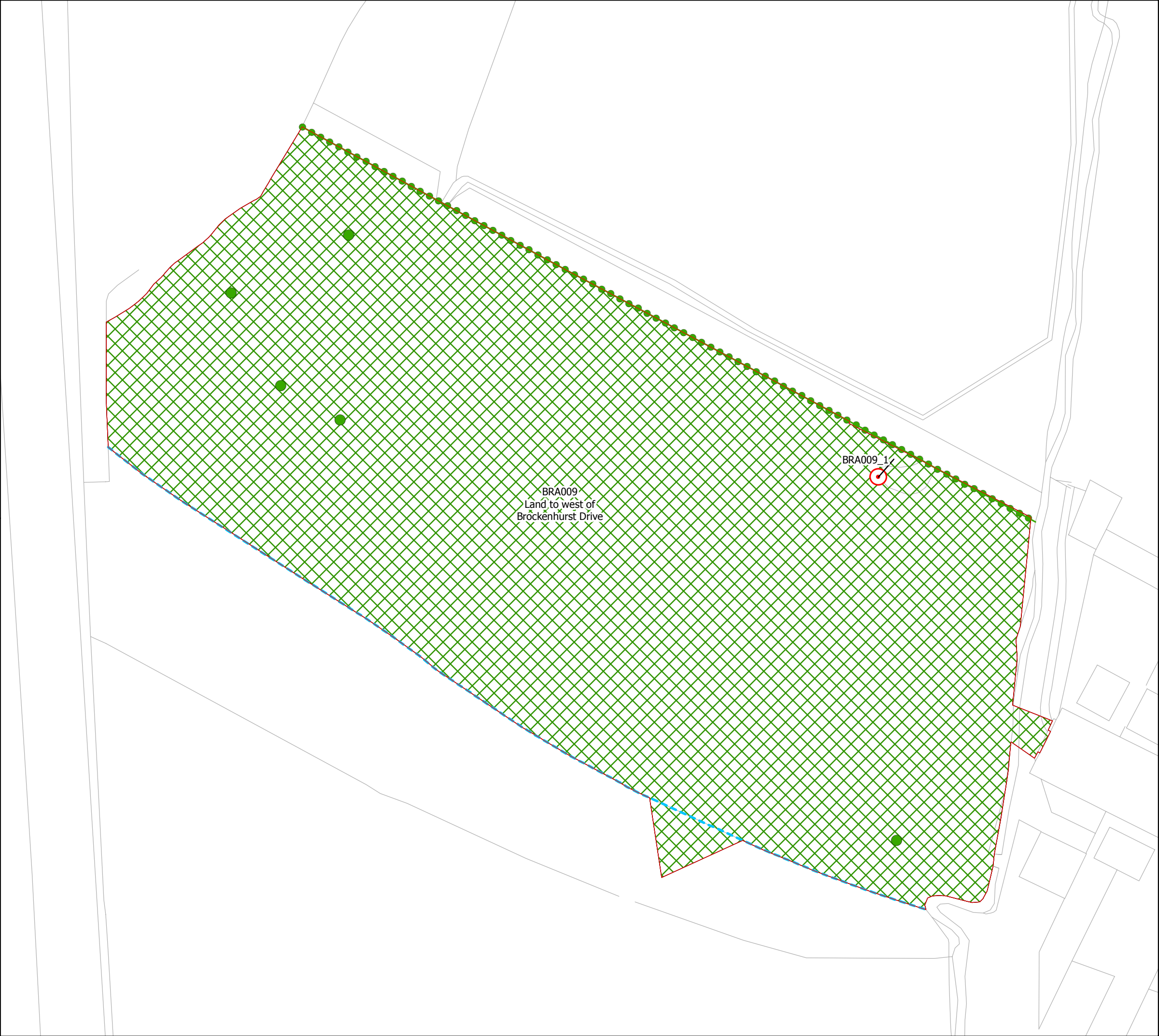
BRA003 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:500	Project No: A081175-95	Drawing No: Figure B8	Revision: B
Drawn by: ben.blowers	Drawn date: 04/10/2017	Approved by: vicki.thomas	







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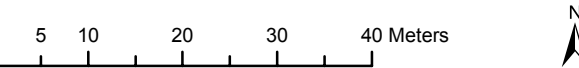


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Option
-  Scrub
-  Line of trees
-  Dry ditch
-  Mature tree
-  Target note

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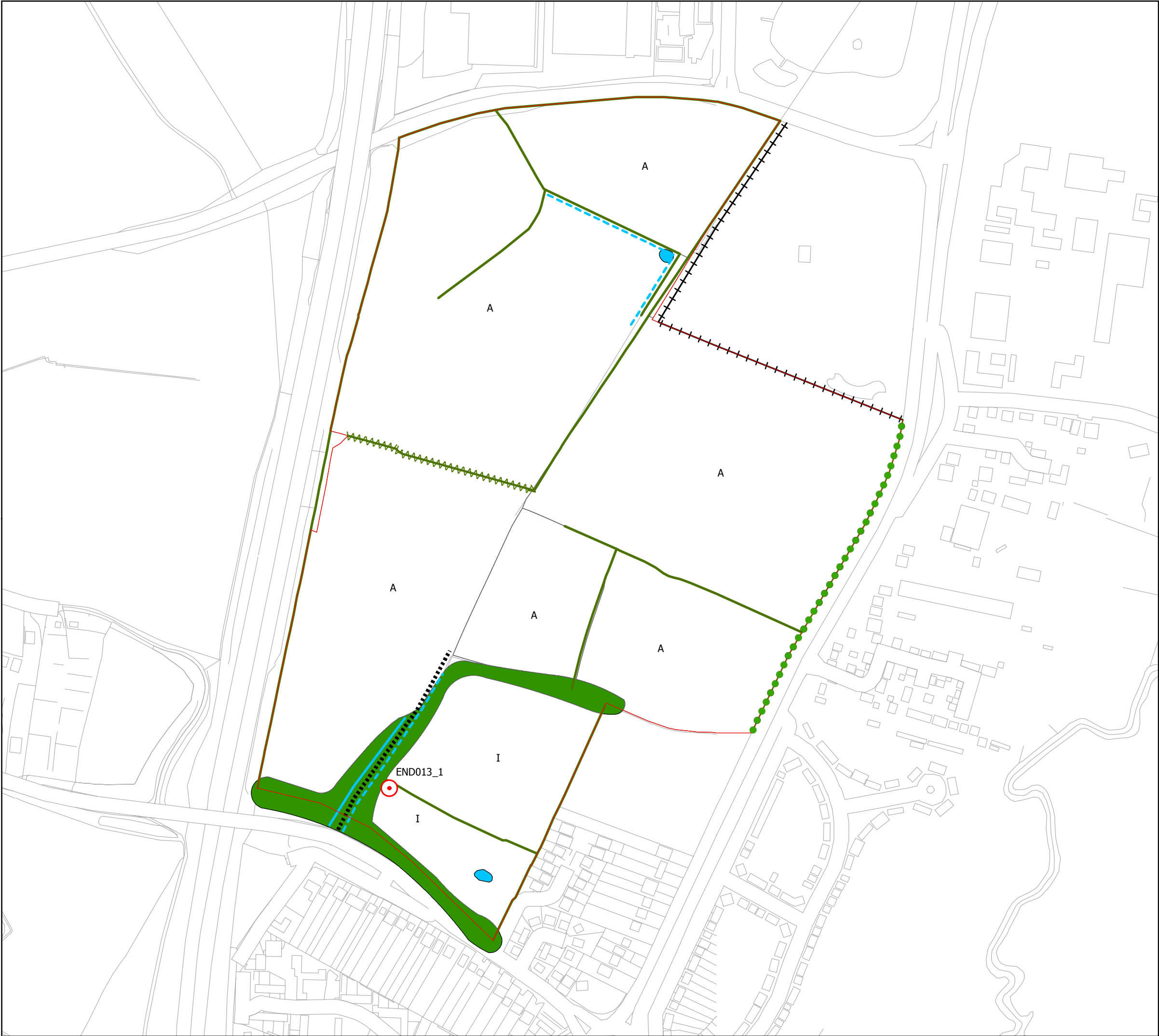


BRA009 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:800	Project No: A081175-95	Drawing No: Figure B9	Revision: B
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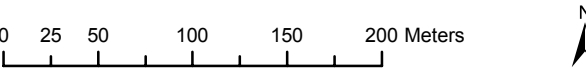


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Arable
- Broad-leaved semi-natural woodland
- SI Improved grassland
- Standing water
- Species-rich hedge
- Species-poor hedge
- Line of trees
- Running water
- Dry ditch
- Path
- Fence
- Target note

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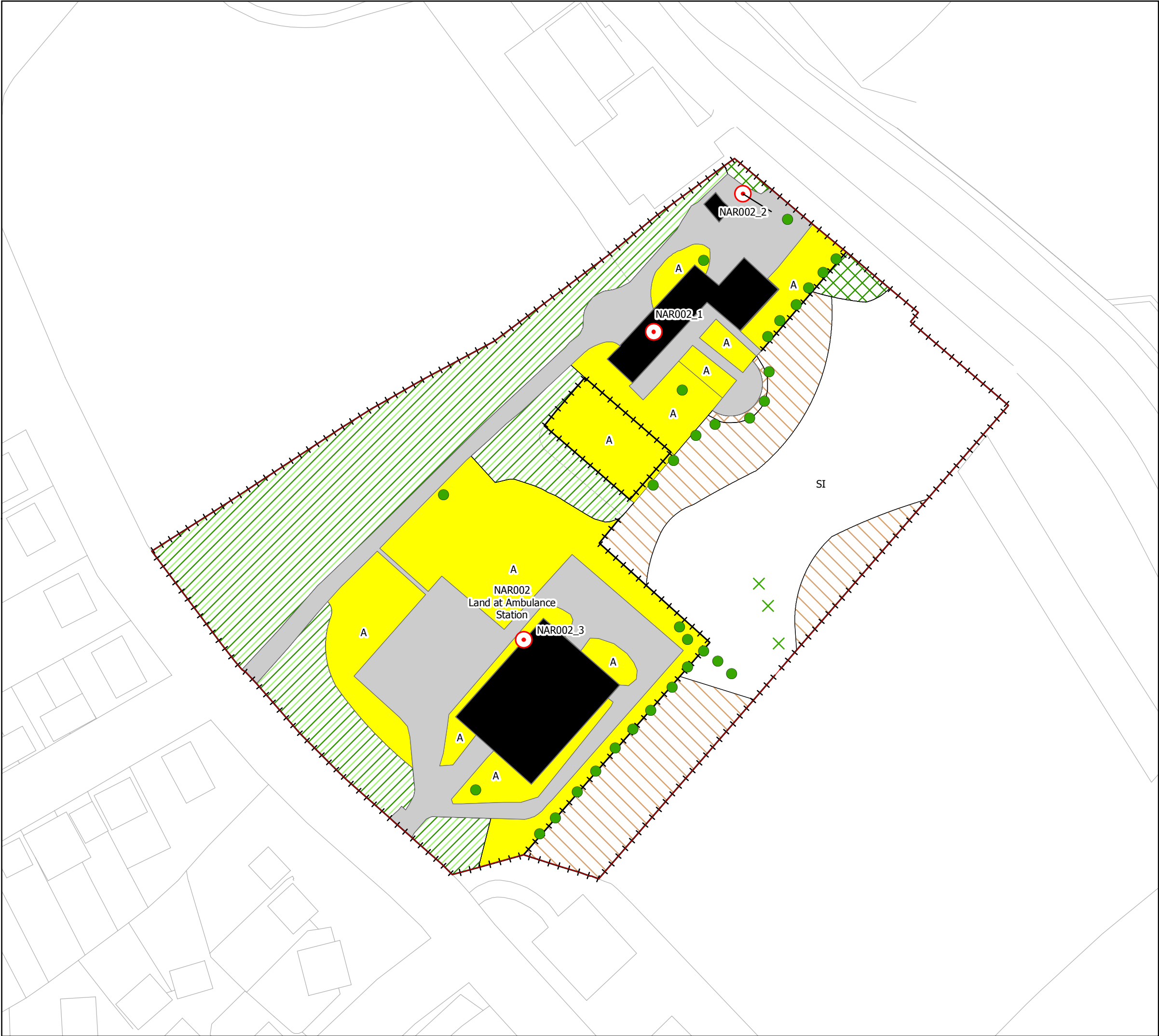


END013 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:4,000	Project No: A081175-95	Drawing No: Figure B10	Revision: B
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Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- Building
- Hardstanding
- Introduced shrub
- Mixed plantation woodland
- SI Poor semi-improved grassland
- Scrub
- Tall ruderal
- Fence
- Mature tree
- X Scrub
- ⊙ Target note

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0 5 10 20 30 40 Meters

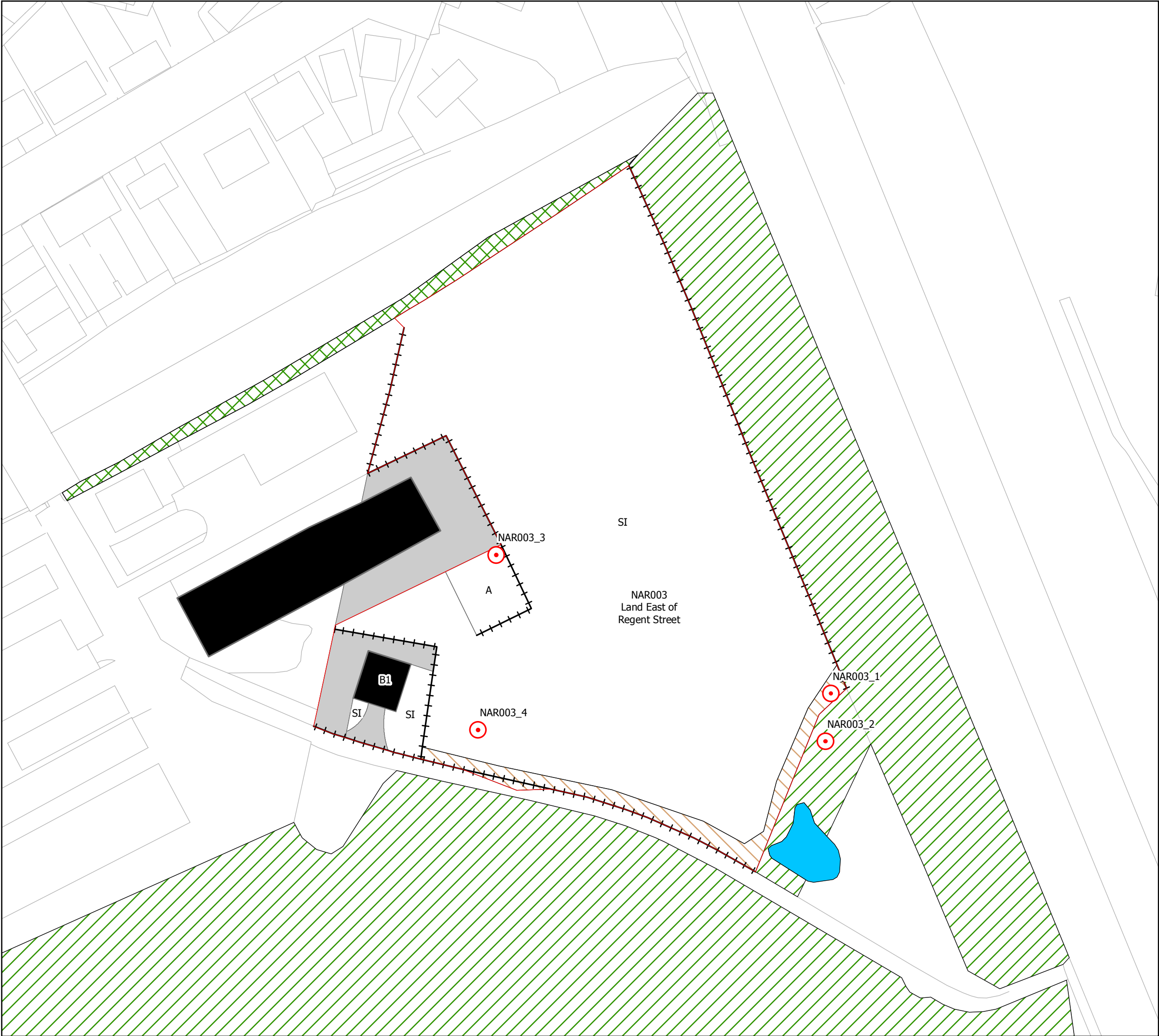


NAR002 Map B

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:1,000	Project No: A081175-95	Drawing No: Figure B11	Revision: B
Drawn by: ben.blowers	Drawn date: 03/11/2017	Approved by: vicki.thomas	

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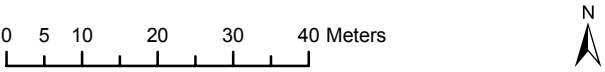


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Arable
- Broad-leaved plantation
- Building
- Hardstanding
- SI Poor semi-improved grassland
- Scrub
- Standing water
- Tall ruderal
- Fence
- Target note

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NAR003 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,000	Project No: A081175-95	Drawing No: Figure B12	Revision: B
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Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Arable
- Scrub
- Tall ruderal
- Species-rich hedge
- Species-poor hedge
- Running water
- Fence
- Target note

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0 5 10 20 30 40 Meters

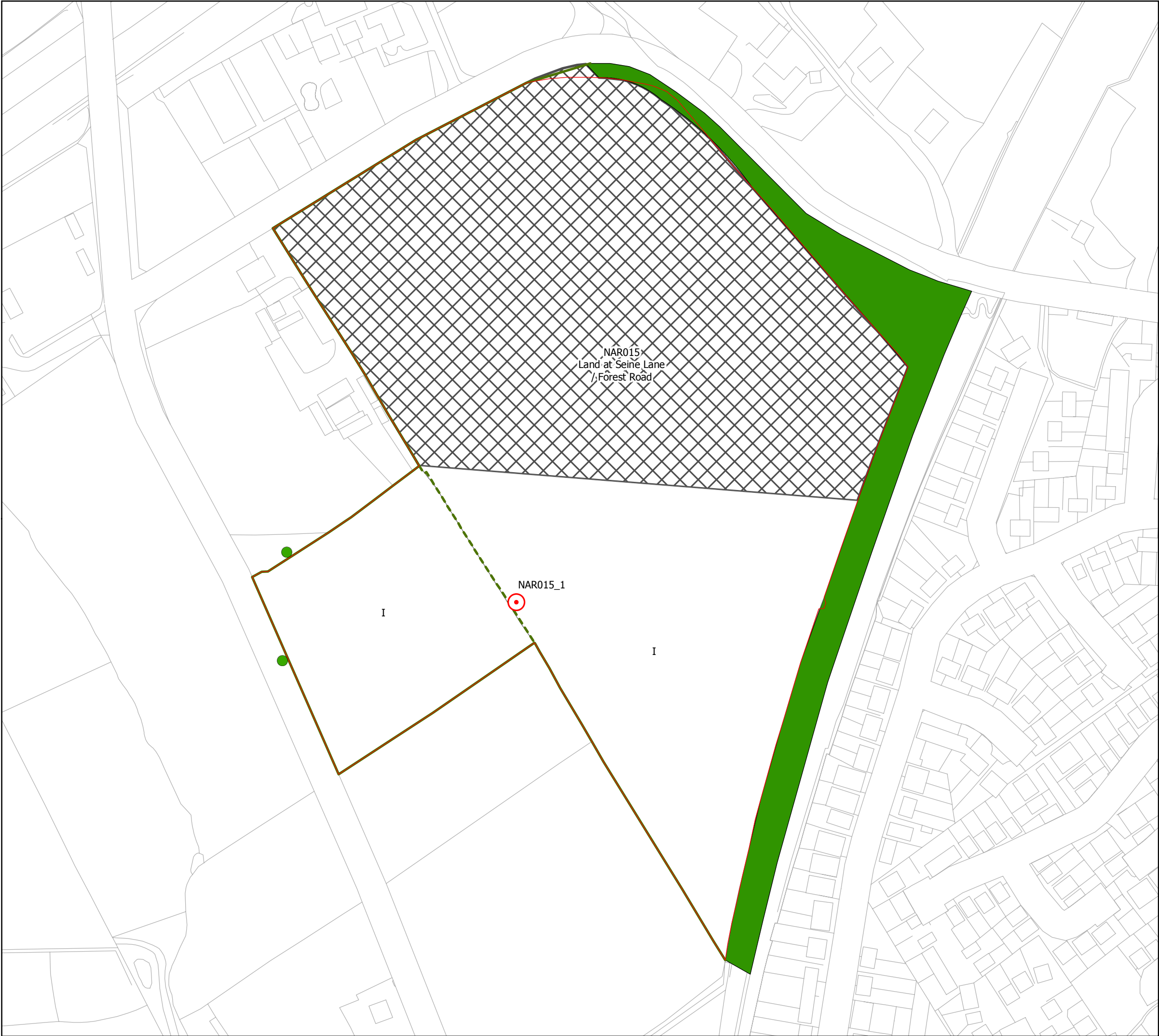


NAR008 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,250	Project No: A081175-95	Drawing No: Figure B13	Revision: B
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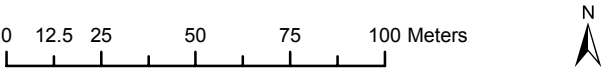


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- Broad-leaved semi-natural woodland
- I Improved grassland
- Not accessed
- Species-poor hedge
- Defunct hedge
- Mature tree
- Target note

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NAR015 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:2,000	Project No: A081175-95	Drawing No: Figure B14	Revision: B
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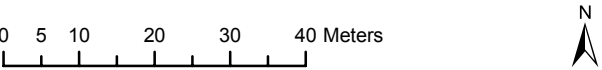


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- Building
- Hardstanding
- SI Poor semi-improved grassland
- Scrub
- Tall ruderal
- Species-rich hedge with trees
- Species-poor hedge
- Species poor hedge with trees
- Defunct hedge
- Line of trees
- Fence
- Mature tree

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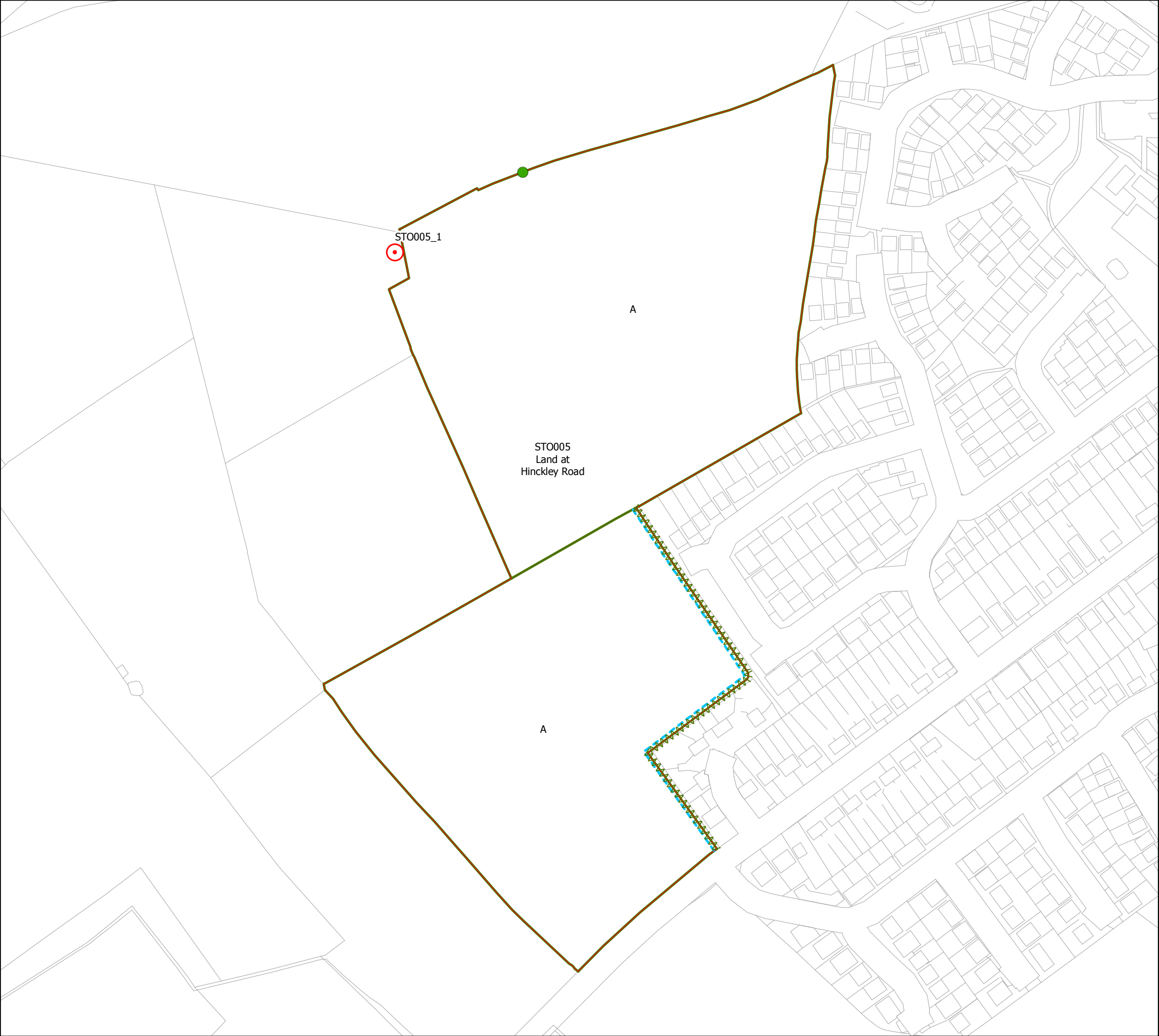


ST0004 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,000	Project No: A081175-95	Drawing No: Figure B15	Revision: B
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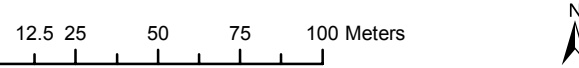


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Arable
- Species-rich hedge
- Species-poor hedge
- Dry ditch
- Mature tree
- Target note

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STO005 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:2,300	Project No: A081175-95	Drawing No: Figure B16	Revision: B
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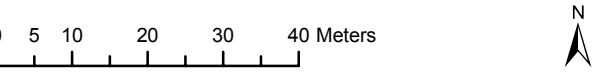


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- A Arable
- Scrub
- Species-rich hedge
- Species-poor hedge
- Dry ditch
- Fence
- Target note

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ST0008 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,000	Project No: A081175-95	Drawing No: Figure B17	Revision: B
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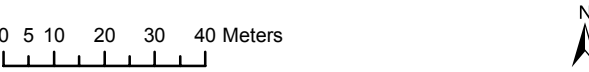


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- Arable
- Tall ruderal
- Species-rich hedge
- Species-poor hedge
- Line of trees
- Dry ditch
- Fence

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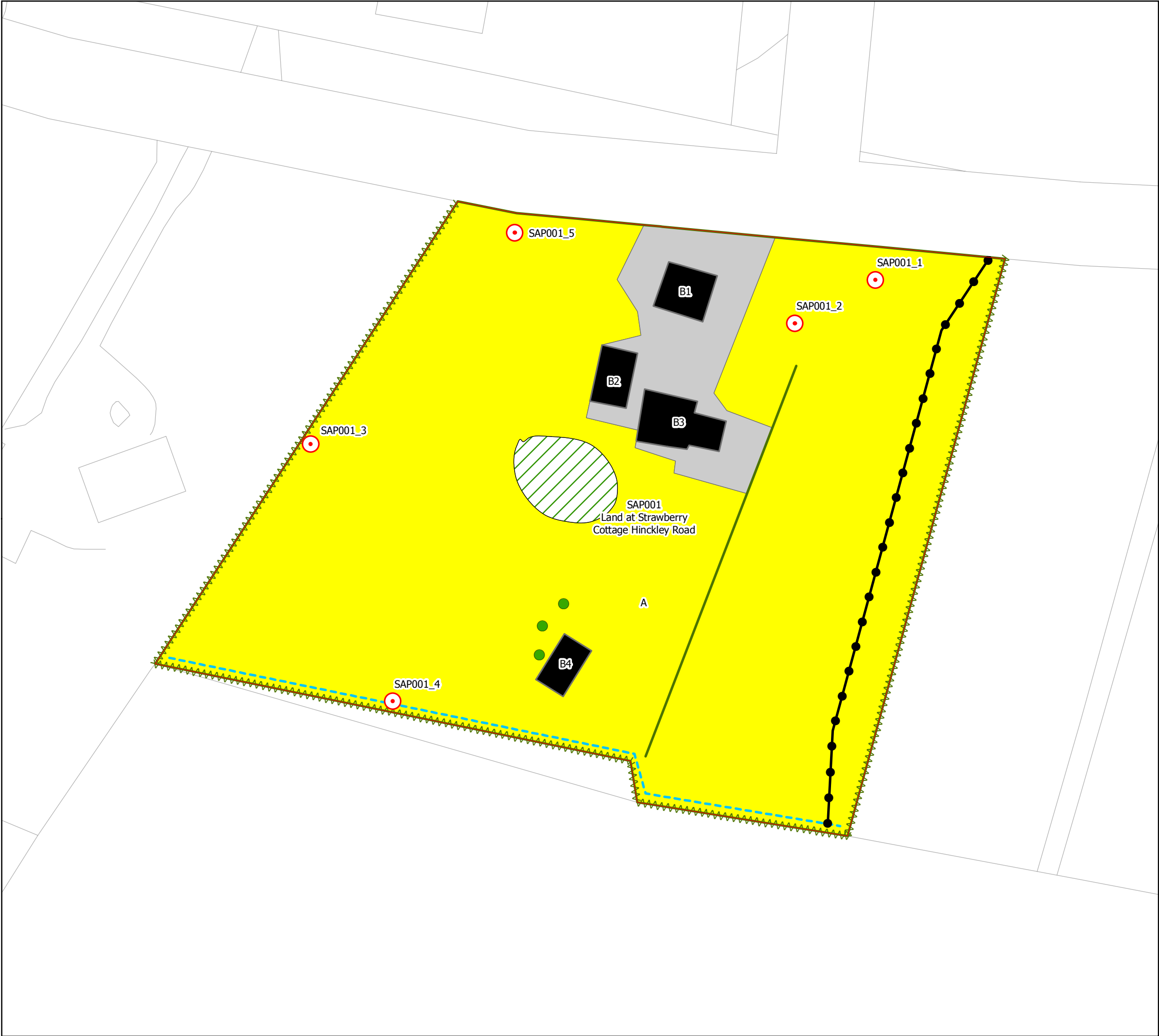


ST0019 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:1,500	Project No: A081175-95	Drawing No: Figure B18	Revision: B
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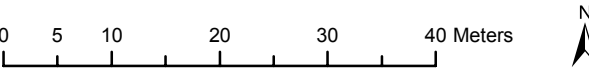


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Option
- A Amenity grassland
- Broad-leaved plantation
- Building
- Hardstanding
- Species-rich hedge
- Species-poor hedge
- Earth bank
- Dry ditch
- Mature tree
- Target note

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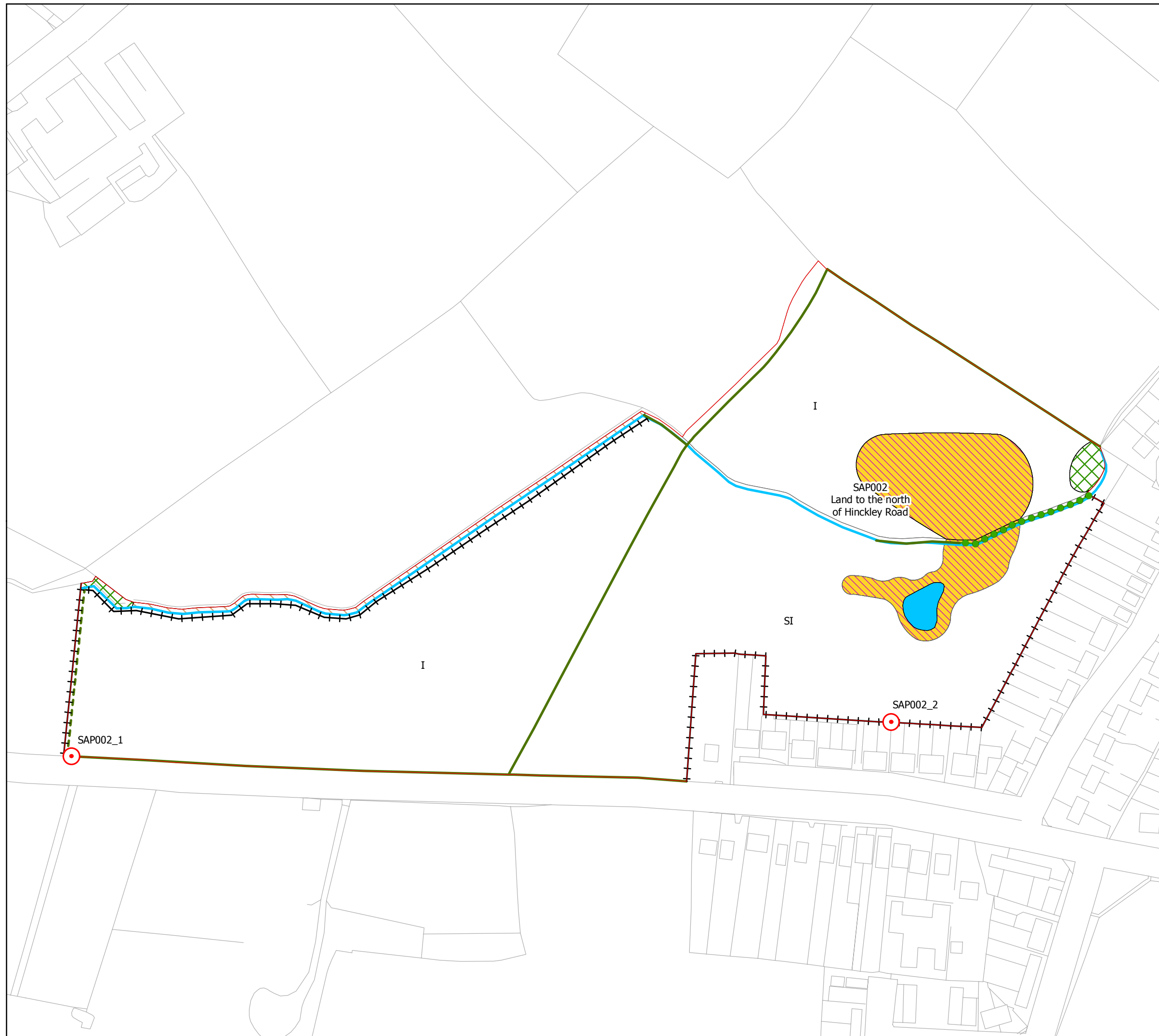
SAP001 Map B

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:700	Project No: A081175-95	Drawing No: Figure B19	Revision: B
Drawn by: ben.blowers	Drawn date: 04/10/2017	Approved by: vicki.thomas	














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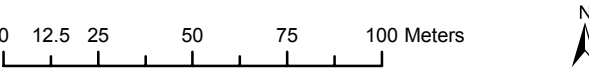
Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- | | |
|---|------------------------------|
|  | Preferred Site Option |
|  | Improved grassland |
|  | Marshy grassland |
|  | Poor semi-improved grassland |
|  | Scrub |
|  | Standing water |
|  | Tall ruderal |
|  | Species-poor hedge |
|  | Defunct hedge |
|  | Line of trees |
|  | Running water |
|  | Fence |
|  | Target note |

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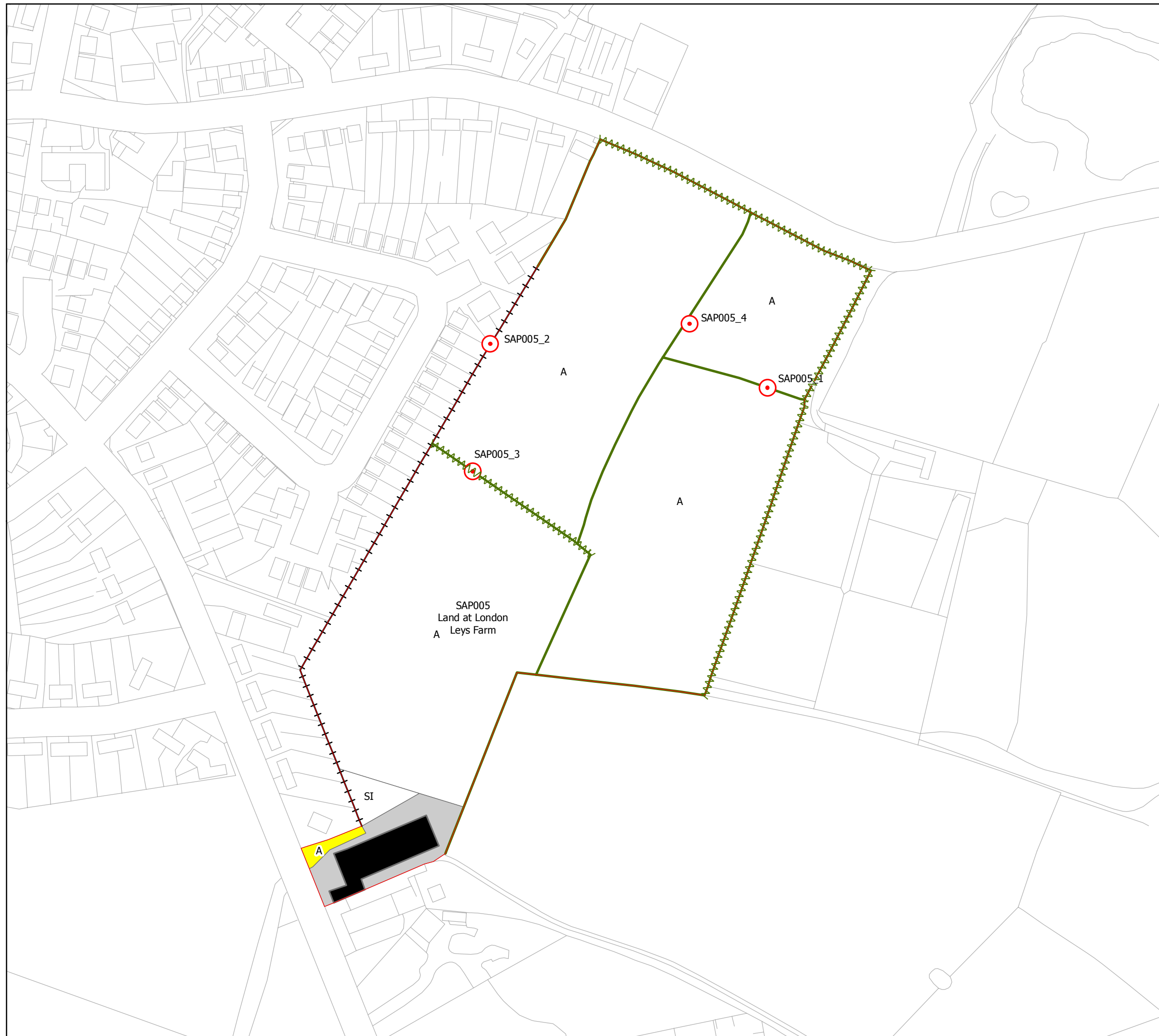


SAP002 Map B

Local Plan Preferred Site Options: Biodiversity Study - Blaby District Council











Scale at A3: 1:2,000	Project No: A081175-95	Drawing No: Figure B20	Revision: B
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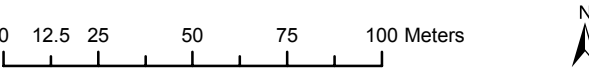
Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Option
 A Amenity grassland
 A Arable
 Building
 Hardstanding
 SI Poor semi-improved grassland
 Species-rich hedge
 Species-poor hedge
 Fence
 Target note

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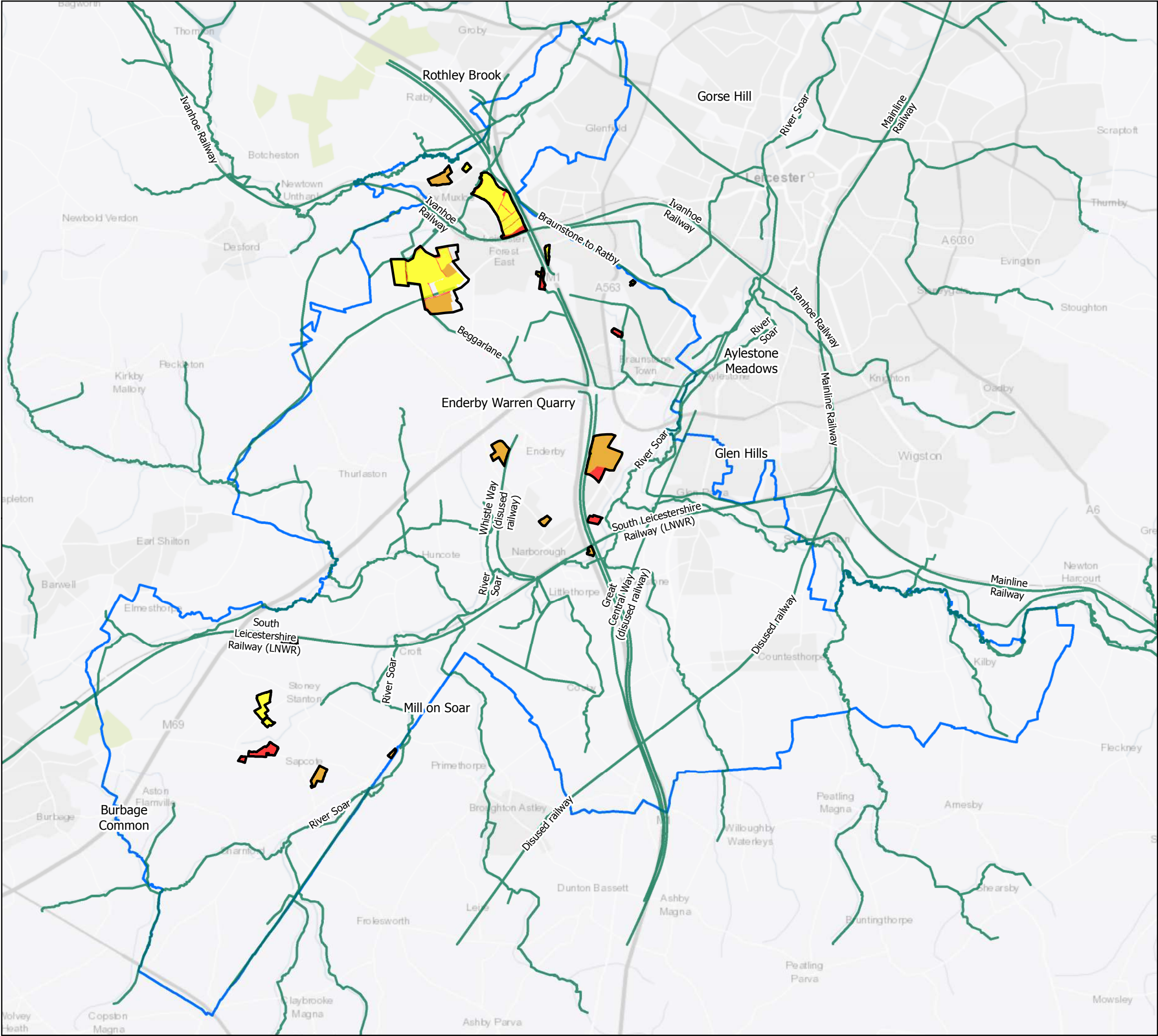
SAP005 Map B

Local Plan Preferred Site Options: Biodiversity Study - Blaby District Council

Scale at A3: 1:2,000	Project No: A081175-95	Drawing No: Figure B21	Revision: B
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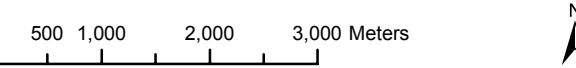


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review
C	26/10/17	Label amendment

Legend

- Blaby District boundary
- Preferred Site Options
- High Site Assessment value
- Moderate Site Assessment value
- Low Site Assessment value
- Wildlife Corridors

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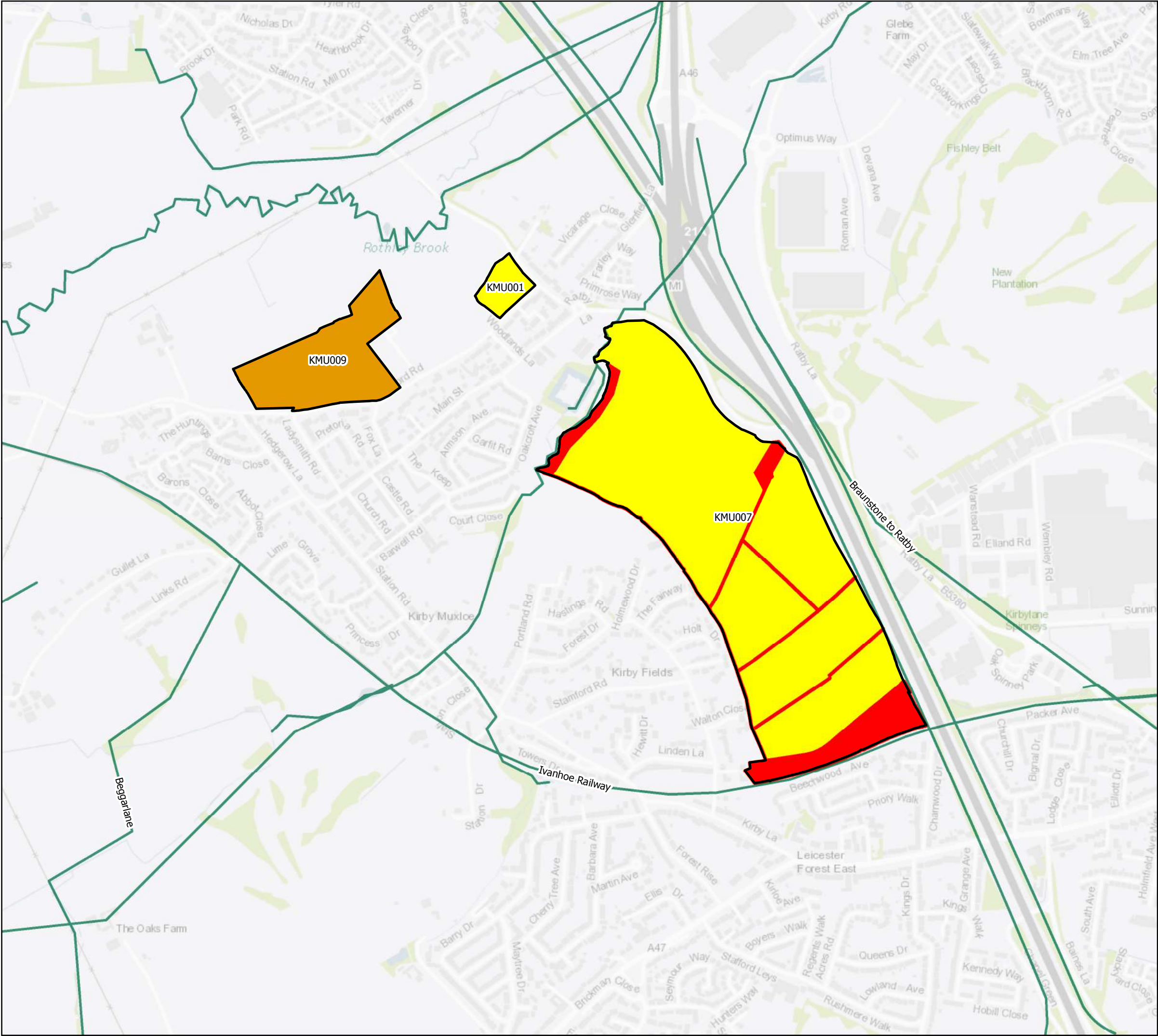
District Map C

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:70,000	Project No: A081175-95	Drawing No: Figure C0	Revision: C
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Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- High Site Assessment value
- Moderate Site Assessment value
- Low Site Assessment value
- Wildlife Corridors

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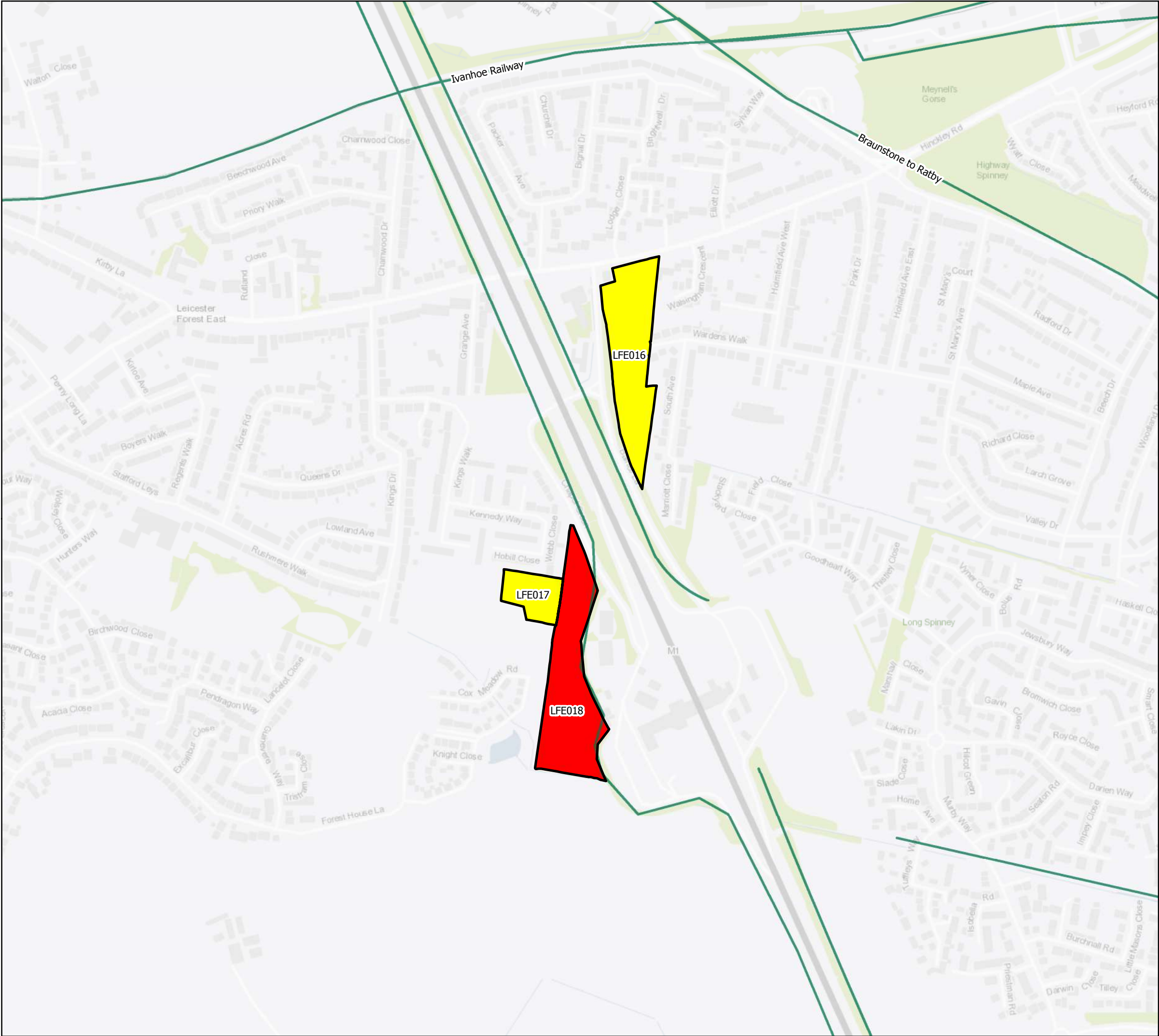


Kirby Muxloe North Map C

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:10,000	Project No: A081175-95	Drawing No: Figure C1	Revision: B
Drawn by: ben.blowers	Drawn date: 13/10/2017	Approved by: vicki.thomas	

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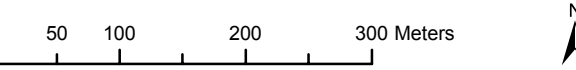


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- High Site Assessment value
- Low Site Assessment value
- Wildlife Corridors

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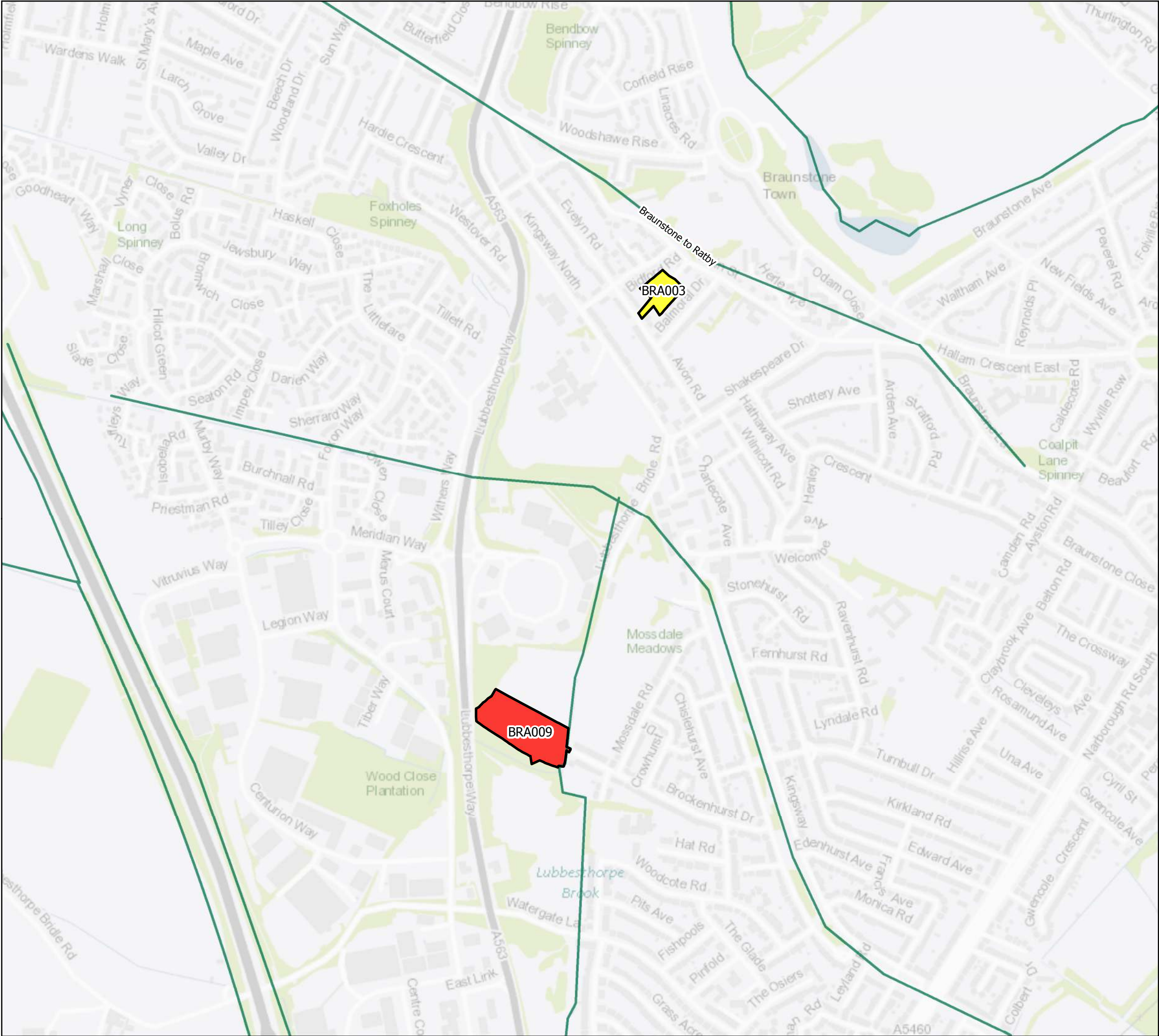


LFE (South) Map C

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:6,000	Project No: A081175-95	Drawing No: Figure C3	Revision: B
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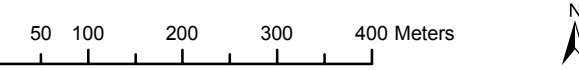


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- High Site Assessment value
- Low Site Assessment value
- Wildlife Corridors

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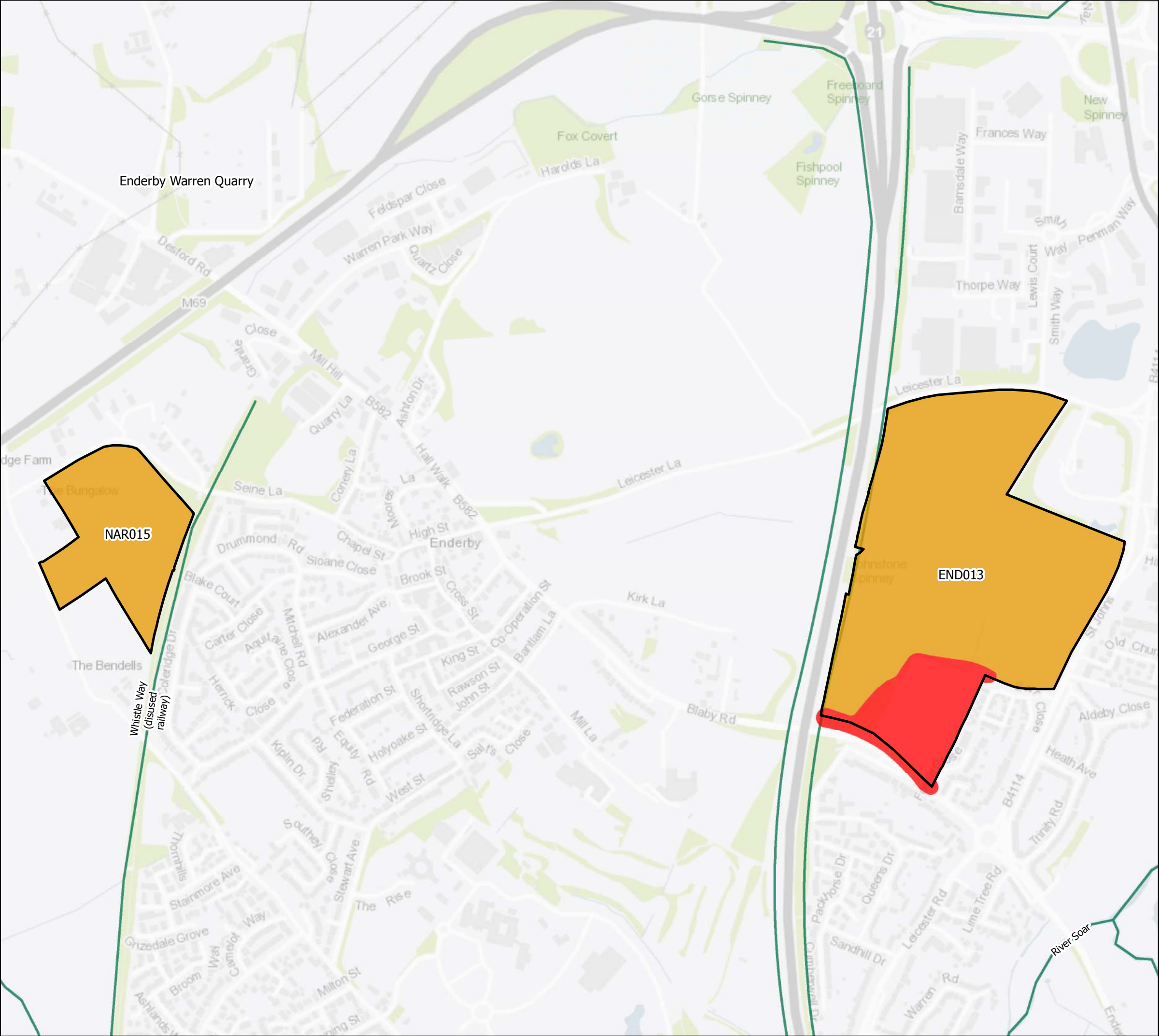


BRA Map C

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:8,000	Project No: A081175-95	Drawing No: Figure C4	Revision: B
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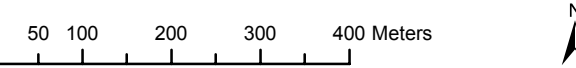


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- High Site Assessment value
- Moderate Site Assessment value
- Wildlife Corridors

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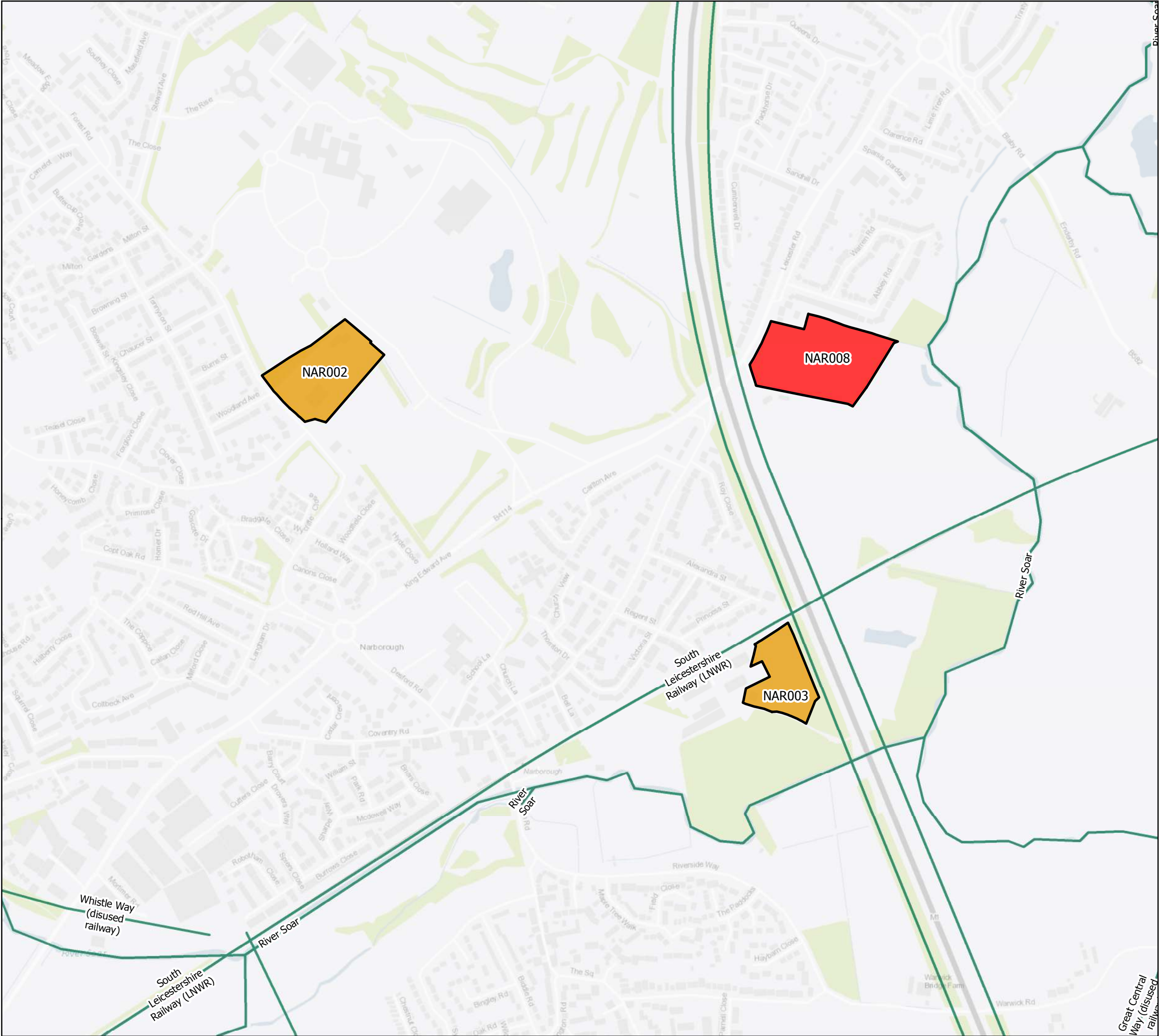


END Map C

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**

Scale at A3: 1:8,500	Project No: A081175-95	Drawing No: Figure C5	Revision: B
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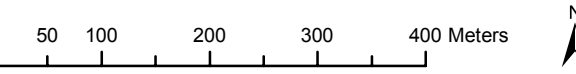


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

- Preferred Site Options
- High Site Assessment value
- Moderate Site Assessment value
- Wildlife Corridors

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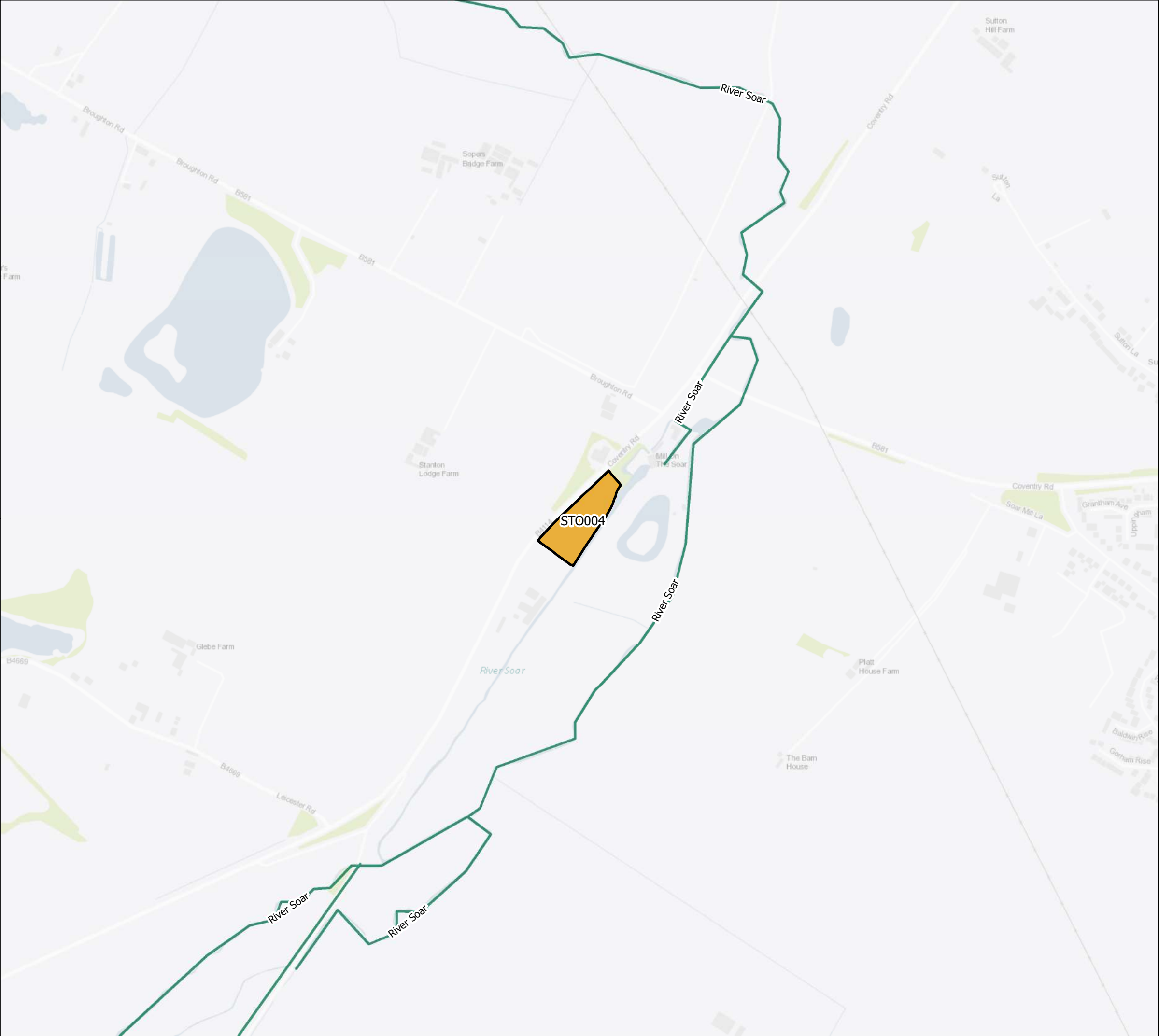


NAR Map C

**Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council**




Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure C6	Revision: B
Drawn by: ben.blowers		Drawn date: 13/10/2017	Approved by: vicki.thomas

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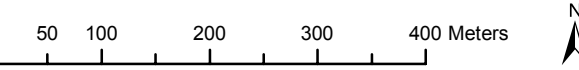


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Options
-  Moderate Site Assessment value
-  Wildlife Corridors

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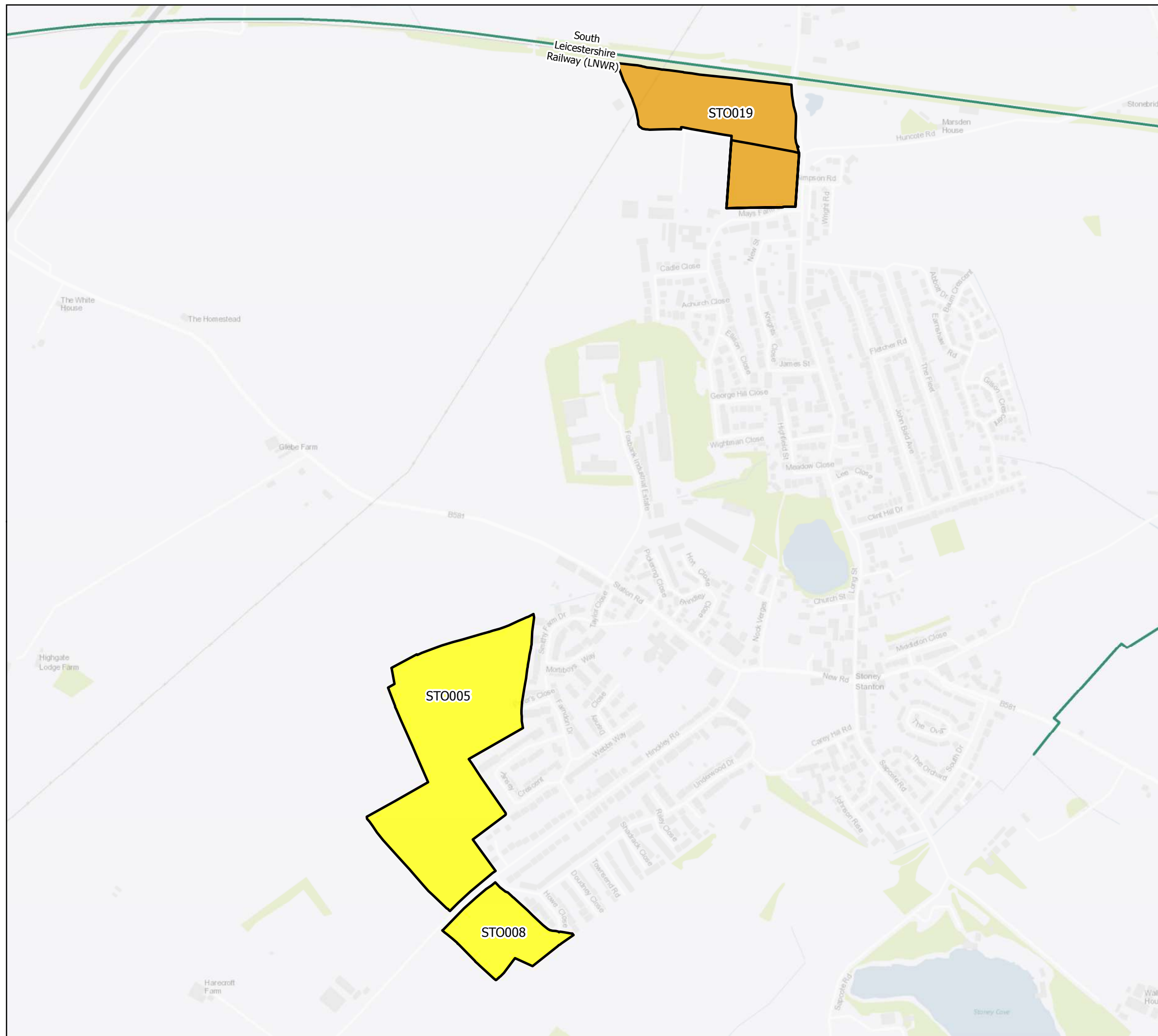


STO (East) Map C

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council





Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure C7	Revision: B
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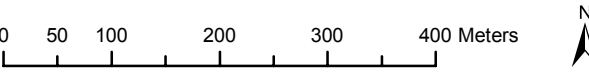


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Options
 Moderate Site Assessment value
 Low Site Assessment value
 Wildlife Corridors

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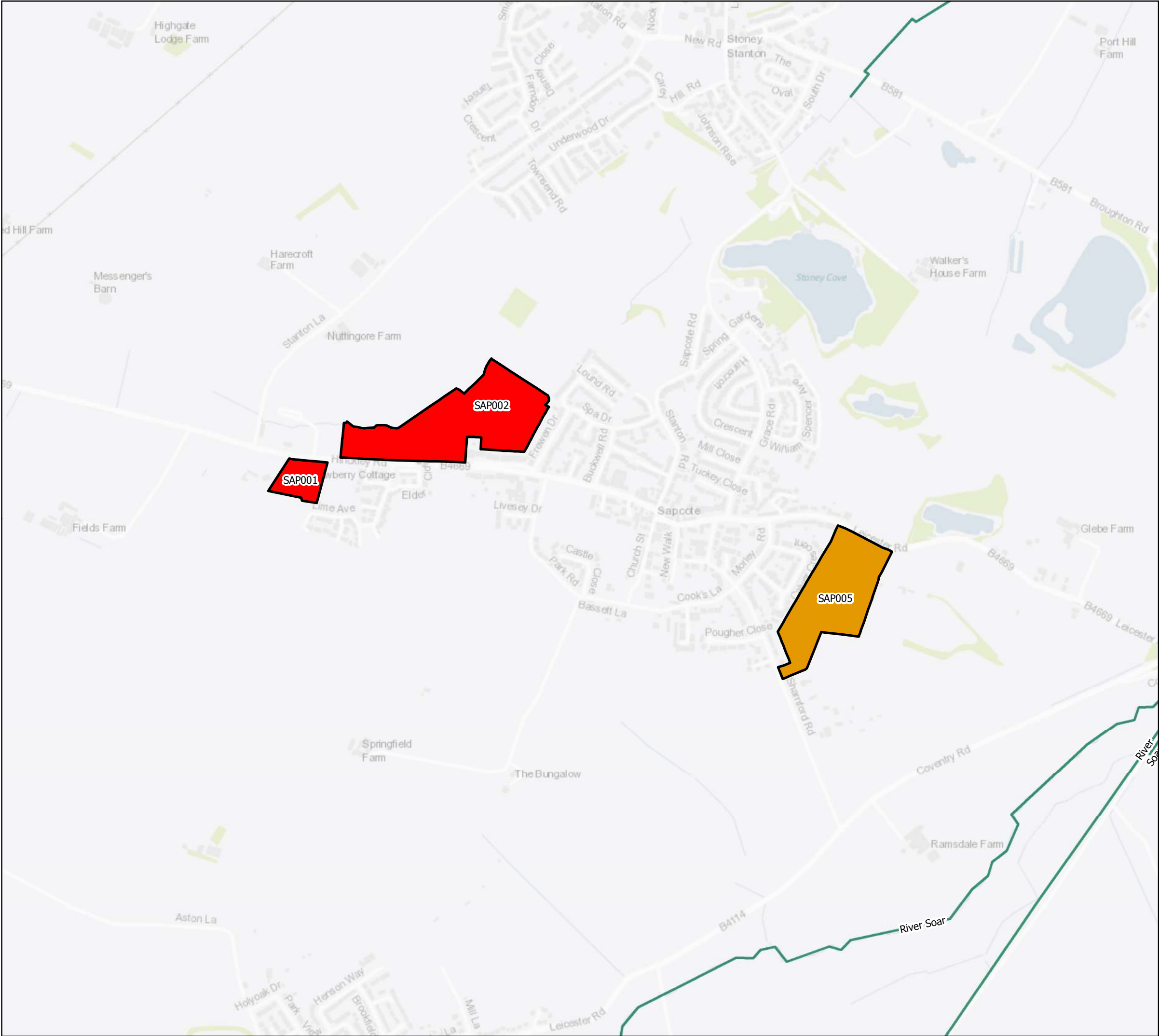


STO (South) Map C

Local Plan Preferred Site Options: Biodiversity Study - Blaby District Council





Scale at A3: 1:7,000	Project No: A081175-95	Drawing No: Figure C8	Revision: B
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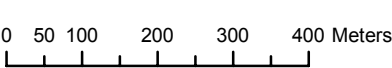


Rev	Date	Notes
A	29/08/17	Initial map production
B	04/10/17	Amended plans following review

Legend

-  Preferred Site Options selection
-  High Site Assessment value
-  Moderate Site Assessment value
-  Wildlife Corridors

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SAP Map C

Local Plan Preferred Site Options:
Biodiversity Study - Blaby District Council

Scale at A3: 1:10,000	Project No: A081175-95	Drawing No: Figure C9	Revision: B
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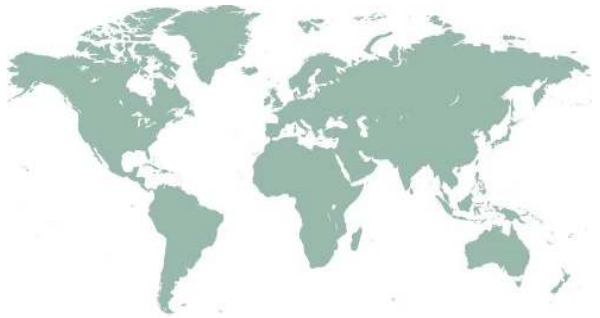


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