

**Hinckley & Bosworth Borough
Council**

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

Final report

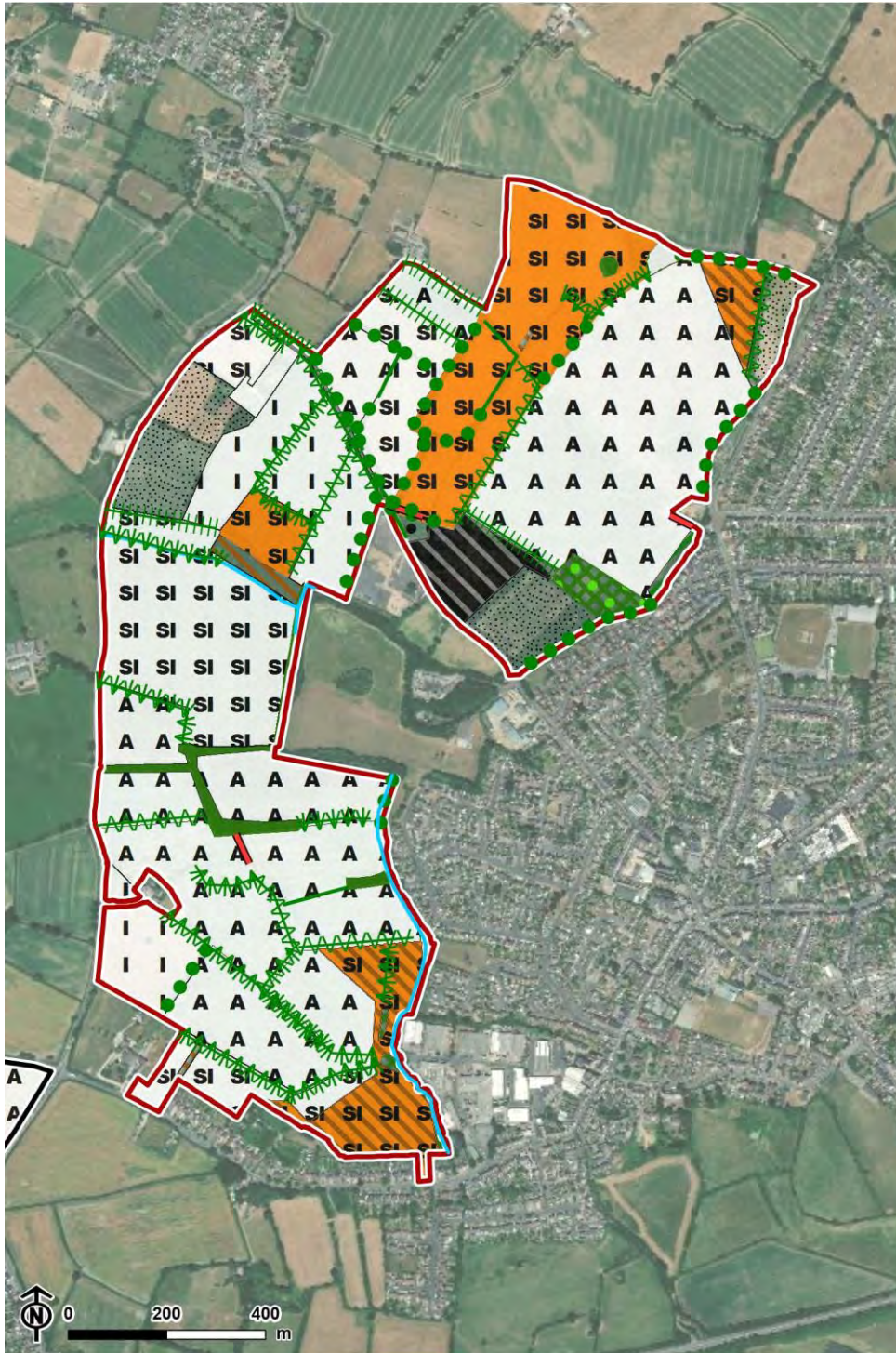
Prepared by LUC

May 2020

Part 9: Appendix C (Assessment site 61 to assessment site 72)

LUC ID: 61
 HBBC ID: AS58
 2014 survey ID: na

Settlement: Hinckley, Barwell and Earl Shilton
 Survey access: Partial



Assessment site: 61
 Hinckley and Bosworth ID: AS58

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- A1.1.2 Broadleaved woodland (plantation)
- A2.1 Scrub (dense/continuous)
- A2.1 Scrub (dense/continuous)/
- A3.1 Broadleaved scattered trees
- A3.1 Broadleaved scattered trees
- SI B2.2 Neutral grassland (semi-improved)
- SI B2.2 Neutral grassland (semi-improved)/
- C3.1 Other tall herb and fern (ruderal)
- B4 Improved grassland
- I B6 Poor semi-improved grassland
- C3.1 Other tall herb and fern (ruderal)
- HS Hard standing
- J1.1 Arable
- J3.6 Buildings/ HS Hard standing
- J4 Bare ground
- J5 Other habitat
- RA Restricted Access
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J5 Other habitat
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km: Burbage Wood and Aston Firs, Kendall's Meadow

SSSI IRZ overlapping site: None

LNRs within 2km: Burbage Common & Woods

LWS within 2km: Yes

LWS on site or adjacent (within 30m): Little Fields Farm Meadow, Barwell Hedgerow

Potential or historic LWS on site or adjacent (within 30m): None

LUC ID: 61 Settlement: Hinckley, Barwell and Earl Shilton
 HBBC ID: AS58 Survey access: Partial
 2014 survey ID: na



Ancient woodland within 2km: Ancient woodland (no name), KIRKBY SPINNEY, SHEEPY WOOD
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: None
 NE Habitats network classification on site: None
 Priority habitats within 1km: Deciduous woodland

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input checked="" type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

This site is a large area of fields with some buildings and woodlands to the north of Earl Shilton. The fields vary in habitat type; the most dominant habitat is arable however a large proportion is poor semi-improved grassland with areas of improved grassland and neutral grassland, some of which is grazed. The Little Fields Farm Meadow LWS is present in the centre of the site. Broadleaf woodland belts run between a small number of fields in the south of the site and mature trees dot many of the hedges, these are ash *Fraxinus excelsior* and oak *Quercus sp.*. Tree lines and hedges (many with trees) run along the margins of fields across the whole site. In the north west of the site, at a field corner, a badger sett was recorded. A stream runs through the centre of the site and is the start of the Tweed River which flows to the west of the site. On the bank of this stream, at the eastern boundary of the site, is a stand of Japanese knotweed. A small area of scrub and scattered trees lies at the north-eastern boundary, where the site abuts housing. The site borders almost the complete length of the western boundary of Earl Shilton.


Land use: Arable, pasture, public access, caravan park
 Management: Hedgerow, grazing
 Management score: Neutral
 Connectivity score: High

Species records within 1km: Bat, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Hobby, Lesser Noctule, Noctule Bat, Pipistrelle, Pipistrelle Bat species, Redwing, Smooth Newt, Soprano Pipistrelle

Invasive species: Japanese Knotweed

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities: LWS, stream, woodland,

LUC ID:	61	Settlement:	Hinckley, Barwell and Earl Shilton	
HBBC ID:	AS58	Survey access:	Partial	
2014 survey ID:	na			

Opportunities on site:	Meadow expansion and enhancement - particularly where this is to support recreational access. Tree line, woodland belt and hedgerow network - extend and enhance.
Opportunities for connectivity:	Hedgerow network Tree lines Woodland belts

Consideration of 2014 data:	na
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Overall assessment: The site has a number of habitats of which hedges, tree lines, woodland belts, stream LWS and scrub provide the primary source of ecological value. The grassland mosaic of the site plays an important role in supporting these habitats. The wide range of habitats means the site has the potential to support protected species and the Phase 2 surveys should focus on birds (considering farmland, breeding and wintering assemblages), bats and badgers.

- Any future development should seek to:
- Protect Little Fields Farm Meadow LWS, which lies within the site, from development. Measures such as provision of buffer habitats and localised enhancement to avoid encroachment during construction or disturbance and erosion during operation, should be informed by detailed baseline data.
 - Extend the Little Fields Farm Meadow LWS into the semi-improved grassland to the south by creating mesotrophic grassland. This new area could then be utilised responsibly as a communal green area for the development and limit damage to the LWS caused through increased recreational pressure.
 - Creation of meadow or open green space at another location within the site to absorb recreational pressures.
 - Retain and enhance the existing tree lines and hedgerows to retain and improve the connectivity within the site and to the wider area.
 - Strengthen and extend the woodland belts in the field margins to provide greater habitat area for protected species and increase connectivity within and beyond the site. Increase length of LWS hedgerow within the south of the site to increase resilience of this habitat.
 - Consider the internal road lay out carefully to ensure hedges and woodland are retained, as far as reasonable practicable.
 - Strengthen the banks of the stream at the centre of the site by planting of native species to prevent bank erosion and limit pollution events by implementing a suitable buffer during development construction.
 - Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and hedge lined pathways within the development, which link to the wider landscape.
 - Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
 - Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are to be maintained as part of a wider functional network.

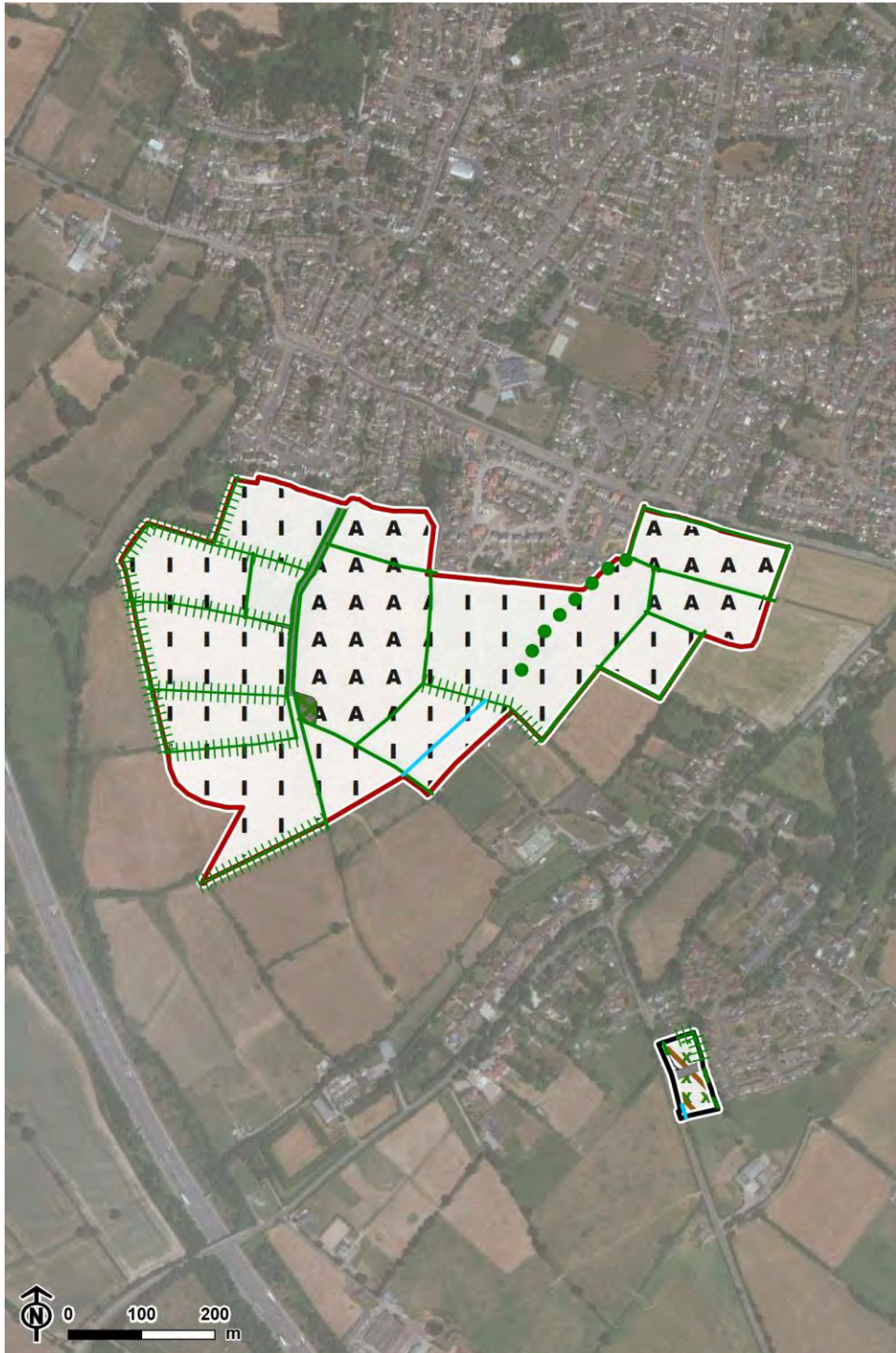
However, it is likely that further surveys and ecological input during Masterplanning could potentially allow development within the site, on the basis that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Sensitive design and mitigation together accommodate a robust package of impact avoidance measures.
- The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status: Amber

LUC ID: 62
 HBBC ID: LPR94
 2014 survey ID: na

Settlement: Markfield
 Survey access: Partial



Assessment site: 62
 Hinckley and Bosworth ID: LPR94

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A2.1 Scrub (dense/continuous)
- A2.2 Scrub (scattered)/
C3.1 Other tall herb and fern (ruderal)
B4 Improved grassland
- HS Hard standing
- A J1.1 Arable
- J5 Other habitat
- G2 Running water
- J2.1.2 Intact hedge (species-poor)
- J2.2.2 Defunct hedge (species-poor)
- J2.3.2 Hedge with trees (species-poor)
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km:

Bardon Hill, Bardon Hill Quarry, Benscliffe Wood, Botcheston Bog, Bradgate Park and Cropston Reservoir, Cliffe Hill Quarry, Groby Pool and Woods, Roecliffe Manor Lawns, Sheet Hedges Wood, Swithland Wood and The Brand, Ulverscroft Valley

SSSI IRZ overlapping site:

None

LNRs within 2km:

None

LWS within 2km:

Yes

LWS on site or adjacent (within 30m):

Lower Grange Farm Hedge, Markfield

LUC ID: 62 Settlement: Markfield
 HBBC ID: LPR94 Survey access: Partial
 2014 survey ID: na



Potential or historic LWS on site or adjacent (within 30m): Semi-Improved Grassland
 Ancient woodland within 2km: BARNBY WOOD, BUSHY FIELD WOOD, COVER CLOUD, GREAT WOOD, JOHNS LEE WOOD, LAWN/OLD WOODS, ULVERSCROFT WOOD
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: None
 NE Habitats network classification on site: None
 Priority habitats within 1km: Deciduous woodland, Good quality semi-improved grassland, Lowland fens, No main habitat but additional habitats present, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description: The site is composed of a number of distinct fields, the majority are improved grassland with the remaining consisting of arable farmland. The improved grassland is dominated by annual meadow-grass *Poa annua* with Timothy *Phleum pratense*, nettle *Urtica dioica* and frequent dandelion *Taraxacum* sp. with some creeping buttercup *Ranunculus repens* and dock *Rumex* sp.. Fields are separated by species-poor hedges both with and without trees. These hedges are dominated by hawthorn *Crataegus monogyna* and hedges with trees consist of mainly ash *Fraxinus excelsior* but also contain elder *Sambucus nigra* and holly *Ilex aquifolium*. There is a large tree line which runs within the eastern area of the site. There is a small section of scrub at the centre of the site, at the corner of a field. A road runs from the northern border into the centre of the site which leads to a residential property and an area of private garden. Running water in the form of a wet ditch can be found in the central southern area of the site. The site lies to the south of Markfield and is bordered to the north by residential properties. To the south, west and east the site is surrounded by farmland.

Land use: Arable and pasture for animal grazing
 Management: Harvesting and grazing
 Mangement score: Neutral
 Connectivity score: High

Species records within 1km: Bat, Bluebell, Brambling, Common Frog, Common Lizard, Common Pipistrelle, Common Toad, Fieldfare, Freshwater White-clawed Crayfish, Great Crested Newt, Hobby, Myotis Bat species, Noctule Bat, Nyctalus Bat species, Osprey, Palmate Newt, Peregrine, Pipistrelle, Pipistrelle Bat species, Red Kite, Red-throated Diver, Redwing, Smooth Newt, Soprano Pipistrelle, Water Vole,

Invasive species: None

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |

LUC ID: 62 Settlement: Markfield
HBBC ID: LPR94 Survey access: Partial
2014 survey ID: na



- Bats Reptiles
 Birds Water vole

Key sensitivities: Loss of hedgerows and trees.
Changes to hydrology.

Opportunities on site: Increase species richness of hedgerows.
Inclusion of SUDs.
Creation/enhancement of lowland meadows.
Wetland creation

Opportunities for connectivity: Strengthen and extend hedgerow network through native species planting
Enhance and create wet ditches.

Consideration of 2014 data: na

Overall assessment: The western portion of this site, and a large area beyond, is an hLWS for semi-improved grassland but as a result of current land use, was mapped in 2019 as improved grassland. Detailed survey is required to determine which, if any parts of the site continue to meet the LWS criteria and where habitat restoration would best be directed as part of an appropriate mitigation and BNG package. This is recommended to inform the earliest stages of Masterplanning.

Whilst this site is categorised as Amber status, the extent of development which is feasible, whilst still achieving BNG may be markedly restricted. The hedges and trees within the site provide a high level of ecological value. The homogenous arable land and species-poor improved grassland is of a lower value, however provides some value within the overall mosaic of the site. The habitats present are suitable for a number of protected species, as listed above, and Phase 2 surveys are recommended accordingly.

Any future development should seek to:

- The distribution of any remaining hLWS grassland should be prioritised for retention, restoration and reconnection with the wider resource of this habitat type. LWS criteria should be used to target habitat management and the detailed baseline data to inform future monitoring.
- Retain hedges and mature trees associated with these to maintain connectivity within the site. The retention of these will also ensure any species mitigation required can be delivered.
- The area to the east of the site currently supports running water; creation of wetland habitat (potentially as part of SuDS) will promote biodiversity on the site.
- Enhancement of existing grassland, targeting the nature and quality of other local LWS grasslands. This is in keeping with the overall character of the borough.
- Creation of woodlands on the site as this site falls within the National Forest area.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and green fencing using hedges within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are 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, on the basis that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Sensitive design and mitigation together accommodate a robust package of

LUC ID: 62 Settlement: Markfield
HBBC ID: LPR94 Survey access: Partial
2014 survey ID: na



impact avoidance measures.

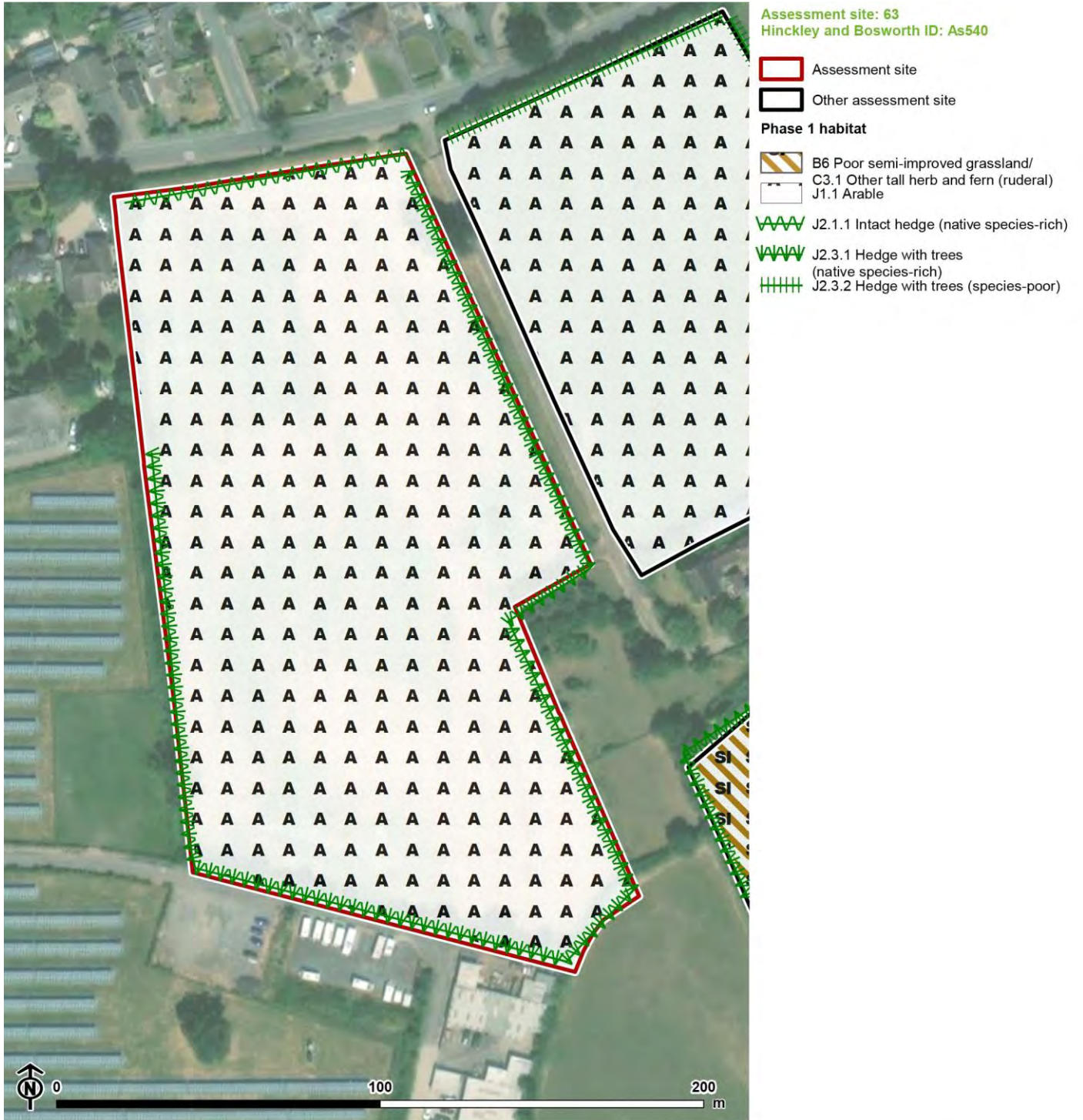
- The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Amber

LUC ID: 63
 HBBC ID: As540
 2014 survey ID: na

Settlement: Stoke Golding and Higham on the Hill
 Survey access: Partial



CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km:	Kendall's Meadow
SSSI IRZ overlapping site:	Yes: resi and/or rural resi SSSI IRZ overlaps
LNRs within 2km:	None
LWS within 2km:	Yes
LWS on site or adjacent (within 30m):	None
Potential or historic LWS on site or adjacent (within 30m):	None

LUC ID: 63 Settlement: Stoke Golding and Higham on the Hill
HBBC ID: As540 Survey access: Partial
2014 survey ID: na



Ancient woodland within 2km: None
Ancient woodland on site or adjacent (within 30m): None
Planning status: None
NE Habitats network classification on site: None
Priority habitats within 1km: Deciduous woodland, Lowland fens, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

The site consists of a single arable field surrounded by native species-rich hedging with trees.
The site lies to the south of Stoke Golding and is bordered on the north by residential properties. To the west and south it borders a solar farm and to the east is farmland.

Land use: Arable/Pasture
Management: Regular
Management score: Beneficial
Connectivity score: Moderate

Species records within 1km:

Bat, Brambling, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Fieldfare, Great Crested Newt, Hobby, Kingfisher, Myotis Bat species, Natterer's Bat, Noctule Bat, Nyctalus Bat species, Pipistrelle, Pipistrelle Bat species, Red Kite, Redwing, Smooth Newt, Soprano Pipistrelle, Water Vole

Invasive species: None observed from areas accessed

Potential phase 2 surveys:

- | | |
|--|---|
| <input type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input checked="" type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities:

Hedgerows providing connectivity and commuting/foraging/roosting opportunities.

Opportunities on site:

Wildflower sowing
Reduced mowing scheme along edges.
Native shrub/tree planting.
Bird/bat boxes

Opportunities for connectivity:

Hedgerow enhancement. Taller grassy areas around edges/along hedgerows.

LUC ID: 63 Settlement: Stoke Golding and Higham on the Hill
HBBC ID: As540 Survey access: Partial
2014 survey ID: na



Consideration of 2014 data:

na

Overall assessment:

The site is relatively simple in regards to habitat types present. The hedges with trees found bordering the site are of a high quality, with many native species and as such provide a high level of ecological value.

Any future development should seek to:

- Retain hedges and trees to ensure continued connectivity within the site.
- Use existing access points, where possible, to limit hedgerow removed to allow access road.
- Create areas of meadow with a reduced mowing regime to encourage increased invertebrate diversity. This will also improve the local character of the area which has few areas of lowland meadow (within 2km of the site) which make up an important part of the overall character of the borough.
- Retain mature trees to ensure any mitigation required for bats can be implemented, including the erection of bat boxes.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS and planting for pollinators in community greenspaces within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion it is considered that residential development may be delivered at this site without adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable, habitats or species.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Green

LUC ID: 64
 HBBC ID: As541
 2014 survey ID: na

Settlement: Stoke Golding and Higham on the Hill
 Survey access: Partial



Assessment site: 64
 Hinckley and Bosworth ID: As541

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- B6 Poor semi-improved grassland/
C3.1 Other tall herb and fern (ruderal)
- J1.1 Arable
- J2.1.1 Intact hedge (native species-rich)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km:	Burbage Wood and Aston Firs, Kendall's Meadow
SSSI IRZ overlapping site:	Yes: resi and/or rural resi SSSI IRZ overlaps
LNRs within 2km:	None
LWS within 2km:	Yes
LWS on site or adjacent (within 30m):	Hinckley Road Grassland
Potential or historic LWS on site or adjacent (within 30m):	None

LUC ID: 64 Settlement: Stoke Golding and Higham on the Hill
 HBBC ID: As541 Survey access: Partial
 2014 survey ID: na



Ancient woodland within 2km: None
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: None
 NE Habitats network classification on site: None
 Priority habitats within 1km: Deciduous woodland, Lowland fens, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

The site consists of two distinct fields separated by an area of semi-natural broadleaf woodland. The northern field is arable and the southern is a mosaic of tall herb and fern and poor semi-improved grassland. There is a small area of standing water in the woodland which was heavily vegetated and covered in thick algae. The south western and north eastern corners of the southern field are bordered by native species-rich hedges with trees. The north and east edges of the northern field are bordered by species-poor hedges with trees. The site lies to the south of the village of Stoke Golding and is bordered to the north by residential properties. The remaining area of the site is surrounded by farmland with two areas of farm buildings.

Land use: Pasture - active & disused
 Management: Grazing, Hedgerow trimming
 Management score: Beneficial
 Connectivity score: Moderate

Species records within 1km:


Bat, Brambling, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Fieldfare, Great Crested Newt, Hobby, Kingfisher, Myotis Bat species, Natterer's Bat, Noctule Bat, Nyctalus Bat species, Pipistrelle, Pipistrelle Bat species, Red Kite, Redwing, Smooth Newt, Soprano Pipistrelle, Water Vole

Invasive species: None observed

- Potential phase 2 surveys:
- | | |
|--|---|
| <input type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input type="checkbox"/> Bats | <input checked="" type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities:

Standing waterbody.
 Woodland copse.
 Hedgerows with trees.
 Tall ruderal/Grassland mosaic

LUC ID:	64	Settlement:	Stoke Golding and Higham on the Hill	
HBBC ID:	As541	Survey access:	Partial	
2014 survey ID:	na			

Opportunities on site:	Mowing regime on tall ruderal mosaic. Wildflower sowing. Pond enhancements i.e. enlargement, aquatic vegetation diversification, include within SuDS. Woodland creation. Woodland copse clearance to allow ground flora to establish. Native tree shrub
Opportunities for connectivity:	Extend woodland reach. Enhance existing hedgerows and create new ones to connect functionally with the woodland. SuDs ditches or ponds to connect with existing waterbody

Consideration of 2014 data: na

Overall assessment: This is a relatively site with low ecological value. Hedges, trees and the waterbody provide the primary ecological value on the site. The tall ruderal and grassland habitats contribute to the mosaic which provides habitat for a number of protected species. The site comprises north and south fields, separated by a small area of woodland, which would be subject to inevitable fragmentation as a result of the proposed development. Compensation for this loss would need to be fully justified and accounted for in any BNG calculations. Accordingly, Amber status is attributed.

Any future development should seek to:

- Detailed survey of the central woodland and pond to inform the development layout and appropriate compensation .
- Retain and enhance the peripheral hedgerows, alongside replacement woodland planting and tree planting to optimise connectivity .
- Where the pond can be retained, enhancement may include reduction of shading, increase in areas and depth, marginal planting, etc. In the event replacement habitat is required, the position, dimensions and planting should optimise its value to wildlife.
- Provision of species-rich grassland and wetland habitats in mosaic with retained features as part of the future green space. The extent and management of this habitat type may be particularly influenced by protected species (if recorded present) requirements for foraging or dispersal.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS and planting for pollinators in communal green spaces within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

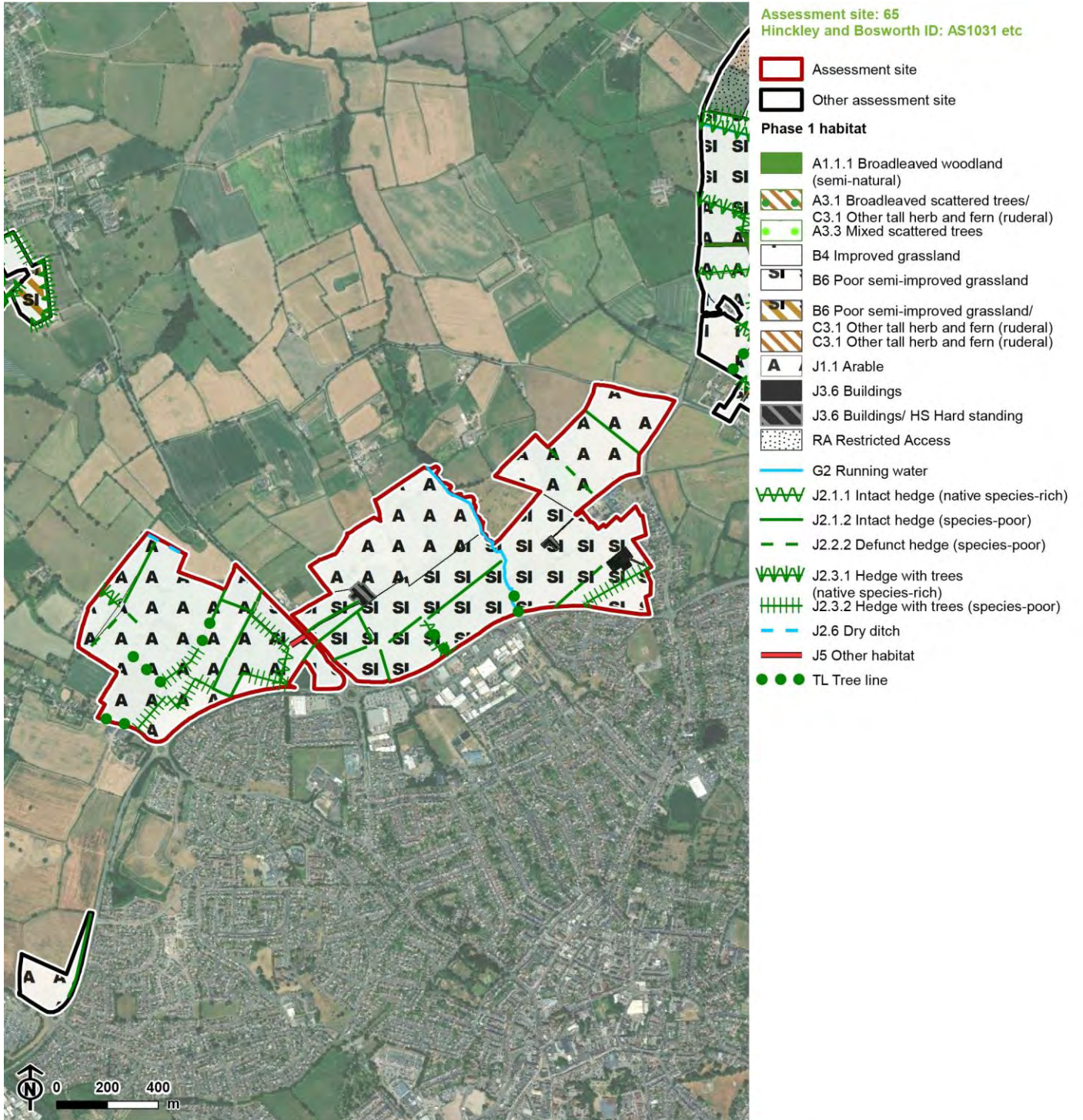
In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are to be maintained as part of a wider functional network.

However, it is likely that further surveys and ecological input during Masterplanning could potentially allow development within the site, on the basis that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Sensitive design and mitigation together accommodate a robust package of impact avoidance measures.
- The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status: Amber

LUC ID: 65 Settlement: Hinckley, Barwell and Earl Shilton
 HBBC ID: AS1031 Survey access: Partial
 2014 survey ID: Majority naSingle field in east POHIN85



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

SSSI within 5km: Burbage Wood and Aston Firs, Kendall's Meadow

SSSI IRZ overlapping site: None

LNRs within 2km: Burbage Common & Woods

LWS within 2km: Yes

LWS on site or adjacent (within 30m): None

Potential or historic LWS on site or adjacent (within 30m): Pond

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020

LUC ID: 65 Settlement: Hinckley, Barwell and Earl Shilton
HBBC ID: AS1031 Survey access: Partial
2014 survey ID: Majority naSingle field in east POHIN85



Ancient woodland within 2km: SHEEPY WOOD
Ancient woodland on site or adjacent (within 30m): None
Planning status: None
NE Habitats network classification on site: None
Priority habitats within 1km: Deciduous woodland, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|--|---|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input checked="" type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

This site is dominated by arable and semi-improved grassland. The semi-improved grassland is used for grazing by cattle and contains perennial rye-grass *Lolium perenne* and white clover *Trifolium repens* with isolated stands of spear thistle *Cirsium vulgare*. There are a number of hedges throughout the site, many of which are species-poor and with trees including ash *Fraxinus excelsior*. A stream runs through the western half of the site. Residential and farm buildings are present in the western half of the site, with access tracks for each of the three building clusters.

Land use: Pasture and arable fields
Management: Hedgerow cutting, harvesting and grazing
Management score: Beneficial
Connectivity score: Low

Species records within 1km:

Barn Owl, Bat, Bluebell, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Freshwater White-clawed Crayfish, Grass Snake, Great Crested Newt, Lesser Noctule, Myotis Bat species, Nathusius's Pipistrelle, Natterer's Bat, Noctule Bat, Nyctalus Bat species, Pipistrelle, Pipistrelle Bat species, Polecat, Serotine, Smooth Newt, Soprano Pipistrelle, Water Vole, Western Barbastelle

Invasive species: None recorded

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input checked="" type="checkbox"/> Water vole |

Key sensitivities: Stream, mature trees
Opportunities on site: Grassland and hedgerow enhancement, wetland creation, wildflower planting
Opportunities for connectivity: Strengthen hedgerow network. Woodland planting

LUC ID: 65 Settlement: Hinckley, Barwell and Earl Shilton
HBBC ID: AS1031 Survey access: Partial
2014 survey ID: Majority naSingle field in east POHIN85



Consideration of 2014 data:

Habitats within the small area of POHIN85 previously surveyed in 2014, remain similar.

Overall assessment:

This large site is generally low in ecological value, however is provided with ecological value by hedges, trees, buildings and a stream. Phase 2 surveys should focus on bats, birds (considering farmland, breeding and wintering assemblages), badgers, water vole and GCN.

Any future development should seek to:

- Accommodate appropriate buffer from development, around the stream corridor within which semi-natural habitats such as wildflower grassland creation and tree planting are provided to optimise connectivity. Avoid crossings of the watercourse where possible.
- Detailed survey of the pond hLWS to determine current condition against LWS criteria and inform the retention, restoration and reconnection strategy. Consideration of all wetland features, including new ponds and SuDS features as part of the interconnected aquatic / ephemeral habitat resource.
- Detailed hedgerow survey to inform the development layout and minimise severance or loss of the richest sections where possible. Baseline data will also inform appropriate mitigation and compensation on site.
- Woodland planting in belts to increase connectivity within the site.- Grassland creation to target areas of priority level grassland within the site.
- Habitat management should target appropriate LWS criteria. Baseline data should inform future monitoring.
- Delineation of recreational access to foster appreciation and ownership of the habitats on site whilst avoiding localised erosion or nutrient enrichment.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and hedge lined walkways within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion it is considered that residential development may be delivered at this site without adverse ecological impacts on the assumption that:

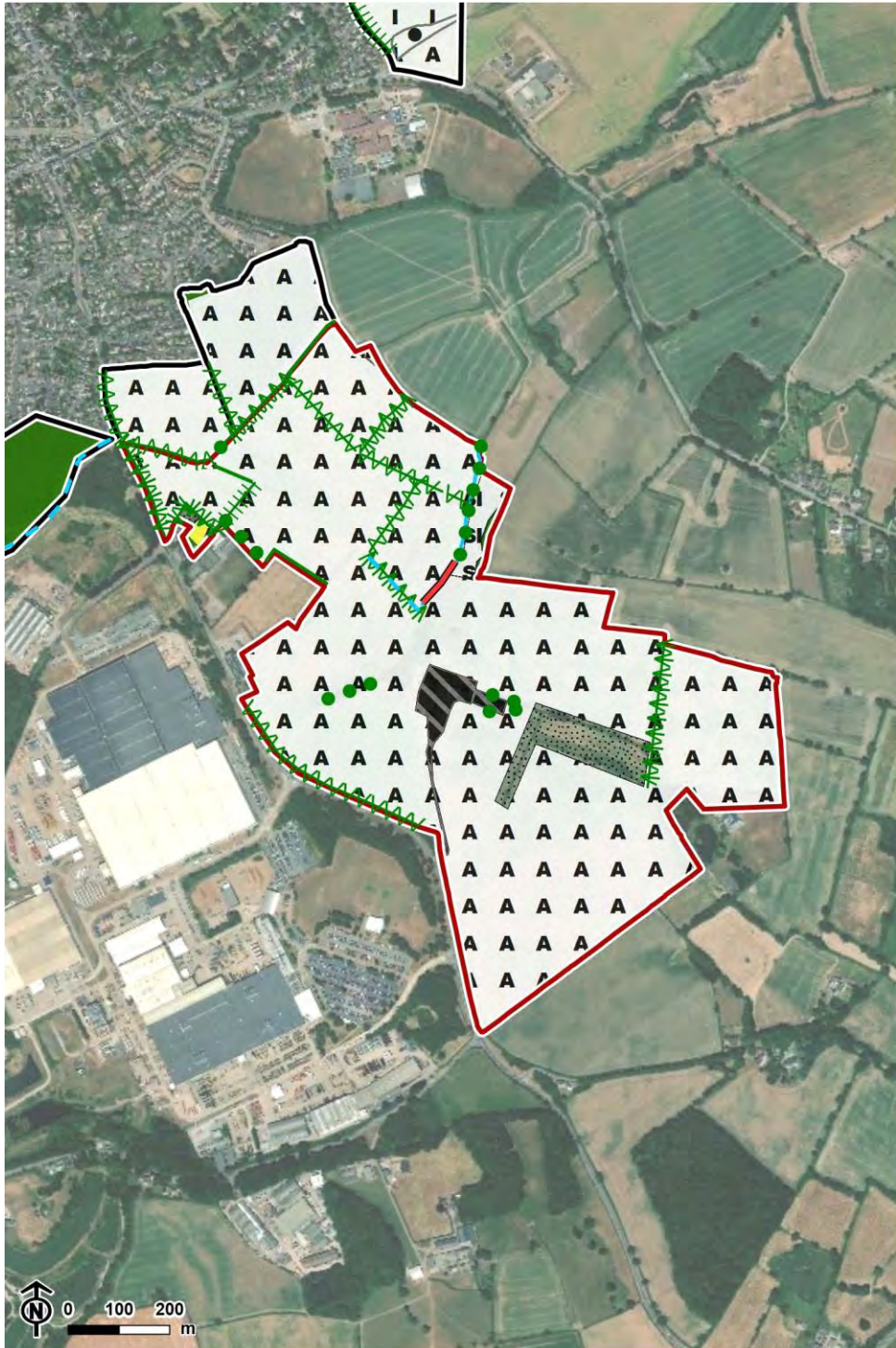
- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable, habitats or species.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Green

LUC ID: 66
 HBBC ID: As200
 2014 survey ID: na

Settlement: Desford and Peckleton
 Survey access: Partial



Assessment site: 66
 Hinckley and Bosworth ID: As200

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- A1.3.2 Mixed woodland (plantation)
- B4 Improved grassland
- B6 Poor semi-improved grassland
- B6 Poor semi-improved grassland/
C3.1 Other tall herb and fern (ruderal)
- C3.1 Other tall herb and fern (ruderal)
- J1.1 Arable
- J1.2 Amenity grassland
- J3.6 Buildings/ HS Hard standing
- J4 Bare ground/ B4 Improved grassland
- RA Restricted Access
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J2.6 Dry ditch
- J5 Other habitat
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km: Botcheston Bog

SSSI IRZ overlapping site: None

LNRs within 2km: None

LWS within 2km: Yes

LWS on site or adjacent (within 30m): Desford, Peckleton Lane (East)

Potential or historic LWS on site or adjacent (within 30m): Hedgerow

LUC ID: 66 Settlement: Desford and Peckleton
HBBC ID: As200 Survey access: Partial
2014 survey ID: na



Ancient woodland within 2km: Ancient woodland (no name)
Ancient woodland on site or adjacent (within 30m): None
Planning status: None
NE Habitats network classification on site: None
Priority habitats within 1km: Deciduous woodland, No main habitat but additional habitats present

LLR BAP habitats on site:

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input checked="" type="checkbox"/> Rocks and built structures |
| <input checked="" type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

The site covers a large area of intensively managed arable farmland with associated farm buildings and a bowling green. There are some very small sections of broadleaf woodland, located in the northern half of the site. Hedges are found at the borders of many of the fields and a small number of short tree lines are scattered throughout the southern half of the site and contain ash *Fraxinus excelsior*. An area of poor semi-improved grassland lies between two fields at the centre of the northern boundary. A small section of running water flows through the centre of the site, from the northern boundary toward the barn buildings at the centre of the site. A small area of standing water is present in the south-east of the site. Surrounding the residential property is an area of bare earth and scrapyard with some tall nettle *Urtica dioica*. The site lies to the south of Desford and is bordered to the north by residential properties, to the west lies a large industrial complex and to the south and east is farmland.

Land use: Arable, private garden, small sports centre and working farmyard
Management: Hedge trimming at edge of main road
Intense mowing of bowling green
Management score: Neutral
Connectivity score: High

Species records within 1km: Barn Owl, Bat, Bluebell, Brambling, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Fieldfare, Grass Snake, Great Crested Newt, Hobby, Myotis Bat species, Natterer's Bat, Pipistrelle, Pipistrelle Bat species, Red Kite, Redwing, Smooth Newt, Water Vole

Invasive species: None recorded

Potential phase 2 surveys:

<input checked="" type="checkbox"/> Aquatic habitats	<input checked="" type="checkbox"/> Botanical/hedgerows
<input checked="" type="checkbox"/> Badger	<input type="checkbox"/> Otter
<input checked="" type="checkbox"/> Bats	<input checked="" type="checkbox"/> Reptiles
<input checked="" type="checkbox"/> Birds	<input type="checkbox"/> Water vole

Key sensitivities: woodland, mature trees, pond, stream

LUC ID: 66 Settlement: Desford and Peckleton
HBBC ID: As200 Survey access: Partial
2014 survey ID: na



Opportunities on site: Woodland expansion
Meadow grassland creation
Hedgerow enhancement and creation
Wetland creation

Opportunities for connectivity: Extend and enhance hedgerow network
Establishment of wider tree lines
Ditch connectivity

Consideration of 2014 data: na

Overall assessment: The arable fields which dominate the site provide limited ecological value. the internal hedgerow network is sparse, although record of isolated stretches of hLWS hedgerows remain. Peripheral hedgerows, small parcels of woodland habitat, the pond in the south and central building complex all provide moderate ecological value. Phase 2 survey recommendations include consideration of bats, birds (considering farmland, breeding and wintering assemblages), badgers, GCN and reptiles.

Any future surveys should seek to:

- Detailed survey of hLWS hedgerows to determine their condition to inform retention, reconnection and restoration priorities. Management should target LWS criteria. Baseline data should inform future monitoring.
- Access from the public highway should be sensitively sited to minimise hedgerow loss. Retention, enhancement and extension of the hedgerow network should respect the local ecological character, including tree planting of appropriate species, widening through natural colonisation of scrub and creation of species-rich and/or structurally diverse grassland alongside.
- Extension and beneficial management of existing woodland areas.
- Planting of native trees and shrubs to increase structural diversity within the site.
- Enhance and increase areas of grassland, targeting a lowland meadow habitat type. This priority habitat is limited in the immediate area however implementation would improve the character of this site in relation to the borough as a whole.
- Enhance the pond in the south of the site through expansion, marginal planting, and creation of other wetland habitats in the surrounding area to increase invertebrate diversity.
- Planting of native trees and shrubs to increase structural diversity within the site.
- Where barn buildings cannot be retained, provide replacement habitat for protected species as informed by Phase 2 survey.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and communal green spaces such as orchards within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

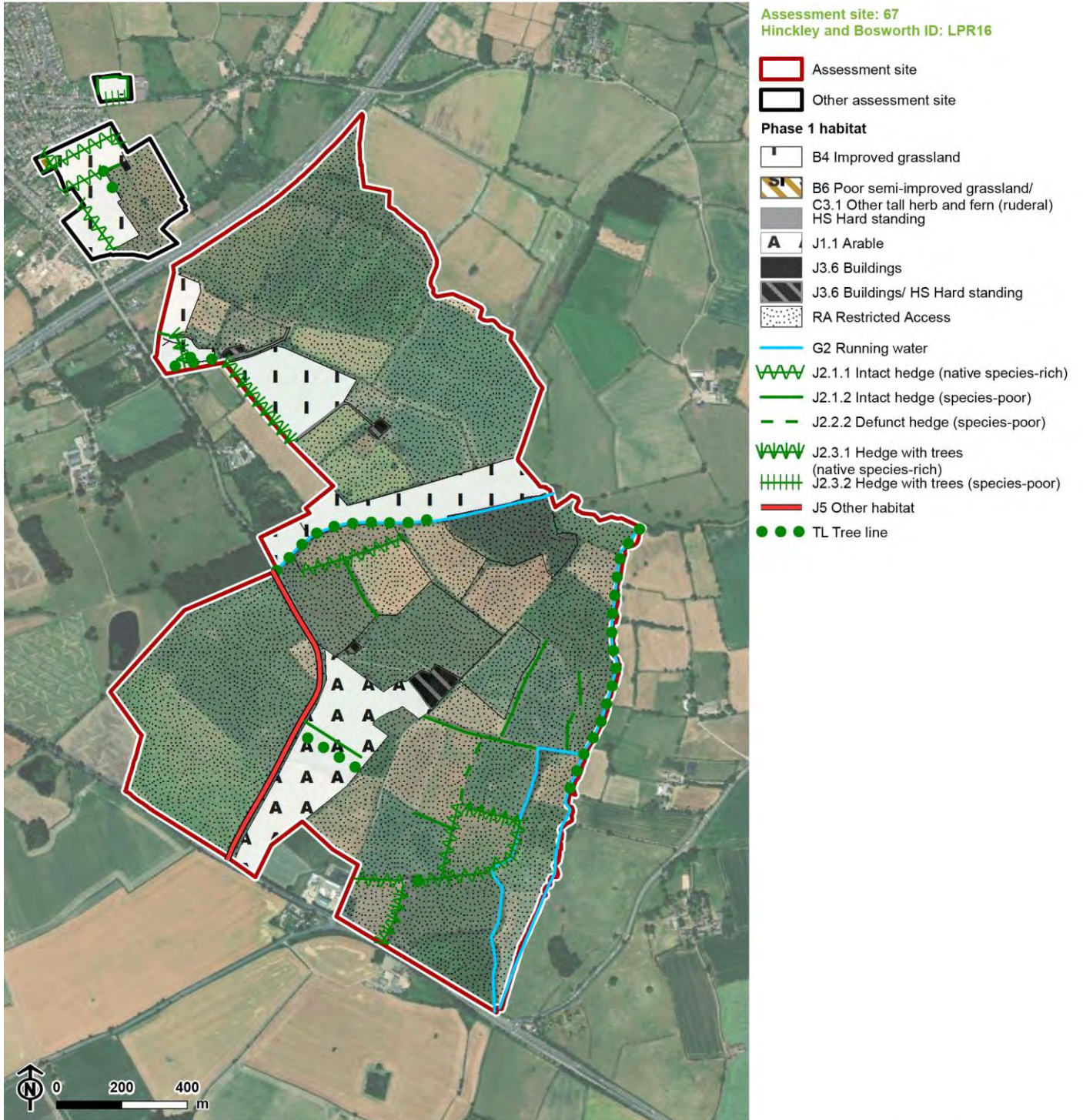
In conclusion it is considered that residential development may be delivered at this site without adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable habitats or species.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status: Green

LUC ID: 67
 HBBC ID: LPR16
 2014 survey ID: na

Settlement: Burbage, Sketchely and South of Burb
 Survey access: Partial



SSSI within 5km:	Burbage Wood and Aston Firs
SSSI IRZ overlapping site:	None
LNRs within 2km:	Burbage Common & Woods
LWS within 2km:	Yes
LWS on site or adjacent (within 30m):	Lutterworth Road Hedgerow, Corner Ash Tree, Lutterworth Road Oak Tree, Triangle Fields Ash Tree, Streamside Meadow, Burbage Hedgerows North Of A5, Soar Brook Fields, A5/B578 Verge, Workhouse Lane Hedgerow, Lutterworth Road Hedgerow 2, Lutterworth Road Hedgerow, Lutterworth Road Verges,

LUC ID: 67 Settlement: Burbage, Sketchely and South of Burb
 HBBC ID: LPR16 Survey access: Partial
 2014 survey ID: na



Potential or historic LWS on site or adjacent (within 30m): Burbage Marshy Grassland, Pathside Hedgerow, Lutterworth Road Hedgerow Oak and Ash
 Smockington Hollow and Nearby Grasslands, Grassland, Smockington Hollow Stream On Parish Boundary, Semi-Improved Grassland, Wigston Parva Grassland W Of Cottage Farm, Stream Flowing Through Semi-Improved Grassland

Ancient woodland within 2km: Ancient woodland (no name), ASTON FIRS, FREEHOLT WOOD

Ancient woodland on site or adjacent (within 30m): None

Planning status: None

NE Habitats network classification on site: None

Priority habitats within 1km: Coastal and floodplain grazing marsh, Deciduous woodland, Good quality semi-improved grassland, No main habitat but additional habitats present, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input checked="" type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |


Phase 1 habitat survey description: Note that this Site boundary matches that of Site 35. This large site is dominated by intensively managed arable farmland. The centre and north of the site has fields of improved and semi-improved grassland which are used as grazing. A section of primary woodland habitat is present at the centre of the eastern boundary of the site, called Hogue Hall Spinney. At the north-west corner of the site, near Workhouse Lane, is a group of semi-mature planted horse chestnuts *Aesculus hippocastanum*. A small section of floodplain grazing marsh falls within the site directly east of Hogue Hall Spinney woodlands. Soar Brook runs through the centre of the site, the south eastern boundary of the site follows the course of a branch of Soar Brook. A small stand of ash *Fraxinus excelsior* trees hangs over the stream. Farm buildings are present in the site in the centre of the northern half and the centre of the southern half of the site. Hedges and tree lines criss-cross much of the site, acting as field separators. Much of the northern section was not surveyed due to restricted access.

Land use: Arable & pasture
 Management: Grazing and harvesting
 Mangement score: Neutral
 Connectivity score: Moderate

Species records within 1km: Barn Owl, Bat, Brambling, Brown Long-eared Bat, Cetti's Warbler, Common Frog, Common Toad, Daubenton's Bat, Fieldfare, Greylag Goose, Heath Speedwell, Hobby, Noctule Bat, Peregrine, Pipistrelle, Pipistrelle Bat species, Red Kite, Redwing, Smooth Newt, Soprano Pipistrelle, Whiskered/Brandt's Bat

Invasive species: None recorded

Potential phase 2 surveys: Aquatic habitats Botanical/hedgerows

LUC ID:	67	Settlement:	Burbage, Sketchely and South of Burb	
HBBC ID:	LPR16	Survey access:	Partial	
2014 survey ID:	na			

- | | |
|--|-------------------------------------|
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities: Hedges
Woodland - Priority habitat quality
Stream connectivity

Opportunities on site: Enhancement of hedges
Extension of woodland
Wetland habitat

Opportunities for connectivity: Hedgerow network

Consideration of 2014 data: na

Overall assessment: The site supports a series of hLWS and pLWS which encompass a significant proportion of the most important terrestrial and aquatic habitats on site. Detailed survey data will be required to inform any impact assessment and to determine the appropriate mitigation and BNG package. This will ensure that the functionality of ecological resources is maintained through construction and operational phases.

Significant areas of public open space (POS) are anticipated to be required to support the future population at this scale. Given the extent of potentially important habitats - including LWS features - across the site, and requirement for POS, which are anticipated to strongly influence design, Red status is assigned. The woodland, hedge and streams all provide high ecological value within the site. These habitats have the potential to support a select number of protected species and Phase 2 surveys should focus on bats, birds (farmland, breeding and wintering assemblages) and badgers.

- Any future development should seek to:
- Detailed survey of all hLWS and pLWS features to determine current value. This information will inform early Masterplanning and , in the event that unavoidable impacts arise, appropriate mitigation or compensation.
 - Management should target LWS criteria where appropriate. Detailed baseline data should inform future monitoring.
 - Appropriate buffer zones to be provided around key features such as watercourses, ponds and woodland habitats, within which the habitat mosaic should support local conservation priority habitats where soil conditions etc permit, e.g. wet pasture flanking Soar Brook which helps reduce flood risk.
 - Strengthen and expand the tree line along the main Soar Brook to reduce risk of bank erosion, potentially reduce flood risk and for direct linking corridor between Hogue Hall Spinney and woods to the west of the B578 . Consider fencing or path network to decrease risk of bank erosion through recreational use.
 - Firm measures must be in place to protect Hogue Hall Spinney woods from impact from the development both during construction and operation phases.
 - Planting of native trees and shrubs to increase structural diversity in the site.
 - Retain and enhance the network of hedgerows an ditches, trees and copses to optimise connectivity and, where appropriate, buffer habitats of highest sensitivity.
 - Delineate recreational access to allow areas free from disturbance for protected and notable flora and fauns to thrive.
 - Incorporate natural play features, boardwalks and/or dipping platforms to encourage residents to engage with wildlife.
 - Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and communal green spaces within the development, which link to the wider landscape. - Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
 - Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

LUC ID:	67	Settlement:	Burbage, Sketchely and South of Burb
HBBC ID:	LPR16	Survey access:	Partial
2014 survey ID:	na		



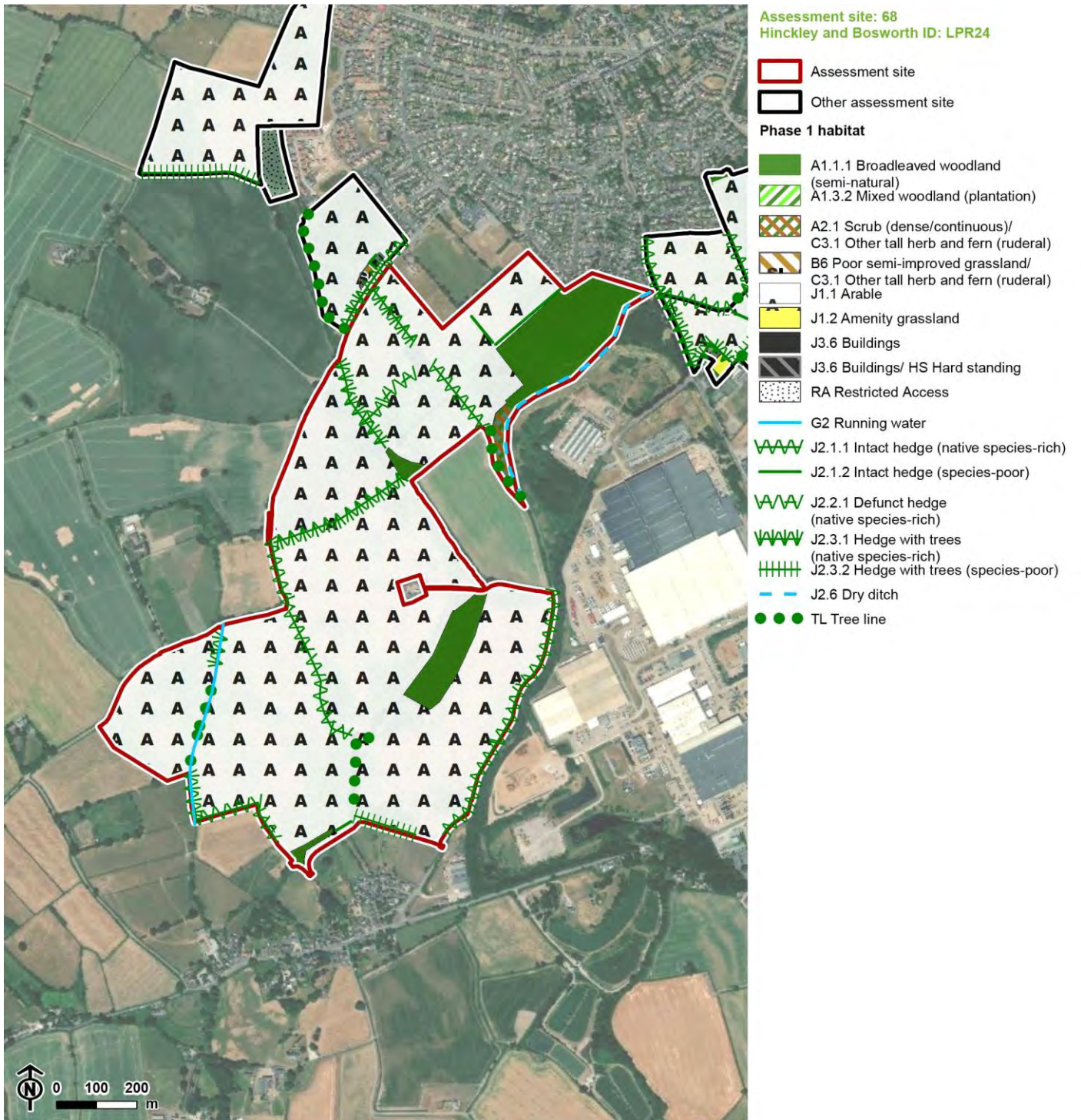
In conclusion, whilst development is not precluded, to achieve an acceptably sensitive design, would be strongly influenced by the need to accommodate the mitigation hierarchy and additional BNG. Red status principally refers to the presence or close proximity of designated sites and/or habitats of high ecological value. Detailed survey and robust mitigation will be required to inform any development proposal and should be considered early to inform BNG calculation and viability studies. Impact assessment will need to evidence the mitigation hierarchy, which should be implemented from Masterplanning, through detailed design and any mitigation or compensation package. The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term. Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Red

LUC ID: 68
 HBBC ID: LPR24
 2014 survey ID: na

Settlement: Desford and Peckleton
 Survey access: Partial



CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km:	Botcheston Bog
SSSI IRZ overlapping site:	None
LNRs within 2km:	None
LWS within 2km:	Yes
LWS on site or adjacent (within 30m):	Desford Lane Hedgerow Peckleton, Hedgerows Between Kirkby Road and Desford Lane, Drayton Lane Oak 2, Drayton Lane Oak, Barn Farm Oak, Fenny Drayton Churchyard, Drayton Lane Hedgerow

LUC ID: 68 Settlement: Desford and Peckleton
HBBC ID: LPR24 Survey access: Partial
2014 survey ID: na



Potential or historic LWS on site or adjacent (within 30m): Peckleton S Of Broomhills Farm, Pond, Hedgerow,
Ancient woodland within 2km: Ancient woodland (no name)
Ancient woodland on site or adjacent (within 30m): None
Planning status: None
NE Habitats network classification on site: None
Priority habitats within 1km: Deciduous woodland, Lowland dry acid grassland, No main habitat but additional habitats present, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

Note: Site boundary duplicates Site 68. The site is comprised of a number of intensively managed arable fields, sections of broadleaf woodland and a section of scrub. The scrub contains bramble *Rubus* sp.. The woodland area in the south east of the site is of a high quality and is classed as priority habitat. A number of hedges and treelines are found throughout the site, acting as separators between fields. Running water flows in a ditch in the south-west of the site. This ditch is fed by a pond to the west of the site at Stocks House Farm. A dry ditch runs along the north eastern boundary of the site, the banks of which are covered in gorse *Ulex europaeus*.

Land use: Arable
Management: Ploughing, hedge cutting
Management score: Neutral
Connectivity score: High

Species records within 1km: Bat, Bluebell, Brambling, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Fieldfare, Grass Snake, Great Crested Newt, Hobby, Myotis Bat species, Natterer's Bat, Pipistrelle, Red Kite, Redwing, Smooth Newt, Water Vole

Invasive species: None recorded

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities: mature trees, streams, species rich hedgerows,

LUC ID: 68 Settlement: Desford and Peckleton
HBBC ID: LPR24 Survey access: Partial
2014 survey ID: na

LUC

Opportunities on site: Grassland creation
Woodland connection and enhancement

Opportunities for connectivity: Connecting between woodland areas with tree planting, hedgerows and other complementary semi-natural habitats.

Consideration of 2014 data: na

Overall assessment: The relatively large sections of broadleaf woodlands provide a high level of ecological value, particularly the parcel in the south east near Broomhills Farm. The hedges, treelines and stream also provide value within the site. Phase 2 surveys should focus on bats, birds (farmland, breeding and wintering assemblages) and badgers.

Any future development should seek to:

- Ensure robust measures are in place to protect priority woodland habitat near Broomhills Farm from potential impacts associated with construction and operational phases of development.
- Enhance woodland south of Desford to bring the area up to priority woodland standard.
- Detailed survey of the pond pLWS in the north of the site. Protection and enhancement of this feature will be required nevertheless. Management should target LWS criteria. Baseline data should inform future monitoring.
- Retain and enhance hedgerows and treelines through planting of native species to maintain and improve connectivity within the site and to the wider area. This should prioritise the hedges bordering the west and east which have been identified as pLWS. Site access from the public highway to minimise habitat loss (and so too, the need for compensation elsewhere on site).
- Planting of woodland belt to allow direct connectivity between woodland at Broomhills Farm and that surrounding industrial area to the east.
- Create lowland meadow habitat, where soil conditions are conducive.
- Protect aquatic habitats from potential impacts during construction and operation.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators, communal green space and hedge lined walkways within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are to be maintained as part of a wider functional network.

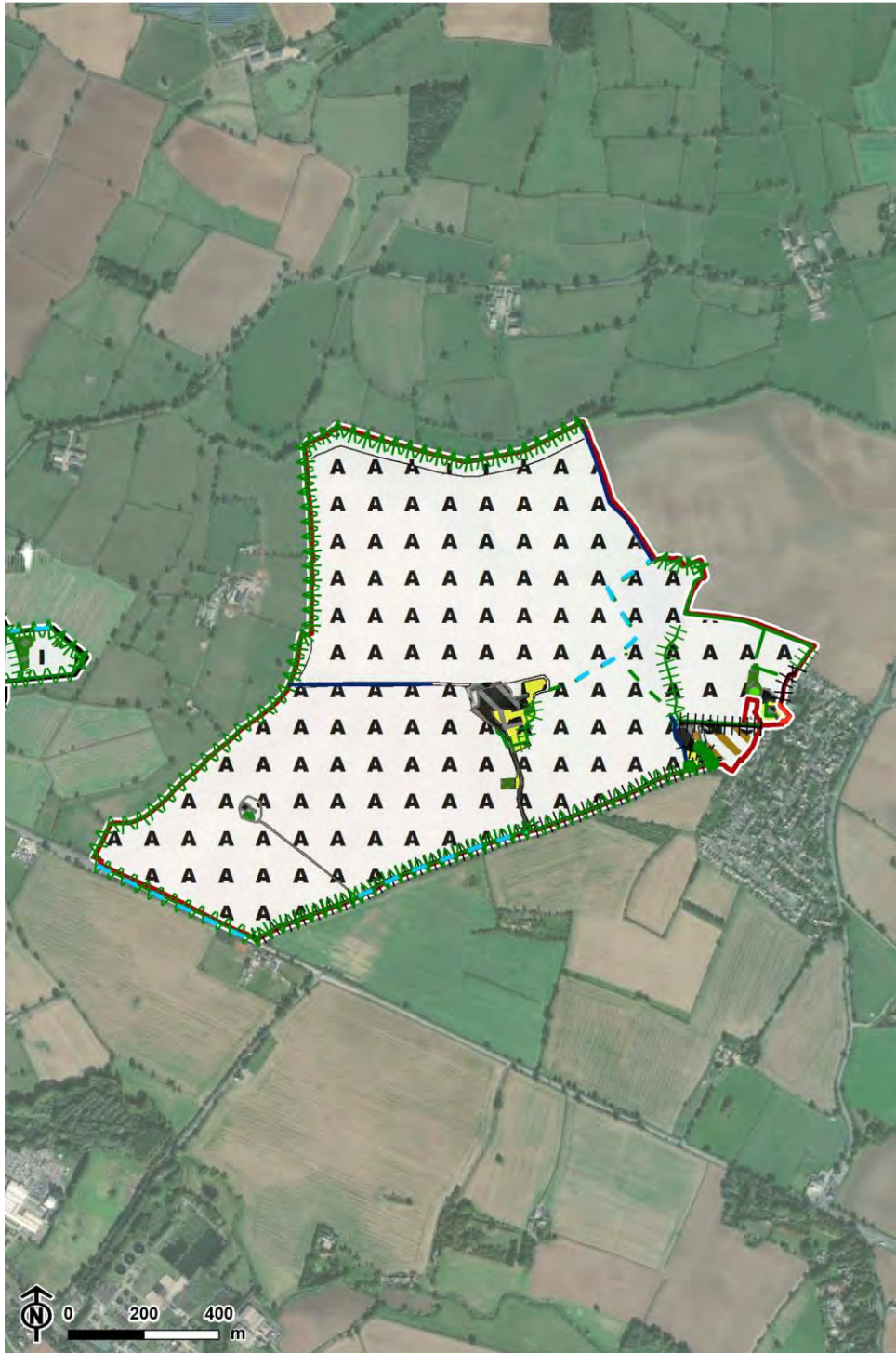
However, it is likely that further surveys and ecological input during Masterplanning could potentially allow development within at least some of the site, on the basis that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Sensitive design and mitigation together accommodate a robust package of impact avoidance measures.
- The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status: Amber

LUC ID: 69
 HBBC ID: LPR88
 2014 survey ID: na

Settlement: Witherley and Fenny Drayton
 Survey access: Partial



Assessment site: 69
 Hinckley and Bosworth ID: LPR88

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A2.1 Scrub (dense/continuous)
- A2.1 Scrub (dense/continuous)/
A3.1 Broadleaved scattered trees
- B4 Improved grassland
- B4 Improved grassland/
A2.2 Scrub (scattered)
- B6 Poor semi-improved grassland/
A3.1 Broadleaved scattered trees
- B6 Poor semi-improved grassland/
C3.1 Other tall herb and fern (ruderal)
- HS Hard standing
- J1.1 Arable
- J1.2 Amenity grassland
- J1.2 Amenity grassland/
A3.1 Broadleaved scattered trees
- J3.6 Buildings
- J3.6 Buildings/ HS Hard standing
- J4 Bare ground
- G1 Standing water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.2.2 Defunct hedge (species-poor)
- J2.3.1 Hedge with trees
(native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J2.4 Fence
- J2.5 Wall
- J2.6 Dry ditch
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km: Bentley Park Wood, Boon's Quarry, Illing's Trenches, Kendall's Meadow, Sheepy Fields, Woodlands Quarry

SSSI IRZ overlapping site: None

LNRs within 2km: None

LWS within 2km: Yes

LWS on site or adjacent (within 30m): Drayton Lane Hedgerow

LUC ID: 69 Settlement: Witherley and Fenny Drayton
 HBBC ID: LPR88 Survey access: Partial
 2014 survey ID: na



Potential or historic LWS on site or adjacent (within 30m): None
 Ancient woodland within 2km: None
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: None
 NE Habitats network classification on site: None
 Priority habitats within 1km: Coastal and floodplain grazing marsh, Deciduous woodland, Lowland meadows, Traditional orchard

LLR BAP habitats on site:

- | | | |
|---|---|--|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input checked="" type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input checked="" type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description:

This large site is dominated by intensively managed arable farmland surrounding Barn Farm and a self storage facility. Strips of improved grassland run along the northern boundary of the site and at the centre of the western boundary. A small area of poor semi-improved grassland and tall herb is present in the western corner of the site along with a small section of dense scrub. Surrounding each of the four buildings present are a mixture of habitats including poor semi-improved grassland, amenity grassland and hard standing. Single mature trees are scattered throughout the east of the site. Hedges surround the majority of the site and are mostly species-rich with trees. A dry ditch runs from the western boundary towards the centre of the site and at the southern boundaries. Standing water was found in ditches at the eastern boundary and the western boundary. The site covers a large area of farmland between Witherley and Fenny Drayton.

Land use: Arable. Commercial
 Management: Arable
 Mowing of lawns
 Management score: Highly beneficial
 Connectivity score: Moderate

Species records within 1km: Barn Owl, Bat, Black Poplar, Common Frog, European Otter, European Water Vole, Fieldfare, Japanese Rose, Merlin, Nyctalus Bat species, Otter, Peregrine, Pipistrelle, Pipistrelle Bat species, Red Kite, Redwing, Scaup, Slow-worm, Small Heath, Smew, Yellow Wagtail

Invasive species: None observed

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

LUC ID: 69 Settlement: Witherley and Fenny Drayton
 HBBC ID: LPR88 Survey access: Partial
 2014 survey ID: na



Key sensitivities: Hedgerows, ditches, tree lines,
 Opportunities on site: Wildflower sowing. Native shrub/tree planting. Hedgerow enhancement/creation. Ditch restoration. Pond creation. Orchard Planting.
 Meadow creation.
 Opportunities for connectivity: Hedgerow enhancement
 Ditch restoration

Consideration of 2014 data: 2014 - na

Surveyed as part of the 2019 Witherley Parish study - the north eastern boundary of Site 61 forms the south western boundary of Witherley Site 501, and the south eastern corner of Site 61 overlies Witherley Site 505a. Whilst the habitat types were common and widespread, the Witherley study notes the value of the northern footpath for a range of invertebrate species.

Overall assessment: This large site covers an expanse of predominantly arable farmland. The species-rich hedges, mature trees, ditch networks and tributary to the River Anker provide the highest ecological value in the site and have the potential to support a number of protected species. Trees and hedgerows along the south eastern boundary form part of the local pLWS network.

Any future development should seek to:

- Provide suitable buffer distance from the watercourse and ditch network. Where this is not possible (e.g. at unavoidable culverts to accommodate an internal road/cycle network) aquatic habitat surveys may be required. Detailed survey of the pLWS features in and around the site to inform sensitive design and provide a baseline for monitoring of future management.
- Retain pLWS mature oaks *Quercus* sp. on the border of the site and Drayton Lane. Retain the hedgerows and mature trees to ensure continued connectivity within the site. All gap planting and additional hedgerow lengths should target the LWS criteria.
- Enhance the quality of improved grassland on site through wildflower planting and reduced mowing regimes, to increase level of lowland meadow in the local area. There are no areas of lowland meadow priority habitat or LWSs within the borough and within 2km of the site. Increasing meadow habitat will improve the overall character of the borough.
- Protect Fenny Drayton Graveyard at the east of the site, with appropriate buffering and delineated recreation access in the area. Increase area of grassland in the area surrounding the graveyard.
- Planting of native trees and shrubs to increase structural diversity across the site.
- Creation of a ponds and wetland habitats, of specific design and planting to increase the potential for invertebrate diversity on the site.
- Extension and enhancement of ditch system and SuDS within the site to create links with the created pond. This system also has the potential to link with the River Anker and hence the wider area.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, hedge lined walkways and planting for pollinators within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion it is considered that residential development may be delivered at this site without adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable, habitats or species.

LUC ID: 69 Settlement: Witherley and Fenny Drayton
HBBC ID: LPR88 Survey access: Partial
2014 survey ID: na



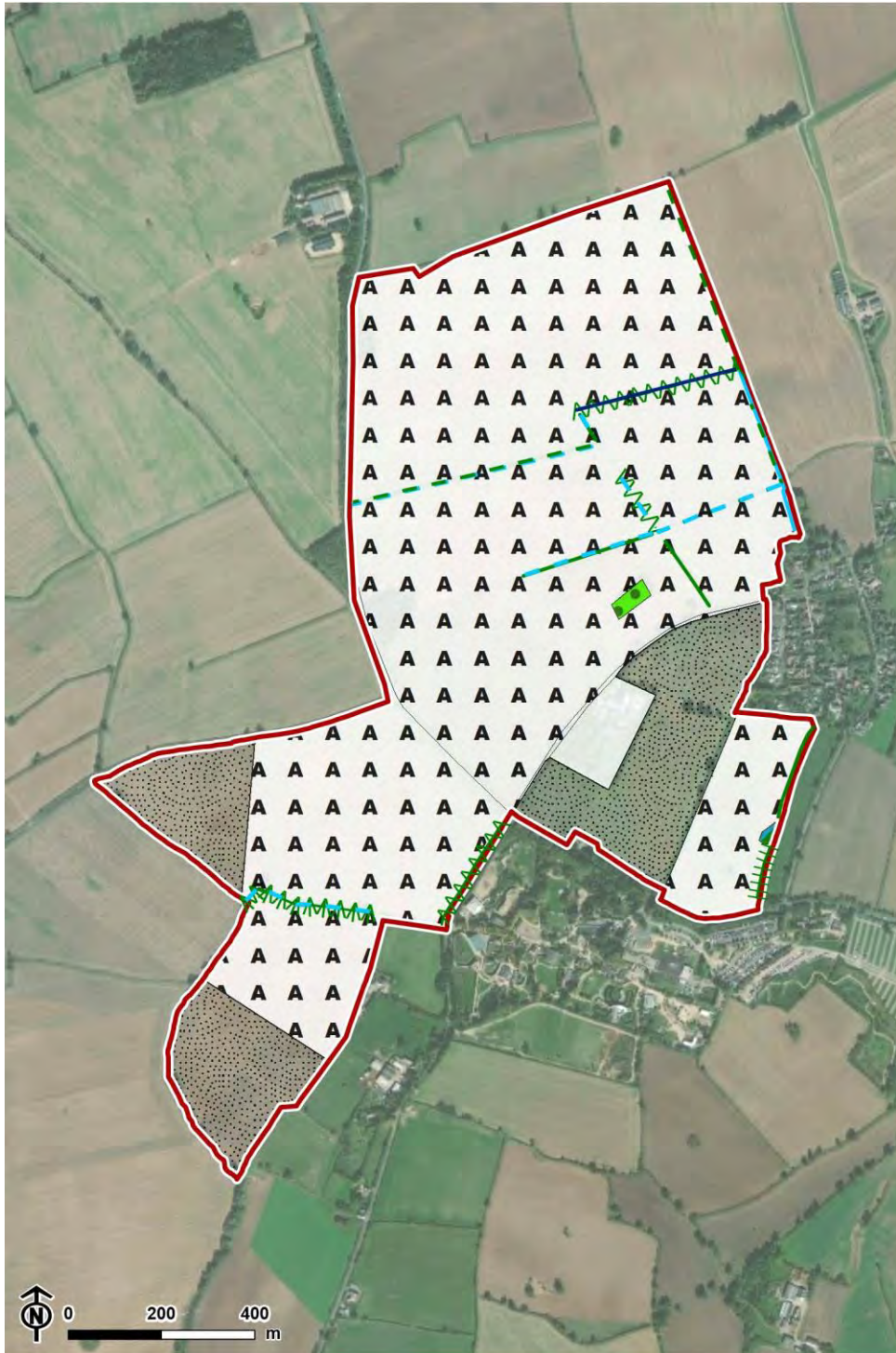
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Green

LUC ID: 70
 HBBC ID: LPR102
 2014 survey ID: na

Settlement: Norton Juxta Twycross
 Survey access: Partial



Assessment site: 70
 Hinckley and Bosworth ID: LPR102

- Assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- A1.1.1 Broadleaved woodland (semi-natural)/ G1 Standing water (semi-natural)
- A1.3.1 Mixed woodland (semi-natural)
- J1.1 Arable
- J5 Other habitat
- RA Restricted Access
- G1 Standing water
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.2.1 Defunct hedge (native species-rich)
- J2.2.2 Defunct hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J2.6 Dry ditch

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km: Alvecote Pools, Ashby Canal, Birches Barn Meadows, River Mease, Sheepy Fields

SSSI IRZ overlapping site: None

LNRs within 2km: None

LWS within 2km: Yes

LWS on site or adjacent (within 30m): Orton Lane Field Oak, Norton Lane Hedgerow

LUC ID: 70 Settlement: Norton Juxta Twycross
 HBBC ID: LPR102 Survey access: Partial
 2014 survey ID: na



Potential or historic LWS on site or adjacent (within 30m): Little Orton Norton House Farm Pool
 Ancient woodland within 2km: GOPSALL WOOD, ORTON WOOD, SHEEPY WOOD
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: None
 NE Habitats network classification on site: None
 Priority habitats within 1km: Deciduous woodland, Good quality semi-improved grassland, Lowland heathland

LLR BAP habitats on site:

- | | | |
|---|---|---|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description: The site comprises of a number of intensively managed arable fields separated by dry ditches and a mixture of intact and defunct hedges. A single mature ash *Fraxinus excelsior* was recorded on the eastern boundary. A very small patch of broadleaf woodland is present in the centre of the site. Two sections of the site were not surveyed due to restricted access. A single small area of standing water is on the south western boundary of the site. The site abuts Twycross Zoo to the south a small residential area to the west.

Land use: Arable and pasture fields
 Management: Hedgerows recently machine cut
 Management score: Beneficial
 Connectivity score: Moderate

Species records within 1km: Bat, Bluebell, Brown Long-eared Bat, Common Frog, Common Pipistrelle, Common Toad, Daubenton's Bat, Grass Snake, Green Sandpiper, Hobby, Noctule Bat, Peregrine, Pipistrelle, Poplar Shoot, Red Kite, Soprano Pipistrelle,

Invasive species: None recorded

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input checked="" type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities: Ponds, ditches, small woodland sections, hedgerows and mature trees
 Opportunities on site: Grassland and hedgerow creation Hedgerow enhancement Wildflower meadows
 Opportunities for connectivity: Strengthen and creation of hedgerows and treelines. Connectivity to and dispersal from the Mease corridor and associated tributaries.

LUC ID: 70 Settlement: Norton Juxta Twycross
HBBC ID: LPR102 Survey access: Partial
2014 survey ID: na



Consideration of 2014 data:

na

Overall assessment:

The site lies c.2.7km south of the River Mease SAC and 2.2km from the River Mease pLWS, upstream of the designated SAC. Whilst there appears to be limited direct habitat connectivity to the Mease, given the scale, potential impacts associated with the large scale of development must be fully assessed and avoided within any future development design. Little Orton, Norton House Farm Pool p/hLWS stands in the east off Shelford Lane and should be prioritised for retention as part of an extended and diverse semi-natural habitat mosaic. Recreational access to the p/hLWS and provision of greenspace within the site will need to be carefully considered to avoid any adverse impact. The actively farmed areas within the site have a generally low level of ecological value. The small lengths of hedgerows, small areas of broadleaf woodland, farm buildings and single small pond provide the ecological value but are typically isolated by the intensive agricultural management.

Any future development should seek to:

- The south of the site supports an hLWS pond. This area should be surveyed to determine if the area still meets LWS selection criteria. Soft landscaping and the provision of open space should target the LWS criteria. Baseline data will inform future management monitoring.
- Any future drainage strategy must consider the pond. It should seek to enhance the ditch network and provide additional ponds interconnected by terrestrial habitat, where ground conditions are appropriate.
- Enhance hedgerows (including those identified as pLWS) to retain and enhance connectivity within the site and the local landscape.
- Target lowland meadow swards within soft landscaping.
- Planting of native species of shrub and trees, of a range of age-classes, to increase structural diversity in the site.
- Woodland planting at appropriate foci to increase this priority habitat and link to other areas farther south and east.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators and communal green spaces within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

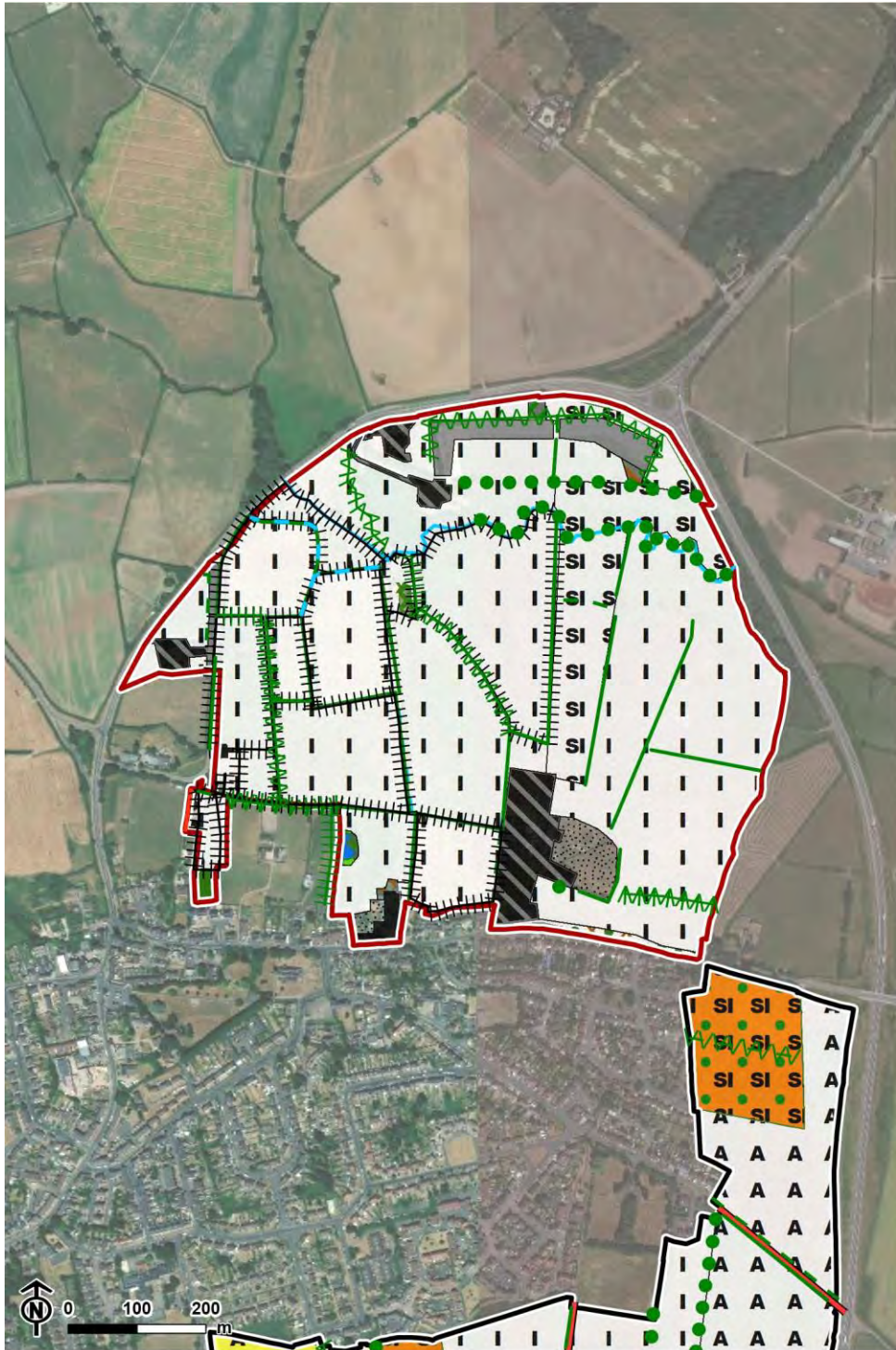
In conclusion it is considered that residential development may be delivered at this site without adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable, habitats or species.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status:

Green

LUC ID: 71 Settlement: Hinckley, Barwell and Earl Shilton
 HBBC ID: Various Survey access: Partial
 2014 survey ID: na



Assessment site: 71
 Hinckley and Bosworth ID: Various

- Assessment site
- Other assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- A1.1.2 Broadleaved woodland (plantation)
- A2.1 Scrub (dense/continuous)
- A2.1 Scrub (dense/continuous)/
A3.1 Broadleaved scattered trees
- A2.2 Scrub (scattered)
- A2.2 Scrub (scattered)/
A3.1 Broadleaved scattered trees
- A3.1 Broadleaved scattered trees/
B2.2 Neutral grassland (semi-improved)
- B4 Improved grassland
- B4 Improved grassland/
A2.2 Scrub (scattered)
- B6 Poor semi-improved grassland
- C3.1 Other tall herb and fern (ruderal)
- G1 Standing water
- HS Hard standing
- J1.1 Arable
- J1.2 Amenity grassland
- J3.6 Buildings
- J3.6 Buildings/ HS Hard standing
- J4 Bare ground
- J4 Bare ground/
B6 Poor semi-improved grassland
- RA Restricted Access
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.2.1 Defunct hedge (native species-rich)
- J2.2.2 Defunct hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J2.4 Fence
- J2.5 Wall
- J2.6 Dry ditch
- J5 Other habitat
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km:	Burbage Wood and Aston Firs, Croft and Huncote Quarry, Croft Hill, Croft Pasture
SSSI IRZ overlapping site:	None
LNRs within 2km:	None
LWS within 2km:	Yes
LWS on site or adjacent (within 30m):	None
Potential or historic LWS on site or adjacent (within 30m):	Thurlaston Brook and Grassland, Pool

Ancient woodland within 2km: None

Ancient woodland on site or adjacent (within 30m): None

Planning status: None

NE Habitats network classification on site: None

Priority habitats within 1km: Deciduous woodland

- LLR BAP habitats on site:
- | | | |
|---|--|--|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input checked="" type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input checked="" type="checkbox"/> Rocks and built structures |
| <input type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description: The site consists of a large area of farmland with associated farm buildings and a small number of residential properties. The majority of the site is composed of improved grassland with smaller sections of poor semi-improved grassland, buildings and hard standing. Small areas of dense and scattered scrub, broadleaf woodland and tall herb and fern are scattered around the edges of the site. The Thurston Burn meanders through the northern half of the site and the route of the burn is followed by a tree line with mature willow Salix sp.. A small pond in the south, just north of Havelock Farm. Many of the fields of improved grassland are grazed by cattle and ponies. Species poor hedges and fences separate many of the fields with smaller sections of hedges containing trees. Species-rich hedges are found predominantly in the north and west of the site. There are mature trees dotted within some of the hedges which comprise of ash Fraxinus excelsior and oak Quercus sp..

Land use: Pasture, working farmland

Management: Hedgerow and grazing

Management score: Beneficial


Connectivity score: Moderate

Species records within 1km: Barn Owl,Bat,Bluebell,Brown Long-eared Bat,Common Frog,Common Pipistrelle,Fieldfare,Great Crested Newt,Green Sandpiper,Hobby,Kingfisher,Peregrine,Pipistrelle,Pipistrelle Bat species,Redwing,Serotine,Smooth Newt,Whiskered/Brandt's Bat

Invasive species: Himalayan balsam Impatiens glandulifera starting to grow along wide stream

- Potential phase 2 surveys:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Aquatic habitats | <input checked="" type="checkbox"/> Botanical/hedgerows |
| <input checked="" type="checkbox"/> Badger | <input type="checkbox"/> Otter |
| <input checked="" type="checkbox"/> Bats | <input checked="" type="checkbox"/> Reptiles |
| <input checked="" type="checkbox"/> Birds | <input type="checkbox"/> Water vole |

Key sensitivities: large stream and floodplain, mature trees

LUC ID:	71	Settlement:	Hinckley, Barwell and Earl Shilton	
HBBC ID:	Various	Survey access:	Partial	
2014 survey ID:	na			

Opportunities on site:	woodland creation and enhancement grassland management scrub management to north Hedgerow enhancement
Opportunities for connectivity:	Along stream and edges of local road network. Protect and enhance hedges and tree lines

Consideration of 2014 data:	na
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Overall assessment: This large site is predominantly made up of grazed grassland fields with a low diversity of species. Treelines, hedges, woodland pockets, river and the pond supply high ecological value within the site. The grassland also provides ecological value as part of the wider landscape. Phase 2 surveys should focus on birds (considering farmland, breeding and wintering assemblages), bats, badgers, reptiles and GCN.

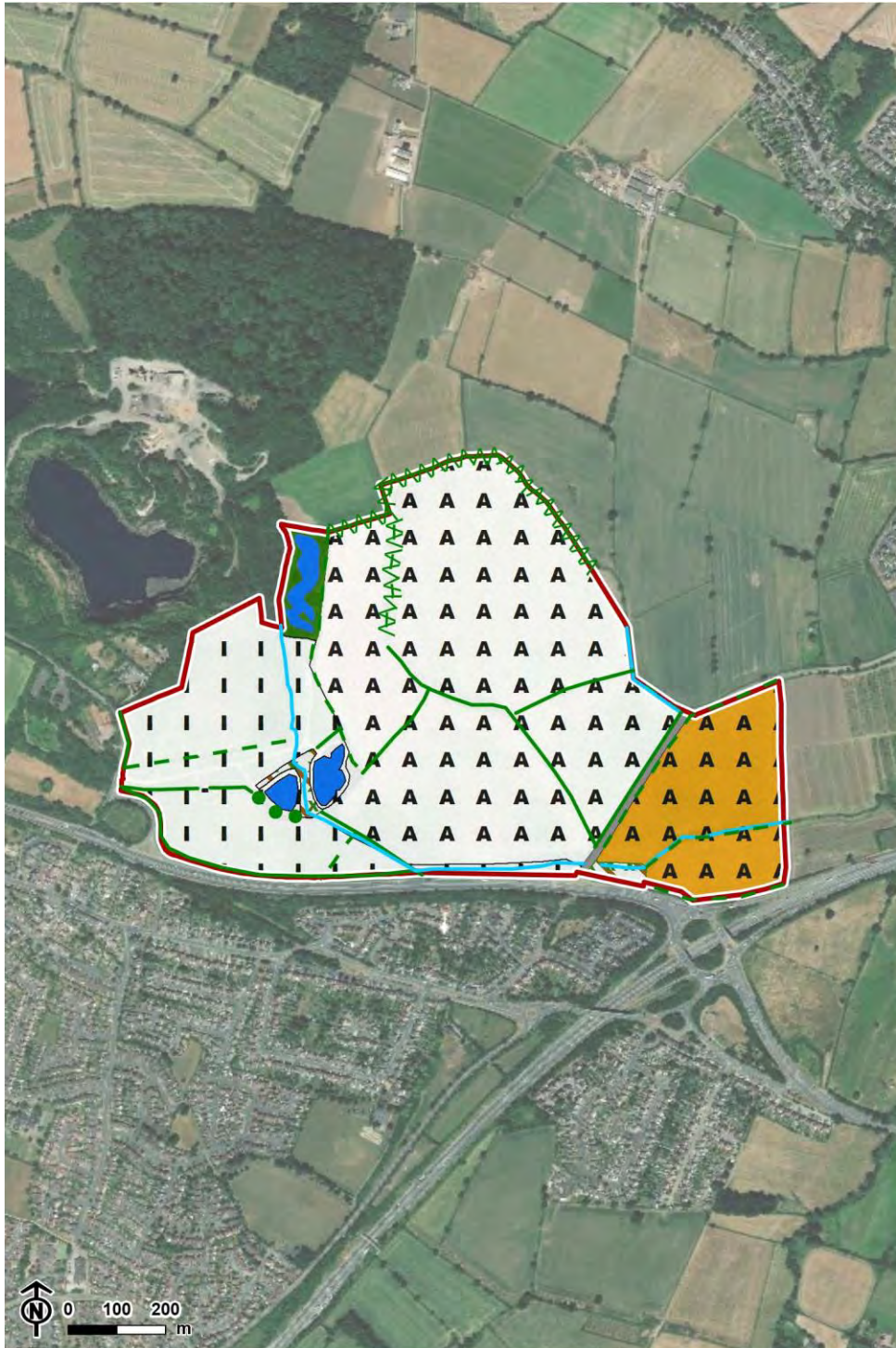
- Any future development should seek to:
- Detailed survey of Thurlaston Burn hLWS runs through the north of the site includes a stream and flanking grassland to ascertain current condition with respect to LWS criteria. This information will inform siting of any crossings to link development areas to the north and south, as well as appropriate mitigation.
 - Similar survey of the hLWS pool in the south west and baseline data used to inform detailed habitat enhancement and , where appropriate, supporting drainage and SuDS design.
 - Detailed hedgerows survey to inform siting of the development and transport infrastructure.
 - Future management should also target LWS criteria for these habitat types. Detailed baseline information should inform future monitoring.
 - Retain and enhance the resources of hedges and tree lines through the planting of native species. A suitable buffer should be installed during any development to mitigate for disturbance, including lighting.
 - Strengthen treeline following river course to limit risk of bank erosion and create natural barrier to protect banks from damage by recreational use.
 - Provide buffer to Thurlaston Burn within which grassland and tree planting should be selected to create varying sward height and increase water absorption.
 - Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS and planting for pollinators in communal green spaces within the development, which link to the wider landscape.
 - Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
 - Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are 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, on the basis that:
- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
 - Sensitive design and mitigation together accommodate a robust package of impact avoidance measures.
 - The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
 - Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

RAG status: Amber

LUC ID: 72 Settlement: Groby and Ratby
 HBBC ID: Various Survey access: Partial
 2014 survey ID: AS978 West portionAs620 East portionna - Central portion



Assessment site: 72
 Hinckley and Bosworth ID: Various

- Assessment site
- Phase 1 habitat**
- A1.1.1 Broadleaved woodland (semi-natural)
- A2.1 Scrub (dense/continuous)
- A2.2 Scrub (scattered)/
- C3.1 Other tall herb and fern (ruderal)
B4 Improved grassland
- G1 Standing water
- HS Hard standing
- A J1.1 Arable
- J1.1 Arable/ RA Restricted Access
- J3.6 Buildings
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.2.1 Defunct hedge (native species-rich)
- J2.2.2 Defunct hedge (species-poor)
- TL Tree line

CB:KS EB:Stenson_K LUC DB_INSET_10695_r0_Phase1 31/03/2020
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Source: LUC

SSSI within 5km: Benscliffe Wood, Bradgate Park and Cropston Reservoir, Groby Pool and Woods, Roecliffe Manor Lawns, Sheet Hedges Wood, Swithland Wood and The Brand, Ulverscroft Valley

SSSI IRZ overlapping site: Yes: resi and/or rural resi SSSI IRZ overlaps

LNRs within 2km: Goss Meadows

LWS within 2km: Yes

LWS on site or adjacent (within 30m): Groby Nature Area and Gun Club, Groby Rothley Brook Tributary, Groby Anstey Lane Hedge (South)

LUC ID: 72 Settlement: Groby and Ratby
 HBBC ID: Various Survey access: Partial
 2014 survey ID: AS978 West portionAs620 East portionna - Central portion



Potential or historic LWS on site or adjacent (within 30m): Groby Farm Track Ford and Lake, Groby Farm
 Ancient woodland within 2km: Ancient woodland (no name), GROBY POOL WOOD, LADY HAY WOOD, LAWN/OLD WOODS, MARTINSHAW WOOD, SHEET HEDGES WOOD ,
 Ancient woodland on site or adjacent (within 30m): None
 Planning status: Green wedge
 NE Habitats network classification on site: None
 Priority habitats within 1km: Deciduous woodland, Good quality semi-improved grassland, Lowland fens, Lowland meadows, No main habitat but additional habitats present

LLR BAP habitats on site:

- | | | |
|--|---|---|
| <input type="checkbox"/> Broad-leaved woodland | <input type="checkbox"/> Mesotrophic lakes | <input type="checkbox"/> Heath grassland |
| <input type="checkbox"/> Wet woodland | <input type="checkbox"/> Floodplain wetland | <input type="checkbox"/> Calcareous grassland |
| <input type="checkbox"/> Lowland wood-pasture and parkland | <input type="checkbox"/> Reedbeds | <input type="checkbox"/> Roadside verges |
| <input checked="" type="checkbox"/> Hedgerows | <input type="checkbox"/> Fast-flowing streams | <input type="checkbox"/> Field margins |
| <input checked="" type="checkbox"/> Mature trees | <input type="checkbox"/> Sphagnum ponds | <input type="checkbox"/> Rocks and built structures |
| <input checked="" type="checkbox"/> Eutrophic standing water (field ponds, lakes, canals and reservoirs) | <input type="checkbox"/> Springs and flushes | <input type="checkbox"/> Urban habitats |
| | <input type="checkbox"/> Neutral grassland | |

Phase 1 habitat survey description: The site is dominated by intensively managed arable farmland with the western portion of the site composed of improved grassland. Species found in the improved grassland include perennial rye-grass *Lolium perenne*, cock's foot *Dactylis glomerata*, dandelion *Taraxacum* sp. and buttercup *Ranunculus repens*. Three ponds are found in the west of the site and are stocked fishing ponds. A small stream flows through the western section of the site and along the southern border, past the fishing ponds. Pond and marginal vegetation included bulrush *Typha* sp., pondweed *Potamogeton* sp. and waterlily *Nymphaeaceae* sp.. Nettle *Urtica dioica*, bindweed *Convolvulus arvensis*, bramble *Rubus* sp. and hazel *Corylus avellana* were also found around the ponds. The stream is bordered by thick scrub vegetation including bramble, hawthorn *Crataegus monogyna* and ash *Fraxinus excelsior*. A length of species-rich hedging runs along the northern boundary of the site with the remaining hedges which criss-cross the site and separate fields being species-poor. Species rich hedges contained hawthorn, dogwood *Cornus sanguinea*, oak *Quercus* sp. and ash. A small tree line runs along the southern edge of one of the fishing ponds and consists of conifers.

Land use: Farmland, fishery
 Management: Ploughing, sowing etc.
 Management score: Beneficial
 Connectivity score: High

Species records within 1km: Barn Owl, Bat, Bearded Tit, Bittern, Black Tern, Black-necked Grebe, Black-tailed Godwit, Bluebell, Brambling, Brown Long-eared Bat, Cetti's Warbler, Common Crossbill, Common Frog, Common Pipistrelle, Common Scoter, Common Toad, Daubenton's Bat, Fieldfare, Firecrest, Garganey, Goldeneye, Grass Snake, Great Crested Newt, Green Sandpiper, Greenshank, Greylag Goose, Hobby, Honey-buzzard, Kingfisher, Lapland Bunting, Lesser Noctule, Little Gull, Little Ringed Plover, Marsh Harrier, Mediterranean Gull, Myotis Bat species, Noctule Bat, Nyctalus Bat species, Osprey, Otter, Peregrine, Pintail, Pipistrelle, Pipistrelle Bat species, Quail, Red Kite, Red-throated Diver, Redwing, Scaup, Smooth

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Newt, Soprano Pipistrelle, Tundra Swan, Whimbrel, White-letter Hairstreak, Whooper Swan, Wryneck

Invasive species: None recorded

Potential phase 2 surveys:

<input type="checkbox"/> Aquatic habitats	<input checked="" type="checkbox"/> Botanical/hedgerows
<input checked="" type="checkbox"/> Badger	<input type="checkbox"/> Otter
<input checked="" type="checkbox"/> Bats	<input checked="" type="checkbox"/> Reptiles
<input checked="" type="checkbox"/> Birds	<input type="checkbox"/> Water vole

Key sensitivities: Loss of connectivity to the wider area from removal of hedgerows, increased disturbance and pollution to water bodies.

Opportunities on site: Woodland creation and links with surrounding woodland.
Meadow creation
Wetland expansion

Opportunities for connectivity: Restoration of hedgerows, increase in biodiversity and connectivity in areas subject to intensive farming.

Consideration of 2014 data: AS978 - Habitat types which were accessible in 2014, remain similar to those subsequently recorded in 2019. The tributary to Rothley Brook was identified as a pLWS in 2014 given the gravel substrate and riparian trees with exposed roots.

As620 - Habitat types remain similar to those previously recorded in 2014. The north western boundary with Groby Road was in part identified as a pLWS in 2014 owing to hedgerow with seven locally native woody species, and verge including meadow vetchling, meadow crane's-bill and tall fescue - further botanical survey recommended. The tributary of Rothley Brook again identified to have gravel substrate and riparian trees with exposed roots, other features may also be present.

Overall assessment: The site is predominantly supports arable and grassland. Fishing ponds, mature trees, small copses and species-rich hedgerows provide the greatest ecological value. These have potential to support a large number of protected species as listed above and Phase 2 surveys should focus on bats, birds (considering farmland, breeding and wintering assemblages), badger, reptiles, GCN, otter and water vole. The larger open arable fields may also be suitable for wintering birds.

The scale of development and proximity of a number of designated sites including Groby Pond SSSI is the single key parameter influencing Amber status. Significant open space will be required within any future development to ensure future recreational need is accommodated on site. Delineation of access routes and habitat management to preserve key features in favourable condition will be required.

Any future development should seek to:

- Two ponds in the west of the site were historically designated as LWSs and surveys should be conducted to determine if they still meet LWS selection criteria.
- Retain all priority deciduous habitat in the north of the site and maintain its link with this habitat to the north, including the LWS.
- Provide appropriate buffer around Rothely Brook from built development and any formal landscaping. Align recreational access to encourage appreciation of these features without compromising bankside or in-channel biodiversity.
- Retain and enhance hedges to maintain connectivity within the site, including those identified as pLWS.
- Retain ponds on the site to retain the character of the borough.
- Creation of wetlands through enlargement of marginal vegetation surrounding ponds to encourage biodiversity.
- Enhance and create tree lines and woodland pockets to link the site with this priority habitat to the west, around Groby.
- Enhancement of grassland in the west of the site to raise this to the level required for lowland meadow priority habitat. Grassland may be used as a communal green space for the development.
- Incorporate a traditional orchard and add natural outdoor play area for children.

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- Planting of native species of tree and shrub to increase structural diversity within the site.
- Incorporate biodiverse green infrastructure such as green roofs and trellises, SuDS, planting for pollinators, communal green spaces and hedge lined walkways within the development, which link to the wider landscape.
- Protection measures to be implemented during construction should be prescribed in a Construction Ecological Management Plan (CEcMP). This should incorporate best practice construction methods, reasonable avoidance measures and cross-reference any protected species licence or hedgerow notice requirements, as appropriate.
- Ensure appropriate management of wildlife-rich habitats in the long-term. Any Landscape & Habitat Management Plan (LHMP) covering retained and created habitats should include appropriate monitoring and remedial measures.

In conclusion, to avoid adverse ecological impact, the nature, scale and form of any future development will be markedly influenced by the presence of ecological constraints, such as the presence of priority habitats and species which are 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 at least some of the site, on the basis that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Sensitive design and mitigation together accommodate a robust package of impact avoidance measures.
- The development must robustly evidence green space provision to accommodate recreational demand for the future population in the long-term.
- Locally-appropriate enhancement is incorporated within the development design. The Draft Environment Bill 2018 proposes BNG at 10%.

In conclusion it is considered that residential development may be delivered at this site without significant adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey to inform impact assessment in accordance with the mitigation hierarchy.
- Robust mitigation is developed to address any unavoidable impact on protected or notable, habitats or species.
- Locally-appropriate enhancement (biodiversity net gain (BNG)) is incorporated within the development design. The Draft Environment Bill 2018 sets BNG at 10%.

RAG status:

Amber