

Preliminary Ecological Appraisal

at

Cadeby Pipe Factory, Leicestershire

on behalf of



by



March 2025

EXECUTIVE SUMMARY

Designated Sites / Habitats / Species	Summary (dark orange = high risk items further surveys or precautionary methods required, yellow = low risk, no further surveys required but mitigation or precautionary measures should be used as good practice green = no constraint)
Background	The site is located to the east of Cadeby (central OS grid reference SK 43130 02187) and is approximately 12.28hectares (ha). It is comprised of livestock grazed improved grassland, arable field margins (unmanaged), scattered trees, hard standing farmers track, post-wire fence and metal gate.
International Statutory	No internationally designated sites for nature conservation were returned within 10km of the site boundary.
Statutory Sites	No statutory designated sites for nature conservation were returned within 2km of the site boundary.
Non-statutory Designated Sites	52 non-statutory designated sites were located within the 2km search radius of the site. A447 Verge and Brascote Lane Hedgerows & Trees pLWS, located adjacent to the western boundary is adjacent to the field being used for biodiversity gains and therefore adverse impacts are not anticipated. Cadeby Gravel Pits RIGS is located adjacent to the northern boundary and Naneby Hall Farm, Wet Woodland and Pools Historic LWS are located in close proximity to the site boundary. They are likely already subject to indirect impacts from existing works however it is recommended that further indirect impacts are avoided or mitigated for through the production and implementation of Dust Management Plan (DMP) and a Construction Environmental Management Plan (CEMP). Operational and construction phases should be considered within these documents.
SSSI Impact Risk Zone	MAGIC identifies that the site does not fall within any SSSI Impact Risk Zone (IRZ).
Priority Habitats	Two areas of deciduous woodland are located approximately 20-30m from the site boundary. One area (W1) is located to the west and the other (W2) is located to the east of the site boundary. W1 lies to the west, on the other side of the A447 and W2 lies to the east, alongside the existing/active quarry area. No direct impacts are anticipated. The DMP and CEMP required for the non-statutory sites should also be implemented for these habitats.
Site habitats	The works will impact some habitats of moderate and high ecological value including the removal of other neutral grassland, bramble scrub and fen/wetland habitat. These will be mitigated for through the creation of habitats within the site boundary as per the BNG post development plan. A further botanical assessment is recommended in the correct season to ensure the wetland habitat has been fully assessed and mitigated appropriately.

Great Crested Newts (GCN)	17 waterbodies were located within 500m of the site, however suitable terrestrial habitat for great crested newts was limited to the perimeter of the fields due to the management of the site. Whilst most of the works are taking place on sub-optimal habitats, the wetland and hedgerows provide suitable habitats, therefore eDNA surveys are recommended for this species.
Reptiles	Whilst there is some suitable habitat on site, the majority of the works will be taking place on sub-optimal habitat due to the grassland management. However, it is recommended that a PWMS is followed during any works to reduce or remove vegetation and for any topsoil stripping activities.
Bats (Roosting and Commuting / Foraging)	The trees within the site were assessed for their suitability to support roosting bats. T17 and T01 were identified as providing potential roosting features. Under the current proposals, direct impacts are not anticipated however, indirect impacts in the form of lighting, noise, vibration, and air pollution are anticipated. If the proposals cannot avoid significant indirect impacts to T17 or T01 or works will occur within 30m of T17 and/or 10m of T01, an aerial inspection is recommended. A PWMS or licencing may be required depending on the above. With regard to foraging and commuting, the majority of the suitable habitats are to be retained, however it is recommended that a lighting scheme is detailed within the CEMP for both construction and operational phases to ensure lighting does not impact foraging and commuting bats (paragraph 4.3.20).
Badgers and Other Mammals	No evidence of badger setts was identified onsite or within 30m during the habitat survey (November 2024) however there were mammal trails present indicative of other mammals. Badgers are highly transient in nature, and suitable commuting and foraging habitats are present within the site. To minimise the risk to badgers and other mammals that may be present at any point, mitigation measures, detailed in paragraphs 4.3.24 - 4.3.26 should be adhered to throughout the works on site.
Birds	The habitats on site, including the grassland were considered to provide suitable nesting and foraging opportunities for birds. Due to the site being subject to management/grazing it is considered that the grassland is unlikely to support important populations of birds. However, if works are to take place within breeding season, a nesting check and/or breeding bird survey within the 24-hour period immediately prior to works will be required. Other mitigation measures are listed in paragraph 4.3.32.
Invasive Species	Cotoneaster has been located on the site. Under the WCA, 1981 Schedule 9 it is an offence to plant or allow the species to spread into the wild. Under current proposals it is indicated that all areas of cotoneaster are set to be retained. However, potential control methods are detailed in paragraphs 4.3.33 - 4.3.36.
Enhancement Measures	Detailed in Section 5.0.

CONTENTS

EXECUTIVE SUMMARY	I
CONTENTS	III
TABLES.....	IV
FIGURES	V
DRAWINGS	V
1 INTRODUCTION	6
1.1 Scope of works	6
1.2 Site Location and Description	6
1.3 Proposed Development	7
1.4 National Legislation and Planning Policy	8
2 ASSESSMENT METHODOLOGY	9
2.1 Desktop Study	9
2.2 Habitat Classification Survey.....	9
2.3 Great Crested Newts (GCN)	10
2.4 Bats	10
2.5 Limitations	11
2.6 Previous Ecological Surveys	11
3 RESULTS.....	12
3.1 Desk Study	12
3.2 SSSI Impact Risk Zone.....	13
3.3 Priority Habitats	13
3.4 Species Records	13
3.5 UK Habitat Classification Survey	15
4 DISCUSSION AND RECOMMENDATIONS	37
4.1 Designated Sites.....	37
4.2 Habitats.....	38
4.3 Species	40
5 ENHANCEMENTS.....	47
6 REFERENCES.....	48
7 DRAWINGS	50
8 APPENDIX A – NATIONAL LEGISLATION, SPECIES LEGISLATION AND PLANNING POLICY	60
9 APPENDIX B – NON-STATUTORY DESIGNATED SITES.....	71
10 APPENDIX C – PROTECTED AND NOTABLE SPECIES RECORDS	75

TABLES

Table 2.1: Consulted resources and search radius.....	9
Table 2.2: Habitat Suitability Index assessment score	10
Table 2.3 Bat roosting potential for trees	10
Table 2.4: A summary of the surveys undertaken by Heaton's and Tetra Tech from 2021.	11
Table 3.1: Summary of designated sites within the 2km search radius.....	12
Table 3.2: Summary of the priority habitats within the 2km search radius	13
Table 3.3: Protected and notable species records.....	14
Table 3.4: European Protected Species Licencing record details for bats (MAGIC, 2024).	15
Table 3.5: Description of native hedgerows found within the site boundary, see Drawing 1.....	21
Table 3.6: Description of native hedgerow – associated with bank or ditch found within the site boundary, see Drawing 1.	23
Table 3.7: Description of native hedgerows with trees found within the site boundary, see Drawing 1.	23
Table 3.8: Description of native hedgerows with trees – associated with bank or ditch found within the site boundary, see Drawing 1.	25
Table 3.9: Description of line of trees found within the site boundary, see Drawing 1.	26
Table 3.10: Description of the ditches found within the site boundary, see Drawing 1.	27
Table 3.11: Target notes descriptions.....	28
Table 3.12: Description and HSI assessment of waterbodies within 500m of the site boundary.	30
Table 3.13: Trees with bat roosting suitability.....	33
Table 4.1: Habitat types within the site boundary.....	39

FIGURES

Figure 1.1: Site location in the wider landscape (Google Maps, 2024)..... 7

Figure 3.1: G1 - modified grassland. 16

Figure 3.2: G2b - modified grassland. 17

Figure 3.3: G3a - modified grassland..... 17

Figure 3.4: G2a - other neutral grassland..... 18

Figure 3.5: G3b – showing the ONG (left of ditch and modified grassland right of ditch). 18

Figure 3.6: Fens, marsh and swamp..... 19

Figure 3.7: S1 - mixed scrub. 19

Figure 3.8: S2 - bramble scrub..... 20

Figure 3.9: BG1 - bare ground. 20

Figure 3.10: BG2 - bare ground. 21

Figure 3.11: Site location within the wider landscape – dominated by agricultural practices with woodland blocks connected to the site through hedgerows (Google, 2024)..... 34

DRAWINGS

Drawing 1	UK Habitat Survey Map
Drawing 2	Target Notes Map
Drawing 3	Waterbodies within 500m of Site Boundary
Drawing 4	Trees with Bat Roosting Potential

Heatons is the trading name of Heaton Planning Ltd

Heatons Document Management

Revision	Author	QA by	Date
V1	AK	RM	March 2025

1 INTRODUCTION

1.1 Scope of works

1.1.1 Heatons were commissioned to undertake a Preliminary Ecological Appraisal (PEA) to determine the ecological status of the land to the east of Cadeby, Leicestershire and south of the existing Cadeby quarry works, hereafter referred to as the site.

1.1.2 To undertake an initial assessment of the potential ecological impact of the proposals, a desk study, Habitat Survey and a preliminary protected species assessment were carried out. This is termed as a Preliminary Ecological Appraisal (PEA) Report in accordance with CIEEM (2018 V1.2 Updated 2022). This assessment is considered 'preliminary' until any required protected species, habitat or invasive species surveys are completed, and the results incorporated into a final Ecological Impact Assessment (EclA) which supports a planning application.

1.1.3 This PEA aims to:

- Undertake a desk-based review of designated sites and records of protected species and other species that could present a constraint;
- Map and assess the habitats present on site;
- Assess the site for potential to support protected species or other species that could present a constraint, and make appropriate recommendations for further survey work, if necessary;
- Provide outline options for mitigation measures as appropriate; and
- Make recommendations for appropriate biodiversity enhancements in line with national and local planning policy.

1.1.4 This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of Heatons. The survey and desk-based assessment undertaken as part of this review are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Site Location and Description

1.2.1 The site is located to the east of Cadeby, Leicestershire and south of the existing Cadeby quarry works, found at OS grid reference SK 43130 02187. The site is

approximately 12.28 hectares (ha) in size and comprises livestock grazed improved grassland, arable field margins (unmanaged) scattered trees, hard standing farmers track, post-wire fence and metal gate.

1.2.2 The site is situated within a predominantly arable landscape, with quarry workings (FP McCann Cadeby) and a solar farm to the north as well as blocks of woodland and waterbodies in the wider landscape.

1.2.3 The site is accessed by Brascote Lane off the A447.

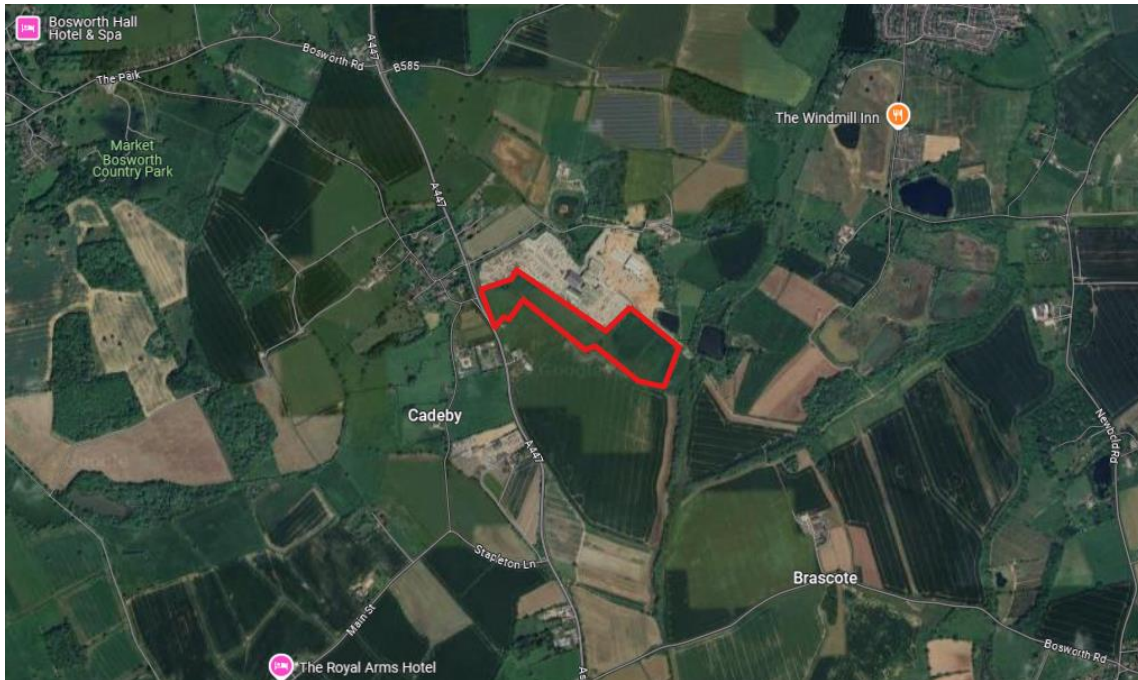


Figure 1.1: Site location in the wider landscape (Google Maps, 2024).

1.3 Proposed Development

1.3.1 In summary the proposed development consists primarily of an extension to existing FP McCann operations at Cadeby by introducing a plastic pipe manufacturing facility.

1.3.2 The proposed works involve the following:

- Plastic Pipe Manufacturing Facility;
- Aggregate Storage Bays;
- External Storage;
- Access Modifications – The access to the site would be provided by the former Cadeby Quarry access which is located 40m east of the existing FP McCann access;

- Biodiversity Enhancement Area – 1.22ha dedicated to the delivery of meaningful landscape and ecological enhancement;
- Operating Hours – It is intended that the site shall be operated 24 hours a day Monday to Saturday, however the normal operational times are 2am to 7pm (Mon-Fri with machinery starting at 4am) and 2am to 12.30pm on Saturdays, again with machinery starting at 4am; and
- Ancillary Development.

1.4 National Legislation and Planning Policy

- 1.4.1 See Appendix A for full legislation and planning policy.

2 ASSESSMENT METHODOLOGY

2.1 Desktop Study

- 2.1.1 Data regarding statutory and non-statutory designated sites, plus any records of protected or notable species and habitats was obtained from Leicestershire and Rutland Environment Records Centre (LRERC) and online resources (Table 2.1).

Table 2.1: Consulted resources and search radius.

Consultee / resource	Data Obtained		Search Radius from Site Boundary
Leicestershire and Rutland Environment Records Centre (LRERC)	Statutory and Non-statutory designated sites Protected and notable species		2km
Multi-Agency Geographic Information for the Countryside (MAGIC)	Statutory Designated Sites	International	10km
		National	2km
	Non-Statutory Designated Sites		2km
	Priority Habitats		1km

2.2 Habitat Classification Survey

- 2.2.1 The PEA consisted of two components: a UK Habitat Classification Survey (UKHabs V2) and a scoping survey for protected species and other species of conservation concern which could present a constraint.
- 2.2.2 The Habitat Survey was undertaken on the 27th November 2024, by Director of Ecology Rhia McBain BSc (Hons) and Senior Ecologist, Alicja Kordula MSc BSc (Hons). The weather conditions were overcast with a moderate breeze (Beaufort scale 2), and a starting temperature of 4°C.
- 2.2.3 The Habitat Survey followed the standard methodology (UKHab V2, 2023), and as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2018 V1.2 Updated 2022). In summary, this comprised walking over the survey area and recording the habitat types and boundary features present.
- 2.2.4 A protected species scoping survey was carried out in conjunction with the Habitat Survey. The site was assessed for its suitability to support protected species, in particular great crested newts (GCN) *Triturus cristatus*, reptiles, birds, badgers *Meles meles*, bats, and other species of conservation importance that could pose a planning constraint.
- 2.2.5 The surveyor looked for evidence of use including signs such as burrows, droppings, footprints, paths, hairs, refugia and particular habitat types known to be used by certain groups such as ponds. Any mammal paths were also noted

down and where possible followed. Fence boundaries were walked to establish any entry points or field signs such as latrines. Areas of bare earth were inspected for mammal prints. Areas of habitat considered suitable for protected species or those of conservation interest were recorded.

2.3 Great Crested Newts (GCN)

Habitat Suitability Index HSI)

- 2.3.1 In order to assess the suitability for GCN of the ponds within 500m of the site boundary, a HSI was undertaken following the standard methodology (ARG UK in 2010). The HSI provides a measure of the suitability of a waterbody to supporting GCN by assigning an overall score as outlined in Table 2.2.

Table 2.2: Habitat Suitability Index assessment score

HSI Score	Habitat Suitability
<0.5	Poor
0.5 – 0.59	Below Average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

2.4 Bats

Ground Level Tree Assessment (GLTA)

- 2.4.1 Any tree(s) present on site, or within close proximity to the site boundary were visually assessed, and potential roosting features or access points for bats were noted, together with any evidence of bat presence.
- 2.4.2 Following current survey guidelines (Collins, 2023), each structure and/or tree was then categorised according to its suitability to support roosting bats (Table 2.3, overleaf). The category also informs the potential need for additional survey effort.

Table 2.3 Bat roosting potential for trees

Suitability	Description
None	Tree with no PRFs or where it is highly unlikely PRFs are present
FAR	Further Assessment Required to establish presence of PRFs
PRF	A tree with at least one Potential Roosting Feature (PRF) present

Site Use by Bats – Foraging / Commuting

- 2.4.3 The habitats on site were also assessed for suitability of use by bats for foraging and commuting in line with the current survey guidelines (Collins, 2023). This initial assessment informs the need for further surveys such as transect or static activity surveys.

2.5 Limitations

- 2.5.1 The desk study data is third party controlled data, purchased for the purposes of this report only. Heatons cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.
- 2.5.2 The Habitat Survey was undertaken outside the optimal period for this type of survey (April to October). However, it was considered that an assessment could be made on the broad habitat types on site and further surveys recommend as appropriate.
- 2.5.3 Due to access restrictions Pond 3, 4, 8, 9 and 10 could not be assessed. Additionally, Pond 1 and 7 could only be assessed from a distance, however, it was considered that a suitable assessment could be made of these two ponds.
- 2.5.4 The protected / notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected / notable species group.

2.6 Previous Ecological Surveys

- 2.6.1 Previous surveys had been undertaken on the existing quarry to the north of the site boundary. See Table 2.4 for surveys undertaken.

Table 2.4: A summary of the surveys undertaken by Heatons and Tetra Tech from 2021.

Application Reference	Survey	Timings
22/00420/FUL	Phase 1 Habitat Survey, by WYG	2020
	Phase 1 Habitat Survey, by Heatons	12 th January 2022
	GCN eDNA Surveys, by Heatons	20 th April 2022
	Reptile Survey, by Heatons	12 th April to 13 th May 2022

3 RESULTS

3.1 Desk Study

Designated sites

- 3.1.1 No internationally designated sites for nature conservation were returned within 10km of the site boundary.
- 3.1.2 No statutory designated sites for nature conservation were returned within 2km of the site boundary.
- 3.1.3 52 non-statutory designated sites were located within the 2km search radius of the site. The closest being A447 Verge and Brascote Lane Hedgerows & Trees (Potential Local Wildlife Site (LWS)), located adjacent to the western boundary and Cadeby Gravel Pit (Regionally Important Geological Site (RIGS)), located adjacent to the north boundary.
- 3.1.4 Table 3.1 details a summary description of the notable designated sites, see Appendix B for full list of non-statutory sites within 2km of the site boundary.

Table 3.1: Summary of designated sites within the 2km search radius.

Site name	Designation	Interest Features	Distance from site boundary
Non-statutory Designated Sites			
A447 Verge and Brascote Lane Hedgerows & Trees	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland. Species-rich hedgerow (x4). Mature tree (x4) – English oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> (x2) and horse chestnut <i>Aesculus hippocastanum</i> .	Adjacent to the western boundary
Cadeby Gravel Pit	RIGS	Geological. No citation received.	Adjacent to the northern boundary
Naneby Hall Farm, Wet Woodland and Pools	Historic LWS	No citation received.	20m north
Cadeby Churchyard	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – amenity grassland with fine sward, herbs frequent throughout.	90m west
Brascote Lane Ash	Candidate LWS	Site that meets LWS criteria. Mature tree – ash standard in hedgerow. Cavities and dead wood. Girth estimated >4m.	380m to the north-east
Pond	Historic LWS	No citation received.	390m west

Brascote and Fox Coverts and associated grassland	Notified / Candidate / Potential LWS	No citation received.	410m south-east
Grassland N of Brascote Lane	Potential LWS	Mesotrophic grassland (x2) – former quarry silt ponds, now grassland, with medium to tall sward. Small number of horses grazing in one area.	410m north
Cadeby Lane hedgerows & Trees	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow (x5). Mature tree (x7) – English oak (x6) and ash.	470m north-west
A447 / Bosworth Lane Grassland & Oak	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – close grazed grassland (Sheep and cows). Mature tree – English oak standard in hedgerow. Small dead wood, splits and loose bark. Girth estimated >3.5m.	500m north
Brscote Lane Woodland	Potential LWS	Broadleaved woodland.	500m north-east

3.2 SSSI Impact Risk Zone

- 3.2.1 MAGIC identifies that the site does not fall within any SSSI Impact Risk Zones. Therefore, the development does not require further consultation with Natural England.

3.3 Priority Habitats

- 3.3.1 The following areas of priority habitat were returned within the 1km search radius, see Table 3.2.

Table 3.2: Summary of the priority habitats within the 2km search radius

Habitat type	Closest distance to site
Deciduous Woodland	20m north
Traditional Orchards	220m south
Ancient and Semi-Natural Woodland	410m south-east
Ancient Replanted Woodland	980m south-west

3.4 Species Records

- 3.4.1 Records of protected species were obtained from the LRERC. A number of species of conservation importance or otherwise notable were recorded within the 2km search radius of the site. A summary of these records, within appropriate distances, is provided in Table 3.3. See Appendix B for the full list of records within 2km of the site boundary.

3.4.2 In order to simplify the results, only recorded of species from the last 10 years are shown.

Table 3.3: Protected and notable species records.

Species	Nearest distance from site	Year of most recent record	Number of records	Conservation status
Mammals				
Common pipistrelle <i>Pipistrellus pipistrellus</i>	100m west	2023	100+	EPS. LBAP. WCA, 1981.
Noctule bat <i>Nyctalus noctula</i>	320m east	2023	22	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
<i>Nyctalus Species</i>	320m east	2015	3	WCA, 1981.
Brown long-eared bat <i>Plecotus auritus</i>	330m east	2023	9	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
Nathusius's pipistrelle <i>Pipistrellus nathusii</i>	330m east	2015	4	EPS. WCA, 1981.
<i>Myotis species</i>	330m east	2023	12	LBAP. WCA, 1981.
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	340m east	2023	97	EPS. UK BAP. LBAP. NERC S41. WCA, 1981.
Western barbastelle <i>Barbastella barbastellus</i>	1.6km south-west	2021	1	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
Daubenton's bat <i>Myotis daubentonii</i>	1.7km north-west	2018	3	EPS. LBAP. WCA, 1981.
Natterer's bat <i>Myotis nattereri</i>	1.8km north-east	2021	3	EPS. WCA, 1981.
Leisler's bat <i>Nyctalus leisleri</i>	1.9km south-east	2023	1	EPS. LBAP. WCA, 1981.
Birds				
Red Kite <i>Milvus milvus</i>	100m north	2021	11	Green: Birds of Conservation Concern (BoCC). WCA, 1981 (Sch1).
Brambling <i>Fringilla montifringilla</i>	260m east	2022	100+	Green: BoCC. WCA, 1981 (Sch1).
Kingfisher <i>Alcedo atthis</i>	330m north	2021	5	Green: BoCC. WCA, 1981 (Sch1).
Peregrine <i>Falco peregrinus</i>	720m east	2022	66	Green: BoCC. WCA, 1981 (Sch1).

Avocet <i>Recurvirostra avosetta</i>	730m east	2021	14	Amber: BoCC. UK BAP. WCA, 1981 (Sch1).
Greylag goose <i>Anser anser</i>	740m east	2022	100+	Amber: BoCC. UK BAP. WCA, 1981 (Sch1 – part 2).
Little ringed plover <i>Charadrius dubius</i>	750m east	2022	100+	Green: BoCC. WCA, 1981 (Sch1).
Garganey <i>Anas querquedula</i>	950m north-east	2020	24	Amber: BoCC. WCA, 1981 (Sch1).

3.4.3 MAGIC returned two records for GCN Class Survey Licence Returns (CSLR) within 2km of the site boundary. The closest was located approximately 520m to the north of the site boundary. The CSLR was made up of six records, which returned positive presence for GCN, dated from 2017.

3.4.4 MAGIC returned one record for GCN pond surveys 2017 – 2019, which was located approximately 1.7km to the north-west of the site boundary. The record was dated from the 26th April 2019, the pond has a HSI score of 0.69 (average) with an inconclusive GCN presence.

3.4.5 MAGIC returned three records for European Protected Species Licencing (EPSL) for various bat species within 5km of the site boundary, details of which can be found in Table 3.4.

Table 3.4: European Protected Species Licencing record details for bats (MAGIC, 2024).

Species	Distance	Date	Details
Common pipistrelle	2.4km to the north-west	06/03/2020 – 31/03/2021	Allow destruction of a resting place
Brown long-eared bat	2.2km to the south-west	23/08/2018 – 30/04/2019	Allow damage of a breeding site
Brown long-eared bat	4km to the west	03/10/2017 – 26/09/2022	Allow destruction of a resting place

3.4.6 MAGIC identified that the site contains four arable assemblage farmland birds and four grassland assemblage farmland birds. Additionally, MAGIC identified several specific farmland birds, including corn bunting *Emberiza calandra*, curlew *Numenius Arquata*, grey partridge *Perdix perdix*, lapwing *Vanellus vanellus*, redshank *Tringa totanus*, tree sparrow *Passer montanus* and yellow wagtail *Motacilla flava*.

3.5 UK Habitat Classification Survey

3.5.1 The survey results are presented in the form of a map with the habitat types and boundary features marked which can be found at Drawing 1.

- 3.5.2 Descriptions of the habitat types and boundary features are detailed below. Habitat descriptions are defined by primary and / or secondary habitat codes (UKHab V2, 2023). Where there is more than one area of any habitat type and they differ in composition, these have been labelled in sequence e.g. X1, X2 for each relevant habitat.

Habitats

Modified Grassland

- 3.5.3 Three areas of modified grassland were noted within the site boundary.
- 3.5.4 G1 was located in the eastern field of the site. This field contained grassland with low species diversity and was evidently subject to management and had a short but tussocky sward structure. Species present included perennial rye grass *Lolium perenne*, Yorkshire fog *Holcus lanatus* and cock's foot *Dactylis glomerata* grasses with forb species generally limited to creeping buttercup *Ranunculus repens*, dandelion species *Taraxacum officinale* and broadleaved dock *Rumex obtusifolius*. There were several areas which were locally dominated by nettle *Urtica dioica* and broadleaved dock.



Figure 3.1: G1 - modified grassland.

- 3.5.5 G2b was located in the south eastern area of the central field. This had a slightly higher species diversity to G1 with Timothy *Phleum pratense* and crested dog's tail *Cynosurus cristatus* present but rare within the sward



Figure 3.2: G2b - modified grassland.

- 3.5.6 G3a was located across an area of the southwestern field. This was a similar habitat to the G2b grassland with a slightly more grass diverse sward than G1 but with very few forbs present.



Figure 3.3: G3a - modified grassland.

Other Neutral Grassland

- 3.5.7 Two areas of other neutral grassland were identified on site. These were located in parts of the central and western fields.
- 3.5.8 G2a was located in the western/northern section of the sites central field. This area of the field had a higher diversity of both grasses and forbs and therefore was assessed as other neutral grassland rather than modified grassland despite the management being the same.
- 3.5.9 G2a contained some perennial rye but the main sward contained timothy, crested dog's tail and false oat grass *Arrhenatherum elatius* in higher densities than the other areas of the fields. The forbs present were also more ecologically valuable including selfheal *Prunella vulgaris*, dove's foot cranesbill *Geranium molle* and sorrel *Rumex acetosa*, with some finer grasses such as fescues *Festuca sp.* present.



Figure 3.4: G2a - other neutral grassland.

- 3.5.10 G3b was located in part of the western field, this field had slightly different grassland habitats present, with one area containing higher density of broadleaved grasses and fewer forbs and another area containing more ecologically diverse grass and forb species although overall the two areas both contained <6species/m² and therefore could be classed as modified grassland.
- 3.5.11 The area of the field that contained other neutral grassland had a high proportion of crested dog's tail and fescue, with rye grass rarer in that section.



Figure 3.5: G3b – showing the ONG (left of ditch and modified grassland right of ditch).

Fens, Marsh and Swamp

- 3.5.12 Part of the first field contained a wet flush along the southwestern boundary created by overflow from the drainage ditch to the north of the field. This area had a good range of species present including hard and soft rush (and potentially a hybrid of these), jointed rush was also present. Creeping soft grass *Holcus mollis*, Timothy species *Phleum sp.*, angelica, great willowherb a *Mentha*

sp., brooklime *Veronica beccabunga* and occasional bramble *Rubus fruticosus* agg..



Figure 3.6: Fens, marsh and swamp.

Mixed Scrub

- 3.5.13 An area of mixed scrub (S1) was located in the south-eastern corner of the site. The area was waterlogged at the time of the survey (November 2024). Species found included bramble, hawthorn *Crataegus monogyna*, willowherb species *Epilobium* sp., oak saplings *Quercus* sp., ash saplings and willow *Salix* sp.



Figure 3.7: S1 - mixed scrub.

Bramble Scrub

- 3.5.14 Two areas of bramble scrub were identified within the site boundary. S2 was noted in the southwestern corner of the eastern field. The area was dense in structure and dominated by bramble.



Figure 3.8: S2 - bramble scrub.

- 3.5.15 S3 was noted in the western corner of the eastern field. The area was dense in structure and dominated by bramble.

Bare Ground

- 3.5.16 Both areas of bare ground have been treated as degraded and therefore for the BNG baseline in the metric these areas have been classed as scrub based on aerial imagery.
- 3.5.17 Two areas of bare ground were noted within the site boundary. Both areas were recently created at the time of the survey (November 2024). BG1 was located along the northern boundary of the south-eastern field. This area had been created through ditch works completed ahead of the survey.



Figure 3.9: BG1 - bare ground.

- 3.5.18 BG2 was located along the access track. There was lack of vegetation, except for the edges at the base of the hedgerows / line of trees.



Figure 3.10: BG2 - bare ground.

Native Hedgerow

- 3.5.19 Three native hedgerows were present within the site boundary. Descriptions of the hedgerows are detailed in Table 3.5.

Table 3.5: Description of native hedgerows found within the site boundary, see Drawing 1

Hedge Number	Description and Importance of Hedgerow (including what criteria failed)	Photograph
H4	Located within the centre of the site. Measuring roughly 2m+ in height and less than 1.5m in width. Species found included bramble, hawthorn and elder <i>Sambucus nigra</i>. For the majority of the hedgerow the ground either side was intensively managed (see paragraph 3.5.13 and 3.5.14). A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	

H7	Located along the western boundary of the site. Measuring roughly 2m+ in height and 2m in width. Species found included hawthorn, holly <i>Ilex aquifolium</i> and bramble as well as pollarded ash and sycamore <i>Acer pseudoplatanus</i>. The hedgerow should evidence of management. A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	
H9	Located along the south-eastern boundary of the western field. Measuring roughly 2m+ in height and 2m in width. Species found included bramble, hawthorn, goat willow <i>Salix caprea</i> A mesh wire with barbed wire fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	
* Hedgerow importance criteria found under Regulation 4, Hedgerow Regulations 1997. Should be noted records for the hedgerow only went as far back as 1999.		

Native Hedgerow – Associated with Bank or Ditch

3.5.20 One native hedgerow – associated with bank or ditch was noted to run along the southern boundary of the centre field. Description of the hedgerow is detailed in Table 3.6.

Table 3.6: Description of native hedgerow – associated with bank or ditch found within the site boundary, see Drawing 1.

Hedge Number	Description and Importance of Hedgerow (including what criteria failed)	Photograph
H5	Measuring roughly 2m in height and less than 1.5m in width. Species found included bramble, hawthorn, elder, holly, dogwood <i>Cornus sanguinea</i> and hazel <i>Corylus avellana</i>. Evidence of recent planting was noted in sections. A wet ditch was noted to run along part of the hedgerow. Additionally, a wooden post and rail fence ran along the hedgerow. <u>Not</u> important *Fails criteria (b)	
* Hedgerow importance criteria found under Regulation 4, Hedgerow Regulations 1997. Should be noted records for the hedgerow only went as far back as 1999.		

Native Hedgerow with Trees

3.5.21 Four native hedgerows with trees were present within the site boundary.

Descriptions of the hedgerows are detailed in Table 3.7.

Table 3.7: Description of native hedgerows with trees found within the site boundary, see Drawing 1.

Hedge Number	Description and Importance of Hedgerow (including what criteria failed)	Photograph
H1	Located along the eastern boundary of the south-eastern field. Measuring roughly 2m+ in height and width. Species found included ash, hawthorn, rose species <i>Rosa sp.</i> and blackthorn <i>Prunus spinosa</i>. Metal mesh fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	

H2	Located along the southern boundary of the south-eastern field. Measuring roughly 2m in height and width. Species found hazel, dog rose <i>Rosa canina</i>, ash, field rose <i>Rosa arvensis</i>, guelder rose <i>Viburnum opulus</i>, oak. Hawthorn, ivy, holly, goat willow and blackthorn. A wet ditch was noted to run along the hedgerow. A metal palisade fence ran along the western edge of the hedgerow. <u>Not</u> important *Fails criteria (b)	
H3	Located along the northern boundary of the south-eastern field. Measuring roughly 2m+ in height and 1.5m in width. Species found included hawthorn, bramble, holly, rose species, beech <i>Fagus sylvatica</i>, ash, field maple <i>Acer campestre</i> and ivy <i>Hedera sp.</i> A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	
H8	Located along the south-eastern boundary of the north-western field. Measuring roughly 2m+ in height and 2m in width. Species found included laurel <i>Laurus sp.</i>, Leyland cypress <i>Cupressus x leylandii</i>, holly, conifer species, wild privet <i>Ligustrum vulgare</i>, cotoneaster <i>Cotoneaster sp.</i> and beech. A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	
* Hedgerow importance criteria found under Regulation 4, Hedgerow Regulations 1997. Should be noted records for the hedgerow only went as far back as 1999.		

Native Hedgerow with trees – Associated with Bank or Ditch

- 3.5.22 Two native hedgerows with trees were present within the site boundary.
Description of the hedgerow is detailed in Table 3.8.

Table 3.8: Description of native hedgerows with trees – associated with bank or ditch found within the site boundary, see Drawing 1.

Hedge Number	Description and Importance of Hedgerow (including what criteria failed)	Photograph
H6	Located along the north-western boundary of the site. Measuring roughly 2m+ in height and 1.5m in width. Species found included hazel, hawthorn, blackthorn, field maple, grey willow <i>Salix cinerea</i>, birch species <i>Betula sp.</i>, goat willow, sycamore, holly, bramble and elder. Evidence of recent planting was noted in sections. Spear thistle, cleavers and common nettle were noted at its base. A steep bank was noted along the northern side of the hedgerow. A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (b)	
H10	Located along the northern boundary of the centre field. Measuring roughly 2m+ in height and less than 1.5m in width. Species found included hawthorn, alder <i>Alnus glutinosa</i>, elder, blackthorn, holly, hazel, bramble, ash, silver birch <i>Betula pendula</i>, oak and conifer species. A steep bank was noted along the northern side of the hedgerow. A wooden post and rail fence was noted to run along the hedgerow. <u>Not</u> important *Fails criteria (a) and (b)	
* Hedgerow importance criteria found under Regulation 4, Hedgerow Regulations 1997. Should be noted records for the hedgerow only went as far back as 1999.		

Line of Trees

3.5.23 Two lines of trees were identified, these are described in Table 3.9.

Table 3.9: Description of line of trees found within the site boundary, see Drawing 1.

Line of Trees Number	Description	Photograph
LT1	Located within the centre of the site. Species found included ash and oak with bramble along its base. For the majority of the hedgerow the ground either side was intensively managed (see paragraph 3.5.13 and 3.5.14). A metal mesh and barbed wire fence ran along the hedgerow.	
LT2	Located along the south-eastern boundary of the north-western field. Species were dominated by Leyland cypress with apple species <i>Malus sp.</i> For the majority of the hedgerow the ground either side was intensively managed (see paragraph 3.5.13 and 3.5.14). A metal mesh and barbed wire fence ran along the hedgerow.	

Ditch

3.5.24 Three ditches were noted within the site boundary. Descriptions of the ditches are detailed in Table 3.10.

Table 3.10: Description of the ditches found within the site boundary, see Drawing 1.

Ditch Number	Description	Photograph
D1	At the time of the survey (November 2024), the ditch held water and was fast flowing in parts but overall flowing. Limited vegetation was noted in and along the bank of the ditch. The ditch was heavily shaded.	
D2	At the time of the survey (November 2024), the ditch held water and was fast flowing. It was noted to flow into D1. The ditch had been recently managed. Limited vegetation was noted in and along the bank of the ditch.	
D3	At the time of the survey (November 2024), the ditch held water and was still. Grasses dominated the base and banks of D3, species included crested dogs' tail, perennial rye grass, creeping bent <i>Agrostis stolonifera</i> , white clover and creeping buttercup. Poaching from sheep was noted both ends of the ditch. Due to the presence of grass species within the ditch, D3 is likely seasonally wet.	

Scattered Trees

- 3.5.25 There are several scattered trees noted across the site. Species include hawthorn and oak.

Target Notes

- 3.5.26 Three areas needing target notes were identified within the site boundary, the descriptions and corresponding photographs can be found in Table 3.11. The locations of which can be found in Drawing 2.

Table 3.11: Target notes descriptions.

Target Note	Description	Photo
TN01	Brick rectangular area, which was filled with water at the time of the survey (November 2024).	
TN02	Mammal track (potentially partially created by sheep), leading between the site and the field to the south-east.	

TN03	Open pipe.	
TN04	Hard standing area with open container. The container was considered suitable for nesting birds, including potential for WCA 1981 (as amended) Schedule 1 birds.	

Species**Amphibians**

3.5.27 17 waterbodies were located within 500m of the site boundary. Pond 11 - 16 were discounted due to the presence of significant barriers (A447 – Ashby Road). Due to access restrictions Pond 3, 4, 8, 9 and 10 could not be assessed. Pond 6 did not exist at the time of the Habitat Survey (November 2024), due to existing quarry workings. The other ponds were subject to HSI assessment. Further details regarding these waterbodies, can be found in Table 3.12 below and exact locations can be found in Drawing 3.

Table 3.12: Description and HSI assessment of waterbodies within 500m of the site boundary.

Pond Number	Description and HSI Score	Photograph
Pond 1	Minor waterfowl present, 5% shading, poor terrestrial vegetation, 10% macrophyte cover, moderate water quality, possible of fish presence, pond never dries. HSI Score = 0.72 (Good).	
Pond 2	Minor waterfowl present, 15% shading, moderate terrestrial vegetation, 10% macrophyte cover, moderate water quality, minor fish presence, pond never dries. HSI Score = 0.72 (Good).	
Pond 5	Minor waterfowl present, 10% shading, moderate terrestrial vegetation, 15% macrophyte cover, moderate water quality, possible fish presence, pond never dries. HSI Score = 0.77 (Good).	
Pond 7	Minor waterfowl present, 85% shading, moderate terrestrial vegetation, 0% macrophyte cover, moderate water quality, possible fish presence, pond never dries. HSI Score = 0.67 (Average).	

Pond 17	Minor waterfowl present, 10% shading, moderate terrestrial vegetation, 35% macrophyte cover, moderate water quality, possible fish presence, pond sometimes dries. HSI Score = 0.70 (Good).	
---------	--	--

- 3.5.28 There were several ditches on site, D1 and D2 were not considered to provide suitable aquatic habitat for GCN, due to the fast-flowing nature and lack of suitable egg-laying vegetation. At the time of the Habitat Survey (November 2024) D3 was non-flowing and provided suitable egg-laying vegetation. However, D3 was considered to occasionally hold water after periods of heavy rainfall. Therefore, it is likely that D3 would be dry during the GCN breeding season.
- 3.5.29 Suitable terrestrial for GCN and other amphibians was present within the site boundary, however, limited to the perimeter of the site (i.e hedgerow bases, marshy grassland and scrub). Due to the grazing regime / management of the grassland, it is considered less likely that GCN will utilise this habitat due to the homogeneity of the sward.

Reptiles

- 3.5.30 The ditches, marshy grassland, hedgerows and scrub were considered to provide suitable refuge, foraging and commuting grounds for reptile species.
- 3.5.31 However, there was limited connectivity to suitable habitats in the wider landscape due to the surrounding area being dominated by intensively managed arable land and active quarry.
- 3.5.32 No sightings or evidence of reptiles was identified during the Habitat Survey.

Bats

Roosting

- 3.5.33 The trees within the site, or within close proximity were assessed for their suitability to support roosting bats, following the best practice guidelines (Collins, 2023). During the Habitat Survey (November 2024), the majority of the trees were immature and/or lacked any suitable features to support roosting bats. However, two trees were identified as providing PRFs (which require

further assessment). Further details can be found in Table 3.13 overleaf and locations can be found in Drawing 4.

Table 3.13: Trees with bat roosting suitability.

Tree Number	Suitable Roosting Features	Photograph
T01	Ash. Thick ivy cladding potentially providing suitable feature and/or hiding suitable PRFs. Small crevice located on limb, likely to be suitable for individual or small number of bats (PRF-I). Feature facing south-west. PRF-I/FAR	
T17	Alder. 2 X tear outs on limb features facing west. 3 X knot holes / callus rolls on limb features facing south. Small crevice on limb, likely to be suitable for individual or small number of bats (PRF-I). Feature facing south. PRF-M / FAR	

- 3.5.34 There was an open container located within the site boundary (TN04, see Table 3.11). Due to the exposed nature of the container and lack of suitable features it is not considered to provide suitable roosting opportunities for bats. There were no other structures on site.

Foraging / Commuting

- 3.5.35 The hedgerows, scrub, open grassland, line of trees and ditches were considered to provide suitable foraging and commuting habitat for bats.
- 3.5.36 The nature of the wider environment is dominated by agricultural practices to the south, east and west with an active quarry to the north. There were woodland areas and waterbodies in the wider landscape. These were connected to the site through hedgerows and woodland edges, see Figure 3.10, below.



Figure 3.11: Site location within the wider landscape – dominated by agricultural practices with woodland blocks connected to the site through hedgerows (Google, 2024).

Badgers

- 3.5.37 During the Habitat Survey, no badger setts were observed on, or within 30m of, the site. However, there was an open pipe (see TN03, Table 3.11) which showed a low level of disturbance indicative of rabbits or other smaller mammals. Across the site, there was evidence of mammal activity including mammal trails through the hedgerows. No field signs indicative of badgers were identified during the Habitat Survey (November 2024).

- 3.5.38 The grassland, hedgerows and scrub within the site boundary were considered to provide suitable foraging and commuting grounds for badger.

Otters *Lutra lutra*

- 3.5.39 The ditches onsite were considered to provide suboptimal habitat for otters, due to their location and lack of suitable coverage, structure and fish stocks. Due to the above and the lack of records within 2km of the site boundary, it is considered that otters are likely absent from the site. Therefore, this species is not considered any further within this report.

Water Voles *Arvicola amphibius*

- 3.5.40 D1 and D2 were considered to provide negligible suitability for water voles, due to the lack of suitable burrowing habitat and vegetation coverage. D3 may only hold water after periods of heavy rainfall. This is because the vegetation within the ditch was not indicative of an aquatic habitat and so is also considered to be unsuitable for water voles. Additionally, no records for water voles were returned within 2km of the site boundary. As a result, it is considered that water vole are likely absent from the site. Therefore, this species is not considered any further within this report.

Hazel Dormouse *Muscardinus avellanarius*

- 3.5.41 Although the hedgerows were considered to provide favourable food plants (including apple, oak, elder, blackthorn, hazel, willow, dog rose, field rose, guelder rose, hawthorn and bramble) habitat for hazel dormice (Bright, *et al.*, 2014). Additionally, the wider landscape is dominated by intensively managed arable land and active quarry with limited connectivity to woodland habitats.
- 3.5.42 Due to the nature of the wider landscape, lack of records and limited suitable habitats on site, it is considered that hazel dormice are likely absent. Therefore, this species is not considered any further within this report.

Other Mammals

- 3.5.43 Multiple mammal paths/trails were observed during the Habitat Survey. The open grassland, hedgerows and scrub provide some suitable habitat for various mammal species. It is considered likely that brown hare, hedgehog, deer species and rabbits are present within the site or in close proximity.

Birds

- 3.5.44 During the Habitat Survey, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, robin *Erithacus rubecula*, gull species and buzzard *Buteo buteo* were observed.
- 3.5.45 The hedgerows, scattered trees, grassland and scrub provides some suitable nesting and foraging opportunities for a range of bird species.
- 3.5.46 Multiple records for birds were returned within the desk study data, including red list species of BoCC.

Invertebrates

- 3.5.47 Suitable terrestrial habitat was present within the site boundary, however, limited to the perimeter of the site (i.e. hedgerow, marshy grassland, ditches and scrub). Due to the periodic management of the grassland, it is considered less likely that invertebrates will utilise this habitat. Due to the large majority of the site being subject to periodic management, it is considered unlikely to support large assemblages of invertebrate species. Therefore, as a result and with no notable records within close proximity to the site boundary, invertebrate species will not be considered any further within this report.

Invasive species

- 3.5.48 Cotoneaster was noted on the boundary of the site within H8 (native hedgerow with trees), located along the south-eastern boundary of the north-western field. Certain cotoneaster species were identified as invasive in Schedule 9 of the WCA 1981 (as amended).
- 3.5.49 Horsetail has previously been identified on the site, whilst not identified under Schedule 9 of the WCA, it is classed as invasive.

4 DISCUSSION AND RECOMMENDATIONS

4.1 Designated Sites

Non-Statutory Designated Sites

- 4.1.1 52 non-statutory designated sites within 2km of the site boundary. The closest being the A447 Verge and Brascote Lane Hedgerows & Trees potential Local Wildlife Site (pLWS), located adjacent to the western boundary. The current proposals do not necessitate any removal of the pLWS. The area of the site adjacent to the pLWS is the field that will be used for ecological gains only and not as part of the operation activities on site. Therefore, it is considered that direct and indirect impacts to A447 Verge and Brascote Lane Hedgerows & Trees pLWS is not anticipated. However, if significant impacts are indicated at any time during works on site, mitigation measures will be required.
- 4.1.2 Cadeby Gravel Pit (RIGS), located adjacent to the north boundary. The current proposals do not necessitate the removal of the RIGS. Therefore, it is considered that direct impacts Cadeby Gravel Pit (RIGS) is not anticipated. However, indirect impacts could arise due to the close proximity of the site and the development proposals. Mitigation measures in the form of a Dust Management Plan (DMP) and Construction Environmental Management Plan (CEMP) will be needed.
- 4.1.3 Naneby Hall Farm, Wet Woodland and Pools (historic LWS) located approximately 20m to the north of the site boundary, adjacent to existing works to the north/west. It is understood that the current draft proposals do not necessitate the removal of any part of the historic LWS and the works will retain a buffer from the historic LWS at all times during both construction and operational phases. Therefore, direct impacts on Naneby Hall Farm, Wet Woodland and Pools (historic LWS) are not anticipated. However, indirect impacts could arise due to the proximity of the site and the development proposals. Mitigation measures in the form of a Dust Management Plan and Construction Environmental Management Plan (CEMP) will be needed.
- 4.1.4 Cadeby Churchyard pLWS located approximately 90m to the west of the site boundary and circa 200m from the proposed work area. Due to the distance, it is considered that impacts on Cadeby Churchyard pLWS are not anticipated.
- 4.1.5 Due to significant barriers between the site boundary and the other non-statutory designated sites, an adverse impact is not anticipated.

4.2 Habitats

Priority Habitats

- 4.2.1 There are two areas of deciduous woodland (W1 and W2) located approximately 20-30m from the site boundary. W1 lies to the west, on the other side of the A447 and W2 lies to the east, alongside the existing/active quarry area. The current draft proposals do not necessitate the removal of either area of deciduous woodland, therefore no direct impacts are anticipated.
- 4.2.2 With regard to W2, this woodland is located adjacent to the current working site and it is not anticipated that any indirect impacts from the proposed works will significantly increase from those already. The A447 acts as a barrier between W1 and the site and the use of the closest field being used for ecological enhancements only, it is not anticipated that any indirect impacts will occur. However, if significant impacts are determined prior to, or during works, further mitigation measures will be required.
- 4.2.3 Due to the presence of barriers between the site boundary and the other priority habitats, adverse impacts are not anticipated.

Site Habitats

- 4.2.4 Due to the presence of a habitat of potentially high ecological value on site and the timing of the survey, it is recommended that a further botanical survey be undertaken in June to assess the wetland/fen area of the eastern field.
- 4.2.5 Table 4.1 summarises the habitats on site, their ecological importance and impacts.

Table 4.1: Habitat types within the site boundary

Habitat Type	Area / Length	Ecological Importance	Proposed Impact
Habitats			
Modified grassland	8.33	Low	Set to be removed or enhanced as part of the proposed works.
Other neutral grassland	3.57	Moderate	Removal of c.2 ha of managed semi-improved grassland to facilitate access road.
Fens, marsh and swamp	0.05	High	Set to be retained.
Mixed scrub	0.01	Moderate	Set to be retained.
Bramble scrub	0.06	Moderate	Partial removal as part of works.
Bare ground	0.24	Negligible	Removed as part of works (treated as bramble scrub under BNG due to recent degradation)
Individual trees	X3	Moderate	Set to be retained throughout the works with suitable 10-15m buffer.
Linear Habitats			
Native hedgerow	0.5	Moderate	Minor removal as per access.
Native hedgerow – associated with bank or ditch	0.44	Moderate	Set to be retained throughout the works.
Native hedgerow with trees	0.77	Moderate	Minor removal as per the works.
Native hedgerow with trees – associated with bank or ditch	0.64	Moderate	Minor removal as per the works.
Line of trees	0.09	Low / moderate	Minor removal as per access.
Ditch	0.67	Low / moderate	Minor removal to incorporate a culvert.

4.2.6 The current proposals involve the construction of a pipe factory along with external storage area and access tracks. Therefore, based on current proposals it is considered that there will be direct impacts to a modified grassland, other neutral grassland, bare ground as well as areas of hedgerow, scrub and ditches. In order to reduce the risk of impacts to habitats appropriate mitigation measures are recommended.

4.2.7 As habitats with high or moderate ecological value cannot be avoided, individual protected species surveys or Precautionary Working Method Statements (PWMS), as detailed below will be required.

- 4.2.8 In line with NPPF and the Environment Act 2021, the scheme will be subject to biodiversity net gain assessments to ensure that the restoration scheme provides a minimum 10% net gain.

4.3 Species

Amphibians

- 4.3.1 GCN are listed as an EPS under Annex IV of the European Habitat Directive. See Appendix A for details of relevant species legislation.
- 4.3.2 17 waterbodies were noted within 500m of the site boundary. Pond 11-16 were discounted due to the presence of significant barriers (A447 – Ashby road). Due to access restrictions Pond 3, 4, 8, 9 and 10 could not be assessed. Pond 6 did not exist at the time of the Habitat Survey (November 2024), due to existing quarry workings. The other ponds were subject to HSI assessment, the results are presented in Table 3.12. In summary, ponds 1, 2, 5 and 17 were assessed as good suitability and pond 7 was assessed as average suitability. The ditches within the site boundary were not considered suitable for GCN.
- 4.3.3 Suitable terrestrial habitat was present across the site, however, it was limited to the perimeter of the site (i.e. hedgerow bases, marshy grassland and scrub). Due to the management of the grassland, it is considered less likely that GCN will utilise this habitat.
- 4.3.4 Under current proposals the works will be restricted to sub-optimal habitat with minor removal of suitable habitat, however due to the presence of wetland habitats it is deemed of high enough risk that it is recommended that either eDNA surveys are completed or a District Level Licence (DLL) is applied for. It is recommended that any works undertaken under a DLL or on sub-optimal habitats ahead of surveys/licencing follow the below precautionary measures.
- 4.3.5 If eDNA surveys are completed it is recommended these include ponds 1, 2, **3**, **4**, 5, **8**, **9** and 17 - those in bold are recommended for eDNA if they are accessible, are still present and are considered suitable for GCN.
- 4.3.6 The Precautionary Working Method Statement (PWMS) should include:
- Timing: Works will avoid core hibernation period (November to February). Works will be undertaken during daylight hours only as GCN are most active at night;
 - Vegetation cut first to 150mm above ground then 24hours a further cut to ground level following a walkover to check for any species present.

These works must be undertaken when temperatures are over 5°C overnight and above 10°C during the day;

- Directional cutting and soil stripping to ensure any animals present are directed away from works;
- Removal of brush piles and/or compost heaps must be undertaken carefully and by hand. Must be undertaken when temperatures are over 5°C overnight and above 10°C during the day; and
- Any building materials, such as bricks, stone, etc. will be stored on pallets to discourage reptiles and amphibians from using them. Any materials will be stored in skips or similar containers rather than in piles on the ground.
- If at any time GCN are found during works, the works should stop immediately, and further advice sought for the Heaton's ecology team.

4.3.7 Other amphibians are not protected under the same legal protection as GCN; however, it is good practice to avoid causing harm to these species.

Reptiles

4.3.8 All British reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Additionally, all British reptiles are listed as Species of Principal Importance under the provision of the NERC Act 2006. See Appendix A for details of relevant species legislation.

4.3.9 The ditches, marshy grassland, hedgerows and scrub were considered to offer suitable habitat for reptile species. Due to the management of the grassland it is considered unlikely to support important populations of reptile species.

4.3.10 Under current proposals the works will be restricted to sub-optimal habitat with minor removal of suitable habitat, therefore, significant impacts to reptiles are not anticipated. However, following best practice, the use of precautionary methods must be adhered to during the development and any works to 'tidy the area' to reduce the likelihood of a breach of legislation. These will be in the form of a PWMS and include the measures highlighted in paragraph 4.3.5.

Bats

4.3.11 All bat species are European protected species, their breeding sites and resting places are fully protected by law. See Appendix A for details of relevant species legislation.

Roosting

- 4.3.12 The trees present within the site, or within close proximity were assessed for their suitability to support roosting bats, the results are presented in Table 3.13. The majority of the trees were immature and/or lacked any suitable features to support roosting bats. However, trees T01 and T17 were identified as providing Potential Roosting Features (PRFs), one of which requires further assessment.
- 4.3.13 Under current proposals no direct impacts to the trees are anticipated. However, indirect impacts (through lighting, noise vibration and air pollution) are anticipated. If the scope changes and direct impacts to trees T01 and T17 are likely, further surveys must take place.
- 4.3.14 The northern boundary of the site is adjacent to active quarry and other industrial processes, and as such, is exposed to regular noise, vibration and dust impacts. If bat roosts are present in close proximity to these areas, the bats will be acclimated to high levels of disturbance.
- 4.3.15 However, if the development proposals cannot avoid increased indirect (lighting, noise vibration and air pollution) impacts to trees with suitable roosting potential or works need to occur within 30m of T17 and/or 10m of T01, it is recommended that aerial inspection survey(s) are undertaken.
- 4.3.16 Aerial inspections involve a bat licenced ecologist (with H&S second for aerial rescue) inspecting features on the tree with the use of tree-climbing or access equipment to enable an assessment of the PRF's for suitability for roosting and to look for evidence of use by bats. If these PRF are verified as PRF-M suitability or as a confirmed roost for bats, further nocturnal or aerial surveys will be necessary to determine the character of any confirmed roosts, or the presence / absence of roost(s).
- 4.3.17 In order to mitigate for any indirect impacts, if no roosts are identified, it is recommended that a PWMS is implemented throughout the construction phase of works. A PWMS will ensure that any indirect impacts from the works do not significantly exceed the current levels, and it will include:
- Timing: within 30m of T01 and T17, any works that take place in closer proximity to those already taking place or that will result in a higher noise or vibrational impact to the trees than is currently established within the locale, will be undertaken outside hibernation season (November to mid-April, inclusively). It is recommended that works on

T17 is avoided during the maternity season as well as the hibernation period.

- Implementation and retention of a highly visible physical barrier to demarcate a 10m buffer from T01 and 30m from T17 (due to the features present), will act as a 'no work zone'. This will be maintained through the installation of a fence);
- On the initial day of the works, a Suitably Qualified Ecologist (SQE) will be onsite to ensure the fence is correctly distanced from the trees as well as to oversee the first 2-3 hours of the works (or more if required) when located within 20m of T01 and T17.
- Light levels – the light should be as low as Health & Safety permits, especially within or adjacent to habitats of value to bats. Any lighting used must be directional and positioned sympathetically to minimise light spill onto trees, hedgerows and woodland habitats. If lighting is not absolutely necessary, then it shouldn't be used. It is recommended that a lighting scheme is implemented, with input from a SQE;
- It must detail the types of machinery / plant allowed and what mitigation measures are necessary for each including no use of vibration rollers or dozers within 20m of the trees (see Drawing 6), directional use of diggers etc;
- If a bat is found at any time on site, works must cease, the bat **should not be touched and should be observed from a distance** to ensure its location is known at all times and advice sought from Heatons ecology team as soon as it is safe to do so;
- On the initial day of the works, a bat licenced ecologist should perform an aerial inspection of any features deemed to be FAR (or PRF-M) on trees within 20m of works.
- An ECoW should be on site on day one (can be the same bat licenced ecologist doing the aerial inspections) to provide a toolbox talk and discuss/approve work activities and / or methods.

4.3.18 A Root Protection Area (RPA) equated to a circle, using the tree as the centre-point, with a radius that is twelve times the tree's Diameter at Breast Height (DBH) for a single stemmed tree, from all retained trees should be implemented in line with BS5837:2012.

Foraging / Commuting

- 4.3.19 It is considered that the habitats (hedgerows, scrub, open grassland, line of trees and ditches) within the site were considered to provide suitable foraging and commuting habitats for bats.
- 4.3.20 Under current proposals these habitats are set to be retained with only minor removal required. Therefore, significant or long-term impacts to foraging and commuting bats are not anticipated.
- 4.3.21 To mitigate for any indirect lighting impacts to commuting and foraging bats the following mitigation measures should be adhered to:
- A 2m dark buffer from any suitable bat habitats should be maintained throughout the works;
 - LED luminaries should be used, where possible;
 - A warm white spectrum should be adopted to reduce the blue light component; and
 - All lighting should be cowled and directional to the areas of works only.
- 4.3.22 It is recommended that a DMP is produced prior to the commencement of the works, to reduce the indirect impacts to foraging / commuting bats.

Badgers

- 4.3.23 Badgers are protected under the Badgers Act 1992. See Appendix A for details of relevant species legislation.
- 4.3.24 No badger setts were noted onsite, or within 30m of the site boundary, during the Habitat Survey (November 2024). However, there were field signs of other mammal activity including an open pipe (see TN03, Table 3.11) and mammal trails.
- 4.3.25 Due to the transient nature of badgers, it is recommended that a pre-commencement badger survey is undertaken prior to any works. If badger sett(s) are found and are determined to be active within 30-50m of the site boundary, it may be necessary to apply for a licence from Natural England to allow the works / close the sett(s).
- 4.3.26 As badgers are highly transient in nature and suitable habitat for foraging and commuting is present within the site boundary, it is recommended that the following mitigation measures should be adhered to during the duration of the works:

- Ramps within open excavations to avoid badger entrapment (minimum a 45-degree angle and in place every 20-30m);
- Reduction in speed limits;
- Appropriate storage methods for potentially harmful chemicals;
- Cap any exposed pipes overnight and when contractors are off site; and
- Any stockpiled soil bund must be checked for evidence of badgers each day prior to any movement onto or off the bund and/or before any seeding / hydroseeding.

4.3.27 In the unlikely event that a badger does become entrapped, or any setts are noted during works, Heatons ecology team should be contacted for further advice as soon as possible. **No attempt should be made to catch the animal/s and all staff should move away from the area to avoid stressing the animal further.**

Other Mammals

4.3.28 Hares, and other wild mammals, including rabbits, while not covered by specific legislation, are covered in general under the Wild Mammals (Protection) Act 1996. See Appendix A for details of relevant species legislation.

4.3.29 Evidence of hare, deer and rabbits were noted across the site during the Habitat Survey. Although these species are not covered by specific legislation, best practice working methods, detailed in paragraph 4.3.27-4.3.28, should be adhered to, to ensure an adverse impact to either of these species is mitigated for.

Birds

4.3.30 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage, or destroy its nest whilst in use or being built or take, damage or destroy its eggs.

4.3.31 Habitats, such as the hedgerows, scattered trees, grassland and scrub were considered to some suitable nesting and foraging opportunities for a range of bird species. However, this was limited to the perimeter of the site. Due to the large majority of the site being subject to periodic management, it is considered highly unlikely that the grassland will support nesting birds.

- 4.3.32 Under the current proposals, works are set to be restricted to sub-optimal habitat with minor removal of hedgerows, ditches and scrub. Therefore, significant impacts to foraging and commuting bats are not anticipated.
- 4.3.33 If the removal of any suitable bird nesting habitat is undertaken, it is recommended that the following mitigation measures should be adhered to:
- Clearance of suitable nesting habitat (hedgerows and scattered trees) should be undertaken outside the nesting bird season (March – August, inclusive); and
 - If clearance is not possible outside the nesting bird season (March – August) a nesting bird check will be required <24 hours prior to any vegetation removal. Where nesting birds are present, a 'no-work' buffer will be implemented, and the nest monitored by a suitably experienced ecologist until all chicks have fledged.

Invasive Species

Cotoneaster

- 4.3.34 Cotoneaster is listed as a Schedule 9 species under the WCA 1981, therefore it is an offence to plant or allow to spread into the wild. Under current proposals, it is indicated that all areas of cotoneaster will be retained. However, if any stands of cotoneaster require removal the following control methods should be followed.

Mechanical Control

- 4.3.35 Root mass can be excavated to remove the entire plant and prevent regrowth. All materials should be chipped or burnt on site or removed to licenced landfill as controlled waste.

Chemical control

- 4.3.36 It is possible to spray smaller plants with herbicide, however, chemical uptake on larger plants is reduced. For chemical removal a treatment specialist should be contacted.

Horsetail

- 4.3.37 Horsetail is an invasive species but not listed as a Schedule 9 under WCA 1981 (as amended). For the removal of horsetail the control methods detailed in paragraph 4.3.34 - 4.3.35 should be followed.

5 ENHANCEMENTS

5.1.1 In line with planning policy, which requires developments to enhance the site for wildlife, a range of both habitat enhancement and creation of opportunities for protected species are recommended:

- Suitable bird and bat boxes targeting a number of species should be installed on retained trees within the site boundary;
- Hibernacula should be created within areas of suitable habitat to provide refuge for amphibian and reptile species;
- Habitat enhancement should be incorporated into the restoration scheme to ensure grassland and wetland habitats are species-rich as well as the retained hedgerows being enhanced;
- Incorporate nectar- and pollen-rich flora species as well as night-scented varieties in keeping with the local area targeting a variety of invertebrate and bat species;
- Native hedgerow, tree and shrub planting, in line with the local character area should be incorporated into the restoration scheme to enhance these habitat types. Additionally, they will provide a variety of berry and seed-bearing species; and
- All gully pot drains will have amphibian ladders the same or similar to those available via British Herpetological Society (BHS) see – [The BHS Amphibian Gully Pot Ladder | British Herpetological Society](#).

6 REFERENCES

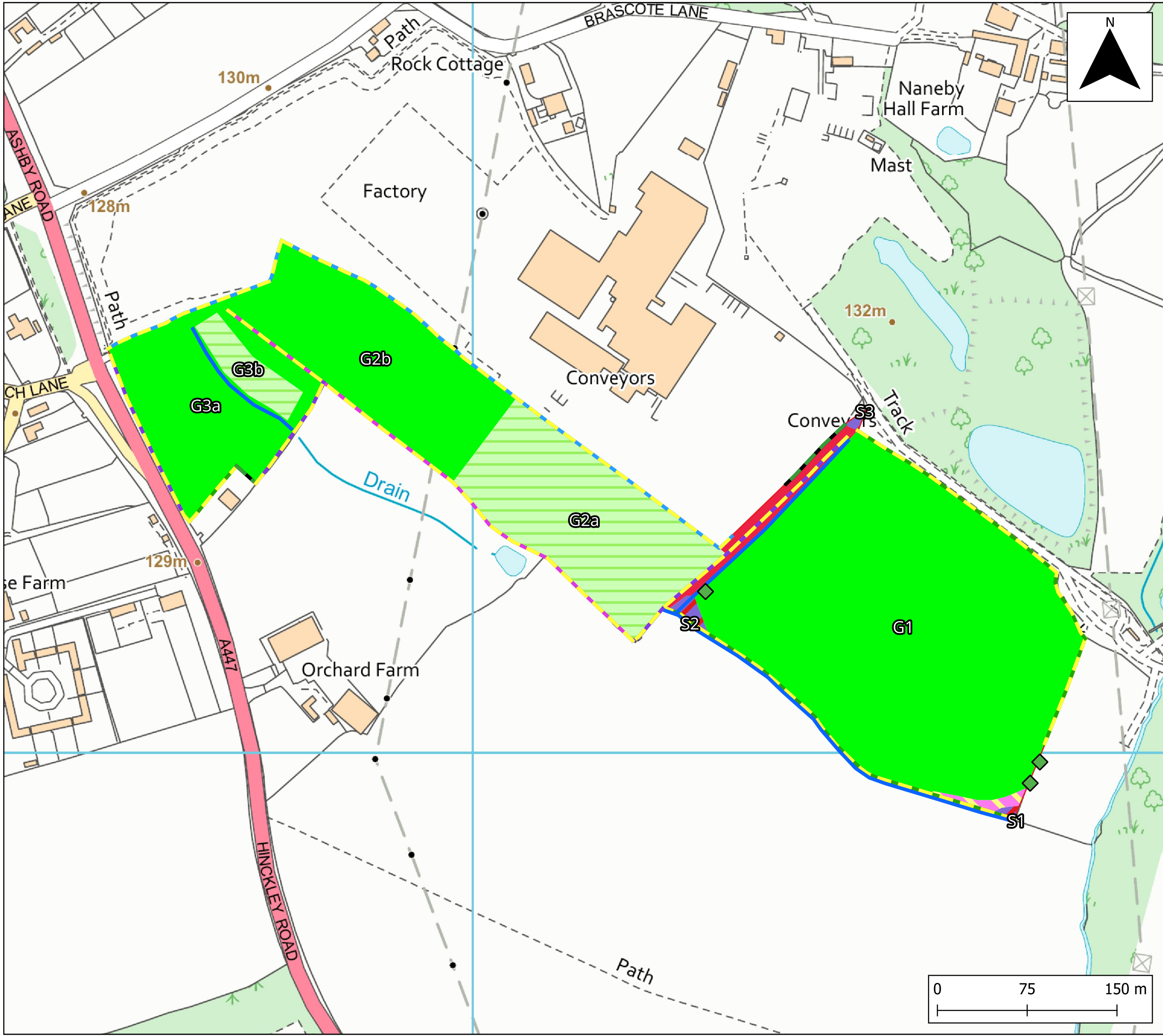
- 1) ARG UK (2010). *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. [Online]. Available at: <https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file>
- 2) Bat Conservation Trust (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. [Online]. Available at: https://cdn.bats.org.uk/uploads/pdf/Resources/Bat_Survey_Guidelines_2016_NON_PRINTABLE.pdf?v=1542281971
- 3) Bat Conservation Trust (2018). *Bats & Trees*. [Online]. Available at: <https://cdn.bats.org.uk/uploads/pdf/Bats-Trees.pdf?v=1541085197>
- 4) Bright, P., Morris, P. and Mitchell-Jones, T. (2014). *The Dormouse Conservation Handbook*. 2nd Edition. London: English Nature.
- 5) Collins, J. (eds), 2023. *Bat Surveys: Good Practice Guidelines*, 4th Edition. London: Bat Conservation Trust
- 6) CIEEM, (2018 V1.2 Updated 2022). *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Hampshire.
- 7) CIRIA (2019) *Biodiversity Net Gain. Good Practice principles for Development – A Practical Guide*
- 8) DEFRA (2016). *UK Biodiversity Action Plan Priority Habitat Descriptions: Open Mosaic Habitats on Previously Developed Land*. [Online]. Available at: <https://data.jncc.gov.uk/data/a81bf2a7-b637-4497-a8be-03bd50d4290d/UKBAP-BAPHabitats-40-OMH-2010.pdf>
- 9) Groom, Q., Walker, K. and McIntosh, J. (2011). *BSBI Recording the British and Irish Flora 2010 – 2020. Annex 1: Guidance on sampling approaches*. [Online]. Available at: https://bsbi.org/wp-content/uploads/dlm_uploads/Sampling_Guidance_-_Annex_1_v4_April_2011.pdf
- 10) Joint Nature Conservation Committee. 2010 edition. *Handbook for Phase 1 Habitat Survey – a technique for environmental audit*. Peterborough: Nature Conservancy Council.
- 11) Mitchell-Jones, A.J. and McLieish, A.P. (2004). *Bat Workers' Manual*. [Online]. Available at: <https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf>

- 12) National Planning Policy Framework (2024) [online] Available at:
<https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf>
- 13) People's Trust for Endangered Species (2013). *Current Dormouse Distribution*. [Online]. Available at: <https://ptes.org/house-a-dormouse/dormice-in-decline/current-dormouse-distribution-map/>
- 14) UKHAB Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

7 DRAWINGS

Drawing 1 – UK Habitat Survey Map

-----*Page left blank intentionally*-----



- Red Line Boundary
- Individual Trees
- Line of trees
- Native hedgerow
- Native hedgerow - associated with bank or ditch
- Native hedgerow with trees
- Native hedgerow with trees - associated with bank or ditch
- Running water; ditches
- Bramble scrub
- Fens, marsh and swamp
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Bare ground



PROJECT

CADEBY PIPE FACTORY

CLIENT

FP MCCANN

DRAWING TITLE

UK HABITAT CLASSIFICATION SURVEY (1/3) - MAIN

DATE	BY	QA
19/03/2025	AK	RM
SCALE	REV	REFERENCE
1:3000 @ A3	1	FPM-009-E/PEA.001

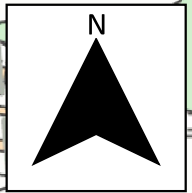
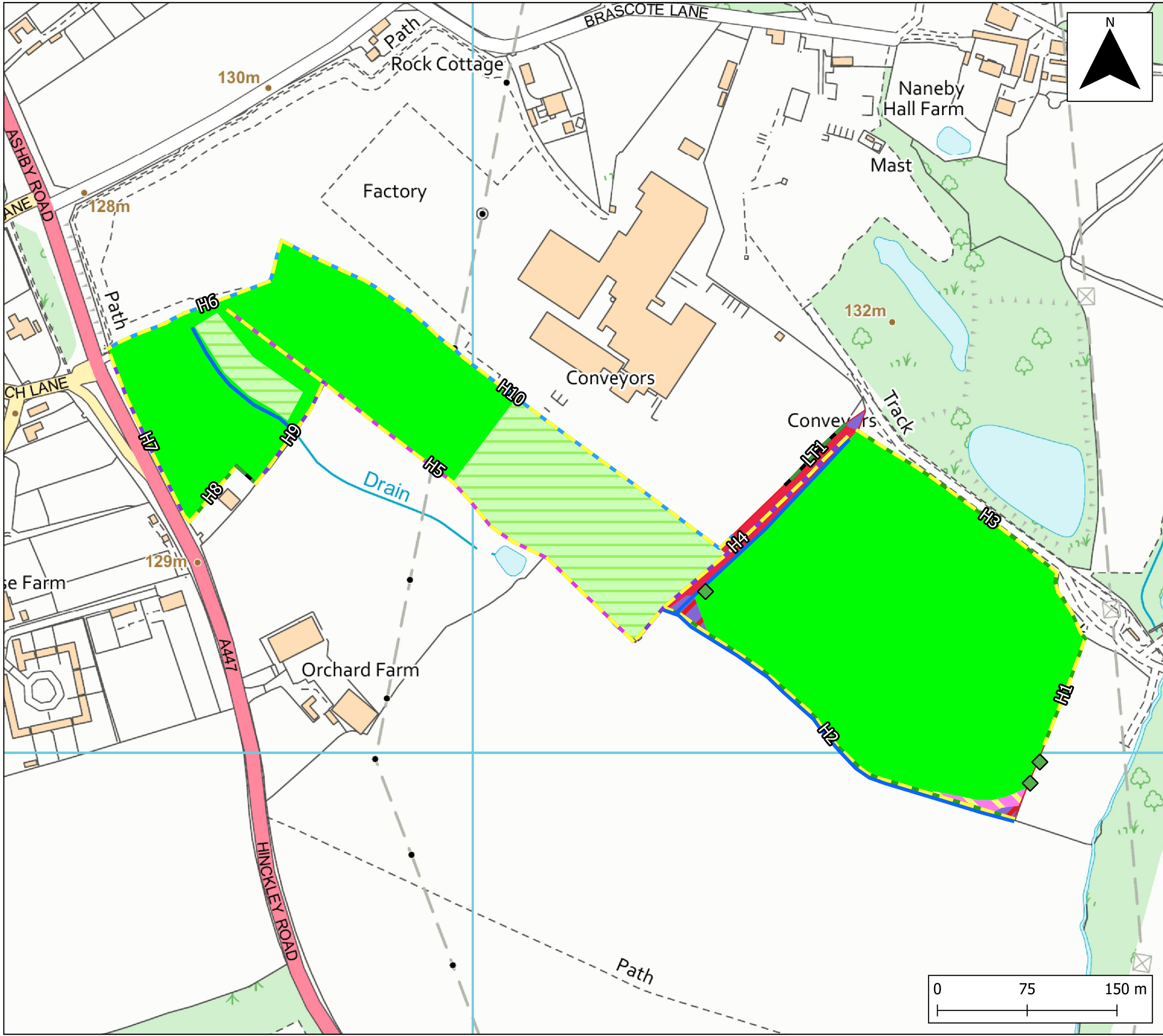
Heatons

Planning Environment Design

Heatons The Arc, 6 Mallard Way, Pride Park, Derby, DE24 8GX

www.heatonplanning.co.uk

© Crown Copyright and Database Rights 2025



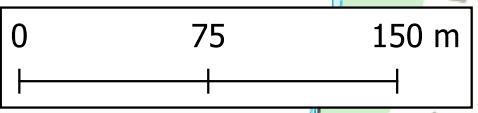
- Red Line Boundary
- Individual Trees
- Line of trees
- Native hedgerow
- Native hedgerow - associated with bank or ditch
- Native hedgerow with trees
- Native hedgerow with trees - associated with bank or ditch
- Running water; ditches
- Bramble scrub
- Fens, marsh and swamp
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Bare ground

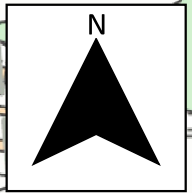
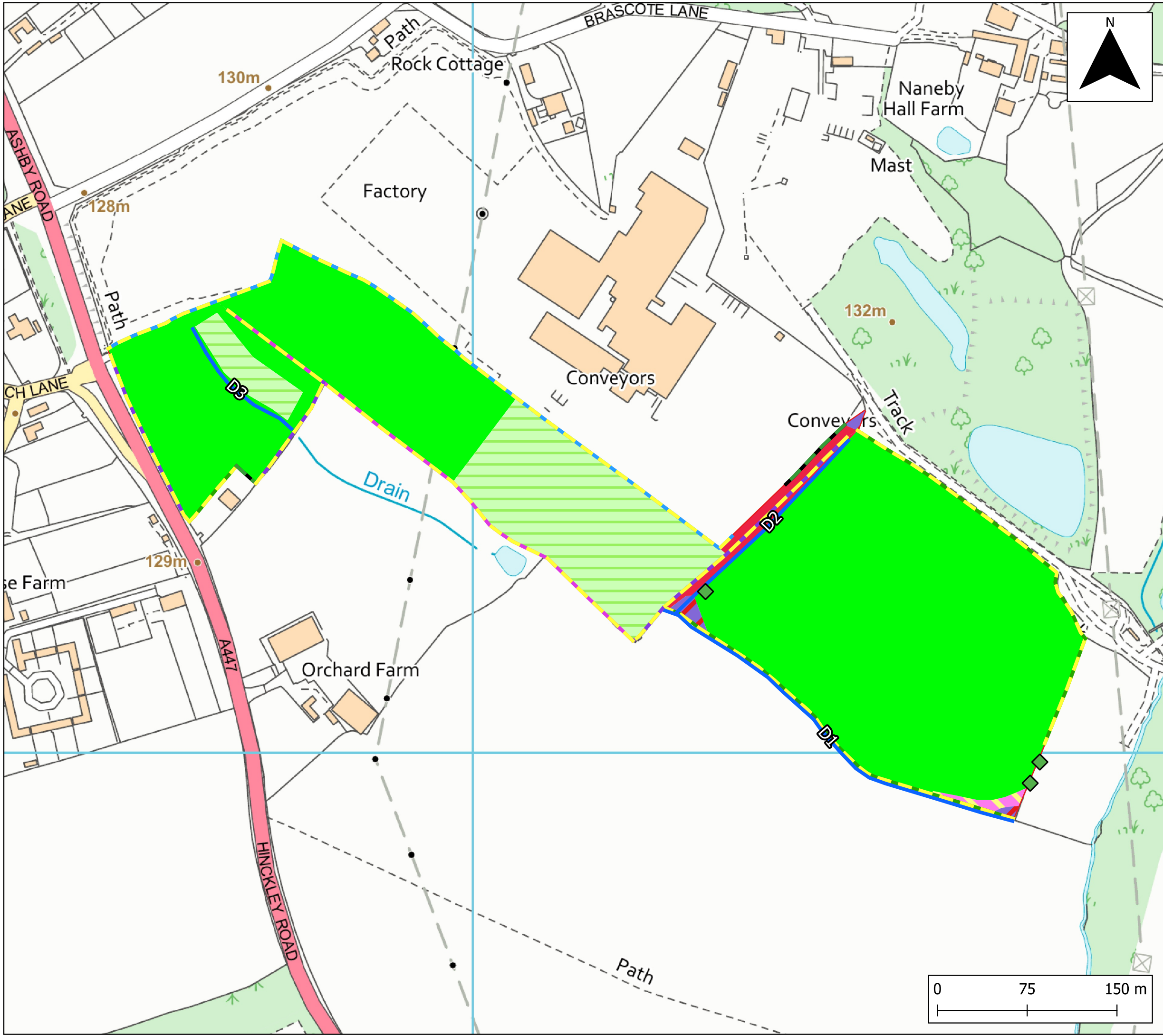


PROJECT		
CADEBY PIPE FACTORY		
CLIENT		
FP MCCANN		
DRAWING TITLE		
UK HABITAT CLASSIFICATION SURVEY (2/3) - HEDGEROWS		
DATE	BY	QA
19/03/2025	AK	RM
SCALE	REV	REFERENCE
1:3000 @ A3	1	FPM-009-E/PEA.002



Heaton's The Arc, 6 Mallard Way, Pride Park, Derby, DE24 8GX
www.heatonplanning.co.uk
© Crown Copyright and Database Rights 2025





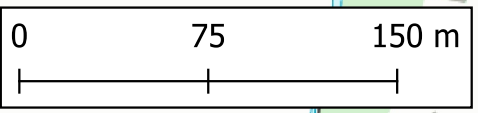
- Red Line Boundary
- Individual Trees
- Line of trees
- Native hedgerow
- Native hedgerow - associated with bank or ditch
- Native hedgerow with trees
- Native hedgerow with trees - associated with bank or ditch
- Running water; ditches
- Bramble scrub
- Fens, marsh and swamp
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Bare ground



PROJECT		
CADEBY PIPE FACTORY		
CLIENT		
FP MCCANN		
DRAWING TITLE		
UK HABITAT CLASSIFICATION SURVEY (3/3) - WATERCOURSES		
DATE	BY	QA
19/03/2025	AK	RM
SCALE	REV	REFERENCE
1:3000 @ A3	1	FPM-009-E/PEA.003

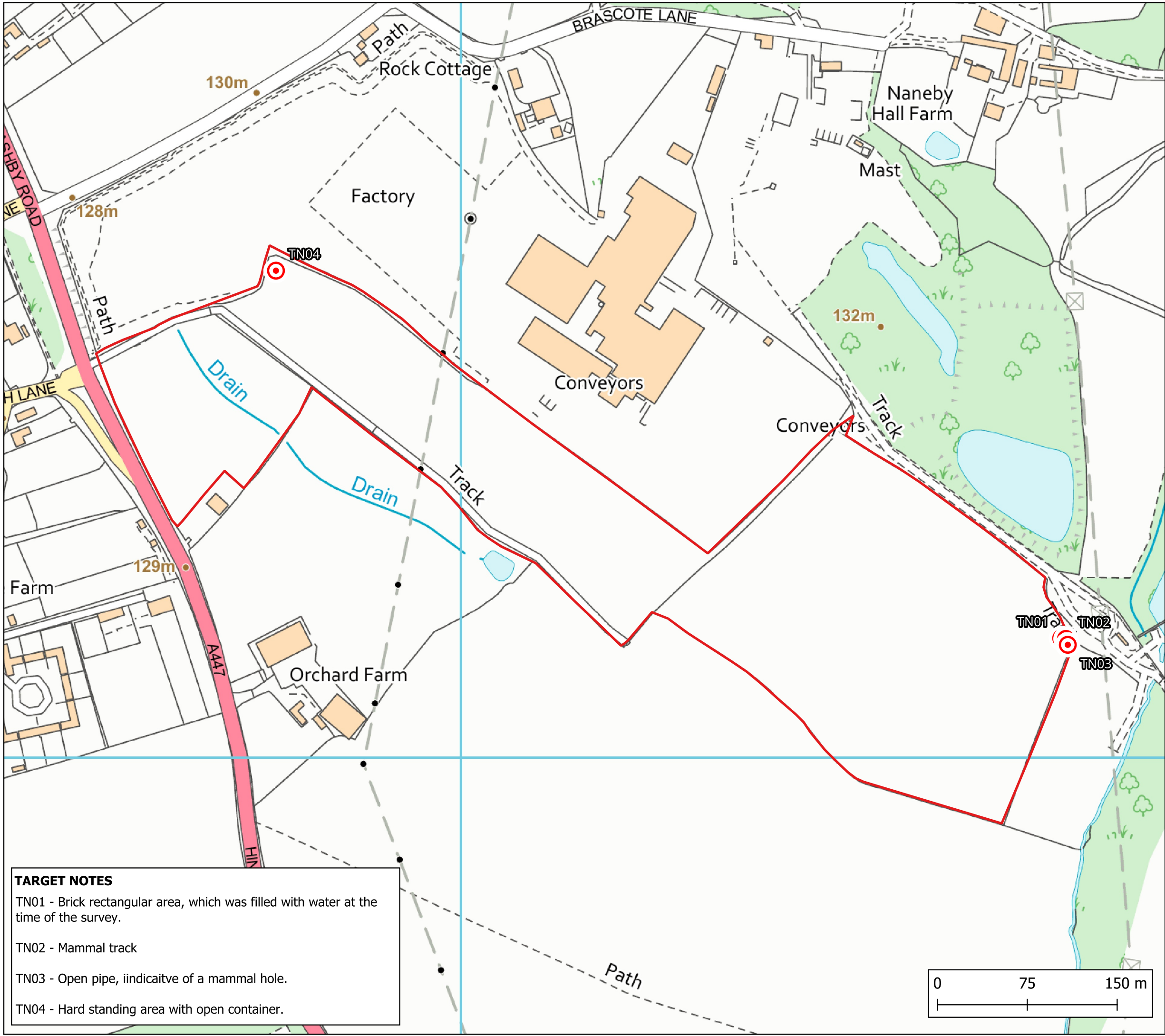


Heaton's The Arc, 6 Mallard Way, Pride Park, Derby, DE24 8GX
www.heatonplanning.co.uk
© Crown Copyright and Database Rights 2025



Drawing 2 – Target Notes Map

-----*Page left blank intentionally*-----



Red Line Boundary

Target Notes

MC

fpmccann

PROJECT

CADEBY PIPE FACTORY

CLIENT

FP MCCANN

DRAWING TITLE

TARGET NOTES MAP

DATE

19/03/2025

BY

AK

QA

RM

SCALE

1:3000 @ A3

REV

1

REFERENCE

FPM-009-C/PEA.004

Heatons

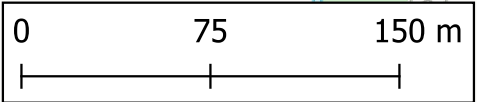
Planning Environment Design

Heatons The Arc, 6 Mallard Way, Pride Park, Derby,
DE24 8GX

www.heatonplanning.co.uk

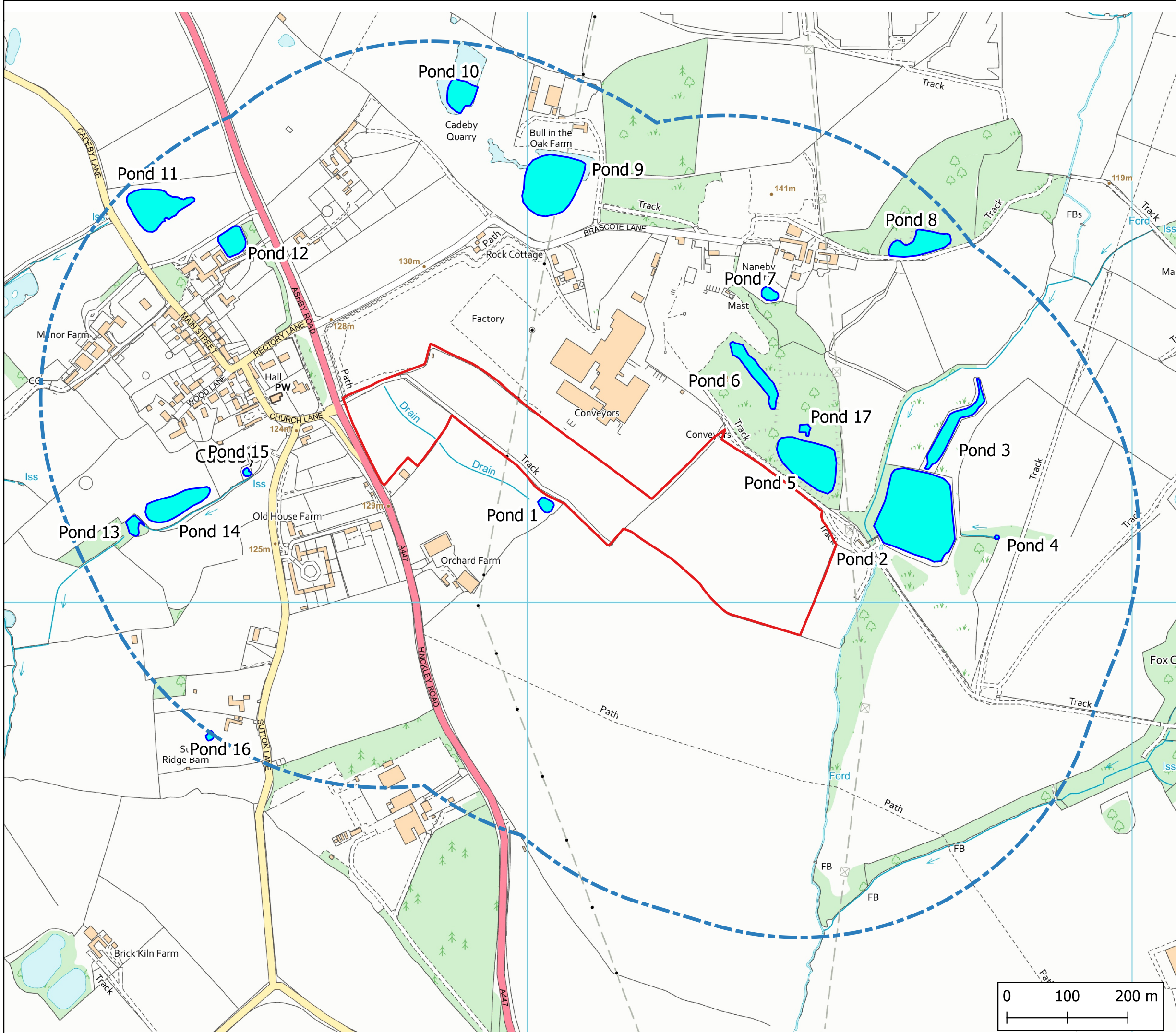
© Crown Copyright and Database Rights 2024

- TARGET NOTES**
- TN01 - Brick rectangular area, which was filled with water at the time of the survey.
 - TN02 - Mammal track
 - TN03 - Open pipe, indicative of a mammal hole.
 - TN04 - Hard standing area with open container.



Drawing 3 – Waterbodies within 500m of Site Boundary

-----*Page left blank intentionally*-----



- Red Line Boundary
- 500m Buffer
- Ponds



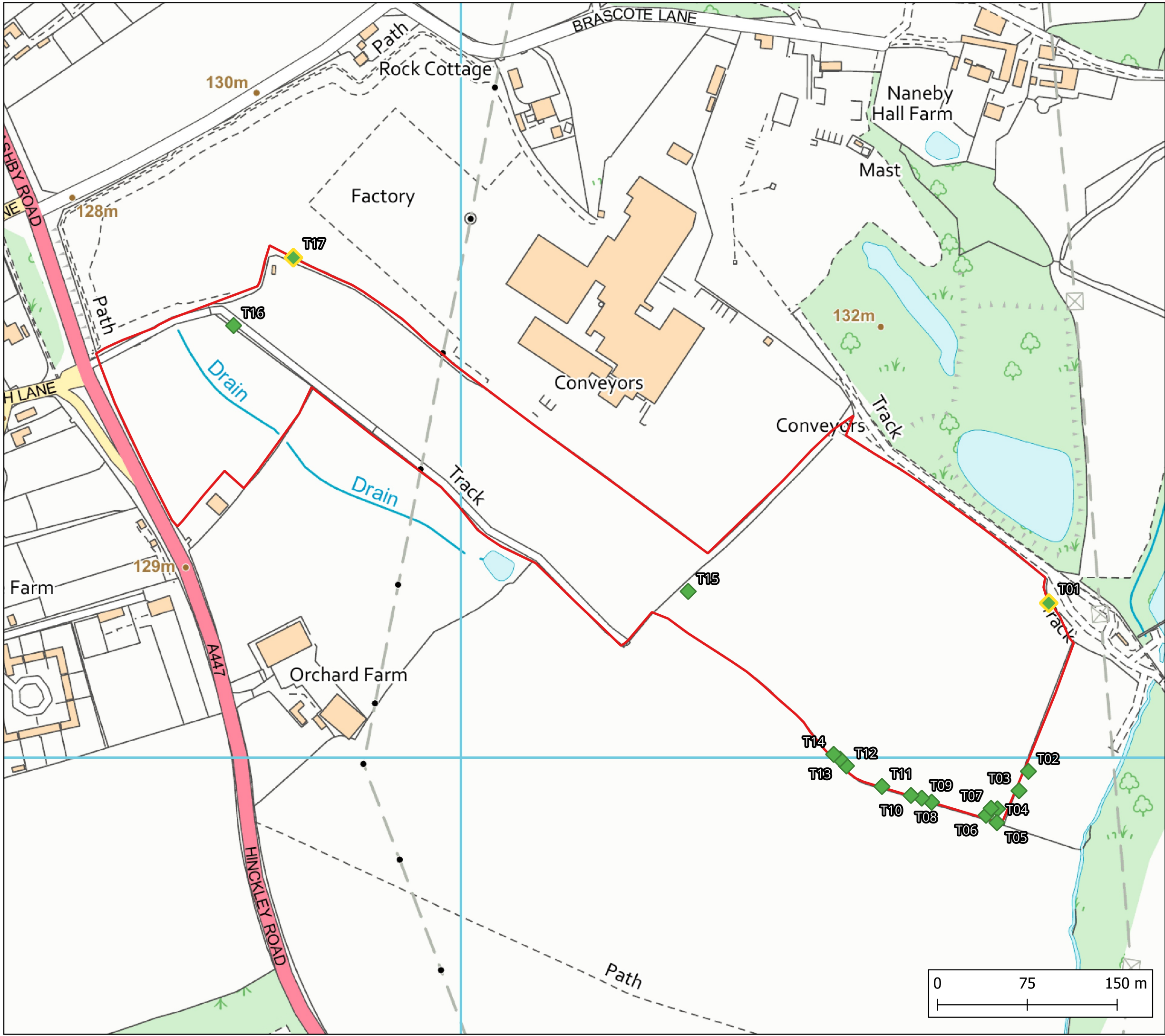
PROJECT		
CADEBY PIPE FACTORY		
CLIENT		
FP MCCANN		
DRAWING TITLE		
WATERBODIES WITHIN 500M SITE BOUNDARY		
DATE	BY	QA
19/03/2025	AK	RM
SCALE	REV	REFERENCE
1:6000 @ A3	1	FPM-009-C/PEA.005



Heatons The Arc, 6 Mallard Way, Pride Park, Derby,
DE24 8GX
www.heatonplanning.co.uk
© Crown Copyright and Database Rights 2024

Drawing 4 – Trees with Bat Roosting Potential

-----*Page left blank intentionally*-----



- Red Line Boundary
- FAR
- None



PROJECT		
CAEDBY PIPE FACTORY		
CLIENT		
FP MCCANN		
DRAWING TITLE		
TREES WITH BAT ROOSTING POTENTIAL		
DATE	BY	QA
19/03/2025	AK	RM
SCALE	REV	REFERENCE
1:3000 @ A3	1	FPM-009-C/PEA.006

Planning Environment Design

Heatons The Arc, 6 Mallard Way, Pride Park, Derby,
DE24 8GX
www.heatonplanning.co.uk
© Crown Copyright and Database Rights 2024

8 APPENDIX A – NATIONAL LEGISLATION, SPECIES LEGISLATION AND PLANNING POLICY

Introduction

- 8.1.1 This section summarises the legislation and planning policy in relation to ecology and biodiversity within the UK.

Legislation

- 8.1.2 A number of different Acts and Regulations refer to the protection of wildlife and habitats and have been outlined below. It is recommended that the full legislation texts are referred to when dealing with individual cases and further legal advice is obtained where required. Protected species licences may be required to further comply with this legislation prior to the implementation of the project.

- 8.1.3 Wildlife legislation potentially relevant to this project includes:

- Environment Act 2021;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2017;
- The Natural Environment and Rural Communities Act (NERC) 2006;
- The Countryside and Rights of Way Act (CRoW) Act 2000;
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

Environment Act 2021

- 8.1.4 An Act to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes (UK Government, 2021).
- 8.1.5 The act also targets four key areas for the recovery of habitats. Additionally, it enables ministers to set legally binding long-term targets, the progress of which they are required to report to Parliament (UK Government, 2021).
- 8.1.6 Under the Act, all planning permissions granted in England (with some exemptions) except small sites will have to deliver at least 10% biodiversity net gain from November 2023 (UK Government, 2021).

National Planning Policy

- 8.1.7 The National Planning Policy Framework (NPPF 2024) paragraphs 187 to 195 set out the Government's policies to protect and enhance biodiversity and geodiversity through the planning system. These policies are expected to be incorporated into development planning documents at regional and local scales and are also of material worth in considering individual planning applications.
- 8.1.8 In relation to biodiversity, NPPF paragraph 187 states that *'Planning policies and decisions should contribute to and enhance the natural and local environment by:*
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;*
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*
- 8.1.9 NPPF paragraph 188 advises that *'Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁶⁵; take a strategic approach to maintaining and enhancing networks of*

habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.'

8.1.10 NPPF paragraph 192 states that *'To protect and enhance biodiversity and geodiversity, plans should:*

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

8.1.11 NPPF paragraph 193 advises that the following principles should be applied by the Local Planning Authority when determining planning applications:

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

developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Local Planning Policy

8.1.12 Relevant local policies and text concerning ecological impact issues in connection with development proposals, include:

- Hinckley and Bosworth Local Plan 2020 – 2041 (July 2024); and
- Essex Minerals Local Plan (adopted July 2014).

8.1.13 A summary of local policies that are relevant to this application can be found below. These policies are consistent with the advice in NPPF to protect, maintain and enhance nature conservation and biodiversity. The policies seek to protect species and habitats and, through restoration, provide replacement and enhanced habitats.

Hinckley and Bosworth Local Plan 2020 – 2041

8.1.14 Policy SP05 (Mitigating and Adapting to Climate Change) states that “proposals will be supported where they support Hinkley & Bosworth becoming carbon neutral by 2050; through where relevant:

Mitigating and adapting to the impacts of climate change, including by:

- n) Creating a better linked habitat network by conserving, creating or enlarging existing habitats and delivering a biodiversity net gain.”*

8.1.15 Policy SP24 (Protecting Biodiversity) states that:

“Internationally and Nationally Designated Sites

International and Nationally Designated Sites will be safeguarded. Development which is likely to have any adverse impact on the notified features of a nationally designated site will not normally be permitted. In exceptional circumstances, a proposal may be found acceptable where it can be demonstrated that:

- a) A suitable alternative site with a lesser impact than that proposed is not available;*
- b) The on-site benefits of the proposal clearly outweigh the impacts on the notified features of the site and where applicable, the overall SSSI or habitat network;*
- c) All appropriate mitigation measures have been addressed through the development management process;*
- d) Does not prevent future attainment of nationally protected sites from meeting Favourable Condition, or to provide enhancements to enable the nationally*

designated sites to meet Favourable Condition as per their Conservation Objectives; and

- e) Development likely to result in a significant effect on internationally designated sites will be subject to assessment under the Habitats Regulations and will not be permitted unless adverse effects can be fully avoided, mitigated and/or compensated.*

Development proposals should not have an adverse impact on the River Mease Special Area of Conservation (SAC). Where a significant effect on the SAC is identified an 'Appropriate Assessment' will be required.

Irreplaceable Habitats

Proposals which are likely to result in the loss or deterioration of an irreplaceable habitat (such as ancient woodland, ancient or veteran trees, old species-rich grassland, including that marked by ridge and furrow, and species-rich hedgerows that meet Hedgerow Regulations ecological criteria and as stipulated in The Biodiversity Gain Requirements (Irreplaceable Habitats) Regulations 2024) would only be acceptable where:

- e) The need and benefits of the development in that location clearly outweigh the loss;*
- f) It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and*
- g) Appropriate compensation measures are provided on site wherever possible and off site where this not is feasible.*

Locally Important Sites

- 8.1.16 Development proposals affecting locally important sites should always seek to contribute to their favourable management in the long term. Where a proposal is likely to result in harm to locally important sites (including habitats or species of principal importance for biodiversity, and sites that meet the Leicester, Leicestershire, and Rutland criteria for designation as a Local Wildlife Site), developers will be required to accord with the following sequential approach:*

- h) Firstly, seek an alternative site with a lesser impact than that proposed;*
- i) Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site; and*

Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible including long term management and maintenance."

- 8.1.17 Policy SP25 (Enhancing Biodiversity and Habitat Connectivity) states that:*

“Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value and shall be considered in accordance with the mitigation hierarchy to avoid, mitigate and then compensate. Proposals must also show how their long-term future management will be achieved and how the scheme is pollinator friendly.

Development proposals should create new habitats, and links between habitats, in line with Leicester, Leicestershire and Rutland Biodiversity Action Plan, the Borough Council’s Green Infrastructure Strategy, Strategic Flood Risk Assessment, Water Cycle Study (once complete) and the Local Nature Recovery Strategy (once completed), to maintain and enhance a network of wildlife sites and corridors, to minimise habitat fragmentation and provide opportunities for species to respond and adapt to climate change.

Biodiversity Net Gain shall be secured and delivered in accordance with the statutory framework and shall maximise opportunities for the enhancement of ecological networks within the Borough and where appropriate support nature-based solutions to climate change. A Biodiversity Net Gain Strategy must be submitted with non-exempt development proposals setting out how the required Biodiversity Net Gain will be achieved, which must include a completed draft metric for proposed scheme and information demonstrating the following:

- a) How the mitigation hierarchy has been followed;*
- b) How the metric principles and good practice principles are being adhered to;*
- c) How the Biodiversity Gain Hierarchy has been followed;*
- d) Whether proposals for onsite habitat creation or enhancement are appropriate taking account of other requirements for greenspace within the development;*
- e) How any need for offsite units will be met; and*
- f) Whether there is an excess of onsite biodiversity units that are intended to be used for other developments or sell to the market.*

Major developments in particular must include measures to deliver biodiversity gains through opportunities to:

- a) Restore and enhance existing features on site;*
- b) Create additional habitats and ecological networks; and*
- c) The linking of existing habitats to create links between ecological networks and where possible, with adjoining features.*

Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the Plan.

The retention and enhancement of linear features which enables strong connectivity of biodiversity as part of an integrated habitat network will be supported; this includes networks of hedgerows and ditches; enhanced habitats along the River Sence and Ashby Canal; roadside verges; and (cumulatively) private gardens, disused railway lines or other linear landscape features.

On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of the hierarchy of international, national and locally designated sites identified in Policy SP25 is secured.

If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

Species Legislation

Amphibians

- 8.1.18 All British amphibian species receive a degree of protection under the Wildlife & Countryside Act 1981 (as amended). The level of protection varies from protection from sale or trade only, as is the case with species such as Common Toad *Bufo bufo* and Smooth Newt *Lissotriton vulgaris*, to full protection afforded to species such as Great Crested Newt *Triturus cristatus*.
- 8.1.19 Great Crested Newt is a European protected species and as such receives full protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence to:
- Deliberately capture, injure or kill a Great Crested Newt;
 - Deliberately disturb Great Crested Newts, including in particular any disturbance which is likely to:
 - impair their ability to survive, reproduce or to rear or nurture their young;
 - impair their ability to hibernate or migrate; or
 - significantly affect their local distribution or abundance.
 - Deliberately take or destroy eggs of Great Crested Newts;
 - Damage or destroy a breeding site or resting place of Great Crested Newts;
 - Possess or control any live or dead specimen or anything derived from a Great Crested Newt; and
 - Sell, offer for sale, possess or transport a Great Crested Newt (live or dead, part or derivative) for the purpose of sale or advertise for buying or selling.

Reptiles

8.1.20 All reptile species are listed under the Priority Species under the UK Post-201 Biodiversity Framework and receive protection under the Wildlife & Countryside Act 1981 (as amended), making it illegal to;

- Intentionally kill or injure reptiles; and
- Sell, offer for sale, possess or transport reptiles (live or dead, part or derivative) for the purpose of sale or advertise for buying or selling.

8.1.21 In addition, due to their status as scarce species both Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis* are European protected species, protected under the Conservation of Habitats and Species Regulations, 2017 (as amended). This affords them additional protection, making it illegal to:

- Deliberately capture Smooth Snakes or Sand Lizards;
- Deliberately disturb Smooth Snakes or Sand Lizards, including in particular any disturbance which is likely to:
 - impair their ability to survive, reproduce or to rear or nurture their young;
 - impair their ability to hibernate or migrate; or
 - significantly affect their local distribution or abundance.
- Damage or destroy a breeding site or resting place of Smooth Snakes and Sand Lizards; and
- Possess or control any live or dead specimen or anything derived from a Smooth Snake or Sand Lizard.

Bats

8.1.22 All British bats are European protected species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence to:

- Deliberately kill, injure or capture a bat;
- Deliberately disturb bats, including in particular any disturbance which is likely to:
 - impair their ability to survive, reproduce or to rear or nurture their young;
 - impair their ability to hibernate or migrate; or
 - significantly affect their local distribution or abundance.
- Damage or destroy a breeding site or resting place of a bat;

- Possess or control any live or dead specimen or anything derived from a bat;
- Sell, offer for sale, possess or transport a bat (live or dead, part or derivative) for the purpose of sale or advertise for buying or selling.

8.1.23 In addition, all British bats are listed under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended), which contains further provisions making it an offence to intentionally or recklessly:

- Damage, destroy or obstruct access to any structure or place which any bat uses for shelter or protection; or
- Disturb any bat while occupying a structure or place which it uses for that purpose.

8.1.24 Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation.

Badgers

8.1.25 In the UK the relevant legislation pertaining to Badgers *Meles meles* is the Protection of Badgers Act 1992 and the Wildlife and Countryside Act, 1981 (as amended). Under the Protection of Badgers Act it is an offence to:

- Wilfully kill, injure, take possession or cruelly ill-treat* a Badger, or attempt to do so;
- To intentionally or recklessly interfere with a sett# (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

* the intentional elimination of sufficient foraging area to support a known social group of badgers may, in certain circumstances, be construed as an offence by constituting 'cruel ill-treatment' of a Badger.

a sett is defined as 'any structure or place which displays signs indicating current use by a Badger', with 'current use' defined by Natural England under interim guidance as over the preceding few months prior to a likely interference/disturbance event.

Licences can be obtained from the SNCO for development activities that would otherwise be unlawful under the legislation.

Brown Hare

8.1.26 Brown hare *Lepus europaeus* are listed under the Priority Species under the UK Post-2010 Biodiversity Framework.

8.1.27 In addition, brown hares are a quarry species which may be legally controlled during the open season, but is protected in the closed season under the listed under Schedule 10A of the Wildlife & Countryside Act 1981 (as amended), which makes it an offence to:

- Intentionally or recklessly kill, injure or take any wild animal included in Schedule 5A in the closed season
 - ... in the case of a brown hare, the period in any year beginning with 1st February and ending with 30th September.

8.1.28 Brown hares are defined as 'ground game' by the Ground Game Act 1880. This Act gives a statutory right to every occupier of land to take or kill ground game; this right may be shared with other persons, such as the holder of the sporting rights. Subject to certain conditions, the occupier may also authorise others to control hares, but only they and one other authorised person may use a firearm. This means that every occupier (farming tenant) retains the right to kill hares whether or not they hold shooting rights and therefore obviates claims for compensation for damage caused by hares.

8.1.29 Brown hares are defined as 'game' by the Game Act 1831. This act prohibits the shooting of game species on Sundays and Christmas Day.

8.1.30 The Hares Preservation Act 1892 makes it an offence to sell, or expose for sale, any hare or leveret between the months of March and July inclusive. This prohibition removes any commercial incentive to kill hares during the main breeding season but does not apply to imported hares.

8.1.31 In addition, brown hares are a quarry species which may be legally controlled during the open season, but is protected in the closed season under Wildlife & Countryside Act 1981 (as amended), which contains further provisions making it an offence to

Birds

8.1.32 All wild birds, their nests and eggs are protected throughout the breeding season (typically late February to late August inclusive) under the Wildlife and Countryside Act, 1981 (as amended). This legislation makes it an offence to (with certain limited exceptions and in the absence of a licence) intentionally:

- Kill or injure any wild bird;
- Take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- Take or destroy the egg of any wild bird;
- It is also an offence to possess any live or dead wild bird or egg, or anything derived from a bird or egg;

- Restrictions on trade and advertising also apply.

- 8.1.33 Schedule 1 of the Wildlife & Countryside Act 1981 is a list of the nationally rare and uncommon breeding birds for which all offences carry special (i.e. greater) penalties. These species also benefit from additional protection whilst breeding, as it is an offence to disturb adults or their dependent young when at a nest.
- 8.1.34 The RSPB categorise British bird species in terms of conservation importance based on a number of criteria including the level of threat to a species population status. Species are listed as Green, Amber or Red. Red Listed species are considered to be of the highest conservation concern, being either globally threatened and / or experiencing a high level of population decline (e.g. a reduction in breeding population size greater than or equal to 50% over the past 25 years or since 1969, when the first species assessment was made).
- 8.1.35 In addition, Birds are listed under Protection of Birds Act 1954 (as amended), which contains similar protection to Wildlife and Countryside Act 1981 (as amended).

9 APPENDIX B – NON-STATUTORY DESIGNATED SITES

Site name	Designation	Interest Features	Distance from site boundary
Non-statutory Designated Sites			
A447 Verge and Brascote Lane Hedgerows & Trees	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland. Species-rich hedgerow (x4). Mature tree (x4) – English oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> (x2) and horse chestnut <i>Aesculus hippocastanum</i> .	Adjacent to the western boundary
Cadeby Gravel Pit	Regionally Important Geological Site (RIGS)	Geological. No citation received.	Adjacent to the northern boundary
Naneby Hall Farm, Wet Woodland and Pools	Historic LWS	No citation received.	20m north
Cadeby Churchyard	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – amenity grassland with fine sward, herbs frequent throughout.	90m west
Brascote Lane Ash	Candidate LWS	Site that meets LWS criteria. Mature tree – ash standard in hedgerow. Cavities and dead wood. Girth estimated >4m.	380m to the north-east
Pond	Historic LWS	No citation received.	390m west
Brascote and Fox Coverts and associated grassland	Notified / Candidate / Potential LWS	No citation received.	410m south-east
Grassland N of Brascote Lane	Potential LWS	Mesotrophic grassland (x2) – former quarry silt ponds, now grassland, with medium to tall sward. Small number of horses grazing in one area.	410m north
Cadeby Lane hedgerows & Trees	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow (x5). Mature tree (x7) – English oak (x6) and ash.	470m north-west
A447 / Bosworth Lane Grassland & Oak	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – close grazed grassland (Sheep and cows). Mature tree – English oak standard in hedgerow. Small dead wood, splits and loose bark. Girth estimated >3.5m.	500m north
Brscote Lane Woodland	Potential LWS	Broadleaved woodland.	500m north-east

A447 Verge and Hedgerow	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – road verge, recently mown with frequent herbs. Species-rich hedgerow – potential LWS (historic) hedgerow, forming southern portion of longer hedgerow.	530m south
Sutton Lane Oak	Potential LWS	Site that is likely to meet LWS criteria. Mature tree – English oak standard in hedgerow. Ivy cladding. Small dead wood in crown. Girth estimated >3.5m.	540m south-west
Bosworth Rd / Deeping Lane / A447 Hedgerows, Verges & Trees	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland. Mature tree (x2) – ash and English oak both standard in hedgerow. Species-rich hedgerow (x4).	550m north-west
Stapleton Lane / Sutton Lane Verges, Hedgerow & Ash	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerows. Mesotrophic grassland. Mature tree – ash standard in hedgerow.	570m south-west
Manor Farm Meadow, Newbold Verdon	Notification of LWS	Previously Site of Importance for Nature Conservation (SINC). Neutral grassland – meets the primary criteria for mesotrophic grassland as it is over 2500m ² and has 10 species from List F (+meets mixed grassland 14 spp F & G).	610m north-east
Cadeby, between Sewage Works and Naneby Hall Farm	Historic LWS	No citation received.	710m north-east
Pond	Historic LWS	No citation received.	730m north
Gorse Wood	Historic LWS	No citation received.	750m north-west
Pond	Historic LWS	No citation received.	770m north
Sutton Cheney, Grassland	Historic LWS	No citation received.	800m south-west
Pond	Historic LWS	No citation received.	800m north-west
Botany Bay Spinney – Mixed Woodland	Historic LWS	No citation received.	820m north
Hedgerow	Historic LWS	No citation received.	830m north
Oak NW of Brick Kiln Farm	Potential LWS	Site that is likely to meet LWS criteria. Mature tree – Oak species <i>Quercus sp.</i> standard in hedgerow. No close access, but good size – girth estimated >3.7m. Frequent dead wood in canopy and large limb lost in past – lying on ground.	840m south-west

Hinkley Road / Bosworth Road Hedgerows, Verge & Trees	Potential LWS	Site is likely to meet LWS criteria. Species-rich hedgerow (x11). Mature tree (x2) – English oak. Mesotrophic grassland.	890m south
The Duckery and Other Woodlands	Historic LWS	No citation received.	960m west
Market Bosworth Country Park Grassland & Pond	Candidate LWS	Site that meets LWS criteria. Mesotrophic grassland – amenity grassland / scattered broadleaved trees. Close mown grassland with frequent herbs. Standing water – pond with steep banks and shallow water, abundant emergent vegetation.	1.1km north-west
Kirkby Mallory, Green Spinney, Ashpole Spinney and Fishpond	Historic LWS	No citation received.	1.4km south-east
Brascote Covert	Notification of SINC / Wildlife Site	Woodland (broadleaved) – meets the primary criteria for woodland as it contains colonies of bluebells <i>Hyacinthoides non-scripta</i> extending over more than 500m ² .	1.4km north-east
Fox Covert / Jubilee Plantation, Kirkby Mallory	Potential LWS	Site that is likely to meet LWS criteria. Broadleaved woodland.	1.4km south-east
Cadeby, Pond and Marsh West of Bull in the Oak	Historic LWS	No citation received.	1.4km north-west
Cowpastures Spinney, Marsh and Stream	Historic LWS	No citation received.	1.5km north-west
Newbold Verdon Hedge	Notified / Candidate / Potential LWS	No citation received.	1.5km north-east
Bosworth Road Hedgerows, Kirkby Mallory	Potential LWS	Site is likely to meet LWS criteria. Species-rich hedgerows (x5) and mesotrophic grassland.	1.5km south-east
Newbold Verdon, Hall Farm Woodland and Moat	Historic LWS	No citation received.	1.6km north-east
Newbold Road Hedgerow	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow with trees.	1.6km east
Newbold Verdon, Stream Hedge	Notified / Candidate / Potential LWS	No citation received.	1.6km north-east

Newbold Road Oak	Potential LWS	Site that is likely to meet LWS criteria. Mature tree – English oak standard in hedgerow. Ivy clad, dead wood, splits. Girth estimated >3.7m.	1.6km north-east
Beech Spinney	Historic LWS	No citation received.	1.6km east
Goatham Spinneys and Marshy Grassland	Historic LWS	No citation received.	1.7km north
Sutton Cheney, Scrub	Historic LWS	No citation received.	1.8km south
Woodside Oak	Potential LWS	Site that is likely to meet LWS criteria. Mature tree – English oak standard on edge of woodland. Girth estimated ~4m. Dead wood and cavities present. Light ivy growth.	1.8km south
Bosworth Road Verges & Hedgerows	Candidate LWS	Site that meets LWS criteria. Species-rich hedgerows (x2). Mesotrophic grassland.	1.8km south-west
Grassland	Historic LWS	No citation received.	1.9km north-east
Pingle Spinney and Adj Woodland	Historic LWS	No citation received.	1.9km north-west
Ashby Road Hedgerows and Verges, Stapleton	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow (x5). Mesotrophic grassland.	1.9km south
Kirkby Mallory, Little Moats Grassland and Hedgerow	Potential LWS	Site that is likely to meet LWS criteria. Mesotrophic grassland – seven indicator species. Hedgerow – contains 4.25 species per 30m count and has four associated features (old layer, a ditch, standards and a parallel hedgerow).	1.9km south-west
Stapleton Lane Hedgerow & Trees, Stapleton	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow. Mature trees (x2) – ash and English oak.	1.9km south
Stapleton Lane Hedgerows, Tree & Grassland	Potential LWS	Site that is likely to meet LWS criteria. Species-rich hedgerow (x2) overgrown hedgerow and species-rich hedgerow. Mature tree – ash tree standard in overgrown hedgerow. Mesotrophic grassland.	1.9km south-east
Newbold Verdon, pavilion green lane hedge (east)	Notified / Candidate / Potential LWS	No citation received.	2km north-east
Kirkby Mallory, Little Moats Hedgerow	Candidate LWS	Hedgerow – contains an average 5.75 woody species per 30m and has two associated features (old layers and dead wood along at least 10% of the hedgerow and English oak standards.	2km south-east

10 APPENDIX C – PROTECTED AND NOTABLE SPECIES RECORDS

Species	Nearest distance from site	Year of most recent record	Number of records	Conservation status
Amphibians				
Smooth newt <i>Lissotriton vulgaris</i>	520m north	2021	7	WCA, 1981.
Great Crested Newt <i>Triturus cristatus</i>	540m north	2017	21	European Protected Species (EPS). Priority Species (PS). UK BAP. WCA, 1981.
Common frog <i>Rana temporaria</i>	1km north-east	2023	2	WCA, 1981.
Reptiles				
Grass snake <i>Natrix Helvetica</i>	1.2km east	2020	2	PS. UK BAP. NERC S41. WCA, 1981.
Mammals				
Common pipistrelle <i>Pipistrellus pipistrellus</i>	100m west	2023	100+	EPS. LBAP. WCA, 1981.
Noctule bat <i>Nyctalus noctula</i>	320m east	2023	22	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
<i>Nyctalus Species</i>	320m east	2015	3	WCA, 1981.
Brown long-eared bat <i>Plecotus auritus</i>	330m east	2023	9	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
Nathusius's pipistrelle <i>Pipistrellus nathusii</i>	330m east	2015	4	EPS. WCA, 1981.
<i>Myotis species</i>	330m east	2023	12	LBAP. WCA, 1981.
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	340m east	2023	97	EPS. UK BAP. LBAP. NERC S41. WCA, 1981.
Western barbastelle <i>Barbastella barbastellus</i>	1.6km south-west	2021	1	EPS. PS. UK BAP. LBAP. NERC S41. WCA, 1981.
Daubenton's bat <i>Myotis daubentonii</i>	1.7km north-west	2018	3	EPS. LBAP. WCA, 1981.
Natterer's bat <i>Myotis nattereri</i>	1.8km north-east	2021	3	EPS. WCA, 1981.
Leisler's bat <i>Nyctalus leisleri</i>	1.9km south-east	2023	1	EPS. LBAP. WCA, 1981.
Badger	CONFIDENTIAL Within 2km of the site boundary	2023	29	PS. WCA, 1981. Endangered on both GB and England Red List for Mammals.
Birds				
Red Kite <i>Milvus milvus</i>	100m north	2021	11	Green: Birds of Conservation Concern (BoCC). WCA, 1981 (Sch1).

Brambling <i>Fringilla montifringilla</i>	260m east	2022	100+	Green: BoCC. WCA, 1981 (Sch1).
Kingfisher <i>Alcedo atthis</i>	330m north	2021	5	Green: BoCC. WCA, 1981 (Sch1).
Peregrine <i>Falco peregrinus</i>	720m east	2022	66	Green: BoCC. WCA, 1981 (Sch1).
Avocet <i>Recurvirostra avosetta</i>	730m east	2021	14	Amber: BoCC. UK BAP. WCA, 1981 (Sch1).
Greylag goose <i>Anser anser</i>	740m east	2022	100+	Amber: BoCC. UK BAP. WCA, 1981 (Sch1 – part 2).
Little ringed plover <i>Charadrius dubius</i>	750m east	2022	100+	Green: BoCC. WCA, 1981 (Sch1).
Garganey <i>Anas querquedula</i>	950m north-east	2020	24	Amber: BoCC. WCA, 1981 (Sch1).
Barn owl <i>Tyto alba</i>	1.1km north-east	2021	2	Green: BoCC. LBAP. WCA, 1981 (Sch1).
Cetti's warbler <i>Cettia cetti</i>	1.1km north-east	2020	5	Green: BoCC. WCA, 1981 (Sch1).
Fieldfare <i>Turdus pilaris</i>	1.1km north-east	2022	100+	Red: BoCC. WCA, 1981 (Sch1).
Goldeneye <i>Bucephala clangula</i>	1.1km north-east	2022	4	Red: BoCC. WCA, 1981 (Sch1 – part 2).
Green sandpiper <i>Tringa ochropus</i>	1.1km north-east	2022	21	Amber: BoCC. UK BAP. WCA, 1981 (Sch1).
Greenshank <i>Tringa nebularia</i>	1.1km north-east	2017	6	Amber: BoCC. UK BAP. WCA, 1981 (Sch1).
Hobby <i>Falco subbuteo</i>	1.1km north-east	2022	22	Green: BoCC. WCA, 1981 (Sch1).
Marsh harrier <i>Circus aeruginosus</i>	1.1km north-east	2019	1	UK BAP. WCA, 1981 (Sch1).
Mediterranean Gull <i>Larus melanocephalus</i>	1.1km north-east	2022	5	UK BAP. WCA, 1981 (Sch1).
Osprey <i>Pandion haliaetus</i>	1.1km north-east	2018	3	UK BAP. WCA, 1981 (Sch1).
Pintail <i>Anas acuta</i>	1.1km north-east	2021	1	UK BAP. WCA, 1981 (Sch1 – part 2).
Redwing <i>Turdus iliacus</i>	1.1km north-east	2022	100+	UK BAP. WCA, 1981 (Sch1).
Ruff <i>Philomachus pugnax</i>	1.1km north-east	2022	8	Red: BoCC. WCA, 1981 (Sch1).
Tundra Swan <i>Cygnus columbianus bewickii</i>	1.1km north-east	2021	2	Red: BoCC. WCA, 1981 (Sch1).
Whimbrel <i>Numenius phaeopus</i>	1.1km north-east	2022	8	Red: BoCC. WCA, 1981 (Sch1).
Wood Sandpiper <i>Tringa glareola</i>	1.1km north-east	2022	2	Amber: BoCC. UK BAP. WCA, 1981 (Sch1).
Wryneck <i>Jynx torquilla</i>	1.1km north-east	2020	6	UK BAP. WCA, 1981 (Sch1).

Black redstart <i>Phoenicurus ochruros</i>	2km north-east	2017	4	Amber: BoCC. UK BAP. WCA, 1981 (Sch1)
Invertebrates				
White-letter hairstreak <i>Satyrion w-album</i>	1km north-east	2018	3	High: Butterfly Conservation Priority (BCP). NERC S41. GB Red List (2022): Vulnerable. WCA, 1981. UK BAP.
Flowering Plants				
Bluebell <i>Hyacinthoides non-scripta</i>	140m north	2022	32	WCA, 1981. Leicester and Rutland Plant Register (LRPR) (2022).