

**Hinckley & Bosworth Borough
Council**

**Hinckley & Bosworth
Borough Phase 1
Habitat Study of Proposed
Allocation Sites**

Final report
Prepared by LUC
May 2020

Hinckley & Bosworth Borough Council

Hinckley & Bosworth Borough Phase 1 Habitat Study of Proposed Allocation Sites

Project Number
10695.001

Version	Status	Prepared	Checked	Approved	Date
1.	Draft	Sofie Swindlehurst	David Green	David Green	22.01.2019
2.	Final	Sofie Swindlehurst	David Green	David Green	07.04.2020
3.	Final – Issue 02	Sofie Swindlehurst	David Green	David Green	22.05.2020

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Chapter 1

Executive Summary

1.1 The Hinckley & Bosworth Local Plan sets the spatial development strategy, policies and guidance for land-use planning, which legislation stipulates should be reviewed at least every five years from adoption. The Council aim to publish a Draft Plan in 2021, with publication of the new Local Plan in 2022, covering the period to 2036. LUC was appointed by Hinckley & Bosworth Borough Council to complete an Extended Phase 1 habitat survey and Biodiversity Study of sites selected from those submitted to the Council through the 'call for sites' process, to inform the identification of preferred sites which will then be published in 2021. In doing so it informs emerging planning policy in the protection of biodiversity and delivery of tangible net gain. A total of 72 sites were identified by the Council for assessment, drawn from the Strategic Housing and Economic Land Availability Assessment (SHELAA).

1.2 This Assessment is centred on the 'mitigation hierarchy', which puts emphasis on sustainable design (including site selection) to set the foundation for viable, healthy ecosystems whilst delivering future communities within the Borough. It is recognised that any site which ultimately comes forward for development will be subject to a detailed ecological appraisal and robust mitigation package. Any future assessment will also need to accommodate biodiversity net gain (enhancement) in line with evolving legislation and policy¹.

1.3 An initial desk-based review of existing baseline data was completed and the information relevant to each site compiled in a bespoke proforma. This was used to inform the field survey; based on the extended Phase 1 Habitat survey method with additional consideration of key sensitivities and opportunities in relation to potential residential development. Within the composite dataset for each site, 'Key Sensitivities' describe the ecological features which would form the focus for avoidance and mitigation which may be required to enable development to proceed in accordance with planning policy and nature conservation legislation. 'Opportunities' outline options for habitat retention and enhancement, based on the key sensitivities identified and local character context. 'Opportunities for Connectivity' were specifically considered, to inform future planning for landscape-scale conservation strategies and policy-making.

1.4 Relevant legislation and planning policy are identified in Section 4, along with a summary of relevant biodiversity and green infrastructure studies. The ecology of the borough is described in terms of the hierarchy of designated sites, notable and priority habitats and national habitat networks which together underpin the strategic opportunities identified. Each of these aspects is considered in relation to the assessment sites.

1.5 The detailed desk study and survey data for each assessment site is provided in Appendix 3 to this report. The overarching findings and implications of development are described for the sites as three cohorts – urban and peri-urban, rural settlements and urban settlements.

1.6 Recommendations for strategic biodiversity enhancement provided in Section 5, are described for the designated site network, the notable and priority habitat network and in terms of delivering a cohesive and resilient ecological resource. Particular emphasis is given to the appropriate scale and extent of development to avoid potential impact or cumulative impact on the SSSI network. Opportunities for borough-wide ecology highlight the value of the network of non-statutory designated sites and of notable and priority habitats in underpinning the viability of higher level designations, in supporting the wider ecological resource, and in serving the future recreational need of the growing community.

¹ Principally the revised NPPF 2012, Draft Environment (Principles & Governance) Bill 2019 and 25 Year Environment Plan 2018, each of which is described in Section 4.

Chapter 2

Introduction

2.1 LUC was appointed by Hinckley & Bosworth Borough Council to complete an Extended Phase 1 habitat survey and Biodiversity Study of sites selected by the Council, to inform the preparation of the Local Plan to be adopted in 2022 (Plan period to 2036). Biodiversity is one of several disciplines informing the identification of preferred sites which will then be published in a Draft Plan in 2021.

2.2 The Hinckley & Bosworth Local Plan will set the spatial development strategy, policies and guidance for land-use planning to 2036. Government legislation stipulates that a Local Plan should be reviewed at least every five years from adoption. Local Plan review commenced with an Issues & Options Consultation in January 2018 and subsequent Directions for Growth Consultation in January 2019. The Council aim to publish a Draft Plan in 2021, with publication of the new Local Plan in 2022, covering the period to 2036.

2.3 The Council requested the Study to review the evidence base that informs preparation of the Plan by assessing the existing biodiversity value and identifying opportunities for mitigation in order to evaluate the potential of each site to accommodate development. Understanding the extent and condition of biodiversity on the selected sites *“is essential if action for biodiversity is to be planned effectively and for progress on sustainable development to be monitored”* (Council ITQ, January 2019).

2.4 A total of 70 sites were identified by the Council for assessment, drawn from the Strategic Housing and Economic Land Availability Assessment (SHELAA). Figure 1 illustrates the distribution of assessment sites.

2.5 Data provided by the Council, the local records centres, and that which was collated from publically available sources, was collated and an initial review of information relevant to each assessment site completed using GIS. An assessment proforma for each site, bespoke to the project, was populated with the initial review information. Field survey data based on the extended Phase 1 Habitat survey method was recorded in the same proforma, along with additional consideration of key sensitivities and opportunities in relation to potential residential development. Within the composite dataset for each site, ‘Key Sensitivities’ describe the ecological features which would form the focus for avoidance and mitigation which may be required to enable development to proceed in accordance with planning policy and nature conservation legislation. ‘Opportunities’ outline options for habitat retention and enhancement, based on the key sensitivities identified and local character context. ‘Opportunities for Connectivity’ were specifically considered, to inform future planning for landscape-scale conservation strategies and policy-making.

2.6 It is recognised that any site which ultimately comes forward for development will be subject to a detailed ecological appraisal, supported by all appropriate surveys of flora and fauna, assessment of potential impacts and robust mitigation package. Any future assessment will also need to accommodate biodiversity net gain (enhancement) in line with the NPPF and Draft Environment Bill 2018 (last updated 2019).

2.7 This Assessment is centred on the ‘mitigation hierarchy’, which requires that potential adverse impacts on biodiversity are avoided at source or, where this is not possible, mitigated or, as a final resort, compensated (off-set). The mitigation hierarchy puts emphasis on sustainable design (including site selection) to set the foundation for viable, healthy ecosystems whilst delivering future communities within the Borough.

Aims & Objectives

2.8 The primary purpose of the Study is to assess the suitability of sites to accommodate development within the Borough through the Plan period to 2036. In doing so it will inform emerging planning policy in the protection of biodiversity and delivery of tangible net gain.

2.9 The objectives of the study are to:

- Determine the ecological value of each site, identifying features of ecological importance and features sensitive to potential impacts associated with residential development.
- Assess the suitability of sites suitable for development, taking into account locally appropriate mitigation measures.
- Provide a strategic overview of locally appropriate restoration and enhancement measures (net gain) that serve a cohesive connectivity of resilient greenspaces across the borough in which biodiversity can thrive.

Chapter 3

Methods

Inception

3.1 The scope, aims, access arrangements and sources of data for the project were agreed at the inception meeting held with the Council. The method set out below was necessarily 'high level' given that the study is to inform the evolving Plan, rather than assess a design proposal for any specific site. It is recognised that each site ultimately taken forward for development would undergo full survey and ecological assessment to reflect any future planning application. The 70 study sites are mapped in Figures 1.1 to 1.18. Settlement groupings are mapped in Figure 2 and listed in Table A1.1.

Desk Study

3.2 Existing information regarding protected sites, notable habitats and existing species records were collated as listed in Table 3.1, along with publicly available maps and aerial photography to inform the assessment of each site. For the purposes of this study, notable fauna were taken to include those listed NERC Act 2006 Section 41 (S41) and on the LLR BAP. Species records provide a useful indication of the species present within the search area, although the absence of a given species from the dataset cannot be taken to represent actual absence.

3.3 An overview of the protected and notable habitats across the borough is provided by way of setting the landscape-scale context for the assessment of individual sites (see Section 4). For each site, GIS was used to populate the individual proformas (see Appendix C) with relevant desk study data to inform each assessment. Designated sites, notable habitats, nature conservation planning status (green wedge, green belt) identified and species records were identified within prescribed buffers deemed most useful to drawing out salient information.

3.4 Previous Phase 1 habitat survey data made available to the project team is listed below. This information was used to inform the site assessments, or as contextual information where access could not be gained to any specific land parcel.

- 2014 Hinckley & Bosworth Borough Council Extended Phase 1 Habitat Survey²- Survey to inform site allocations and development management policies proposed at that time. Overlap between sites surveyed in 2014 and those assessed for the current study are tabulated in Appendix A. Change in condition between survey years is recorded in each site survey proforma (Appendix C).
- 2018 Soar Brook Village Ecology Constraints Plan³ – Phase 1 Habitat map covering those parts of the Soar Brook Village site which could be accessed from the PROW network. LWS and select protected species information also illustrated. This site overlies Site35of the current study.
- 2019 Witherley Parish Ecological Survey⁴– Sites surveyed across Witherley (south west of the borough) to determine those 'considered to be amongst the best wildlife sites in the Parish', and whether any may meet the standard criteria for designation as an LWS. Key habitat features identified included species-rich hedgerows, grassland roadside verges and associated ditches. Sites which overlies those of the current study lie are Fenny Drayton 501 and 505a (both Site 69), and Witherley 608/609 (Site 9).

3.5 Relevant planning policies, and available borough-wide biodiversity and green infrastructure (GI) studies were also reviewed.

² White Young Green (2014) Hinckley & Bosworth Borough Council Extended Phase 1 Habitat Survey

³ EDP (2018) Soar Brook Village Ecology Constraints Plan

⁴ David Nicholls Consulting (2019) Witherley Parish Ecological Survey (provided to LUC 2020 Q1)

3.6 Note that as not all sites identified by the Council had been attributed individual reference numbers, an ‘LUC ID’ reference was instead attributed to each. Correspondence between the Council and LUC ID references are given in Figure 1 and Appendix A.

Table 3.1: Desk Study Data

Source	Data
Natural England	International & national designated nature conservation sites within 5km of all assessment sites, and Local Nature Reserves within 2km SSSI IRZ within borough NE Habitat Network Classification Mapping within 2km Ancient Woodland within 2km S41 Priority Habitats within 2km
Ordnance Survey	Canals within borough
Leicestershire & Rutland Environmental Records Centre	Local designated sites within 2km Protected & notable species records within 2km
Warwickshire Biological Records Centre	Local designated sites within 2km Protected & notable species records within 2km

Field Survey

3.7 Each site was subject to survey based on the standard Phase 1 Habitat method (JNCC 2010⁵) during the period July to September 2019. Survey entailed rapid classification of visibly accessible habitats within each site based on dominant or characteristic flora. Field survey data was recorded in the proforma, pre-populated with the key desk study information already identified for each site. An example proforma is provided in Appendix B. The ‘Phase 1 habitat survey description’ included a description of the habitat type/s present, plant species, habitat structure or notable features, and any incidental records of protected or notable fauna. Descriptors include habitat rarity, naturalness, extent and connectivity, and species diversity. Species were recorded by common name (where species have common names, otherwise scientific names are provided).

3.8 Note that surveys were completed, where possible, using publically accessible footpaths, roads etc. Site access was additionally requested from landowners. Where habitats could not be accessed and accurately be classified from distance, an additional ‘No access’ code was used in the standard Phase 1 habitat mapping for the purpose of transparency.

3.9 Land use, management and a management score (to record whether this was highly beneficial, beneficial, neutral, detrimental or highly detrimental effect to biodiversity) were also logged. Habitat connectivity was scored using the criteria of the DEFRA 2.0 Biodiversity Net Gain Metric, as summarised in Table 3.2.

Table 3.2: Habitat Connectivity Score (based on DEFRA 2.0 BNG Metric)

Score Category	Example of Habitat Type
High connectivity	Extensive connection to similar habitat within 1km or forming a key part of important network.
Moderate	Limited connection to similar habitat with potential to create additional links to unconnected habitats within 1km; or Physical habitat connection which offer some opportunity for species dispersal, etc but that are in some way restricted; or Forming a stepping stone within a wider cohesive network.

⁵ JNCC (1991). Handbook for Phase 1 Habitat Survey

Score Category	Example of Habitat Type
Low	Limited connection to similar habitat with no potential to create additional links to unconnected habitats within 1km; or Unconnected to similar habitat with potential to create links to habitats within 1km.

3.10 Habitat suitability for protected species was considered alongside the pre-populated species records within 1km of each site, and record of any non-native invasive species such as Japanese knotweed, giant hogweed and Himalayan balsam. Potential Phase 2 surveys (i.e. protected species or detailed vegetation surveys) that may be required (dependent on the nature and scale of any future development) were logged in this section of the proforma.

3.11 Additional notes were taken in respect of the opportunities to enhance or connect biodiversity based on the ecological resources and key sensitivities present on site and in the immediate vicinity. This section of the proforma was included to reflect the requirement for measurable biodiversity net gain (BNG) within all future development, as set out in the Draft Environment Bill (see Section 4). The Bill mandates BNG at 10%. BNG measures appropriate to any specific site will be dependent on the proposed development design. Whilst it is therefore beyond the scope of this study to detail BNG, this section summarises appropriate opportunities that may be taken forward.

3.12 'Key Sensitivities' describes the ecological features – identified through both the desk study and field survey – of key concern in relation to potential impacts associated with residential development, such as direct habitat loss and fragmentation, or indirect impacts associated such as disturbance. These features would form the focus for avoidance and mitigation which may be required to enable development to proceed in accordance planning policy and nature conservation legislation (e.g. requirements for species translocation). Any future development would need to follow the mitigation hierarchy. Whilst consideration of potential impacts was necessarily high level given the absence of development proposals, both construction and operational phase impacts were considered.

3.13 Recognising the need for future BNG, 'Opportunities on Site' outline options for habitat retention and enhancement, based on the key sensitivities identified and local character context (e.g. urban or rural, existing habitat networks, etc). 'Opportunities for Connectivity' were specifically considered, to inform future planning for landscape-scale conservation strategies and policy-making.

Site Assessment

3.14 The desk study and field data compiled for each site, as above, was considered in light of the 2014 survey data (where applicable). A brief description of the change in habitat type or condition is provided in the proforma, prior to the overall assessment.

3.15 The assessment of each site summarises the key features of value for nature conservation. Where relevant, any LWS criteria requiring further detailed consideration, are highlighted.

3.16 Recommended measures for the protection and enhancement of ecological features were tailored to the ecological features (designated sites, habitats and/or species) present. Assessment was based on professional judgement as informed standard approaches to ecological impact assessment, including those produced by CIEEM (2017) ⁶ and the BSI (2013) ⁷. Recommendations are typically habitat-focused, reflecting the extent of survey undertaken (Phase 2 surveys were beyond the scope of this study), and the emphasis of a 'network approach' to maintain and enhance the ecological resource of the borough and to deliver BNG.

3.17 In conclusion, the reasoning for the RAG status category of each site is provided, and reflects the criteria set out in Table 3.3.

3.18 Table 3.3 provides the RAG criteria previously used in 2014 alongside the revised criteria for 2019. Principally, the difference is to reflect the requirement to now include consideration of the feasibility to deliver BNG. Descriptors also aim to support future translation into plan policy. GIS was used to initially screen the desk study data to identify designated sites,

⁶ CIEEM (2017) guidelines for Preliminary Ecological Appraisal. 2nd Ed

⁷ BSI (2013) BS42020:2013 Biodiversity – Code of Practice for Planning and Development

before detailed assessment of wider desk study and field data using professional judgement. No single site is entirely precluded from development – likely a result of the preceding work by the council to identify the short list of sites for this study – however, three sites (Sites 35 and 42– the latter of which overlies 35) were identified as Red status. To achieve an acceptably sensitive design, the nature and extent of development would be strongly influenced by the need to accommodate the mitigation hierarchy and additional enhancement/net gain.

Table 3.3: RAG Status Criteria

RAG Status	2014 Criteria	2019 Criteria
Red	Significant ecological constraints present within or adjacent to the site. Detailed mitigation and compensation / enhancement measures likely to be required to allow development on these sites.	<p>Development is not precluded but, to achieve an acceptably sensitive design, would be strongly influenced by the need to accommodate the mitigation hierarchy and additional enhancement/net gain.</p> <p>Assessment site includes or lies adjacent⁸ to statutory designated site / non-statutory designated site⁹/ ancient woodland.</p> <p>Assessment sites may additionally be included where such designations:</p> <p>A) lie in close proximity and;</p> <p>B) are recognised to be under pressure or proposed cumulative pressure which is detrimental to the viability of the qualifying features.</p> <p>Conversely, assessment sites may be revised to Amber status where the retention and protection of qualifying features are unlikely to impart strong constraint to development design.</p>
Amber	There may be ecological constraints on site such as an adjacent river corridor or area of woodland that we would recommend to be retained within the final development. 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.	<p>The nature, scale and form of development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species to be maintained as part of a wider functional network. However, it is likely that further surveys and ecological input during Masterplanning could potentially allow development within the site.</p> <p>Requirement for enhancement/net gain applies as for the Green status.</p> <p>The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.</p>
Green	Site appears to be of relatively low ecological value. Further surveys may still be required to inform mitigation e.g. for GCN, bats or badger, but they are not considered to be of any significant constraint to the development of the site.	<p>Site appears to be of relatively low ecological value. Further surveys (e.g. for protected species) would be required to inform mitigation and appropriate enhancement/net gain of ecological features but they are not considered to be of significant constraint to the principle of development on site.</p> <p>Additional provision of appropriate net gain/enhancement will be required.</p> <p>The extent and composition of habitat management &/or creation must reflect the scale of predicted impact/s through the lifetime of the development i.e. accommodate recreational demand for the future population.</p>

Constraints

3.19 It is recognised that not all land parcels could be fully accessed, and a dedicated mapping code was used to illustrate areas which could not be surveyed. Some habitat types are more readily identifiable from distance, such as arable crop.

⁸ Identified using GIS buffer of 30m.

⁹ Note this includes previously identified pLWS.

However, it is recognised that others, such as grasslands, require detailed survey at select times of year. Accordingly, the Phase 2 survey recommendations given in each site assessment include consideration of habitats of higher conservation value, where appropriate. No significant constraint to this high-level assessment is therefore anticipated.

3.20 Surveys were completed during the summer to early autumn period, which, whilst within the optimum period for Phase 1 Habitat survey, falls outside that for select habitat types such as woodland. Further, all ecological surveys represent a 'snapshot' of information at the time of survey. Changes in land use and land management as well as natural colonisation of vegetation over time may increase or decrease the conservations status of a habitat and/or its suitability for faunal species. Recognising these considerations, the method undertaken for this study remains appropriate to meet the objectives.

Chapter 4

Results

4.1 In line with national policy drivers, this study contributes to the evidence-base of forthcoming local planning policy. It considers the presence of, and potential impact on, the designated site network as well as notable and priority species as a result of development. For each assessment site, it identifies where further ecological survey is required to inform development and, by assigning RAG status, where the scale of any development may most be influenced by the requirement to deliver an ecologically sensitive design and BNG. The opportunities for BNG outlined take into consideration the ecological features on site and in the local landscape to optimise contribution to a wider Nature Recovery Network. Sections 4 and 5 are written with due consideration for the cross-compatible principles of green infrastructure design.

Relevant Legislation & Planning Policy

4.2 The Wildlife & Countryside Act 1981 (as amended) forms the backbone to nature conservation legislation, transposing the European Habitats and Birds Directives¹⁰ into UK law. The Conservation of Habitats & Species Regulations 2010 (as amended) additionally address the designation and protection of European sites and the protection of European species. Further protection for habitats and species is set out, for example, in the natural Environment & Rural Communities (NERC) Act 2006, Countryside & Rights of Way (CRoW) Act 2000, Protection of Badgers Act 1992, and Hedgerows Regulations 1992.

4.3 Legislation and policy relating to the council's responsibilities to identify, protect and enhance biodiversity are summarised under the subheadings below.

The revised National Planning Policy Framework (NPPF) 2012 (last updated February 2019)

4.4 The NPPF sets out the government's planning policies for England and how these are expected to be applied. It promotes a strategic approach to maintaining and enhancing coherent ecological networks that are more resilient to current and future pressures. Paragraph 170 states that the role of the planning system should:

- Protect and enhance valued landscapes, sites of biodiversity or geological value and soils;
- Recognise the wider benefits from natural capital and ecosystem services;
- Minimise impacts on biodiversity and providing net gains in biodiversity.

4.5 Paragraph 171 requires that Plans should take a strategic approach to maintain and enhance networks of green infrastructure, and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

4.6 Paragraph 174 states that Plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks¹¹
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species;
- Identify and pursue opportunities for securing measurable net gains for biodiversity.

¹⁰ Council Directives 92/43/EEC and 79/409 EEC respectively.

¹¹ 'Networks' are stated to include the hierarchy of sites designated for biodiversity, the wildlife corridors and stepping stones that connect them, and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation.

The revised Planning Practice Guidance (PPG): Natural Environment 2016 (last updated July 2019)

4.7 The PPG aspires for planning authorities, neighbourhood planning bodies and other partners to “*work collaboratively with other partners to develop and deliver a strategic approach to protecting and improving the natural environment based on local priorities and evidence*”. It states that together “they need to consider the opportunities that individual development proposals may provide to conserve and enhance biodiversity and geodiversity, and contribute to habitat connectivity in the wider area including as part of the Nature Recovery Network [as described in the 25 Year Environment Plan; described under the relevant subheading below]”.

4.8 Features of the natural environment to be considered within the network range from the underpinning geological and biogeographical character to the location and extent of designated, priority and irreplaceable habitats; from existing landscape features and potential new corridors that support migration, dispersal and gene flow, to areas identified for habitat enhancement or restoration. By its nature, such a network would serve help biodiversity adapt to, and increase resilience against, climate change.

4.9 Regarding the network of locally designated sites, the PPG recognises LWS as “*areas of substantive nature conservation value*”, important for their contribution to ecological networks and nature’s recovery, as well as wider benefits including climate mitigation and ecosystem services. “*National planning policy expects plans to identify and map these sites, and to include policies that not only secure their protection from harm or loss but also help to enhance them and their connection to wider ecological networks*”.

Natural Environment & Rural Communities (NERC) Act 2006

4.10 The NERC Act 2006 requires planning authorities to consider impacts on “species of principal importance for the conservation of biodiversity” when determining planning applications. The Council has an obligation to ensure that in exercising its functions, it has “regard... to the purpose of conserving biodiversity” (Section 40(1)). Section 41 lists habitats and species of principal importance in England (‘S41’ habitats and species), which are to be considered, irrespective of whether they are covered by other legislation. Section 42 (3)(a) requires that the Council “take such steps as appear to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section” or, Section 42(3)(b), “promote the taking by others of such steps”.

Draft Environment (Principles & Governance) Bill 2018 (last updated July 2019)

4.11 The Bill mandates biodiversity net gain for development; under Schedule 7A, developers would need to submit a biodiversity gain plan to the local authority before seeking planning permission. This comes ahead of a future intention to “*expand the net gain approaches used for biodiversity to include wider natural capital benefits, such as flood protection, recreation and improved water and air quality*”¹². The Government’s ambition for the Bill is to mandate a 10% BNG for developments¹³. The DEFRA October Policy Statement¹⁴ affirms the role of local government in “responding to challenges at a local level, leading specific and locally appropriate responses and driving innovation”.

25 Year Environment Plan 2018

4.12 The Government’s 25 Year Environment Plan sets long-term targets for environmental improvement to which Government will be legally bound. The Plan commits to embed the principle of ‘environmental net gain’ to development, such as housing and infrastructure, and calls for ‘nature recovery areas’ as important parts of developing Ecological Networks. Ambitions of the Plan include the creation or restoration of 500,000ha of wildlife-rich habitat outside the protected site network.

¹² Westminster Briefing 08 May 2019 www.westminster-briefing.com/Biodiversity_net_gain_Manchester?elqTrackId=beb19658b99e4f1b8dc776c9b36225ef&elq=25561b5f337444fbad162960cd22da1a&elqaid=2185&elqat=1&elqCampaignId=1633&utm_source=Green+Infrastructure+Partnership&utm_campaign=c4f959944f-EMAIL_CAMPAIGN_2017_08_31_COPY_01&utm_medium=email&utm_term=0_f4eb0dc7a3-c4f959944f-103371929

¹³ DEFRA Summer Policy Statement 23 July 2019 www.gov.uk/government/publications/draft-environment-principles-and-governance-bill-2018/environment-bill-summer-policy-statement-july-2019?utm_source=GDPR+CIEEM+List&utm_campaign=0687e82792-EMAIL_CAMPAIGN_2019_07_26_02_25&utm_medium=email&utm_term=0_6b23f028b5-0687e82792-148778245

¹⁴ DEFRA Autumn Policy Statement 15 October 2019 <https://www.gov.uk/government/publications/environment-bill-2019/environment-bill-policy-statement#delivering-environmental-ambition-at-the-local-level>

Local Planning Policies

4.13 Relevant Local Plan policies currently fall under the headings listed below. Note that these will be superseded in the Local Plan review.

- Hinckley & Bosworth Core Strategy 2009 – Policies 1 – 4 and 6 – 13 addressing development at specific locations. Policies 19 and 20 addressing green infrastructure, green space and play provision. Policy 21 addressing the National Forest.
- Site Allocations & Development Management Policies DPD 2016 – Policies DM4 and DM6 – 9, which include enhancement of biodiversity and geological interest.
- Green Infrastructure Strategy 2008 – Recommendations provided for each the southern, western and north eastern zones of the borough.
- Hinckley Town Centre Area Action Plan 2011 – Spatial objective SP7 (the contribution of environmental improvement to the public realm), plus Policies 2, 5, 6, 10 & 11 (aspirations and developer contributions set for explicit areas).
- Earl Shilton & Barwell Area Action Plan 2014 – Spatial objective 8 (regarding green infrastructure), plus Policies, 9, 12 & 15 (guidance for sustainable design and access).

Relevant Biodiversity & Green Infrastructure Studies

2018 National Habitat Networks Mapping Project

4.14 The 2018 Project¹⁵ supports the planning and delivery of ecological networks across England. Habitat network maps were generated for 18 priority habitat types to provide a national overview of the distribution of habitat networks with suggestions for future action to enhance biodiversity when used in conjunction with other datasets and with local knowledge to identify opportunities for action. The project identified existing habitats (primary, secondary and associated), enhancement zones, restorable habitat and habitat for restoration/creation. Presence of the habitat zones is recorded in the proformas for each assessment site.

2016 Space for Wildlife: Leicester, Leicestershire & Rutland Biodiversity Action Plan 2016-2026

4.15 The BAP¹⁶ describes 19 priority habitat summaries across the region and important areas for wildlife (Section 8). Areas of decline include grassland habitats (neutral, heath and calcareous), roadside verges and sphagnum ponds. As 80% of the BAP area is made up of farmed land, increasingly intensified farming practices have particular influence. Leicestershire and Rutland have some of the lowest levels of sites recognised for their nature conservation value in the UK; Site of Special Scientific Interest (SSSI) represent only 2% of the land area, in contrast to the national average of 6%.

4.16 Creation of habitat benefit wildlife locally (Section 9) is described under three broad categories:

- Wetland – including open water and/or land which has impeded drainage and retains water for part or all of the year or which floods regularly.
- Woodland – including planted or naturally regenerating, trees or scrub.
- Open land – of no or low intensity management, with little or no agricultural inputs

2014 Hinckley & Bosworth Extended Phase 1 Habitat Survey

4.17 To inform the preparation of the Site Allocations & Development Management (SADM) Policies, the 2014 Survey focused on 21 potential development sites. The Survey also identifies key wildlife corridors for conservation and enhancement. Key corridors identified broadly reflect those of earlier biodiversity studies – the canals, rivers, brooks, active and disused railways, hedgerows, ponds and grasslands.

¹⁵ Edwards, J et al (2018) National Habitat Networks Mapping Project. Natural England

¹⁶ <https://www.lrwt.org.uk/our-work-for-wildlife/biodiversity-action-plan/>

4.18 The 2014 survey also recommends levels of protection required for habitats and species in the Borough, and mitigation measures required to ensure they are satisfactorily conserved (Chapter 9). These include:

- Incorporating multifunctional greenspace within development sites to relieve visitor pressure on SSSI.
- Achieving developer contributions for the ongoing maintenance of SSSIs through Section 106 Agreement or Community Infrastructure Levys.
- Retaining and enhancing hedgerows which fall within site designs, where possible, through the planting of native species to improve existing hedges and create additional lengths.
- Buffering of water courses by retaining existing bank side vegetation and avoiding any human access. A standard buffer of 8-10m is recommended with large areas for those rivers of particular importance to biodiversity.
- Favouring native species over purely ornamental species in landscaping for habitat creation and incorporating ponds and wetlands of any size.
- Controlling invasive species prior to any development to prevent spread into the wider environment.

2011 Guidelines for the Selection of Local Wildlife Sites

4.19 The 2011 Guidelines¹⁷ detail selection criteria for LWS in Leicester, Leicestershire and Rutland following a flexible system which is responsive to modern demands. Selection requires one of the five following criteria to be met:

- Habitat quality – The site contains a listed habitat and meets primary criteria for that habitat.
- Habitat diversity – The site contains two or more listed habitats in close association with the combined area amounting to over 1ha or more and at least two habitats meet the secondary criteria.
- Presence of Red Data Book species – The site supports an established population of a county Red Data Book or Rare Plant Register species. Birds can only be used according to the criteria specified for their inclusion in the list. Lists of species and/or features used to determine the LWS habitat criteria are prescribed in the guidance.
- Significant species assemblages – The site contains a species assemblage which meets one of the listed species criteria.
- Use of site as a wildlife resource by the community – The site meets the secondary criteria for habitat and is accessible to and widely used by the local community, there is a sense of ownership of the area by the community, it is used for education and raising public awareness or is of historical importance for its ecology. These criteria recognise the multi-functional use of green infrastructure.

4.20 The 2011 guidelines suggest that areas with the following habitats are reviewed for their inclusion in LWS lists: broadleaved woodland, native scrub, species-rich hedgerows, mature trees, neutral grasslands, calcareous grassland, streams and smaller rivers, standing water bodies and field margins.

4.21 It is recognised that the revised PPG: Natural Environment (last updated July 2019; see relevant subheading above) lists standard criteria for LWS selection nationally. These include the additional criteria of size or extent, naturalness, rare or exceptional feature (allowing consideration of habitats or geological features), fragility, typicalness (potentially overlapping the LLR criteria for quality), and connectivity within the landscape. When assessing the value of candidate, potential or historic LWS (cLWS, pLWS or hLWS respectively) within the borough for full designation, the additional criteria of the PPG should be considered alongside those of the 2011 LLR guidelines.

4.22 Finally, it is also recognised that some tree species, not strictly 'local' to an area may be considered within the selection and positive management of LWS where these support the overall resilience of a site to climate change.

2009 Hinckley & Bosworth Biodiversity Assessment

4.23 The 2009 Assessment¹⁸ provided a baseline assessment of the ecological resource across the borough. The assessment notes that the extent and intensity of arable farming has resulted in the fragmentation of key habitat areas, acting as a barrier to

¹⁷ LCC et al (2011) guidelines for the Selection of Local Wildlife sites (previously known as sites of Importance for Nature Conservation or SINCs) in Leicester, Leicestershire & Rutland. Leicestershire Country Council, Leicester City Council, Natural England, Leicestershire & Rutland wildlife Trust

¹⁸ HBBC (2009) Biodiversity Assessment: Hinckley & Bosworth Borough. Final Report. Hinckley & Bosworth Borough Council

movement and impacting the viability of local populations. Opportunities to improve and enhance biodiversity highlight the importance of green corridors, stepping stones, interconnecting linkage and edge habitats. Recommendations for implementation focus on river and canal corridors, hedgerows, north east of the borough, quarry and gravel pit restoration, the National Forest, and urban areas and villages).

4.24 The Assessment indicates that the borough has “a solid foundation from which to enhance existing biodiversity” both within the borough and the East Midlands Region. Mechanisms for delivery include the planning process, mineral extraction restoration and agri-environment schemes. Habitat linkages were, in parallel, identified in the 2008 Green Infrastructure Strategy.

2008 Borough Green Infrastructure Strategy

4.25 The 2008 Strategy¹⁹ highlights the value of woodlands and watercourses within the borough. Both for their inherent ecological value but also woodlands (notably the clusters around Gopsall and Market Bosworth, and in the north east of the borough) for their function in regulating air, water and soil resources, and watercourses (notably the river corridors and the area around the canal close to Hinckley) for their function as wildlife corridors. More widely, the ecological resources of the time are described as of “*comparatively little in the way of natural or seminatural habitat, although there are areas where there is a clustering of habitats – the most obvious being the National Forest in the north east, around Market Bosworth and Gopsall Park, and the river systems. The protected status of Groby Pool, Burbage Common, Billa Barra and Cliffe Hill Quarry alongside their proximity to other important habitats highlights their importance*”.

4.26 Current update of the Green Infrastructure (GI) Strategy is nearing completion. As a parallel workstream to this Phase 1 study, recommendations arising herein have been used to inform the emerging GI Strategy. In summary, the Strategy follows a network-led approach to the recognition of ecological value and future potential across the borough. It recognises the relatively limited area of land designated at the national level for nature conservation, and the elevated value of supporting habitats at county or local level in maintaining the viability of these. The Strategy reflects emerging policy, such as for agri-environment and biodiversity net gain. Recommendations follow the network approach, for example, to optimise the value of connecting features, identify opportunities for woodland expansion and to address recreational pressures (of both existing and future populations).

National Forest Strategy 2014-2024

4.27 The National Forest captures the north east of the borough and, therein, assessment sites at Bagworth (Sites 1-3 and 42), Thornton (Sites 44, 11 and 18), Markfield (Sites 13, 33, 41, 54 and 62), and Ratby (Site 56).

4.28 The Strategy sets the on-going aims and objectives for landscape-scale restoration across the National Forest area. Objectives of the Strategy include an increase in forest cover to over 21%, as well as more broadly addressing community, economic and research goals. The Strategy recognises the need for publically accessible greenspace alongside biodiverse forest habitats. Delivery of strategic green infrastructure within the National Forest is supported in select local planning policies (e.g. Core Strategy Policy 21).

Designated Sites & Notable Habitats

4.29 Figure 3 provides an overview map of international and national designations within 5km of the borough. Figure 4 provides an overview map of Local and non-statutory designations within 2km. Figures 5.01 to 5.18 map all designations for each assessment site in detail.

4.30 The borough supports a predominantly farming land use. Hinckley in the south forms the largest urban area, with Burbage extending south, and Barwell and Earl Shilton to the north west. Smaller villages occur scattered through the borough – particularly to the north east toward Leicester – with small rural villages interspersed in-amongst. The distinction between rural and more urban areas is overlaid with a general trend of S41 habitats becoming increasingly abundant to the north and east. The resource of S41 habitats is predominantly of woodland and grassland habitats. The network canals and rivers, together with large waterbodies typically remnant of former industrial heritage, also draw of draw significant features through the borough landscape.

¹⁹ TEP (2008) A Green Infrastructure strategy for Hinckley & Bosworth

International Designated Sites

4.31 International designations identified within 5km the borough are illustrated in Figure 3 and listed by corresponding assessment site in Appendix A Table A1.2.

4.32 There are no international designated sites within the borough. The closest is the River Mease Special Area of conservation (SAC), also nationally designated as a SSSI, at the closest point, c1.1km north of the borough boundary. The closest of the assessment sites to the SAC is Site 70 at Norton-Juxta-Twycross. This lies c2.9km from the designation and c2km from the upstream River Mease p/hLWS which flows north into the SAC (passing close to Ashby Canal SSSI).

National & Local Designated Sites

4.33 29 SSSI were identified within 5km of the borough (Figure 3). Of these, nine SSSI were identified within, and in close proximity to, the borough (Figure 4), as listed below. The designations reflect the trends of habitat distribution across the borough; in general terms, those in the west are designated for grassland habitats, and those in the east for wetlands and woodlands:

- Ashby Canal SSSI – Situated in the north west, the SSSI flows through a large section of the borough, covering 24.9ha in total. Designated for the communities of aquatic and emergent plants.
- Botcheston Bog SSSI – The 3.2ha site, west of Leicester, contains one of the best remaining areas of marshy grassland in the county and is representative of grazed marsh communities on peaty soil.
- Burbage Woods & Aston Firs SSSI – One of the best remaining examples of ash-oak-maple woodland in Leicestershire. Covering 52.0ha at the southern boundary of the borough.
- Cliffe Hill Quarry SSSI – Designated for its geological features, this 37.9ha site in the north east displays contact between many rock types.
- Groby Pool & Woods SSSI – 29.4ha in the north east of the borough, comprising a range of habitats including alder wood, dry and wet grassland types, marsh and open water.
- Kendall's Meadow SSSI – 2.7ha of traditionally managed hay meadow located c3.5km north of Hinckley.
- Newton Burgoland Marshes SSSI – Abuts the northern boundary of the borough. This 8.67ha site comprises two land parcels – the north supports marsh and wet grassland habitats, and the south, grassland representative of better drained alluvial soils.
- Sheepy Fields SSSI – Located in the north west of the borough, this 5.3ha site supports some of the best remaining examples of neutral grassland in Leicestershire and is representative of hay meadow plant communities.
- Sheet Hedges Wood SSSI – Abuts the northern boundary of the borough. 22.57ha of ash and alder woodland, representative of ancient woodland developed on clay soils.

4.34 None of the assessment sites extend to within, or immediately adjacent to, an SSSI designation. However, assessment sites which propose large, or collectively large, scales of development in the vicinity of SSSI include the new settlements south of the M69 (Soar Brook), those around the urban and peri-urban areas of Earl Shilton, Barwell and Hinckley, and the rural areas of Groby, Ratby and Markfield. Potential indirect impacts on the SSSI network are likely to relate to recreational pressure associated with the growing future population. As an aid, Impact Risk Zones (IRZ)²⁰ for SSSI which overlap any assessment site are listed in each site proforma. This is described further in Sections 4 and 5.

²⁰ IRZ are a GIS tool developed by Natural England to inform a rapid initial assessment of the potential risks posed by development proposals to SSSI and the higher international designations of SAC, etc. They are not a replacement for robust assessment but are helpful to inform initial scoping of potential impacts on designations both within and beyond the borough boundary. IRZ reflect the particular sensitivities of the qualifying features for which a site is designated and list the land uses of risk, not all of which are relevant to the assessment of housing allocations. Some IRZ will identify a scale of development considered to pose risk, e.g. rural residential development of 50 or more units, and residential of 100 units or more, are listed in select IRZ for both Ulverscroft Valley SSSI and Newton Burgoland Marshes SSSI, which overlap the borough. Therefore, whilst IRZ may usefully inform high level assessment of allocation sites, future detailed assessment must consider the scale and nature (e.g. whether community, retail or other mixed use development is included) within a proposed development design.

Whilst some S41 priority habitats transcribe directly to individual LLR BAP habitat types (such as reedbeds), the majority do not. S41 habitat types are defined for England, hence, the MAGIC Map dataset provides a national map to inform the identification of networks across all local authority boundaries. The LLR BAP habitat types describe county priorities and have informed historic development of LWS criteria. Whilst these remain important, this study focuses on S41 habitat types, which have been consistently mapped across the borough, to inform each site assessments and the broader recommendations for a network approach to future planning policy.

4.35 Two Local Nature Reserves (LNR) are present in the borough. Both are predominantly composed of grassland with areas of woodland:

- Billa Barra Hill LNR – Located in the north east of the borough, this predominantly grassland site includes improved areas planted with native broadleaf.
- Burbage Common & Woods LNR – The largest of the council’s countryside sites, consisting of semi-natural woodland and grassland. The LNR encompasses the portion of Burbage Woods SSSI that falls within the borough, plus a large area of open habitat immediately north.

4.36 None of the assessment sites extend to within, or immediately adjacent to, an LNR designation. As previously discussed for SSSI, potential indirect impacts on the LNR network are likely to relate to recreational pressure associated with the growing future population. This is of particular relevance to the assessment sites south of the M69, Earl Shilton and several at Hinckley, which all lie in close proximity to Burbage Common & Woods LNR.

Non-Statutory Designated Sites

4.37 Non-Statutory designations within 2km of the borough are illustrated in Figure 4. A total of 60 Local Wildlife Sites (LWS) have been designated within the borough. A further 360 potential or historic (p/hLWS) are identified by the records centre/s, which reflects the need for up to date survey data to verify the status. For the purpose of this study, all are assessed as equal value unless evidence is available to the contrary. The network of LWS again reflects the general trends of habitat distribution outlined above. Farmland with hedgerows and some associated grasslands of value dominate the majority of the borough, with areas of woodland present in the north east. LWS in the west and centre of the borough have typically been selected for lane verges, meadows, streams, and flood retention areas in the town of Hinckley. LWS in the north east of the borough, more typically for streams, ponds and woodlands. A number of LWS and p/hLWS fall within or immediately adjacent to the assessment sites, which is described in more detail within each site proforma.

4.38 Six Ecosites overlap the south western part of the borough – along the River Anker west of Witherley and the River Mease west of Hinckley. For the purposes of this study, the Ecosite designation is assessed as equivalent value to the LWS.

4.39 A total of 21 assessment sites²¹ encompass at least one non-statutory site, and numerous more lie alongside or in proximity to one of this designated network.

Notable & Priority Habitats

4.40 Figure 6.01 illustrates the priority habitat and ancient woodland habitats in and around the borough. Subsequent Figures 6.02 to 6.18 detail these with the assessment site boundaries.

4.41 Ten priority habitat types occur across the borough, which can be broadly described as woodland and orchard, grassland and wetland habitats. These represent both the local ecological character and conservation priorities. Notable and priority habitats should therefore be interpreted alongside the national habitat networks mapping (subsequent subheading) to guide the opportunities for maintaining and strengthening borough-wide biodiversity.

4.42 Deciduous woodland as a S41 habitat type includes woodland growing on the full range of soil conditions, from very acidic to base-rich, and takes in most semi-natural woodland in southern and eastern England. Deciduous woodland in the borough (totalling 1,131ha) is scattered throughout, with the greatest density and size of individual areas found in the north-east. In addition, a small number of ancient woodland habitats occur scattered throughout the borough (totalling 315.73ha); at greatest density in the north east where there is a mixture of semi-natural and replanted woodland sub-types. Several assessment sites occur in close proximity to ancient woodlands, the closest of which is Site 56 (Ratby) which extends north to Martinshaw Wood LWS (separated only by Markfield Road). For traditional orchards as a S41 type, habitat structure rather than vegetation type, topography or soils, is the defining feature of the habitat. Totalling 4.13ha, this is present in typically small land parcels throughout the borough, with greater frequency to the west.

4.43 Grassland habitats include lowland dry acid grassland, lowland heathland, lowland meadows, purple moor grass and rush pastures, and good quality semi-improved grassland totalling 90.58ha. The north and north east of the borough hold the

²¹ Sites 4, 5, 11, 14, 22, 35, 38, 42, 44-46, 48, 61 & 62, 65 & 66 and 70-72.

greatest density of individual areas for semi-improved grassland, meadow and dry acid grassland. The south contains a very large single area of lowland dry acid grassland at Burbage Common to the east of Hinckley.

4.44 Wetland habitats include coastal and floodplain grazing marsh and lowland fens. These habitats are present in both the far west and far east of the borough, totalling 26.99ha.

National Habitat Networks

4.45 Five opportunity areas within the network of S41 priority habitats were identified as part of the 2018 national mapping project. This high level mapping includes S41 priority habitats within and beyond the borough boundary, offering opportunity for strategic cross-boundary nature conservation efforts:

- North west of Groby - Opportunity to enhance existing lowland meadows and good quality semi-improved grassland.
- East of Hinckley - Opportunity to enhance lowland acid grassland. Adjoining to the east there is opportunity to enhance lowland fens and to restore good quality semi-improved grassland (which themselves lie beyond the borough boundary).
- North of Barleston - Opportunity for enhancement of lowland meadows.
- West of Newton Burgoland - Opportunity to enhance the lowland meadow and fens (which again, lie just beyond the borough boundary).
- Sheepy Parva - Opportunity for enhancement of existing, and for habitat restoration-creation of, lowland meadows.

4.46 Whilst the opportunity areas are not explicitly logged within the assessment proforma, these are considered in the recommendations for strategic biodiversity enhancement (Section 5).

Assessment Sites

4.47 The assessment proforma for each assessment site is provided in Appendix C. Sites are described by individual LUC ID reference²². Each proforma should be read in conjunction with the overarching assessment set out below and the recommendations in Section 5. The RAG status attributed to each site is illustrated in Figures 7.01 to 7.18.

4.48 Within each proforma the ecological value of each site is described, identifying the features of ecological importance and features sensitive to potential impacts associated with residential development. Locally appropriate opportunities for mitigation and enhancement are provided, both in relation to the features on or immediately adjacent to site, and the wider landscape-scale connectivity.

- The sites can broadly be described as three cohorts (tabulated in Appendix A):
- Urban & peri-urban – Hinckley, Barwell, Earl Shilton, and Burbage;
- Rural settlements – including rural centre, villages and hamlets;
- New settlements – Site 35 (south of the M69), 69 (Fenny Drayton) and 70 (Norton Juxta Twycross) have been considered new settlements based on the area of allocation site in contrast to the existing number of dwellings.

4.49 A summary of the key sensitivities associated with residential development and the opportunities for mitigation and enhancement (net gain), detailed within each site proforma, are summarised for each broad cohort is provided under the subheadings below.

Urban & Peri-Urban

4.50 Extension of residential capacity in the south of the borough is sited to avoid statutory designated and the majority of LWS and S41 priority habitats. The majority of assessment sites are bounded by development and or transport infrastructure, although those along the northern edge - Sites 23, 28, 61, 65 and 71 - most notably interface the rural fringe. Habitat retention and creation will extend through any development parcels, and should seek to optimise substantial linear habitat creation at field boundaries and along sustainable transport corridors or roads.

²² Note that two sites – 67 and 68 – were duplicates of other site boundaries already considered and as such have been removed from the final report issue.

4.51 Mapping of notable and priority habitats together with the national habitat networks indicate locally-appropriate target habitat types for ecological mitigation and any future BNG to be delivered. In the south east, sites which lie in close proximity to Burbage Common & Aston Firs SSSI and Burbage Common & Woods LNR (Sites 5, 14, 34, 45, 47 and 60) may be influenced by extension of deciduous woodland cover and grassland creation. In contrast, those along the rural fringe to the north may give greater weight to wetland habitats, to strengthen and connect between the existing watercourse corridors of the Sense and the Tweed.

4.52 As noted earlier under 'National Designated Sites', the number and scale of assessment sites would incur significant increase in recreational demand, and must be assessed in relation to Burbage Common & Aston Firs SSSI and Burbage Common & Woods LNR to ensure this is fully mitigated within any forthcoming development design. Strategic habitat creation to ensure landscape-scale connectivity, maintenance of ecological character, quality and resilience is also recommended. This is explored further in Section 5.

4.53 Grassland creation will be strongly influenced by soil conditions and target land use. Extension of the dry acid grassland resource and bringing into optimal condition and this habitat type could be complemented by the creation of good quality semi-improved grasslands and, at appropriate locations, wildflower-rich mixes or taller tussocky swards which are relatively resilient to the wear and tear, and increased nutrient input typically associated with recreational use.

4.54 Extension of the tree canopy cover into urban and peri-urban area is recognised as particularly valuable for climate change resilience as well as habitat connectivity, and is referenced accordingly in the 2020 GI Strategy. Developing the network of green infrastructure to include vertical, horizontal and elevated habitats should serve to optimise permeability of the built landscape for biodiversity to breed, feed and disperse.

Rural Settlements

4.55 The largest of the rural settlement assessment sites is Site 72 at Groby, extending the village beyond the A50. Site 72 lies within the green wedge which encompasses numerous SSSI designations of the borough and of south west Leicestershire, and the associated S41 priority woodland, grassland and heathland habitats which extend to the assessment site boundary. Site 72 encompasses two LWS and lies adjacent to a third. Any development must cumulatively assess potential impacts on the designated site network and provide a robust habitat creation and mitigation package to ensure all impacts – particularly operational impacts associated with recreational pressure – are avoided.

4.56 The risk of isolating designated sites, and notable and priority habitats, as a result of development is exemplified at Site 22 Groby, Ratby (also within the green wedge). One grassland p/hLWS lies within the assessment site, south of Rothley Brook, and a second immediately adjacent. Both are bounded to the east by the A46. Any proposed development must ensure habitat connectivity is maintained, not only for general wildlife dispersal but to allow the grasslands to remain in favourable condition habitat, despite possible bottle necks in recreational access. Significant barriers such as transport infrastructure must be acknowledged. Robust approaches to maintain landscape-scale connectivity should be set as a framework within which the appropriate scale and extent of any development is then considered.

4.57 Site 56, the third large assessment site in the north east lies adjacent to the largest area of ancient woodland habitat in the borough at Martinshaw Wood LWS (separated only by Markfield Road). This habitat type is irreplaceable, as discussed further in Section 5. Martinshaw LWS also support lowland acid grassland. Both habitat types are typically sensitive to the effects of recreational pressure but any future assessment should consider the condition of such receptors as part of the assessment of sensitivity (i.e. habitats in suboptimal condition may be more sensitive, more vulnerable to small increase/s in visitor pressure). Again, any new development should consider cumulative impacts.

4.58 Assessment sites at Markfield – Sites 33, 41, 54 and 62 – should also be cumulatively assessed in relation to the SSSIs and wider designated site network. Such assessment should include development proposals within Leicestershire which pose potential impact on the same ecological features. Loss, fragmentation or isolation of the numerous LWS between the M1 and A50 must be avoided. As described earlier for Site 22, this requires strategic planning of landscape-led for any development.

4.59 Nine assessment sites are proposed at Desford and Peckleton, including Sites 38 and 66 which together capture c.75% of the assessment area. Whilst predominantly of large open arable fields, these do include substantial areas of deciduous woodland, often interconnected by hedgerows and tree belts, and some of which are recognised within the LWS network. Residential development at this scale will require careful consideration of the internal road infrastructure to avoid severance or fragmentation. Strategic consideration of sustainable transport routes through and between proposed development sites to allow

connectivity of new communities as well as connectivity of biodiversity at the 'inter-settlement' scale. There is scope for this approach to be extended to Newbold Verdon and Barlestone, and south to Earl Shilton.

4.60 Sites 20, 21 and 59 at Market Bosworth together cover an area which, in broad terms, is equivalent to one third that of the existing settlement. Site 56 includes p/hLWS deciduous woodland, the status of which requires review. The 2011 LWS criteria include consideration of value to the local community as well as ecological value. Similar review of status is appropriate at the other assessment sites which include p/hLWS, such as Newbold Verdon Site 46 (grassland), Peckleton Site 66 (hedgerows), Bagworth Site 42 (woodland, grassland and scrub) and Markfield Site 62 (hedgerows and grasslands). Comprehensive review of the non-statutory designation network, the setting of targets and monitoring in line with the LLR BAP is described further in Section 5.

4.61 Market Bosworth also offers example of the opportunity for traditional orchards, allotment and other community-led projects which offer recognised benefit to biodiversity as well as supporting cohesion within a growing population.

4.62 Congerstone Sites 25, 49 and 50 each require consideration of aquatic as well as terrestrial habitats owing to the close proximity of the of the settlement to Ashby Canal SSSI east of the settlement and River Sence LWS to the west. Any future development design must account for potential off-site and indirect impacts during both construction and operation. Robust mitigation may include buffering of sensitive habitats, etc but again, consideration more broadly of strategic sustainable pedestrian and cycle routes to avoid potential impact and/or support linear habitat connectivity. Consultation with local stakeholders, such as the Canal & Rivers Trust, would be carried out where appropriate.

New Settlements

4.63 Site 35 south of the M69, are separated from Burbage and Hinckley by the M69 but the as part of the same built landscape, poses similar potential impacts and opportunities to those described under 'Urban & Peri-urban'. Additional opportunities include the Soar Brook tributaries, associated grassland, marshland and woodland habitats and, more widely, the ponds and waterbodies scattered through the rural landscape. Again, the existing road network provides a potential framework for substantial linear tree planting and/or grassland creation.

4.64 Site 69 at Fenny Drayton is notably lacking in the hedgerows, trees and ditch habitats typically associated with the smaller field pattern of the surrounding farmland to the north and indeed, which is typically of the borough. Farmland to the west and south is managed under coarse-scale intensive agriculture similar to the assessment site. Reintroduction of semi-natural habitat connectivity through the landscape would be of benefit both to biodiversity and to climate change resilience in contrast to the existing (where risk of dry summers and wet winters can be exacerbated). This should include buffering of the tributary that flows along the northern site boundary to the River Anker. Atherstone lies c.1km west and, whilst separated by the A5 and River Anker, potential operational impacts at Site 69 on local receptors should be considered cumulatively with those nearby in Warwickshire. Opportunity for creation of a range of wetland habitats should be optimised as part of any future SUDS, as run-off rates and quality to the local ditch network will need to be maintained despite introduction of impermeable built development plots.

4.65 Site 70 at Norton Juxta Twycross, closest of all assessment sites to the River Mease SAC, lies c.2.7km south of the SAC and 2.2km from the River Mease LWS, upstream of the designated stretch. Whilst there appears to be limited direct habitat connectivity to the Mease, given the scale of potential impacts associated with the large scale of development must be assessed and avoided within any future development design. This assessment site comprises large arable fields, not unlike to Site 69. Similar land use extends north west to the borough boundary, and north east to encompass Cottage Farm. Woodland copses occur throughout the site, typically isolated from other semi-natural habitats. Little Orton, Norton House Farm Pool p/hLWS stands in the east off Shelford Lane. Reintroduction of semi-natural habitats through the site should extend and buffer retained woodland and hedgerow habitats, and maximise connectivity between fragmented features.

Cumulative Assessment

4.66 Note that this assessment does not consider cumulative impacts in detail. Each site allocation is reviewed on an equal basis to inform the emerging Local Plan, and opportunities recognised at a strategic level. Further assessment will be completed as part of the Local Plan assessment, including via Sustainability Assessment prior to examination.

4.67 Current best practice guidelines for impact assessment (CIEEM 2019²³) explain that cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location. Cumulative effects are particularly important as ecological features may be already exposed to background levels of threat or pressure and may be close to critical thresholds where further impact could cause irreversible decline. Cumulative effects can also make habitats and species more vulnerable or sensitive to change. The key types of cumulative effect recognised by CIEEM include:

- Additive or incremental effects - involve multiple activities/projects (each with potentially insignificant effects) which added together give rise to a significant effect due to their proximity in time and space. The effect may be additive or synergistic (i.e. facilitative).
- Associated or connected effects - where a development activity enables another development activity e.g. phased development as part of separate planning applications.

4.68 Note that the potential for cumulative effects is primarily associated with incidences where a level of residual effect (significant or not) remains. Where residual effect/s can be avoided through appropriate siting and scaling of development, through application of the mitigation hierarchy, or where the residual effect is beneficial, there is typically no opportunity for additive/incremental effects to occur. The recommendations provided herein therefore seek to avoid and/or successfully mitigate ecological effects, and deliver biodiversity net gain for each assessment site to minimise the potential for cumulative impacts to occur.

²³ CIEEM (2019) Guidelines for Ecological Assessment in the UK & Ireland: Terrestrial, freshwater a& Marine. Version 1.1 Updated September 2019

Chapter 5

Recommendations for Strategic Biodiversity Enhancement

5.1 This section provides a strategic overview of locally appropriate restoration and enhancement measures that serve a cohesive connectivity of resilient greenspaces across the borough in which biodiversity can thrive. Recommendations for policy and supporting strategies of the emerging Local Plan are outlined.

The Designated Site Network

5.2 The condition of some designated sites within the borough is not optimal (such as Burbage Common) or not known (over 85% of those within the non-statutory designated network). Review of the existing designation database is recommended. Given the spatial extent and number of sites requiring review, a bespoke method focussing on the 2011 SBI guidelines would be recommended. Options for delivery in partnership with local bodies such as the Wildlife Trust could be explored.

5.3 A number of assessment sites propose large, or collectively large, scales of development in the vicinity of one or more SSSI; those south of the M69, at Earl Shilton and several at Hinckley, for example, lie in close proximity to Burbage Wood & Aston Firs SSSI. The ability of the Burbage SSSI to maintain functional habitats and healthy ecosystem despite an increase in recreational demand should be assessed cumulatively as each development comes forward, irrespective of the scale of development. In accordance with the mitigation hierarchy, appropriate avoidance measure would be delivered on-site within any proposed development. Where the existing condition of an SSSI, or component habitat therein, is known to be suboptimal, sensitivity to additional impact may be higher. To accommodate a marked increase in visitor capacity, provision of additional, connected habitat will likely be required. There may, in part be delivered, as part of the revised GI Strategy or any future Nature Recovery Strategy that identifies strategic measures to re-establish favourable status of biodiversity at the landscape-scale. Both of these strategies would inherently offer opportunity for cross-boundary collaboration with neighbouring authorities.

5.4 The SSSI IRZ identify the areas within which Natural England identifies potential impact/s – such as recreational access – associated with specific land uses, this should not be treated as exhaustive. Notably large developments, such as Site 72 at Groby, beyond the IRZ but within a distance at which impacts may occur will also need to be assessed.

5.5 Approximately 30% of all assessment sites encompass at least one non-statutory site, and numerous more lie alongside or in proximity to one of this designated network. It is recognised that some designations may be retained or indeed enhanced as part of a development site but this will depend on the nature and scale of development in balance with the mitigation and enhancement measures proposed. A single pond designation may, for example, be retained within an area of newly created diverse grassland and scattered ponds, which connects wider woodland and scrub habitats. It is recognised that the LWS network includes a number of designations for which the condition of habitat is not known, this is particularly true for cLWS, pLWS and hLWS. All assessment sites that overlies, or fall adjacent to, these designations are identified in the proforma desk study, with appropriate Phase 2 survey/s recommended to ascertain current condition, and protection and enhancement measures outlined in the overall assessment. Development which incurs loss of designated land or potential reduction in condition long-term, would be contrary to planning policy.

5.6 The network of non-statutory designated sites is essential to support biodiversity across the borough, to serve the recreational demands of the local community and, in both regards, support the network of higher level, national designated sites in the local region. The presence and condition of non-statutory designations, and the potential impact of proposed development should form part of the planning decision-making process. Cumulative assessment of potential impacts should be scoped for all developments, dependent on the nature and scale of proposed development, and the sensitivity and importance of ecological receptor/s potentially impacted. Cumulative impacts are of particular importance where either an ecological feature is already exposed to background levels of pressure and may be close to critical thresholds where further impact could cause irreversible

decline, or the sensitivity of a feature is sufficiently high that even minor additional disturbance may impact viability (e.g. uncommon or declining ground nesting birds).

5.7 Cumulative assessment should be included in the ecological assessment accompanying a planning application and the scope rationalised back or extended out to reflect the sensitivity of ecological receptors potentially affected, the nature of potential impacts from development within its 'zone of influence', and the amount of BNG committed to. Within formal EIA, this would follow national guidance and be completed as part of the Scoping process. Projects to be considered in cumulative assessment may include but would not be restricted to: recently granted permissions (prior to construction completion), refused applications awaiting determination of appeal, planning applications awaiting consent, future strategic development/s specifically referenced in local policy.

5.8 As referenced in Chapter 4, CIEEM (2019) describes the actions causing cumulative effect as additive/incremental or associated / connected. Note that associated developments may include different aspects of the project which may be authorised under different consent processes. It is important to assess impacts of the project as a whole and not ignore impacts that fall under a separate consent process.

5.9 It is recognised that delivery of BNG as part of any development proposal would serve to minimise the risk of cumulative impact. The Draft Environment Bill targets BNG at 10%. Successful implementation of this level of BNG would be expected to deliver beneficial outcome for the ecological network of the borough in the long-term i.e. allowing for recovery of any unavoidable temporary impacts, establishment of habitats, etc.

Representation of Notable & Priory Habitats

5.10 Within the borough, habitats of conservation value are, generally more abundant in the east and north, as is typified by deciduous and ancient woodlands (1,131.13ha). Intensively farmed land across much of the centre and west offer a relatively limited area and diversity of such habitats. Habitat creation and enhancement should follow the Lawton principles of 'bigger, better and more joined up' – extending the area of woodlands planted and under favourable management, buffering, connecting and, where appropriate, diversifying the habitat structure and species- composition of existing sites. Such measures should be guided by the principles of optimising climate change resilience, such as selection of locally-appropriate species and long-term management techniques. These principles are in synergy with those underpinning the design and delivery of green infrastructure.

5.11 Note that as ancient woodland is an irreplaceable habitat, potential impacts must be avoided (as opposed to mitigated or compensated). BNG does not apply to ancient woodland. Several assessment sites occur in close proximity to ancient woodlands, the closest of which is Site 56 (Ratby) which extends north to Martinshaw Wood LWS (separated only by Markfield Road). Any proposed development must avoid potential impact (including temporary impacts) on ancient woodland.

5.12 S41 priority grasslands collectively account for only 90.58ha across the borough. This is again in part a function of the intensity of widespread agriculture. The range of grassland types captured under the LLR BAP offer wide opportunity for locally-appropriate habitat creation and restoration, depending on soil type and hydrology. Under beneficial management, grasslands offer significant opportunity for diversification and connectivity of the habitat mosaic through rural, urban and peri-urban environs.

5.13 Wetland habitat is least represented (26.99ha). Opportunity to increase this include not only creation of ponds and enhancement of existing lakes and former quarries, but by large-scale re- wetting and management of habitats that currently support lower conservation value grassland or farmland. Such measures would augment the existing network of watercourses.

5.14 In delivering BNG, it may be appropriate to reduce or prevent recreational access to select sites or habitats within sites for a period of time, as habitats establish and/or recover. This would need to be taken into account when assessing any displaced recreational impact.

Delivery of a Cohesive & Resilient Network

5.15 Habitat restoration and creation should contribute to the targets of the 2016-2026 LLR BAP (Section 4), identified across the broad categories of wetland, woodland and open land. It is anticipated that this would form the basis for any future Nature Recovery Strategy, which should identify target objectives, partners for their delivery, and monitoring within defined timescales.

Locally-appropriate opportunities for target habitats builds on the notable and priority habitats, and the national habitat networks mapped.

5.16 Recognising the need to encourage public enjoyment and ownership of the countryside, and the need to balance this with the potential risk of excessive recreational pressure on sensitive ecological features, any Nature Recover Strategy should cross-correlate to the GI Strategy. The emerging Local plan should allow for these strategies to be referenced as part of a positive policy framework.

5.17 Noting the correlation between aspects of ecology, landscape and green infrastructure, assessment sites already identified as 'green wedge' should be respected where possible, such as Site 72 at Groby. Where development is permitted, this should be of an appropriate scale and using a landscape-led approach to Masterplanning which builds expansion of and connectivity between existing designated and notable habitats. Opportunity for a substantial area of deciduous woodland, lowland meadow, good quality semi-natural grassland and lowland fen has been identified in the vicinity of Groby Pool SSSI. However, any development at Site 72, for example, would need to provide appropriate BNG, realistically maintained in favourable condition in the long-term, whilst also accommodating the recreational demand of any future residents to avoid potential off-site impact on surrounding designated sites. The woodland network north and east of the site, could be extended across both northern and southern boundaries as part of a wider mosaic of grasslands of conservation value, interconnecting hedgerows, scrub and wetland habitats which respect the prevailing topography.

5.18 Regarding the need to strengthen and extend the ecological resource in the south east of the borough, there is opportunity for a substantial area of semi-natural habitat enhancement of lowland dry arid grassland and of deciduous woodland extending from Burbage Common, potentially connecting to similar habitats farther east beyond the authority boundary at Croft and, interlinking these, the restoration of good quality semi-improved grassland and enhancement of lowland fen farther east to the M69. Refer also to the approach outline for support of 'the designated site network' described above.

5.19 North of Hinckley, Barwell and Earl Shilton, measures that could contribute to delivering a strategic, borough-wide prioritisation of the watercourse network include woodland planting, grassland creation and diversification of wetlands along the River Tweed and other tributaries to the River Sence. Further example of the importance of the watercourse corridors is seen north of Barlestone where opportunity for enhancement of lowland meadows is identified along a tributary to the Sence in the central north of the borough.

5.20 Opportunities for creation of lowland fens and lowland meadows is identified in the land surrounding Newton Burgoland Marshes SSSI which abuts the north boundary of the borough. Whilst this does not lie in close proximity to any assessment site, it forms one of the highest valued features within the borough and should be integrated into any strategic planning for future recovery and resilience. Delivery could logically reflect the local topography and ditch network, so too soils and hydrology.

5.21 Lowland meadow creation and restoration is also prioritised at Sheepy Parva, encompassing Sheepy Fields SSSI, Manor Farm Meadows LWS and, farther upstream, the River Sence LWS. The rural habitat mosaic encompasses tributaries to the Sence, ditches and woodland copses. Opportunities at Sheepy Parva lie at some distance from the assessment sites proposed across the north west of the borough but remain important to support the existing designated network and to promote the habitat mosaic within the rural heartlands.

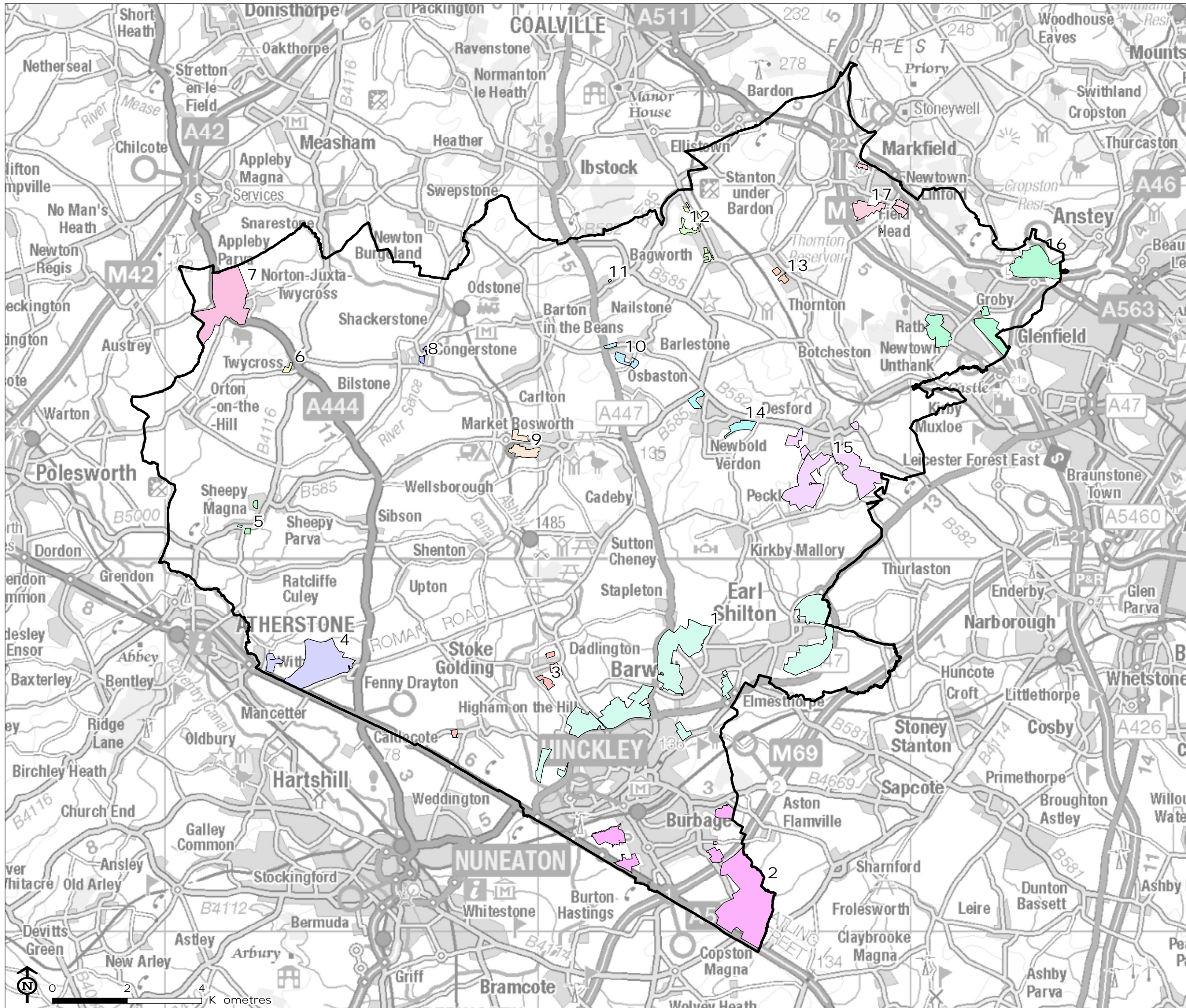
5.22 Any assessment site taken forward for allocation must allow capacity for the delivery of BNG in accordance with the mitigation hierarchy, i.e. on site or, where this is not possible, within an identified off-site land parcel within which all prescribed measures can be delivered. The DEFRA Metric 2.0 continues to evolve as a national guidance and is recommended for reference within any new policy regarding BNG. Emerging local plan policy should seek to maximise BNG in line with the most up to date DEFRA guidance available at that time. The metric is anticipated to form the 'Secretary of State's metric' once published later in 2020 and therefore directly referenced in the Environmental Bill once enacted (royal assent anticipated late 2020).

5.23 For policy relating to small and/or urban 'minor development' applications (other than the scale of sites assessed for this study), assessment of BNG may be proportionately simplified. 'Minor development' is defined for residential where the no. proposed dwellings is between one and nine on a site of less than 1ha, or where no. proposed dwellings is not known and the site area less than 0.5 hectares. Accordingly, the latest updates to DEFRA Metric 2.0 include simplified calculation to parameters such as connectivity.

Drawings

Hinckley & Bosworth Phase 1 Habitat survey

Figure 1: Settlement Groupings



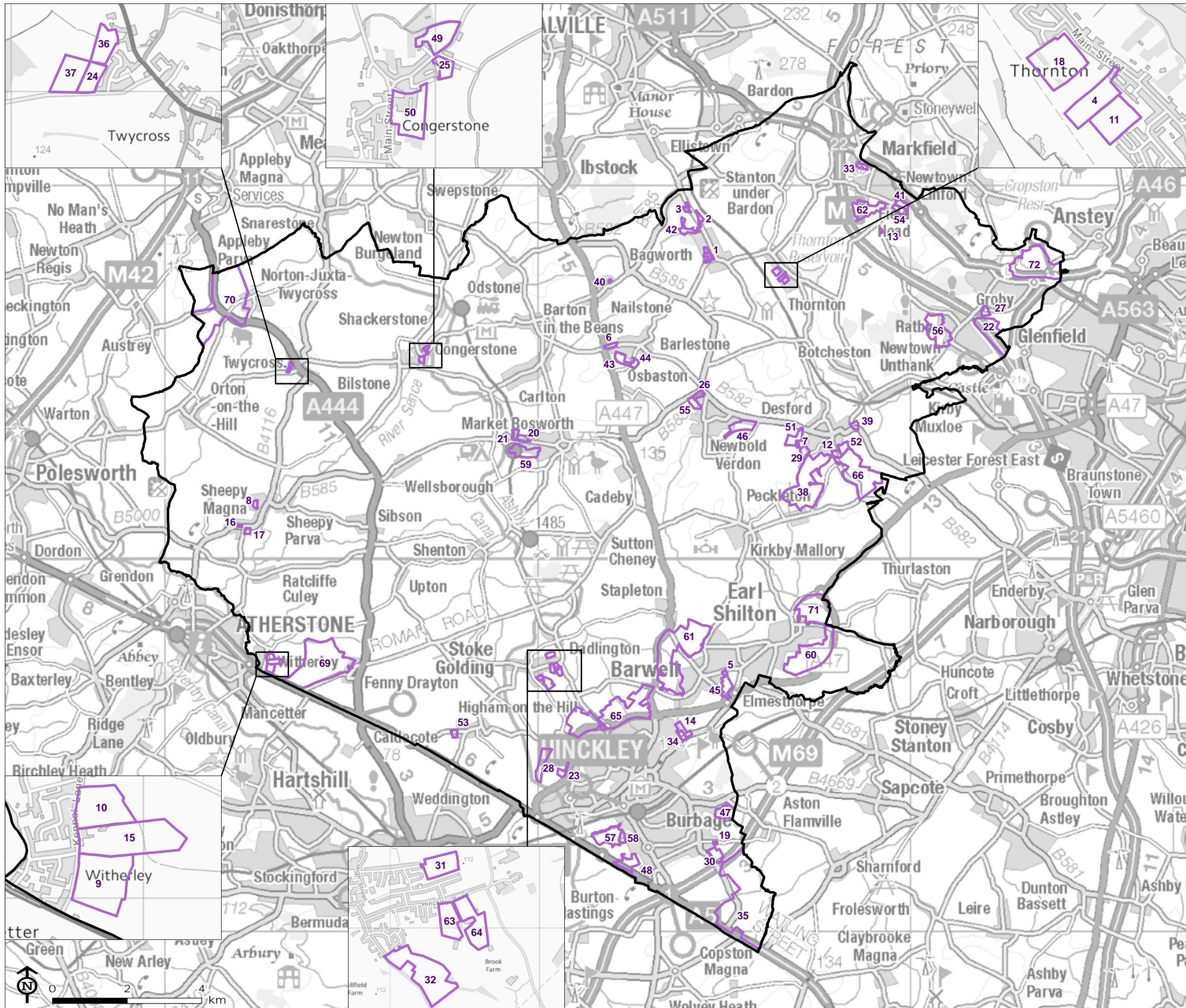
- Hinckley and Bosworth
- Settlement grouping
- 1: Hinckley, Barwell and Earl Shilton
- 2: Burbage, Sketchely and South of Burbage
- 3: Stoke Golding and Higham on the Hill
- 4: Witherley and Fenny Drayton
- 5: Sheepy Magna
- 6: Twycross
- 7: Norton Juxta Twycross
- 8: Congerstone
- 9: Market Bosworth
- 10: Barlestone
- 11: Nailstone
- 12: Bagworth
- 13: Thornton
- 14: Newbold Verdon
- 15: Desford and Peckleton
- 16: Groby and Ratby
- 17: Markfield

Map Scale @A3: 1:100,000



Hinckley & Bosworth Phase 1 Habitat survey

Figure 2.1: Assessment Sites



Hinckley and Bosworth
 Assessment site

Corresponding LUC ID and Council ID

1: AS5	36: LPR64
2: AS12	37: LPR65
3: AS16/1027	38: LPR24
4: AS32	39: LPR37
5: AS66	40: AS1030
6: AS455	41: LPR70
7: AS466	42: LPR71
8: AS519	43: AS53
9: AS585	44: LPR72
10: AS586	45: LPR75
11: AS33	46: AS445
12: AS201	47: AS134
13: AS407	48: LPR26
14: AS303	49: LPR79
15: AS589	50: LPR80
16: AS616	51: LPR83
17: AS618	52: LPR119
18: AS686	53: LPR90
19: AS809	54: LPR96
20: AS392	55: LPR100
21: AS1050	56: LPR107
22: AS1008	57: LPR44
23: AS1021	58: AS1015
24: LPR10	59: LPR9
25: LPR18	60: AS237
26: LPR29	61: AS58
27: LPR30	62: LPR94
28: LPR31	63: AS540
29: LPR35	64: AS541
30: LPR36	65: AS1031
31: LPR39	66: AS200
32: LPR41	69: LPR88
33: LPR43	70: LPR102
34: LPR50	71: Various
35: LPR16	72: Various


Note that two sites – 67 and 68 – were duplicates of other site boundaries already considered and as such have been removed from the final report issue.

Map Scale @A3: 1:100,000



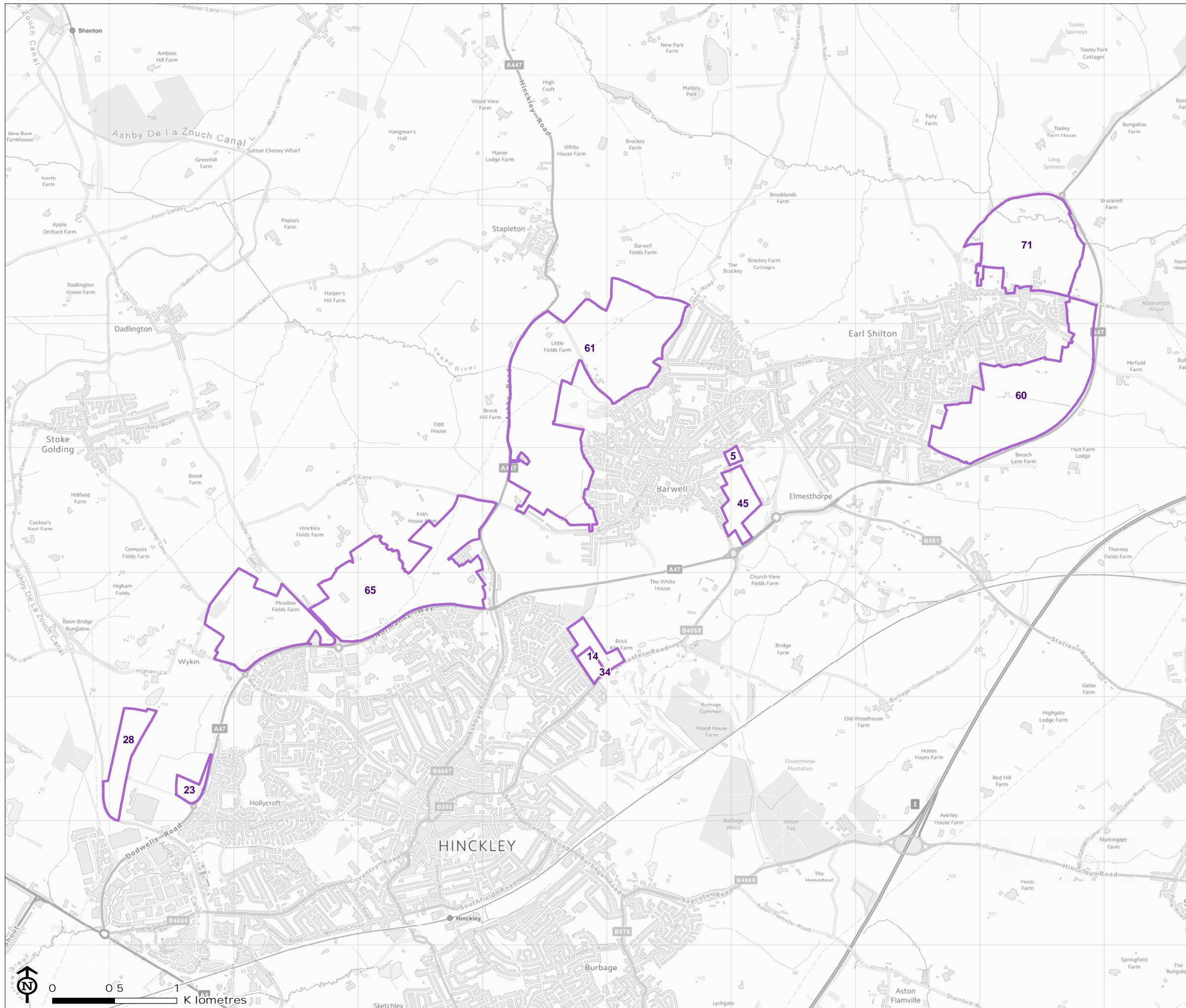
Hinckley & Bosworth Phase 1 Habitat survey

Figure 2.02: Hinckley, Barwell and Earl Shilton Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

- | | |
|------------|-------------|
| 5: AS66 | 45: LPR75 |
| 14: AS303 | 60: AS237 |
| 23: AS1021 | 61: AS58 |
| 28: LPR31 | 65: AS1031 |
| 34: LPR50 | 71: Various |




Map Scale @A3: 1:30,000



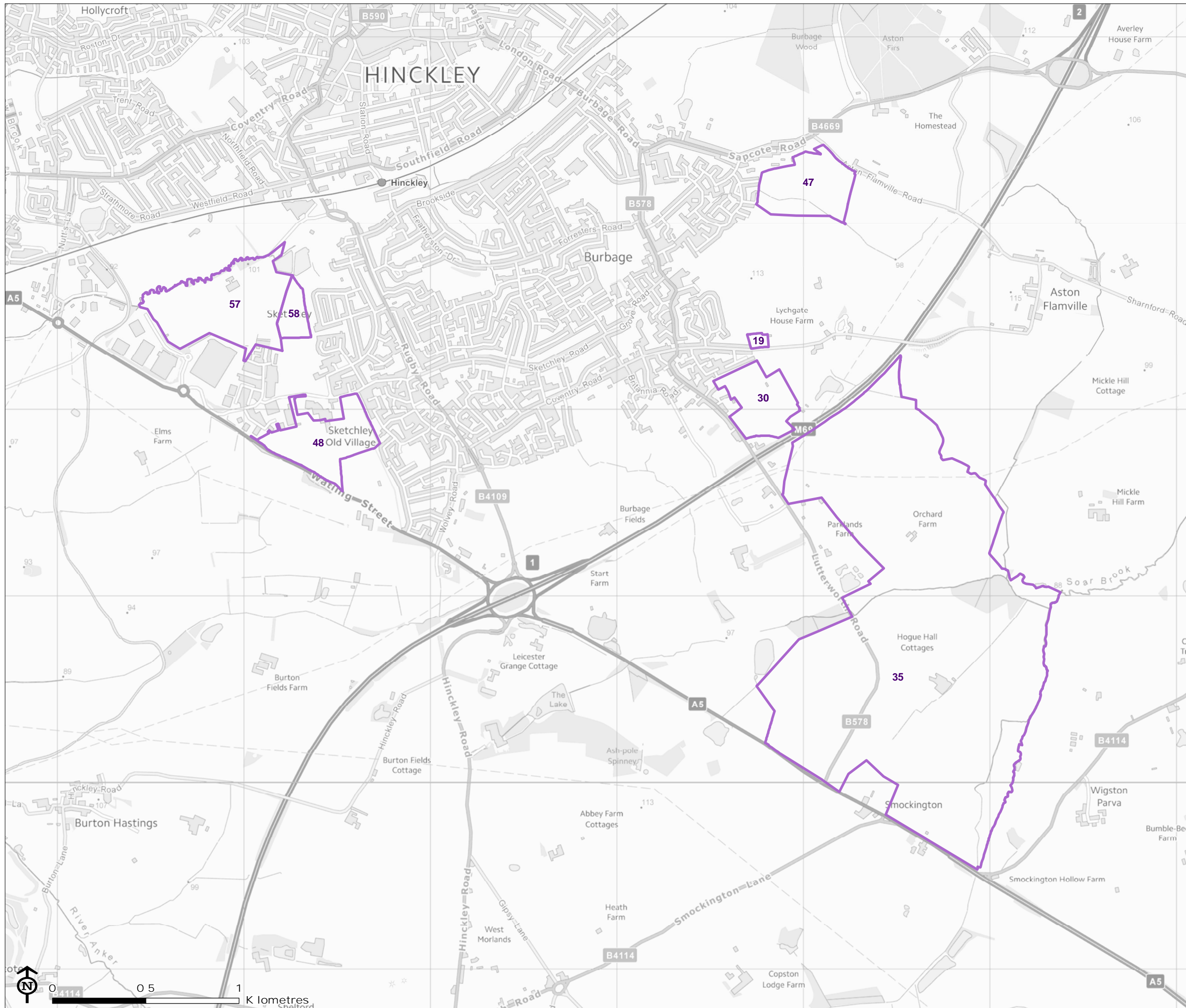
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Figure 2.03: Burbage, Sketchely and South of Burbage Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

- | | |
|-----------|------------|
| 19: AS809 | 48: LPR26 |
| 30: LPR36 | 57: LPR44 |
| 35: LPR16 | 58: AS1015 |
| 47: AS134 | |




Map Scale @A3: 1:20,000



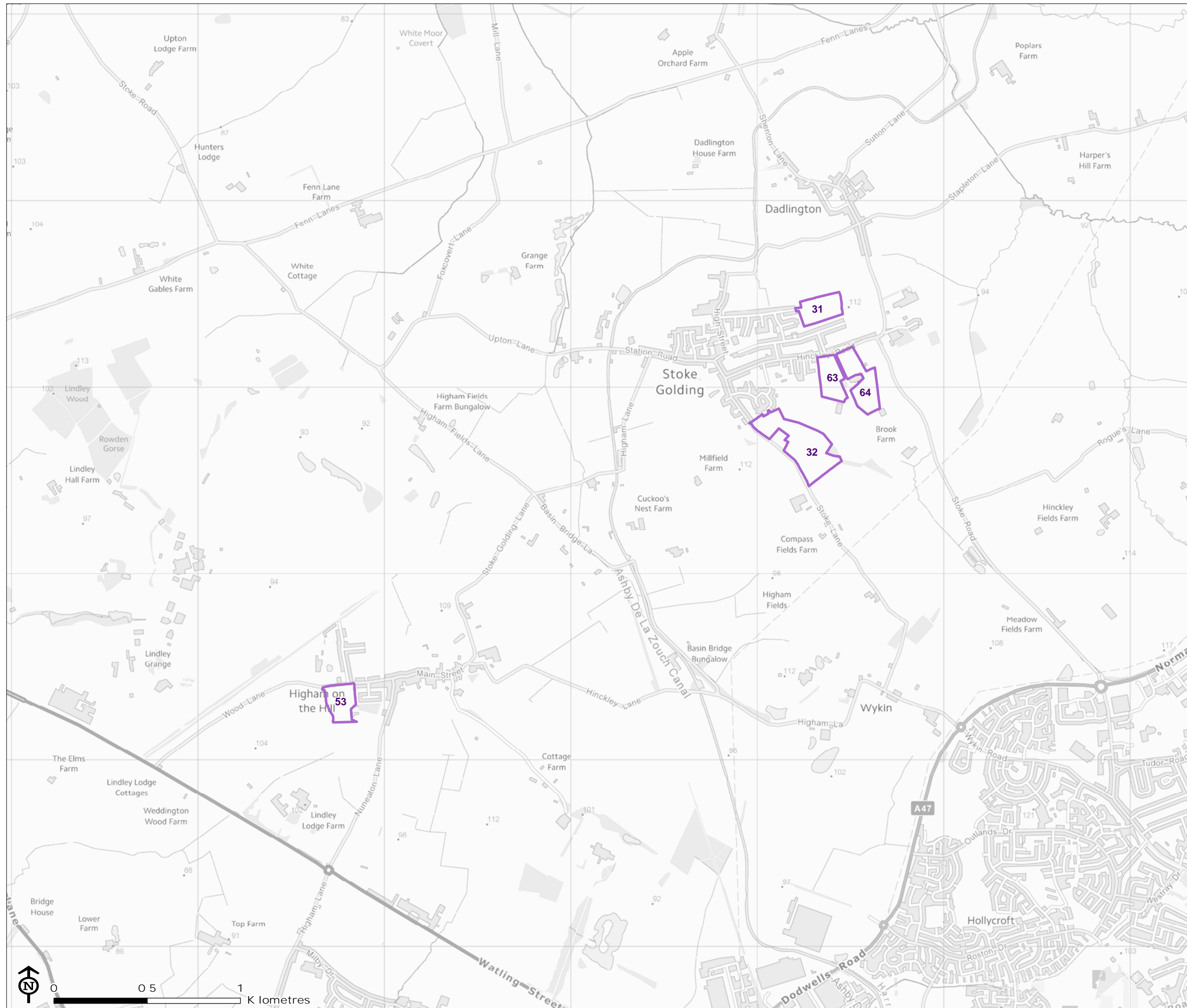
Hinckley & Bosworth
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Figure 2.04: Stoke Golding and Higham on the Hill Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

- 31: LPR39 63: As540
- 32: LPR41 64: As541
- 53: LPR90




Map Scale @A3: 1:20,000



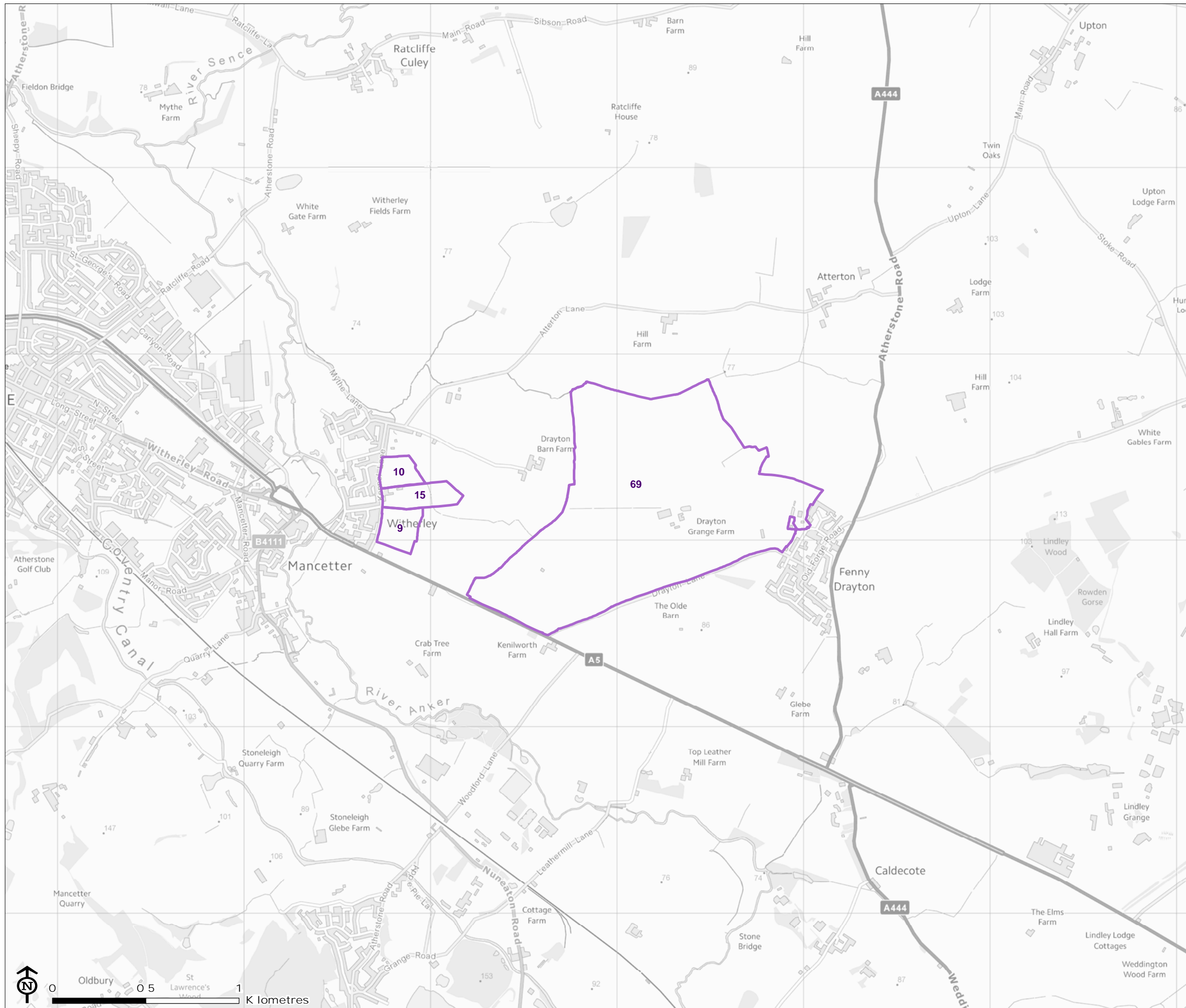
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Figure 2.05: Witherley and Fenny Drayton Assessment Sites

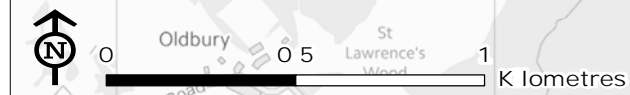
 Assessment site

Corresponding LUC ID and Council ID

9: AS585 15: AS589
10: AS586 69: LPR88




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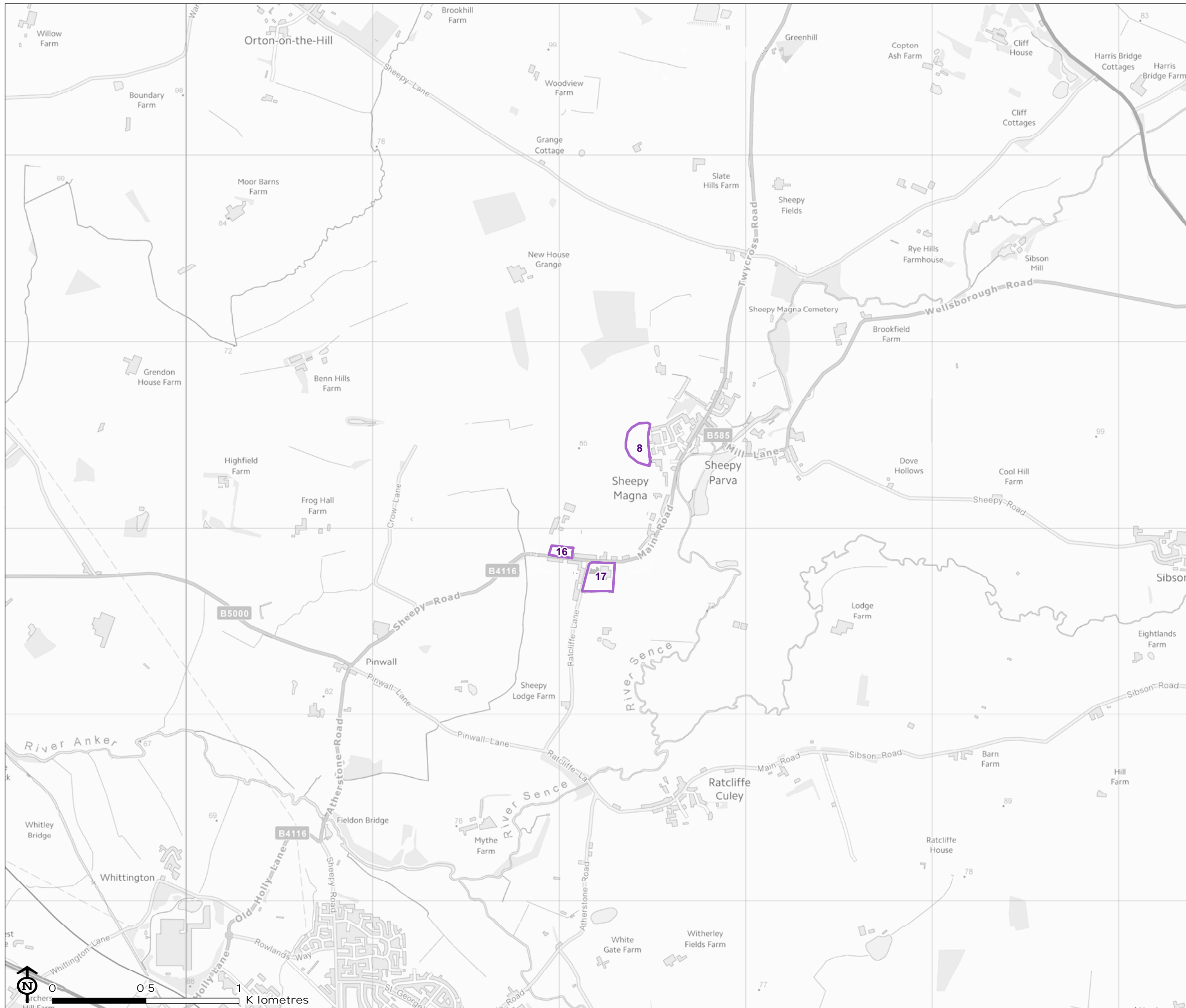
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Figure 2.06: Sheepy Magna
Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

8: AS519 17: AS618
16: AS616




Map Scale @A3: 1:20,000



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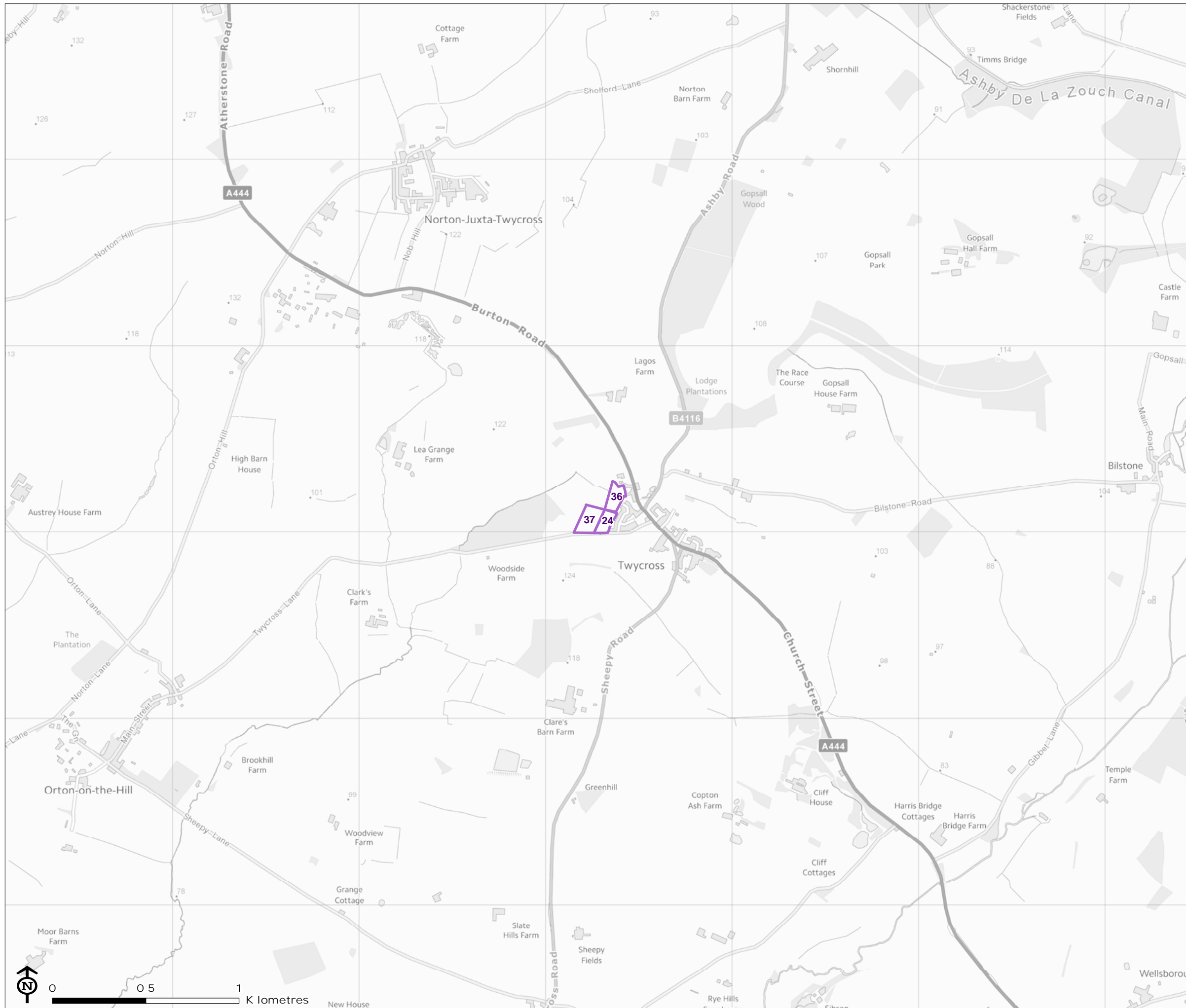
Figure 2.07: Twycross Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

24: LPR10 37: LPR65


36: LPR64



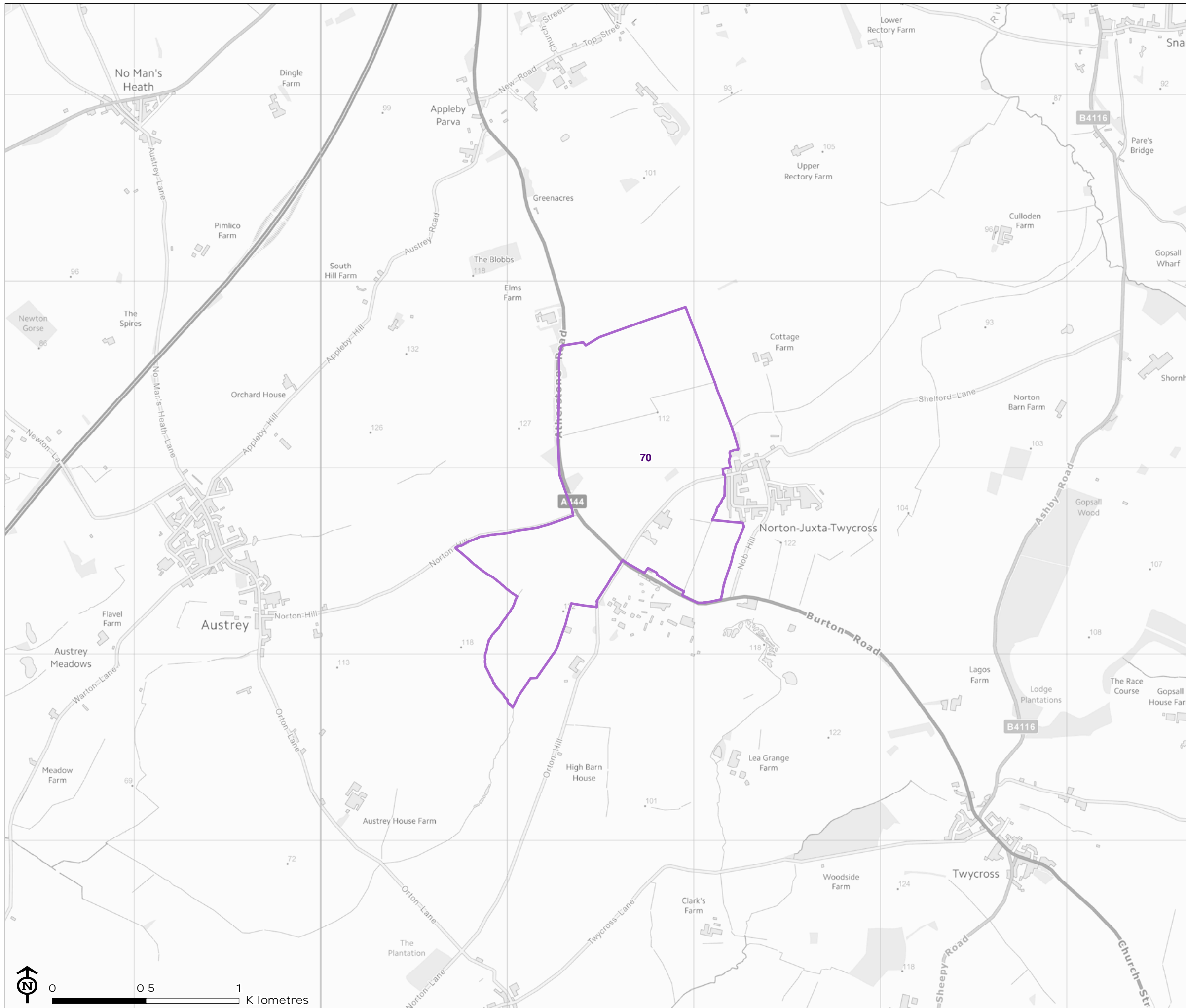
Map Scale @A3: 1:20,000



Figure 2.08: Norton Juxta Twycross
Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID
70: LPR102




Map Scale @A3: 1:20,000



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Phase 1 Habitat survey

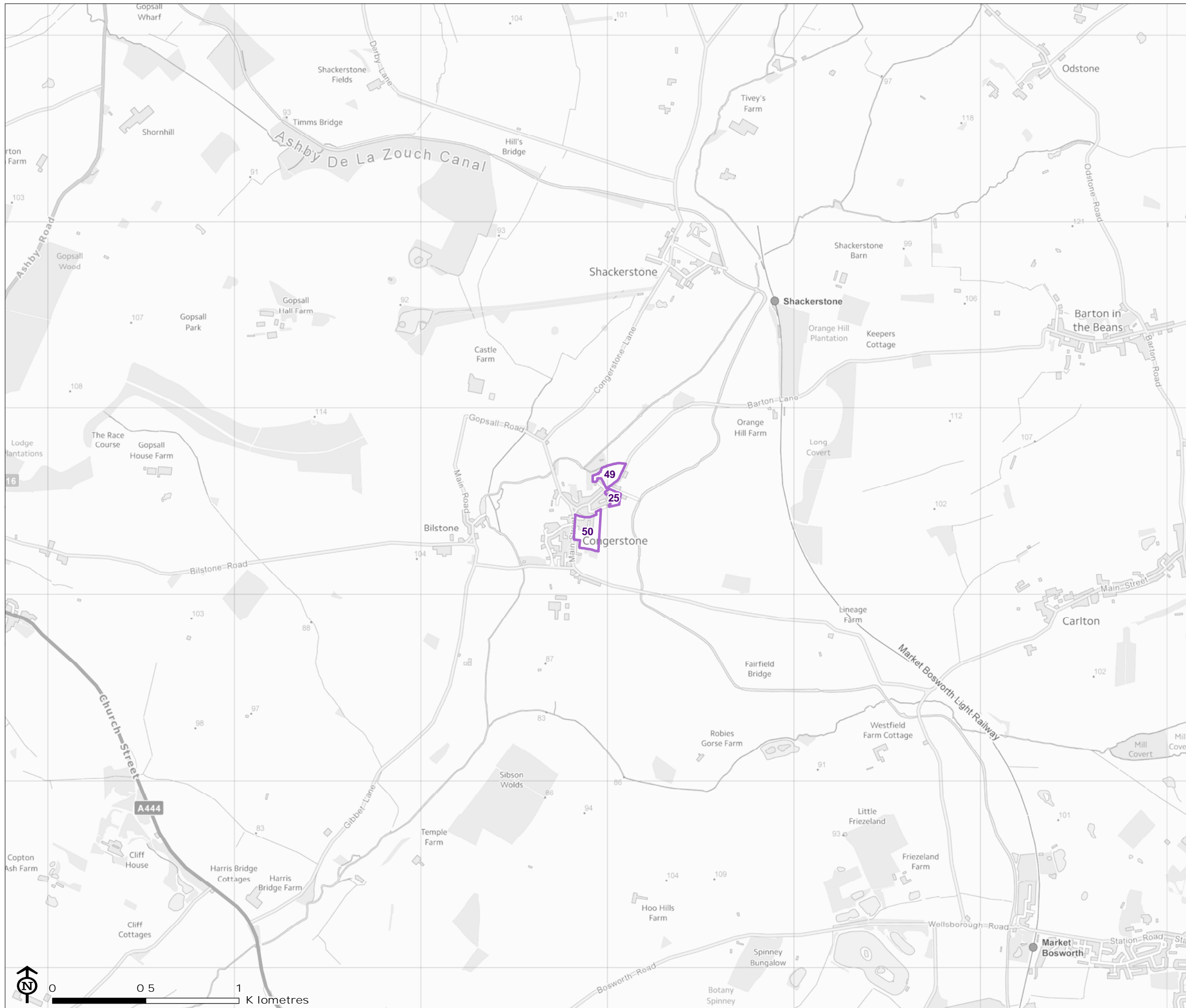
Figure 2.09: Congerstone
Assessment Sites

 Assessment site

Corresponding LUC ID and Council ID

25: LPR18 50: LPR80

49: LPR79



Map Scale @A3: 1:20,000

