

**East Midlands Gateway
Phase 2 (EMG2)**

Document DCO 6.9A/MCO 6.9A

ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 9A

Preliminary Ecological Appraisal

October 2025

09

The East Midlands Gateway Phase 2
and Highway Order 202X and The East Midlands Gateway
Rail Freight and Highway (Amendment) Order 202X

[SEGRO.COM/SLPEMG2](https://segro.com/slpemg2)

SEGRO



SEGRO Properties Limited and SEGRO (EMG) Limited

East Midlands Gateway 2

ES Appendix 9A

PRELIMINARY ECOLOGICAL APPRAISAL

September 2025

FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. [REDACTED] . [T] [REDACTED] [E] [REDACTED] [W] [REDACTED]

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd.

Rev	Issue Status	Prepared / Date	Reviewed / Date	Approved / Date
-		RAM / 07.11.24	JDH / 10.02.25	SJA / 13.02.24
A		RAM / 01.04.25		JDH / 01.05.25
B	DRAFT			JDH / 27.06.25
	Final	RJC / 26.09.25		SJA / 26.09.25

CONTENTS

1.0	INTRODUCTION	3
2.0	METHODOLOGY.....	5
3.0	RESULTS.....	7

TABLES

Table 1a: Statutory Designated Sites

Table 1b: Non-statutory Designated Sites

Table 2: Records of European Protected Species

Table 3: Hedgerow Descriptions – EMG2 Works

Table 4: Woodland Descriptions – Highway Works

Table 5: Mixed Scrub Descriptions – Highway Works

Table 6: Other Neutral Grassland Descriptions – Highway Works

Table 7: Modified Grassland Descriptions – Highway Works

Table 8: Hedgerow Descriptions – Highway Works

Table 9: Other Neutral Grassland Descriptions – EMG1 Works

Table 10: Modified Grassland Descriptions – EMG1 Works

Table 11: Hedgerow Descriptions – EMG1 Works

APPENDICES

Appendix A: Records of Protected/Notable Species within 1km

Appendix B: Botanical Species List

FIGURES

Figure 1a: Site Location and Consultation Results Plan – Designated Sites – 1km Search

Figure 1b: Site Location and Consultation Results Plan – Designated Sites – 2km and 15km Search

Figure 2a: Desk Study Results – Distribution of European Protected Species Records

Figure 2b: Desk Study Results – Distribution of Other Protected/Notable Species Records – Notable Animals

Figure 2c: Desk Study Results – Distribution of Other Protected/Notable Species Records – Notable Plants

Figure 3a: Habitat Baseline – Site Layout Plan

Figure 3b: Habitat Baseline – Main Site (EMG2 Works area)

Figure 3c: Habitat Baseline – Highway Works Area (1)

Figure 3d: Habitat Baseline – Highway Works Area (2)

Figure 3e: Habitat Baseline – Highway Works Area (3)

Figure 3f: Habitat Baseline – EMG1 Works Area

1.0 INTRODUCTION

- 1.1 FPCR Environment & Design Ltd. were commissioned by SEGRO to undertake a preliminary ecological appraisal on the EMG2 Project (detailed below). This document should be read in conjunction with the other ecological documents prepared for this Environmental Statement application which includes the Environmental Statement itself, protected species reports for badgers¹, bats², birds³, invertebrates⁴, riparian mammals⁵, and reptiles⁶, the shadow Habitat Regulations Assessment for the River Mease SAC⁷, and Biodiversity Net Gain (BNG) calculations⁸.

1.2 Development proposals

- 1.3 The EMG2 Project comprises the following three main components:

DCO Application (DCO Scheme)

- EMG2 Works— Logistics and advanced manufacturing development located on the EMG2 Main Site south of East Midlands Airport and the A453, and west of the M1 motorway. The development includes HGV parking and a bus interchange, together with the provision of a Community Park and an upgrade to the EMG1 substation;
- Highways Works –works to the highway network: the A453 access junction works, significant improvements at Junction 24 of the M1, works to the wider highway network including the Active Travel Link, Hyam's Lane Works, L57 footpath upgrade, A6 Kegworth Bypass/A453 Junction Improvements and finger farm roundabout improvements, together with other works;

MCO Application (MCO Scheme)

- EMG1 Works – Additional warehousing development on Plot 16 together with works to increase the permitted height of the cranes at the EMG1 rail-freight terminal, improvements to the EMG1 public transport interchange, site management building and the EMG1 pedestrian crossing.

Site Location and Context

- 1.4 The location of the Scheme is described in Chapter 2 of the ES with reference to its various component parts. In brief, the majority of development will be on the EMG2 Main Site (build development) and the Community Park (landscaping/drainage attenuation). The remaining components of the proposals are located on land within EMG1 and on land required for off-site highway improvements.

Legislation

- 1.5 The national policy and legislation most relevant here are:

¹ FPCR (2025) EMG2 Appendix 9b: Badger Report

² FPCR (2025) EMG2 Appendix 9c: Bat Report

³ FPCR (2025) EMG2 Appendix 9d: Bird Report

⁴ FPCR (2025) EMG2 Appendix 9e: Invertebrate Report

⁵ FPCR (2025) EMG2 Appendix 9f: Otter and Water Vole Report

⁶ FPCR (2025) EMG2 Appendix 9g: Reptile Report

⁷ FPCR (2025) EMG2 Appendix 9h: Shadow Habitat Regulations Assessment – River Mease SAC

⁸ FPCR (2025) EMG2 Appendix 9i: Biodiversity Net Gain Report

- The Conservation of Habitats and Species Regulations (“The Habitats Regulations”) (Amendment) 2017 in relation to the European Protected Species (EPS) great crested newt, (GCN), bats (all species) and dormouse; and European protected sites i.e. Special Areas of Conservation (SAC), Special Protection Areas (SPAs) and internationally protected “Ramsar Sites” (collectively known as “Natura 2000 sites”). Annex II bat species are of particular relevance in relation to SACs designated for bats.
- The Wildlife and Countryside Act 1981 (WCA) (as amended) in relation to all wild birds (including Schedule 1 species), other animals (notably Schedule 5 species), flora (those listed in Schedules 8 and 9) and Sites of Special Scientific Interest (SSSI);
- Protection of Badgers Act 1992;
- Natural Environmental and Rural Communities (NERC) Act 2006 in relation to various priority species and habitats;
- Hedgerow Regulations 1997 made under Section 97 of the Environment Act 1995;
- National Planning Policy Framework (NPPF) (2024);
- Local Nature Reserves (LNR) as designated most recently by the NERC Act 2006;
- Non-statutory protected local sites including County Wildlife Sites (CWS), Sites of Importance for Nature Conservation (SINC), Local Wildlife Sites (LWS) and Ancient Woodland Inventory (AWI) sites;
- Local Biodiversity Action Plans (LBAP); and
- Birds of Conservation Concern (BoCC).

2.0 METHODOLOGY

- 2.1 In order to compile existing baseline information, relevant ecological information was requested from both statutory and non-statutory nature conservation organisations including:
- Multi Agency Geographic Information for the Countryside (MAGIC);
 - Biological records requested from the Leicestershire & Rutland Environmental Records Centre (LRERC), Derbyshire Biological Records Centre (DBRC), and Nottinghamshire Biological and Geological Record Centre (NBGRC).
- 2.2 Further inspection of colour 1:25,000 OS base maps [REDACTED] and aerial photographs from Google Earth [REDACTED] was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.
- 2.3 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:
- 15km around the EMG2 Project Order Limits for sites of International Importance (e.g. Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites, extended to 20km for international sites which support birds with extended foraging distance, i.e. wintering geese/ swans, and 30km for international sites where bats are a notifying feature. 2km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSIs);
 - 2km for European protected species records (e.g. The Conservation of Habitats and Species Regulations 2017, SCHEDULE 2);
 - 1km for sites of Local or County Importance or statutory sites such as Local Nature Reserves (LNRs), Priority Habitats and Ancient Woodland; and
 - 1km for other species records (e.g. protected, or Section 41 NERC species of principal importance and notable species).
 - Scheme/adjacent – listed habitats of principal importance (HPI) under the NERC Act
- 2.4 When assessing data, species data were filtered to include records from the previous twenty years only.

Extended Phase 1 Habitat Survey

- 2.5 During the site design process, various site parameters, including the red line boundary, have been subject to multiple revisions, and additional surveys were conducted to reflect these changes.
- 2.6 Initial field surveys were conducted on the EMG2 Main Site and Community Park on 22nd February and 20th April 2022 and updated on 13th June 2024. Additional areas covered by the Highway Works and the EMG1 Works were surveyed 3rd July, 4th July, 5th July, 10th July, 6th August and 14th November 2024. Survey methods followed the extended Phase 1 Survey (JNCC, 2010) technique and UKHab methodology (Butcher et al., 2020) as recommended by Natural England. This involved a systematic walk over of the site to classify the broad habitat types and identify any Habitats of Principal Importance (HPI) for the conservation of biodiversity as listed within Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006. Habitats were broadly mapped in the field using an OS base map.

- 2.7 Where ecologically notable features / habitats were identified, target notes and species lists were compiled for individual areas and assessments of abundance were made using the DAFOR scale. Vascular plant nomenclature follows Stace (2019). Whilst the species lists collected should not be regarded as exhaustive, sufficient information was gained during the survey to enable classification and assessment of broad habitat types and identify features likely to be of interest.
- 2.8 A River Condition Assessment (RCA) was conducted by accredited MoRPh field surveyors on 31st January 2023 and reviewed on 17th October 2024. Data was recorded using the RCA information system and interpreting RCA indicators and scores for baseline and post-intervention scenarios. The levels of 'in-watercourse' and 'riparian' encroachment were also assessed following guidance provided in the DEFRA Statutory Biodiversity Metric User Guide and Technical Supplement.

Invasive Plants, Notifiable Weed Species and Other Notable Flora

- 2.9 Consideration was given as to the presence of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) (WCA 1981) and the presence of any notable weeds including those covered under the Weed Act 1959 (where population is significant enough to be considered injurious).

3.0 RESULTS

Desk Study

- 3.1 The locations of designated sites and protected and notable species records discussed in the following section are illustrated in Figures 1a and 1b and Figures 2a, 2b, and 2c respectively.

Statutory Designations

- 3.2 One internationally designated site of nature conservation interest was identified within the search area. River Mease, Special Area of Conservation (SAC), was located approximately 14km from the EMG2 Project Order Limits .
- 3.3 One nationally designated site of nature conservation interest was identified within 2km of the Site boundary. Lockington Marshes, Site of Species Scientific Interest (SSSI) was located approximately 1.2km from the EMG2 Project Order Limits . These are detailed in Table 1a below.

Table 1a: Statutory Designated Sites within relevant search area

Site	Designation	Location (Distance and Orientation from EMG2 Project Order Limits)	Summary Description
Lockington Marshes	Site of Special Scientific Interest (SSSI)	~1.2km	The site comprises one of the largest remaining areas of willow carr woodland in Leicestershire and a diverse complex of wetland habitat supporting an important invertebrate fauna with many nationally scarce species
River Mease	SSSI, Special Area of Conservation (SAC)	~14km	Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation for which the area is considered to support a significant presence. <i>Cobitis taenia</i> for which this is one of only four known outstanding localities in the United Kingdom. <i>Cottus gobio</i> for which this is considered to be one of the best areas in the United Kingdom. <i>Lutra lutra</i> for which the area is considered to support a significant presence. <i>Austropotamobius pallipes</i> for which the area is considered to support a significant presence.

Non-statutory Designations

- 3.4 Consultation with the Leicestershire and Rutland Environmental Records Centre (LRERC) identified sites of local conservation importance within 1km of the EMG2 Project Order Limits. These are detailed in Table 1b below.

Table 1b: Non-statutory Designated Sites within 1km of the EMG2 Project Order Limits

Site	Designation	Summary Description
Long Lane Willows	Local Wildlife Site (LWS)	Mature trees - 2 <i>Salix fragilis</i> .
Ratcliffe Bridge willow	Local Wildlife Site (LWS)	Mature tree - <i>Salix fragilis</i> .
Kegworth Bridge Hedge & Willows	Local Wildlife Site (LWS)	Red Data Book species in hedgerow and 3 mature trees - <i>Salix fragilis</i> .
Long Lane Mature Trees	Local Wildlife Site (LWS)	Mature trees - 4 <i>Salix fragilis</i> .
River Soar , Loughborough Meadows to Trent	Local Wildlife Site (LWS)	This stretch of the River Soar, which for much of its length forms the county boundary with Leicestershire, runs through farmland and a number of villages in south Nottinghamshire. In places it retains many of its natural features with gentle meanders and low banks running through pastures, but it has also been subject to flood control and navigational measures with cuts, stretches of canalisation and locks in places.
Lockington (EMG) Oak 143	Candidate Local Wildlife Site (cLWS)	Oak of dbh 1370mm - poor condition
Diseworth Donington Park Services M1 J23A ash trees	Candidate Local Wildlife Site (cLWS)	2 large Ash trees in hedgerow; not measured due to basal growth
M1 J23A Donington Park Services grassland and scrub	Candidate Local Wildlife Site (cLWS)	Rough unmanaged but species-rich grassland, plus scrub, marsh and new plantation. GCNs recorded in 2015, Grass Vetchling in 2020
Lockington (EMG) Oak 145	Candidate Local Wildlife Site (cLWS)	Oak with dbh 2150mm
Lockington (EMG) Oak 144	Candidate Local Wildlife Site (cLWS)	Oak with dbh 1450mm
M1/A50 Junction Ponds and Grassland	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland, pond; <i>Persicaria bistorta</i> , <i>Schoenoplectus tabernaemontani</i> , <i>Typha angustifolia</i> , <i>Menyanthes trifoliata</i> , <i>Anthemis cotula</i> (probably planted)
The Dumps	Candidate Local Wildlife Site (cLWS)	Secondary mixed woodland around narrow steep-sided valley; stream with moss covered boulders, bedrock, waterfall, earth cliffs. Good fern communities.
Hemington Meadow	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Castle Donington Oak 1	Candidate Local Wildlife Site (cLWS)	Mature tree
Diseworth Brook	Candidate Local Wildlife Site (cLWS)	Small river or stream

Site	Designation	Summary Description
Hemington Pasture Ash 2	Candidate Local Wildlife Site (cLWS)	Mature tree
Castle Donington Grassland	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Hemington Grassland	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Castle Donington Pasture	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland; <i>Agrostis vinealis</i> , <i>Isolepis setacea</i>
Hemington Pasture Ash 5	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Pasture Ash 6	Candidate Local Wildlife Site (cLWS)	Mature tree
West Meadow Brook	Candidate Local Wildlife Site (cLWS)	Small river or stream
Long Whatton Meadow 2	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Castle Donington Oak 2	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Pasture Ash 4	Candidate Local Wildlife Site (cLWS)	Mature tree
Diseworth Brook - Woodland	Candidate Local Wildlife Site (cLWS)	Wooded stream
Castle Donington Pasture Woodland & Stream	Candidate Local Wildlife Site (cLWS)	Deciduous woodland in steep ravine with stream over bedrock. Small remnant of species-rich grassland - not known if still has value
Diseworth Brook Oak	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Pasture Oak 2	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Pasture Oak 1	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Wet Grassland	Candidate Local Wildlife Site (cLWS)	Wet grassland

Site	Designation	Summary Description
Hemington Grassland	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland, scrub, woodland; <i>Trifolium striatum</i>
Long Whatton Meadow	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Diseworth Brook Ash 2	Candidate Local Wildlife Site (cLWS)	Mature tree
Hemington Pasture	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
Castle Donington row of Crack Willows and an Oak off Carnival Way	Candidate Local Wildlife Site (cLWS)	Row of 5 large crack willows, all over 1000mm diameter, plus one Oak of 1140mm diameter
Long Whatton Woodland	Candidate Local Wildlife Site (cLWS)	Woodland
M1/A50 Junction Pond	Candidate Local Wildlife Site (cLWS)	Pond; <i>Schoenoplectus tabernaemontani</i> , <i>Menyanthes trifoliata</i>
Hemington Pasture	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland
A453 Viaduct Grassland	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland; <i>Medicago arabica</i> . Goes under flood viaduct.
Warren Lane Pond	Candidate Local Wildlife Site (cLWS)	Pond
Soar Bank Drain	Candidate Local Wildlife Site (cLWS)	Small river or stream
Castle Donington Gothic House Lime	Candidate Local Wildlife Site (cLWS)	Large-leaved lime of over 4m girth, within a large, mature garden
River Soar (W bank) south of A453	Candidate Local Wildlife Site (cLWS)	Large river
Veteran Ash 2 West End	Candidate Local Wildlife Site (cLWS)	Mature tree
Castle Donington Grassy Scrub	Candidate Local Wildlife Site (cLWS)	Patchwork of species-rich mesotrophic grassland amongst developing scrub and young woodland; probably on long-established spoil associated with airport. Scrub and two ponds, one with <i>Potamogeton natans</i>

Site	Designation	Summary Description
Soar Bank White Willow	Candidate Local Wildlife Site (cLWS)	Mature tree
Veteran Ash 3 West End	Candidate Local Wildlife Site (cLWS)	Mature tree
Land E of Netherfield Lane	Candidate Local Wildlife Site (cLWS)	Mesotrophic grassland and scrub, with 19 LWS indicator species recorded.
Kegworth Derby Rd Oak	Potential Local Wildlife Site (pLWS)	Large English Oak (1.32m diameter, 4.2m girth), but currently without significant dead wood features.
Hemington Pasture Ash 1	Potential Local Wildlife Site (pLWS)	Mature tree
Hemington Pasture Ash 3	Potential Local Wildlife Site (pLWS)	Mature tree
Diseworth Brook Ash 1	Potential Local Wildlife Site (pLWS)	Mature tree
Lockington Quarry extension hedgerow and ditch	Potential Local Wildlife Site (pLWS)	Hedgerow
Lockington Quarry Oak	Potential Local Wildlife Site (pLWS)	Large Oak, a fraction short of LWS size criterion at 3.72m girth.
Long Whatton Meadows Ash 4	Potential Local Wildlife Site (pLWS)	Mature tree
Lockington Warren Lane hedge	Potential Local Wildlife Site (pLWS)	Several species-rich hedges, all 'important' under HRegs; not surveyed to LWS criteria, but with 4/5 species per sample 30m, 8-12 species overall; with ditches, old layers, standards
Hemington Scrubby Grassland	Potential Local Wildlife Site (pLWS)	Mesotrophic grassland
Veteran Ash I West End	Potential Local Wildlife Site (pLWS)	Mature tree
Ratcliffe Lane Hedge 1	Potential Local Wildlife Site (pLWS)	Hedgerow
Ratcliffe Lane Pasture and Stream	Potential Local Wildlife Site (pLWS)	Mesotrophic/acid indicator species
Ratcliffe Lane Willow 1	Potential Local Wildlife Site (pLWS)	Mature tree

Site	Designation	Summary Description
Castle Donington Swan River verge	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Castle Donington Charnock Hill grassland	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
King Street Plantation	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Pond	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
The Paddock - Semi-improved grassland	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Diseworth Green Lane NW of village	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Lockington Park	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Stream	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Long Mere Lane - Hedgerow	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Hedgerow	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Mixed plantation	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value
Stream along edge of arable field	Potential Historic Local Wildlife Site (pLWS.hist	No recent survey data - not known if the site still has value

Site	Designation	Summary Description
Hedgerow	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value
Ash Spinney	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value
Stream	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value
His Lordships woodland	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value
River Soar and floodplain habitats	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value
Long Whatton Brook	Potential Historic Local Wildlife Site (pLWS.hist)	No recent survey data - not known if the site still has value

Protected/Notable Species

- 3.5 Table 2 details records of European Protected species returned by the LRERC for within 1km of the EMG2 Project Order Limits.

Table 2: Records of European Protected Species within 2km from 2000 onwards

Species	Conservation Status	Number of Records
Otter <i>Lutra lutra</i>	LBAP, CHSR, NERC, W&CA Sch5	7
Brown long-eared bat <i>Plecotus auritus</i>	LBAP, CHSR, W&CA Sch5, NERC	49
Common pipistrelle <i>Pipistrellus pipistrellus</i>	LBAP, CHSR, W&CA Sch5	99
Daubenton's bat <i>Myotis daubentonii</i>	LBAP, CHSR, W&CA Sch5	11
Leisler's bat <i>Nyctalus leisleri</i>	LBAP, CHSR, W&CA Sch5	4
<i>Myotis</i> bat species <i>Myotis sp.</i>	LBAP, CHSR, W&CA Sch5	43

Species	Conservation Status	Number of Records
Nathusius's pipistrelle <i>Pipistrellus nathusii</i>	LBAP, CHSR, W&CA Sch5	9
Natterer's bat <i>Myotis nattereri</i>	CHSR, W&CA Sch5	2
Noctule bat <i>Nyctalus noctula</i>	LBAP, CHSR, W&CA Sch5, NERC	62
<i>Nyctalus</i> bat species <i>Nyctalus sp.</i>	CHSR, W&CA Sch5	14
Pipistrelle bat species <i>Pipistrellus sp.</i>	LBAP, CHSR, W&CA Sch5	17
Serotine bat <i>Eptesicus serotinus</i>	LBAP, CHSR, W&CA Sch5, NERC	2
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	LBAP, CHSR, W&CA Sch5, NERC	62
Unidentified bat species <i>Chiroptera sp.</i>	LBAP, CHSR, W&CA Sch5	19
Whiskered bat <i>Myotis mystacinus</i>	LBAP, CHSR, W&CA Sch5	2
Great crested newt <i>Triturus cristatus</i>	W&CA Sch5, NERC, CHSR	23

Key to Conservation Status: CHSR – The Conservation of Habitats and Species Regulations 2017 (as amended), NERC – Natural Environment and Rural Communities Act 2006, W&CA – Wildlife and Countryside Act 1981 (as amended), LBAP – Local Biodiversity Action Plan.

- 3.6 Appendix A details records of protected/notable species returned by the LRERC for within 1km of the EMG2 Project Order Limits . Ten records were returned on the EMG2 Works Site itself.

Survey Results - Habitats/Flora

- 3.7 A detailed description of each habitat type is described below with the location of each habitat type illustrated in Figure 3: Phase 1 Habitat Plan. Grassland botanical species lists are included in Appendix B.

EMG2 Main Site and Community Park

Trees

- 3.8 Mature and semi-mature trees were present throughout, mainly in association with hedgerows. Tree species typically included: ash *Fraxinus excelsior*, English Oak *Quercus robur*, field maple *Acer campestre*, crack willow *Salix fragilis* and sycamore *Acer pseudoplatanus*. These trees are in various states of decline and maturity.

Broadleaved Woodland

- 3.9 The western site boundary was bordered by a woodland block, comprising ash, hawthorn, blackthorn, dog rose, elder and elm with an understory comprising common couch, bramble, common nettle and cow parsley.

Scrub – Dense/Continuous and scattered

- 3.10 Dense hawthorn, willow, elder *Sambucus nigra* scrub was present in association with pond P1 and pond P3 (Appendix B – Photographs 1-2).

Other Neutral Grassland

- 3.11 One semi-improved neutral grassland field was present within the site. It had a sward height of 5-40cm dominated by Yorkshire fog *Holcus lanatus*, with locally dominant red fescue *Festuca rubra* and perennial ryegrass *Lolium perenne*, abundant creeping thistle *Cirsium arvense*, red clover *Trifolium pratense* and ribwort plantain *Plantago lanceolata*, locally abundant bristly oxtongue *Helminthotheca echioides* and frequent spear thistle *Cirsium vulgare* and common ragwort *Jacobaea vulgaris*. Wild carrot *Daucus carota*, red clover *Trifolium pratense* and black medic *Medicago lupulina* were also present amongst the sward (Appendix B – Photograph 3). The northern section of the other neutral grassland parcel had a covering of scattered ash saplings.

Modified Grassland

- 3.12 One improved horse grazed field was present. It had a sward height of 5-15cm dominated by perennial ryegrass, with abundant crested dog's-tail *Cynosurus cristatus*, locally abundant common chickweed *Stellaria media* and frequent cock's-foot *Dactylis glomerata*, annual meadow-grass *Poa annua* and creeping buttercup *Ranunculus repens*.
- 3.13 A small area of modified grassland was located to the south-west amongst an arable field. Grass species included cock's-foot, Yorkshire fog, false oat grass *Arrhenatherum elatius* and meadow foxtail *Alopecurus pratensis*. Forbs were common and widespread species indicative of higher nutrient levels including creeping thistle, spear thistle, hogweed *Heracleum sphondylium*, curled dock *Rumex crispus* and white clover *Trifolium repens*.

Tall Ruderal/Forb

- 3.14 Two areas of tall ruderal vegetation were present in association with an area of bare ground in the centre of the site. Species recorded included bramble, common dandelion, cocksfoot and common nettle (Appendix B – Photograph 4). A strip of tall forb vegetation was present along the northern boundary of the most westerly arable field. Species included dominant common nettle with false oat grass, hogweed, creeping thistle and cow parsley also present.

Standing Water

- 3.15 Three ponds (P1-P3) were present on site.
- 3.16 Pond (P1) was seasonal pond located just north of Hyam's Lane in the south western corner of a field compartment. It was approximately 5 x 8m in size, and was bounded by a small group of crack willow trees. The pond lacked any aquatic vegetation.

- 3.17 Pond (P2) is a field pond adjacent to the south side of a hedgerow between Hyam's Lane and the A453. It comprised a steep banked pond 20 x 5m in size bounded by dense bramble scrub (Appendix B – Photograph 5).
- 3.18 Pond (P3) was located adjacent to Donington Park Services. It comprised a wet depression, with a small rectangular area of open water at its centre. Inundation vegetation was limited to reed canary grass *Phalaris arundinacea*, with lesser burdock *Arctium minus*, great willowherb *Epilobium hirsutum* and cow parsley *Anthriscus sylvestris* also present. The pond was surrounded by scattered scrub. Pond P3 is listed as a potential (historic wildlife site), however does not meet criteria 9 to qualify as an LWS.

Arable

- 3.19 The remainder of the site comprised a mixture of recently ploughed arable field compartments and arable fields planted with winter wheat, with narrow grassy margins (1-2m), dominated by common couch *Elytrigia repens*, with locally abundant creeping bent *Agrostis stolonifera*, ivy *Hedera helix* and cleavers *Gallium aparine* and frequent/locally frequent cock's-foot, perennial sow-thistle *Sonchus arvensis*, cow parsley, great willowherb, lesser celandine *Ficaria verna*, hard rush *Juncus inflexus* and green alkanet *Pentaglottis sempervirens* (Appendix B – Photographs 7-8).

Hedgerows

- 3.20 There were 60 hedgerows present on the EMG2 Main Site and Community Park.
- 3.21 No hedgerows were considered to be species-rich; however, all comprised at least 80% native woody species and therefore qualify as Habitats of Principal Importance (HPI) under S41 of the NERC Act.
- 3.22 Seven hedgerows (H4 & H5, H11a, H11b, H18a, H36, H42a and H42b) met the secondary criteria for consideration as LWS, however they did not meet the overarching criteria required under the habitat diversity selection route¹⁰.
- 3.23 Summary details are presented in Table 3.

⁹ Guidelines for the selection of Local Wildlife Sites in Leicester, Leicestershire and Rutland. 2011. 4th edition. Available at https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2016/8/22/Guidelines_LWS_0.pdf

¹⁰ Guidelines for the selection of Local Wildlife Sites in Leicester, Leicestershire and Rutland. 4th edition. 2011.

Table 3: Hedgerow descriptions – EMG2 Main Site and Community Park

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H1a	Native Hedgerow – Associated with Bank or Ditch	237	Birch, blackthorn, field maple, hawthorn, ash
H1b	Native Hedgerow – Associated with Bank or Ditch	202	Hawthorn
H2	Native Hedgerow – Associated with Bank or Ditch	172	Hawthorn, elder, dogrose
H3	Native Hedgerow – Associated with Bank or Ditch	174	Hawthorn, ash, blackthorn, elder
H4 & H5	Native Hedgerow – Associated with Bank or Ditch	323	Hawthorn, crab apple, ash, blackthorn, field maple, elder, dogrose
H6	Native Hedgerow – Associated with Bank or Ditch	190	Ash, hawthorn, blackthorn, elder
H7	Native Hedgerow – Associated with Bank or Ditch	234	Hawthorn, ash, dogrose, blackthorn, English oak, elm, elder
H8a	Native Hedgerow	91	Ash, blackthorn, hawthorn, dogrose
H8b	Native Hedgerow	110	Elder, hawthorn, blackthorn
H8c	Native Hedgerow – Associated with Bank or Ditch	96	Hawthorn, ash, elder
H9	Native Hedgerow – Associated with Bank or Ditch	156	Dogrose, hawthorn, elder, blackthorn
H10	Native Hedgerow – Associated with Bank or Ditch	236	Elder, hawthorn, ash, blackthorn, dogrose, English oak

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H11a	Native Hedgerow – Associated with Bank or Ditch	80	Hawthorn, blackthorn, ash, dogrose, garden privet
H11b	Native Hedgerow – Associated with Bank or Ditch	201	Hawthorn, dogrose, wild privet, blackthorn, elder, ash
H11c	Native Hedgerow – Associated with Bank or Ditch	522	Hawthorn, dogrose, field maple, elder, blackthorn
H11d	Native Hedgerow – Associated with Bank or Ditch	104	Hawthorn, elder, blackthorn, elm
H12	Native Hedgerow – Associated with Bank or Ditch	212	Hawthorn, crab apple, ash, dogrose, elm, field maple
H13	Native Hedgerow	45	Blackthorn, hawthorn, holly, elder, oak, ash
H14a	Native Hedgerow	181	Hawthorn, ash
H14b	Native Hedgerow – Associated with Bank or Ditch	389	Blackthorn, hawthorn, ash, dogrose, sycamore
H15	Native Hedgerow	94	Hawthorn, ash, dogrose, elder, field maple
H16	Native Hedgerow	134	Hawthorn
H17a	Native Hedgerow	158	Hawthorn, ash
H17b	Native Hedgerow	220	Hawthorn, elder, oak
H18a	Native Hedgerow – Associated with Bank or Ditch	159	Hawthorn, ash, dogrose, elm, blackthorn
H18b	Native Hedgerow – Associated with Bank or Ditch	206	Hawthorn, dogrose, field maple, ash, blackthorn
H18c	Native Hedgerow – Associated with Bank or Ditch	196	Ash, hawthorn, blackthorn, field maple, dogrose

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H19a	Native Hedgerow	139	Hawthorn, dogrose, ash
H19b	Native Hedgerow	122	Blackthorn, field maple, hawthorn, ash, dogrose
H20a	Native Hedgerow – Associated with Bank or Ditch	153	Hawthorn, dogrose, English oak
H20b	Native Hedgerow – Associated with Bank or Ditch	337	Hawthorn, ash, dogrose
H21	Native Hedgerow – Associated with Bank or Ditch	235	Hawthorn, ash, dogrose
H22	Native Hedgerow – Associated with Bank or Ditch	315	Ash, hawthorn, dogrose, field maple, elder
H23	Native Hedgerow	248	Elder, hawthorn
H24	Native Hedgerow – Associated with Bank or Ditch	420	Hawthorn, ash
H25	Native Hedgerow – Associated with Bank or Ditch	291	Hawthorn, dogrose
H26a	Native Hedgerow – Associated with Bank or Ditch	174	Field maple, hawthorn, ash, dogrose, elder, blackthorn
H26b	Native Hedgerow	252	Ash, hawthorn, elder
H27	Native Hedgerow – Associated with Bank or Ditch	182	Hawthorn, field maple, blackthorn
H28a	Native Hedgerow – Associated with Bank or Ditch	189	Elder, hawthorn, ash, dogrose
H28b	Native Hedgerow – Associated with Bank or Ditch	218	Blackthorn, hawthorn, elder, dogrose

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H29	Native Hedgerow – Associated with Bank or Ditch	232	Hawthorn, dogrose, elm, blackthorn, elder
H30	Native Hedgerow – Associated with Bank or Ditch	200	Hawthorn, elder, ash, field maple
H31a	Native Hedgerow – Associated with Bank or Ditch	246	Hawthorn, ash, elm
H31b	Native Hedgerow	133	Hawthorn
H32a	Native Hedgerow	198	Elder, hawthorn, ash, dogrose
<i>H32b</i>	Native Hedgerow	<i>184</i>	Hawthorn, ash, elder, dogrose
<i>H32c</i>	Native Hedgerow	<i>186</i>	Hawthorn, elder, dogrose, English oak
<i>H33</i>	Native Hedgerow – Associated with Bank or Ditch	<i>158</i>	Hawthorn, dogrose, elder, ash
<i>H34</i>	Native Hedgerow – Associated with Bank or Ditch	<i>128</i>	Hawthorn, blackthorn, dogrose, hazel
H35	Native Hedgerow – Associated with Bank or Ditch	170	Blackthorn, dogrose, hawthorn, ash, field maple, English oak
<i>H36</i>	Native Hedgerow – Associated with Bank or Ditch	<i>150</i>	Hawthorn, blackthorn, ash, field maple, elm
H37	Native Hedgerow – Associated with Bank or Ditch	266	Blackthorn, hawthorn, elder, dogrose, ash
H38	Native Hedgerow	121	Hawthorn, elder
H39	Native Hedgerow – Associated with Bank or Ditch	245	Field maple, blackthorn, ash, hawthorn, holly

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
<i>H40a</i>	Native Hedgerow – Associated with Bank or Ditch	206	Elder, hawthorn, ash, blackthorn
<i>H40b</i>	Native Hedgerow	159	Dogrose, hawthorn, elder
H41	Native Hedgerow	129	Wayfaring tree, field maple, ash, dogrose, blackthorn, hawthorn
<i>H42a</i>	Native Hedgerow	67	Hawthorn, ash, field maple, blackthorn
<i>H42b</i>	Native Hedgerow	72	Blackthorn, hawthorn, field maple, ash

Ditches

- 3.24 Dry (inundation) ditches were present throughout in association with the bases of hedgerows (H1a-b, H2-H5, H7, H8c, H9, H10, H11a-d, H12, H14b, H18a-c, H20a-b, H21, H22, H23, H24, H25, H27, H28a-b, H29, H33-H35, H37, H39 and H40a). The ditches were generally between 50-70cm wide and 30-50cm deep, lacking aquatic vegetation, with vegetation limited to common nettle great willowherb and hard rush, suggesting they only hold water after periods of heavy rainfall. As such, these have not been classed as ditches in the BNG assessment as they do not meet the required definition to be assessed in isolation from the hedges
- 3.25 A shallow field ditch in poor condition runs through the south-east of the site, feeding into an offsite subterranean drainage system. The nature of the channel is clearly straightened to serve as a field ditch. Hydrological monitoring and modelling indicate that the ground water level is generally below the depth of the ditch, and the feature is therefore not fed by ground.

Stream

- 3.26 Beyond the western boundary, a small tributary of the Diseworth brook runs from north to south. As the stream comes within 10m of the site, it is considered that the associated riparian zone extends into the site redline. The stream appears to be fed from attenuation and drainage features within the East Midlands Airport Complex, with a culverted section crossing under the A453 in the northwest corner of the site. The stream has straightened and reinforced channel sections and was classified as over-deep within the River Condition Assessment, resulting in a final condition score of fairly-poor.

Hardstanding

- 3.27 The A453 and its associated modified grassland (G4) verges formed the northern extent of the site.

Highways Works

Trees

- 3.28 Mature and semi-mature trees were present throughout, mainly in association with hedgerows and lines of trees.
- 3.29 Eight individual trees are located by Ashby Road South of junction 24 of the M1, with an addition two individual trees to the south of that. Four individual trees were present within the roundabout island off Beverley Road along the A53. Nine individual trees were present parallel to H24.

Broadleaved Woodland

- 3.30 Several areas of broadleaved woodland were associated with the highways infrastructure, largely around the Donington Services roundabout and along the A453 between the Donington Services roundabout and the Kegworth Bypass/A453 Junction. Woodland descriptions are provided in Table 4.

Table 4: Woodland Descriptions – Highway Works

Parcel	Description
W1	Part of a wider section of broadleaved woodland was recorded to the west of the of M1 northbound J23A slip road towards the Donnington Services roundabout. The woodland couldn't be assessed in full due to access restrictions and dense shrub layer. Two age classes of tree were recorded, and the trees appeared to be in good condition. Canopy species included oak and wild cherry, with blackthorn, hawthorn and dog rose present in the understory shrub layer. Bramble was present amongst the ground flora.
W2	Part of a wider section of broadleaved woodland was recorded to the east of the of M1 northbound J23A slip road towards the Donnington Services roundabout. One age class of tree was present with little open space within the woodland. Canopy species included silver birch, wild cherry, field maple, oak and hazel.
W3	A section of broadleaved woodland on an east facing slope to the east of the Donnington Services roundabout. The woodland comprised abundant hawthorn and lime spp., with frequent hazel and occasional wild cherry in the canopy. Beech and ash were rarely recorded in the canopy and the woodland had an understory layer of dog rose and dogwood.
W4	A patch of broadleaved woodland was present in the centre of the roundabout surrounded by an edge of scrub and other neutral grassland. The woodland could not be safely accessed but species included dominant maple spp., occasional ash and rarely present willow spp.
W5	A strip of broadleaved woodland was recorded along the western side of the A453 between the Donnington Services roundabout and the Kegworth Bypass/A453 Junction. A dry ditch ran through the centre of the woodland, parallel to the A453. A small stand of the woodland to the west was separated from the larger extent by a vehicle track. Canopy species comprised co-dominant ash and lime spp., with oak, elm, elder and field maple also present. The understorey comprised hawthorn, blackthorn and dogwood. A large amount of rubbish was present alongside the lay-by next to Diner 51. Male ferns, common nettle and harts tongue fern <i>Asplenium scolopendrium</i> were recorded amongst the understory, which comprised largely bare ground.
W6	A strip of broadleaved woodland plantation, approximately 7m in width, was present along the eastern side of the A453 between the Donnington Services roundabout and the Kegworth Bypass/A453 Junction. Rubbish had been discarded along some of the length where in proximity to the lay-by. Species comprised abundant ash and lime spp., frequent hawthorn and occasional field maple and <i>Prunus</i> spp.

Parcel	Description
W7	Young broadleaved woodland lined the M1 northbound which sloped up from the motorway to the A453. The woodland was approximately 4-5m in height and had little open space. Species included abundant oak and field maple and frequent hawthorn and blackthorn.
W8	Young broadleaved woodland with a similar composition to W7 continued along the edge of the M1 northbound road. Species comprised abundant oak, frequent wild cherry, occasional hawthorn and rarely present ash. The full extent of the woodland could not be accessed.
W9	A small area of broadleaved woodland was present which connected to a hedgerow running along the M1 northbound. Species included dominant ash with field maple, Norway maple, wild cherry, oak and hawthorn also present.
W10	A section of broadleaved woodland was present along the M1 southbound adjacent to a gantry. This section of woodland could not be accessed.
W11	Broadleaved woodland was present in the western compartment of the M1 J24 roundabout island. Species comprised oak, hazel, wild cherry, sycamore and hawthorn.
W12	A woodland edge which extends slightly into the redline from an area of offsite woodland, to the south-east of the M1 J24 roundabout island.

Mixed Scrub

- 3.31 Five parcels of mixed scrub were present along the highways areas. Mixed scrub descriptions are provided in Table 5.

Table 5: Mixed Scrub Descriptions – Highway Works

Parcel	Description
S4	An area of mixed scrub was present in the roundabout island of the Donnington Services roundabout which provided a gradual edge to the woodland parcel (W4). Species comprised dominated hawthorn and rarely present ash.

Parcel	Description
S5	A mixed scrub edge, approximately 4m in height, which developed offsite into woodland was present along the western edge of the Donnington Services roundabout. Species included hawthorn, hazel, dogwood, blackthorn, <i>Malus spp.</i> , lime spp., and oak.
S7	Two strips of mixed scrub along the edge of woodland were recorded either side of the public footpath running parallel along the A453. Scrub species included dogwood, hawthorn, blackthorn, field maple, elder and ash. A thin fringe of tall ruderal and forbs including St John's wort <i>Hypericum spp.</i> and willowherb were present along the footpath.
S10	An area of mixed scrub adjoins a block of bramble dominated scrub (S9) along the A453 northbound approaching the Kegworth Bypass/A453 Junction. The scrub had a well developed edge with scattered scrub and long grassland surrounding the mixed scrub parcel. Species included field maple, <i>Malus spp.</i> , hawthorn, and bramble.
S12	A block of newly planted mixed scrub was present along the southern side of Remembrance Way (A453). Species included hazel, maple spp., hawthorn, field maple, ash, and bramble. The scrub has a well developed edge with tall grassland and scattered scrub around the edges.
S16	Two areas of mixed scrub were present either side of the northern and southern slip roads for J23a of the M1. These areas of scrub could not be safely accessed during the survey.

Bramble Scrub

- 3.32 Six areas of bramble dominated scrub (S6, S8, S9, S13, S14, and S15) were present within the highways boundary. The largest area of bramble scrub was present along the western side of the A453 between the Donnington Services roundabout and the Kegworth Bypass/A453 Junction. Other small areas of bramble scrub were largely located within and around the roundabouts.

Other Neutral Grassland

- 3.33 Several parcels of other neutral grassland were present along road verges and in land between the A453 and the M1. Descriptions of the other neutral grassland habitat are provided in Table 6.

Table 6: Other Neutral Grassland Descriptions – Highway Works

Parcel	Description
G6	A strip of grassland adjacent to G5 along the A453, was categorised as other neutral grassland due to the presence of species indicative of higher distinctiveness grassland. These included lesser knapweed <i>Centaurea nigra</i> , common vetch <i>Vicia sativa</i> , wild carrot <i>Daucus carota</i> , meadow vetchling <i>Lathyrus pratensis</i> , perforate St John's wort <i>Hypericum perforatum</i> and a single pyramidal orchid <i>Anacamptis pyramidalis</i> .
G7	A section of grassland along the A453, north of the main site, was categorised as other neutral grassland. The grassland had approximately 9 species per m ² and a varied sward height. Scrub and bare ground were absent. Grass species included frequent red fescue <i>Festuca rubra</i> and perennial ryegrass <i>Lolium perenne</i> with occasional Yorkshire fog <i>Holcus lanatus</i> and creeping bent <i>Agrostis stolonifera</i> . Forbs included dominant creeping cinquefoil <i>Potentilla reptans</i> , frequent common bird's-foot trefoil <i>Lotus corniculatus</i> , selfheal <i>Prunella vulgaris</i> , black medick <i>Medicago lupulina</i> , common ragwort <i>Jacobaea vulgaris</i> and white clover <i>Trifolium repens</i> , and rarely recorded species including lesser knapweed <i>Centaurea nigra</i> , oxeye daisy <i>Leucanthemum vulgare</i> and forget-me-not <i>Myosotis</i> spp.
G9	Areas of other neutral grassland within and around the services roundabout were similar in terms of characteristics and species composition and therefore assessed as one. Sward height was consistent (>20cm) and no bare ground was present. here was an average of 9 species per m ² . Grass species included Yorkshire fog, creeping bent, false oat grass <i>Arrhenatherum elatius</i> , red fescue, crested dog's-tail <i>Cynosurus cristatus</i> and cock's-foot <i>Dactylis glomerata</i> . Forbs included bristly oxtongue <i>Helminthotheca echioides</i> , spear thistle, mugwort and field bindweed. A variety of forbs indicative of higher distinctiveness grassland were also present including oxeye daisy, lesser knapweed, yarrow <i>Achillea millefolium</i> , wild carrot <i>Daucus carota</i> , common bird's-foot trefoil, common mallow <i>Malva sylvestris</i> , common centaury <i>Centaureum erythraea</i> , hairy tare <i>Vicia hirsuta</i> and creeping cinquefoil.
G12	A strip of other neutral grassland with ~8 species per m ² was present on the stretch of the A453 running between the Donnington Services roundabout and the Kegworth Bypass/A453 Junction. The grassland was encroached with bramble scrub along the southern sections. Yorkshire fog was the dominant grass species with creeping bent frequent amongst the sward. Forb species included abundant common ragwort, locally abundant bramble and occasional white clover and common bird's-foot trefoil. Lesser knapweed, oxeye daisy, hedge bedstraw <i>Galium mollugo</i> and common centaury were rarely observed.

Parcel	Description
G15	A circle of mown modified grassland was present in the Kegworth Bypass/A453 Junction. The grassland had on average 10 species per m ² . SUD1 was present in the centre of the grassland which had not been mown. Species comprised, but were not limited to, abundant perennial ryegrass, frequent white clover, hop trefoil <i>Trifolium campestre</i> and lesser trefoil. Yorkshire fog, creeping bent, selfheal and lesser knapweed.
G21	A strip of other neutral grassland was present to the east of the Kegworth Bypass/A453 Junction. Sward height was approximately 30cm-70cm with little bare ground present. There were approximately 10 species per m ² . The western side of the grassland parcel slopes up towards the road. A SUD feature was present in the centre of the grassland. Scattered scrub had been planted over some of the grassland. Grass species included crested dog's-tail, perennial ryegrass, creeping bent, fescue spp., and false oat grass. Forb species included abundant wild carrot, frequent oxeye daisy, occasional yarrow, lesser knapweed and dog rose <i>Rosa canina</i> .
G35	Six compartments of other neutral grassland with a similar species composition to G36, were present within and around the junction 24 roundabout. One strip of grassland extended northwards along the M1 southbound J24 sliproad. The grassland had on average 9 species per m ² and a varied sward height with no bare ground or scrub encroachment. The sections within the roundabout island could not be accessed, however, they looked to be a similar composition to the other parcels of G35. In general oxeye daisy was found to be abundant and grass species including Yorkshire fog, red fescue and false oat grass, all frequent amongst the sward.
G36	Two sections of other neutral grassland were present to the east of the junction 24 roundabout, either side of a footpath. The grassland had approximately 10 species per m ² . The sward had not been recently mown and bramble scrub had encroached the grassland. False oat grass and cock's foot were co-abundant and oxeye daisy was frequently recorded across the sward. Species indicative of higher distinctiveness grassland including yarrow, wild carrot, common bird's-foot trefoil, and lesser knapweed were also present.
G38	A strip of other neutral grassland was present within the central reservation of the S453 between the Kegworth Bypass/A453 Junction and the junction 24 roundabout. The grassland could not be accessed, however, the grassland appeared to have a similar composition to G35.

Parcel	Description
G39	A strip of other neutral grassland was present along the A50. The sward was dominated by false oat grass, with other species including cock's foot, creeping thistle, bindweed <i>Convolvulus</i> spp., hogweed <i>Heracleum sphondylium</i> , mugwort <i>Artemisia vulgaris</i> , teasel <i>Dipsacus fullonum</i> , red clover and yarrow.
G40	Two strips of grassland were present along the western side of the M1 southbound J24 slip road. The grassland could not be accessed, however, its composition looked similar to that of G35.

Modified Grassland

- 3.34 Several areas of modified grassland were present along the highways land. The majority comprised managed areas of amenity grassland around the SEGRO EMG1 Management Suite and road verges along the A453. Modified grassland descriptions are provided in Table 7.

Table 7: Modified Grassland Descriptions – Highway Works

Parcel	Description
G5	A strip of modified grassland was present along part of the A453 up until the start of the services roundabout. Species included abundant perennial ryegrass and white clover, with occasional Yorkshire fog, creeping bent, red clover <i>Trifolium pratense</i> , meadow buttercup <i>Ranunculus acris</i> , and common bird's-foot trefoil.
G8	Two strips of modified grassland were present either side of a path along the Donnington services roundabout. Sward height was varied and scrub was absent. Species included perennial ryegrass, creeping bent, fescue spp., common daisy <i>Bellis perennis</i> , bristly oxtongue, white clover, common bird's-foot trefoil and yarrow.
G10	An area of modified grassland was present within the Donnington services roundabout island.

Parcel	Description
G11	A public footpath comprised modified grassland was present parallel to the A453 linking the Donington services roundabout to the back of East Midlands Airport. Seven species per m ² were present on average. The sward was short due to foot-fall, however, no bare ground was present at the time of survey. Grass species included abundant perennial ryegrass, occasional Yorkshire fog and frequent creeping bent. Along the edges of the path creeping thistle <i>Cirsium arvense</i> , common nettle <i>Urtica dioica</i> and willowherb <i>Epilobium spp.</i> , were locally frequent-abundant. Along the path, forbs included occasional white clover, selfheal, creeping buttercup <i>Ranunculus repens</i> and red bartsia <i>Odontites vernus</i> . A single common spotted orchid <i>Dactylorhiza fuchsia</i> was present along the side of the path.
G13	A strip of modified grassland was present along the A453 central reservation between the Donington services and the Kegworth Bypass/A453 Junction. Seven species per m ² were present on average. The grassland was dominated by perennial ryegrass, with creeping bent noted as frequent and timothy as occasional amongst the sward. Forbs included rarely observed common daisy, dandelion <i>Taraxacum</i> agg., common ragwort and the occasional yarrow and selfheal.
G14	Three small segments of species poor modified grassland with short sward heights were located around the Kegworth Bypass/A453 Junction. Species composition included abundant perennial ryegrass, white clover and lesser trefoil, with occasional selfheal.
G16	A mown compartment of species poor modified grassland was present to the north of G15 which surrounded SUD2. Species composition was similar to that of G13, with dominant red fescue and abundant white clover.
G17	A small area of species poor modified grassland was present to the west of the Kegworth Bypass/A453 Junction. The grassland was dominated by perennial ryegrass with frequent white clover.
G22	A small patch of modified grassland was present split in two by a public footpath to the south-east of the Kegworth Bypass/A453 Junction. Species composition was similar to that of G13.
G32	Two strips of species poor modified grassland were present along a path to the west of the junction 24 roundabout.

Tall Forb

- 3.35 Two strips of tall forb (TF4) were present along the grass footpath adjacent to the A453 along the boundary of East Midlands Airport. Species included willowherb spp., creeping thistle, common nettle, willow scrub, colt's foot *Tussilago farfara* and hairy tare.

Sustainable Drainage Features

- 3.36 Three Sustainable drainage systems (SuDS) attenuation features were located within and around the Kegworth Bypass/A453 Junction .
- 3.37 SuDS1 was recorded within the Kegworth Bypass/A453 Junction. The SuDS feature was dry at the time of survey. Species included great reedmace *Typha latifoli*, common reed *Phragmites australis*, Yorkshire fog, great willowherb *Epilobium hirsutum*, and oxeye daisy.
- 3.38 SuDS2 was located within the central reservation to the north of the Kegworth Bypass/A453 Junction had a similar species composition to SuDS1 but with abundant common ragwort. The SuDS feature was dry at the time of survey
- 3.39 SuDS3 was located within G21, which was dry at the time of survey. The SuDS feature was culverted and then extended into a dry grass dominated ditch which was assessed as other neutral grassland. Species included great reedmace, dock *Rumex* spp., willowherb spp., and willow saplings.

Arable

- 3.40 A single arable field was located within the highway Works. The field comprised an Italian ryegrass *Lolium multiflorum* ley with other species including mayweed, annual meadow grass *Poa annua*, nettle, spear thistle and white clover present around the margins or sparser areas of ryegrass. Sward height was approximately 20-30cm.

Hardstanding

- 3.41 Areas of hardstanding comprised a network of roads including large parts of the A453 and associated footpaths.

Hedgerows and Line of Trees

- 3.42 There were 23 hedgerows and five lines of trees present along the highways.
- 3.43 No hedgerows were considered to be species-rich although they all comprised at least 80% native woody species and therefore qualify as Habitats of Principal Importance (HPI) under S41 of the NERC Act.
- 3.44 Details of hedgerows along highways areas are presented in Table 8.

Table 8: Hedgerow Descriptions – Highway Works

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H43a	Native Hedgerow	187	Not accessed
H43b	Native Hedgerow	476	Not accessed
H44a	Native Hedgerow	217	Field maple, hawthorn, ash, blackthorn, dogwood
H44b	Native Hedgerow	199	Field maple, hawthorn, ash, blackthorn, dogwood
H45	Native Hedgerow	143	Not accessed
H46	Native Hedgerow	180	Ash, hawthorn, elder, blackthorn, field maple
H47	Native Hedgerow	914	Hawthorn, hazel, wild cherry, field maple, blackthorn, willow spp.
H48	Non-native and Ornamental Hedgerow	32	Leylandii
H49	Native Hedgerow – Associated with Bank or Ditch	52	Hawthorn
H50	Native Hedgerow	40	Blackthorn, hawthorn
H51	Native Hedgerow	28	Blackthorn, hawthorn
H52	Native Hedgerow	409	Not accessed
H55	Native Hedgerow	150	Hawthorn
H56	Native Hedgerow	944	Hawthorn, elder, field maple, oak
H57	Native Hedgerow	540	Hawthorn, wild cherry, elder, ash, maple spp.

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Main Canopy Species
H58	Native Hedgerow	478	Not accessed
H62	Native Hedgerow	112	Hawthorn, <i>Malus</i> spp., oak spp., elder
H63	Native Hedgerow	137	Field maple, hazel, blackthorn, hawthorn, elder, sycamore
H64	Native Hedgerow	80	Blackthorn, elder, hawthorn
H65a	Native Hedgerow	73	Ash, blackthorn, elder, hawthorn
H65b	Native Hedgerow	20	Ash, blackthorn, elder, hawthorn
H66	Native Hedgerow	108	Ash, blackthorn, elder, hawthorn
H67	Native Hedgerow	126	Not accessed
H68	Native Hedgerow	46	Privet
H69	Native Hedgerow	42	Privet
H70	Native Hedgerow	59	Hawthorn, sycamore
LOT1	Line of Trees	68	Blackthorn, ash, lime spp., dogwood, field maple, <i>Prunus</i> spp.
LOT2	Line of Trees	144	Oak spp
LOT3	Line of Trees	44	Wild cherry, oak spp.
LOT4	Line of Trees	64	Ash, oak, field maple
LOT5	Line of Trees	482	Oak spp., hawthorn, willow spp., ash, sycamore, field maple
LOT6	Line of Trees	70	Hawthorn, <i>Prunus</i> spp., holly

EMG1 WorksTrees

- 3.45 Nine small newly planted trees were present within the amenity area around the SEGRO EMG1 Management Suite office.

Mixed Scrub

- 3.46 Newly planted mixed scrub (S11), still encased in tree guards, had been planted along the access road to EMG1. Scrub species included *Prunus* spp., *Salix* spp., hazel, maple spp., and blackthorn. A hedgerow was present along the roadside of the scrub and other neutral grassland, which had been mown, along the other.

Other Neutral Grassland

- 3.47 Areas of other neutral grassland were recorded surrounding the rail freight to the east of the EMG1 site and around the SUDs to the north of the EMG1 site. Species were indicative of a recently sown seed mix planted as part of the development of EMG1. Descriptions of each parcel of other neutral grassland are provided in Table 9.

Table 9: Other Neutral Grassland Descriptions – EMG1 Works

Parcel	Description
G20	A compartment of other neutral grassland present to the west of the Kegworth Bypass/A453 Junction comprised short sward with no areas of bare ground or scrub. Yorkshire fog and perennial ryegrass were recorded as abundant with creeping bent, red fescue and crested dog's-tail all occasional. Forbs included abundant white clover, locally frequent lesser knapweed, occasional oxeye daisy, locally occasional lady's bedstraw, and rarely recorded common bird's-foot trefoil, wild carrot, yellow wort <i>Blackstonia perfoliate</i> and wool ruff <i>Galium odoratum</i> .

Parcel	Description
G25	A large parcel of other neutral grassland was present along the slope surrounding the rail freight. Sward height was generally long (approx. 50cm to 1m) but had pockets of grassland with shorter sward. There was just under 10 species per m ² on average. Bare ground was not present and there was a notable amount of scattered scrub cover which exceeded 5% of the total area. Grass species comprised abundant creeping bent <i>Agrostis stolonifera</i> , and Yorkshire fog <i>Holcus lanatus</i> , frequent crested dogs-tail <i>Cynosurus cristatus</i> , locally frequent false oat grass <i>Arrhenatherum elatius</i> , and occasional perennial ryegrass <i>Lolium perenne</i> . Forbs included a variety of species indicative of higher distinctiveness grassland including locally abundant lesser knapweed <i>Centaurea nigra</i> , frequent wild carrot <i>Daucus carota</i> , locally frequent lady's bedstraw <i>Galium verum</i> and oxeye daisy <i>Leucanthemum vulgare</i> , occasional yarrow <i>Achillea millefolium</i> , and rarely present common birds-foot trefoil <i>Lotus corniculatus</i> , great burnet <i>Sanguisorba officinalis</i> , and kidney vetch <i>Anthyllis vulneraria</i> .
G26	An area of grass dominant other neutral grassland was present to the west of G25. Creeping bent was abundant with Yorkshire fog and common couch <i>Elymus repens</i> were frequent amongst the sward. Forbs included locally frequent oxeye daisy with perforate St John's worth, red campion and ribwort plantain rare amongst the sward.
G27	An area of grassland amongst G25 was dominated by common bird's-foot trefoil, with frequent black medick <i>Medicago lupulina</i> and occasional wild carrot. This compartment was visibly different from G25 and was therefore assessed separately. Forbs dominated and sward height was varied. There was no scrub encroachment and bare ground account for ~5% of ground cover.
G28 / G30 / G31	Two areas of other neutral grassland parcels (G28 +G30) surrounded SUDs features (SUD4, SUD5 and SUD6). Leading to G30, a strip of other neutral grassland with a similar species composition was present along the road (G31) was present. Some of the grass had been mown which provided a varied sward height, with patches of bare ground present. There were ~7 species per m ² . Yorkshire fog was abundant with frequent perennial ryegrass, fescue <i>Festuca</i> spp., and occasional crested dog's-tail. Forbs included locally abundant red clover <i>Trifolium pratense</i> , locally frequent wild carrot and tufted vetch <i>Vicia cracca</i> , occasional curled dock <i>Rumex crispus</i> , ribwort plantain <i>Plantago lanceolata</i> , white clover <i>Trifolium repens</i> and lesser trefoil <i>Trifolium dubium</i> and rarely present lesser knapweed, salad burnet <i>Sanguisorba minor</i> , lady's bedstraw and smooth tare <i>Vicia tetrasperma</i> .

Modified Grassland

- 3.48 Modified grassland was largely present along the roadsides within EMG1 where management had been more intensive. Parcels of grassland that were species poor, or had fewer examples of species indicative of higher distinctiveness grassland, were also categorised as modified grassland. Descriptions for each parcel of modified grassland are provided in Table 10.

Table 10: Modified Grassland Descriptions – EMG1 Works

Parcel	Description
G18 / G19	Two strips of mown species poor grassland were present to the north of the SEGRO EMG1 Management Suite. Perennial ryegrass was dominant amongst the sward alongside frequent lesser trefoil and occasional white clover.
G29	A small parcel of modified grassland fenced off as part of a conservation area was dominated by Yorkshire fog and abundant perennial ryegrass. Bent <i>Agrostis</i> grass was also abundant amongst the sward. There was <20% of forbs and there was an average of 3 species per m ² . Bee hives were present in the western part of the grassland parcel.
G32	A strip of species poor modified grassland was present between the roadside and large area of hardstanding. The grass was mown with a sward height <7cm. Perennial ryegrass was dominant with white clover and lesser trefoil both frequent.
G33	An area of modified grassland, with an average of 5 species per m ² , characterised the bund along the north-eastern site boundary. Grass species included abundant Yorkshire fog and frequent perennial ryegrass and creeping bent, and locally frequent false oat grass. Forbs included locally frequent creeping thistle, occasional ribwort plantain and wild carrot, with creeping buttercup <i>Ranunculus repens</i> , common vetch <i>Vicia sativa</i> and spear thistle <i>Cirsium vulgare</i> all rare throughout the sward.
G33a	An area of modified grassland with established whip planting was located along the western end of the bund along the north-western boundary, adjacent to G33. The recent whip planting did not account for 75% ground cover and so was defined under UKHab 2.0 as modified grassland with scattered scrub as a secondary code. Sward height was approximately 70cm. Species included dominant Yorkshire fog, abundant red fescue, and rarely present perennial ryegrass, spear thistle, bristly oxtongue <i>Helminthotheca echinoides</i> , and common ragwort. Established whip species included willow <i>Salix</i> spp., hazel <i>Corylus avellana</i> , oak <i>Quercus</i> spp., silver birch <i>Betula pendula</i> , and holly <i>Ilex aquifolium</i> .

Parcel	Description
G34	A patch of modified grassland remained untouched amongst a larger area of bare ground. The grass had an average of 6 species per m ² and a sward height of approximately 20-40cm. Perennial ryegrass was abundant alongside white clover and mayweed <i>Tripleurospermum</i> spp. Tufted vetch was frequent amongst the sward with occasional timothy <i>Phleum pratense</i> , smooth tare and hairy tare <i>Vicia hirsuta</i> .
G41	A small area of modified grassland was present.

Sustainable Drainage Features

- 3.49 Three sustainable drainage features (SUDs) were present toward the north of the EMG1 Works site boundary. Species across SUD4, SUD5, and SUD6 were similar and included common reed *Phragmites australis*, hard rush *Juncus inflexus*, great reedmace *Typha latifolia*, horsetail *Equisetum* spp., greater willowherb *Epilobium hirsutum*, creeping cinquefoil *Potentilla reptans*, red shank *Persicaria maculosa* and toad rush *Juncus bufonius*.

Ephemeral

- 3.50 An area of ephemeral vegetation (E1) was present in the EMG1 Works site boundary which was present to the south of the EMG1 Works site boundary. Approximately 40-50% of the ground was free of vegetation. Vegetation amongst the areas of bare ground included mayweed, perennial ryegrass, wild radish *Raphanus raphanistrum*, rough meadowgrass *Poa trivialis*, tufted vetch, cock's foot *Dactylis glomerata* and common mouse ear *Cerastium fontanum*.

Artificial Unvegetated-Unsealed Surface

- 3.51 A large area of artificial unvegetated- unsealed surface (AU1) was present to the south of the EMG1 Works site boundary. Less than 10% vegetation was present in this area and comprised soil disturbed by earth works.

Hardstanding

- 3.52 Areas of hardstanding comprised the freight exchange in the centre of EMG1 Works site, a series of roads connecting the site and the site office and associated carpark to the south of the Site.

Hedgerows

- 3.53 There were seven hedgerows present within the EMG1 Works site.
- 3.54 No hedgerows were considered to be species-rich however all comprised at least 80% native woody species and therefore qualify as Habitats of Principal Importance (HPI) under S41 of the NERC Act.
- 3.55 Details of hedgerows along Highways areas are presented in Table 11.

Table 11: Hedgerow Descriptions – EMG1 Works

Hedgerow Number	Hedgerow Type	Approximate Length (m)	Canopy Species
H53	Native Hedgerow with Trees	98	Elm, small-leaved lime, birch
H54	Native Hedgerow with Trees	211	Blackthorn, hawthorn, hazel
H59	Native Hedgerow	95	Not assessed
H60a	Native Hedgerow	16	Hawthorn, hazel, field maple
H60b	Native Hedgerow	7	<i>Prunus</i> spp.
H61	Native Hedgerow	166	Hawthorn, elm, rowan, <i>Prunus</i> spp.

Protected Species

Amphibians

- 3.56 Records of GCN, smooth newts, common frogs and common toads were returned as part of the desk study. GCN and smooth newts recorded within the EMG2 Project Order Limits.
- 3.57 The EMG2 Main site and Community Park provides suitable aquatic habitat for amphibians in field ponds and ditches. Suitable on-site terrestrial habitat is limited, however a network of hedgerows does provide connectivity to off-site habitat. A medium population of GCN have been recorded in ponds located adjacent to the site within the Donington Park Services area. The supporting ecological documentation (Tyler Grange 2024) for the “*Land South of A453*” application (24/00727/OUTM) includes eDNA results confirming GCN presence in on-site pond P2.
- 3.58 The Highway Works area contained limited areas of suitable terrestrial habitat along hedgerows, woodland, scrub and some restricted areas of tussocky grassland.
- 3.59 The EMG1 Works area included a SuDs feature which may provide a seasonal aquatic resource. Areas of suitable terrestrial habitat along hedgerows, woodland, scrub and some restricted areas of tussocky grassland within wider managed areas.

Badgers

3.60

[REDACTED]

Bats

3.61

[REDACTED]

Birds

- 3.62 The EMG2 Project Order Limits has potential to support foraging and breeding arable and generalist bird species assemblages. An assessment of bird activity is provided in the separate bird report (FPCR, 2025).

Invertebrates

- 3.63 The EMG2 Project Order Limits has potential to a range of invertebrate assemblages. An assessment of invertebrate activity is provided in the separate invertebrate report (Kirby-Lambert, 2025).

Otter and Water vole

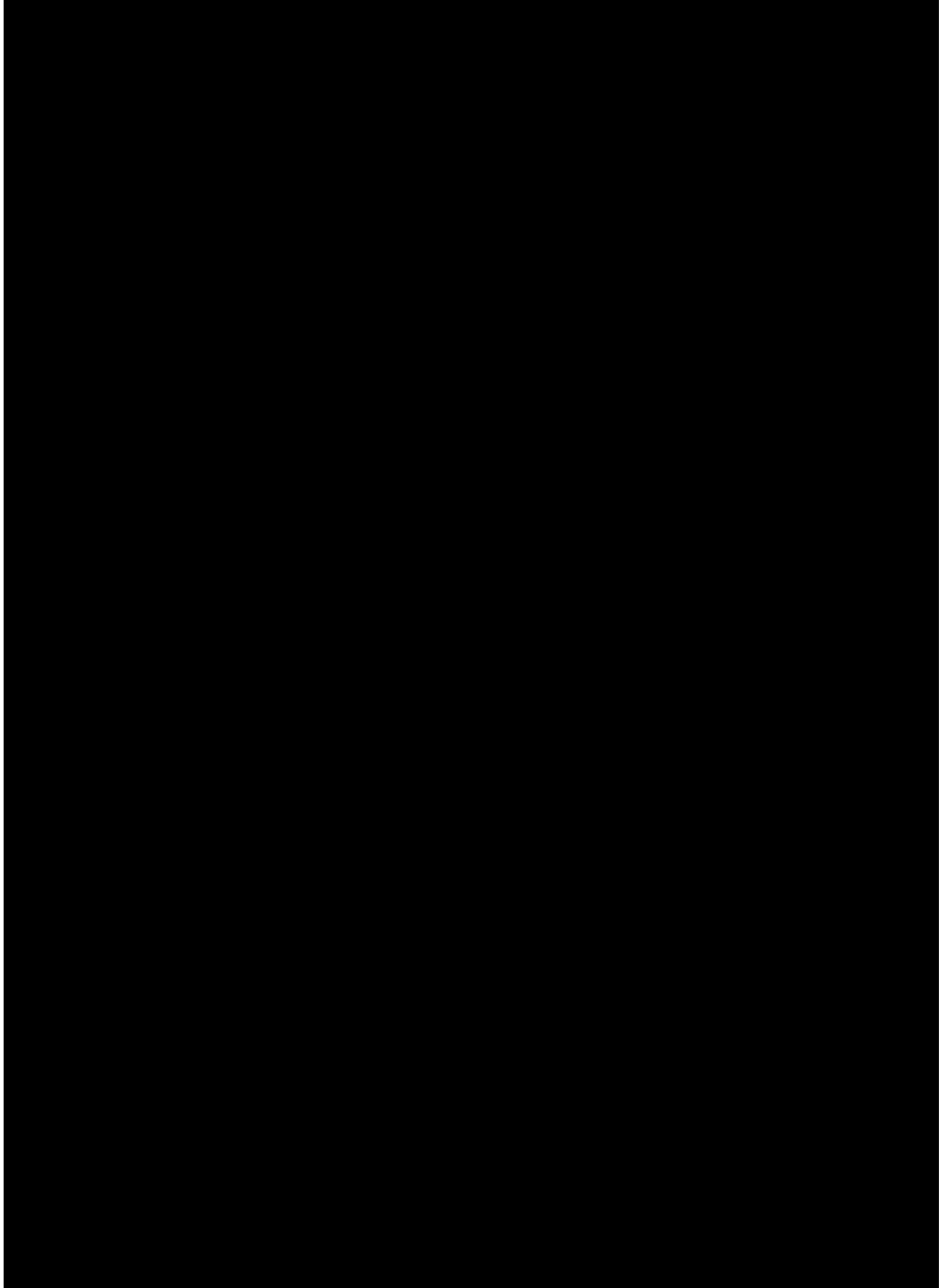
3.64

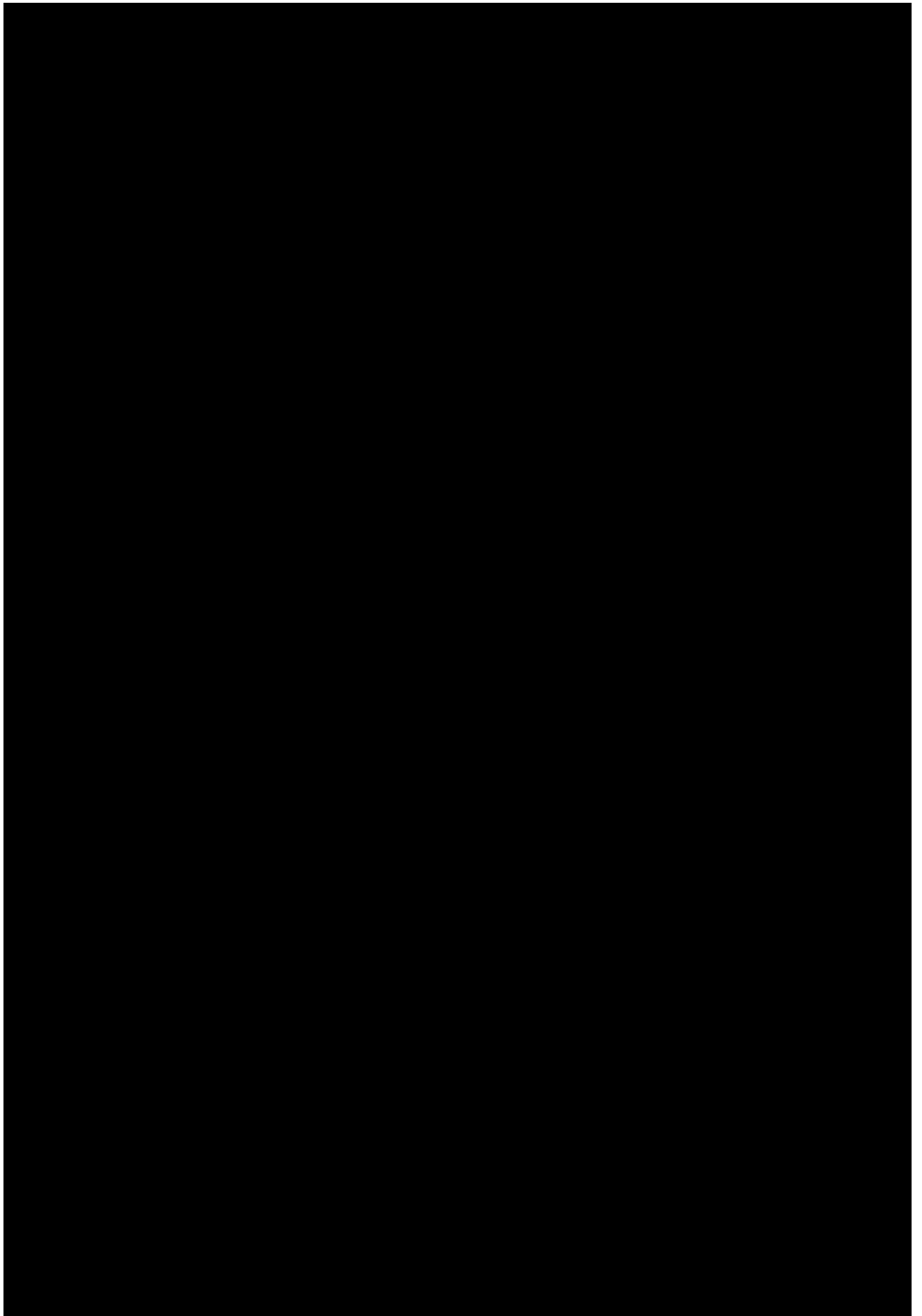
[REDACTED]

Reptiles

- 3.65 The EMG2 Project Order Limits includes suitable commuting, foraging and refuge habitats for reptiles, however connectivity to wider areas of suitable habitat is limited. An assessment of reptile activity is provided in the separate reptile report (FPCR, 2025).

APPENDIX A – RECORDS OF PROTECTED/NOTABLE SPECIES WITHIN 1KM





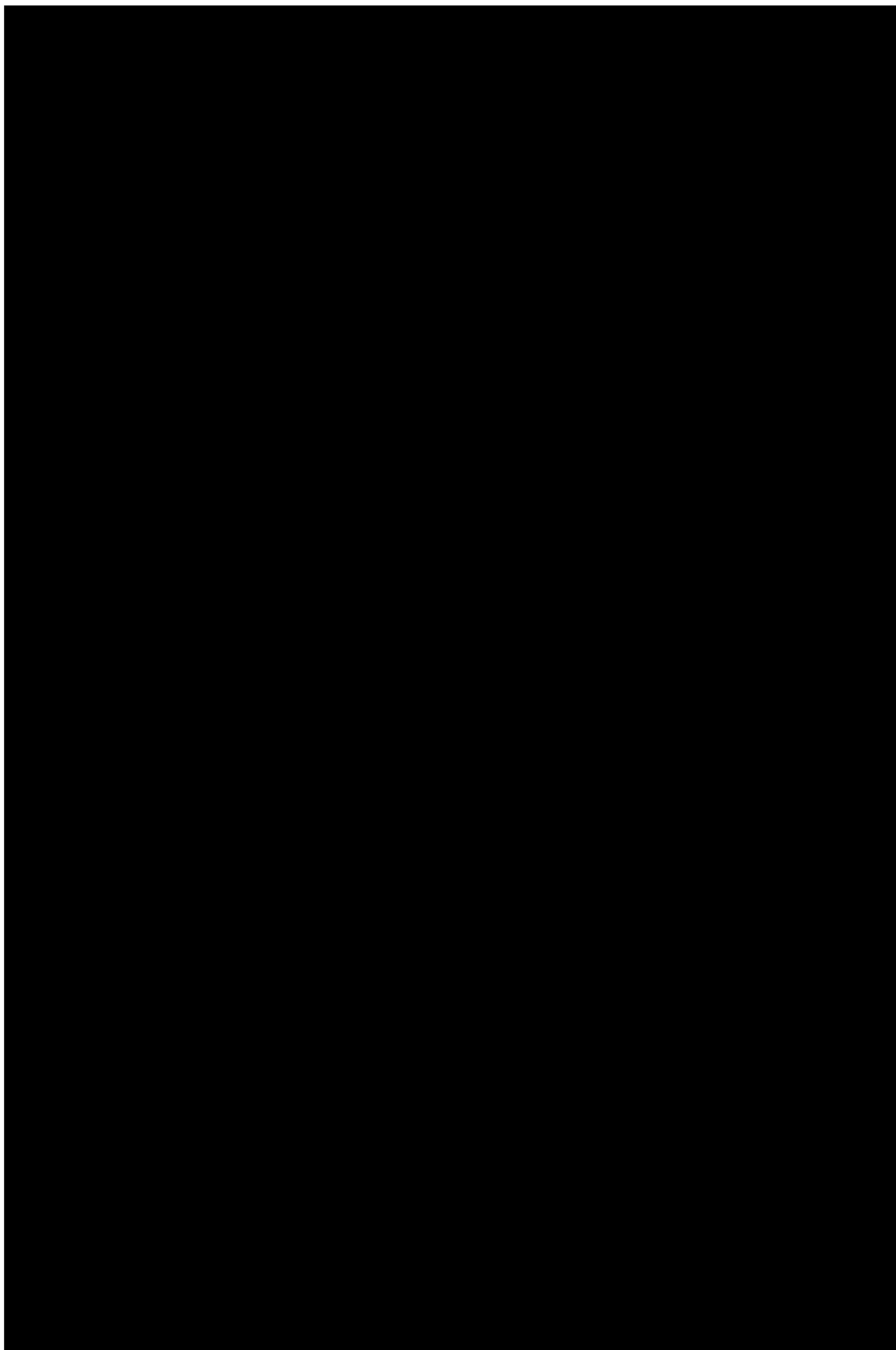
1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

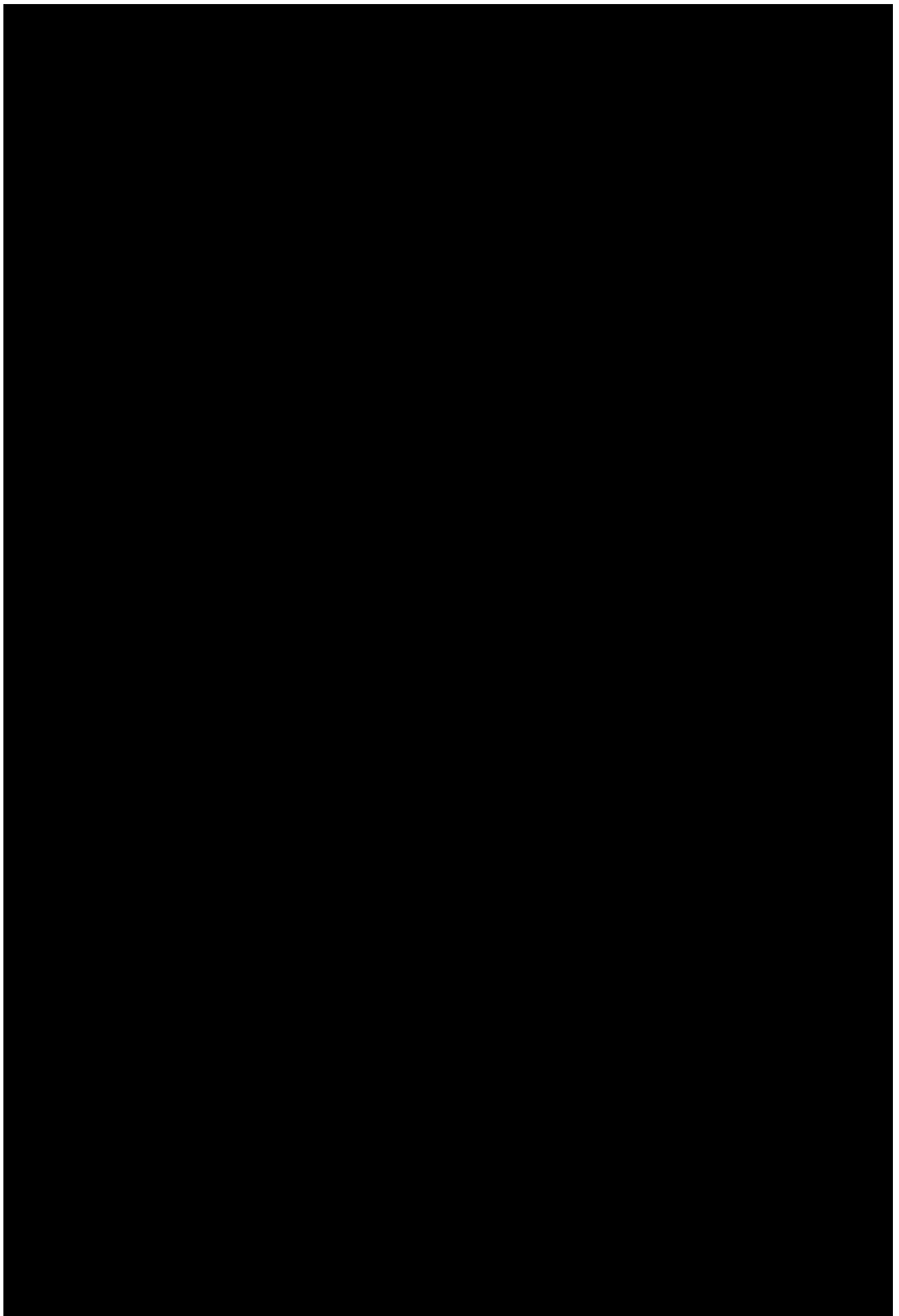


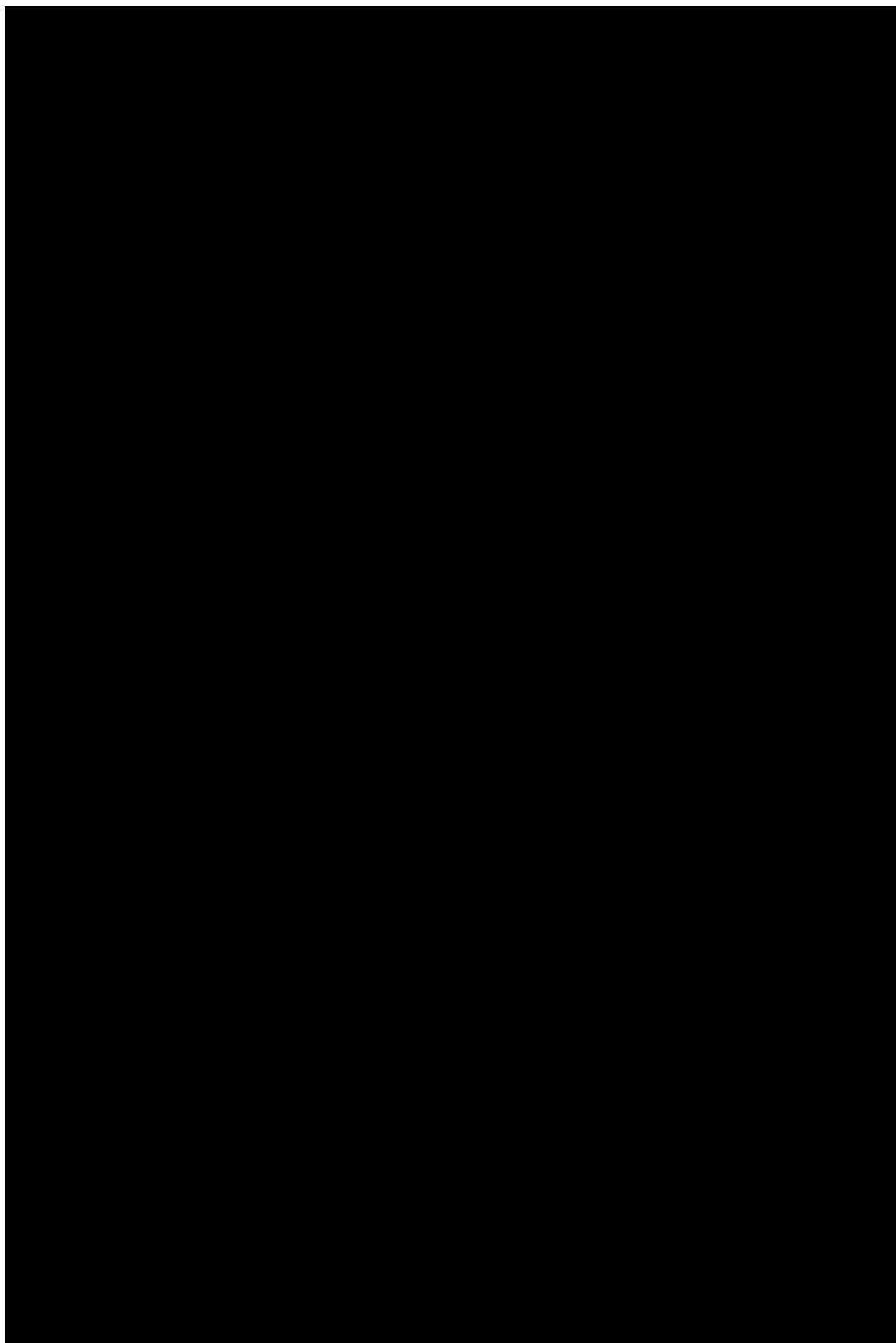
APPENDIX B – BOTANICAL SPECIES LIST

Grassland

G1: Modified Grassland







the 1990s, the incidence of *S. flexneri* has increased in the United Kingdom [10]. In the United States, *S. flexneri* has been reported to be the most common serotype of *S. flexneri* isolated from children with acute colitis [11].

There is a paucity of data on the epidemiology of *S. flexneri* in the United Kingdom. In the 1980s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [12]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

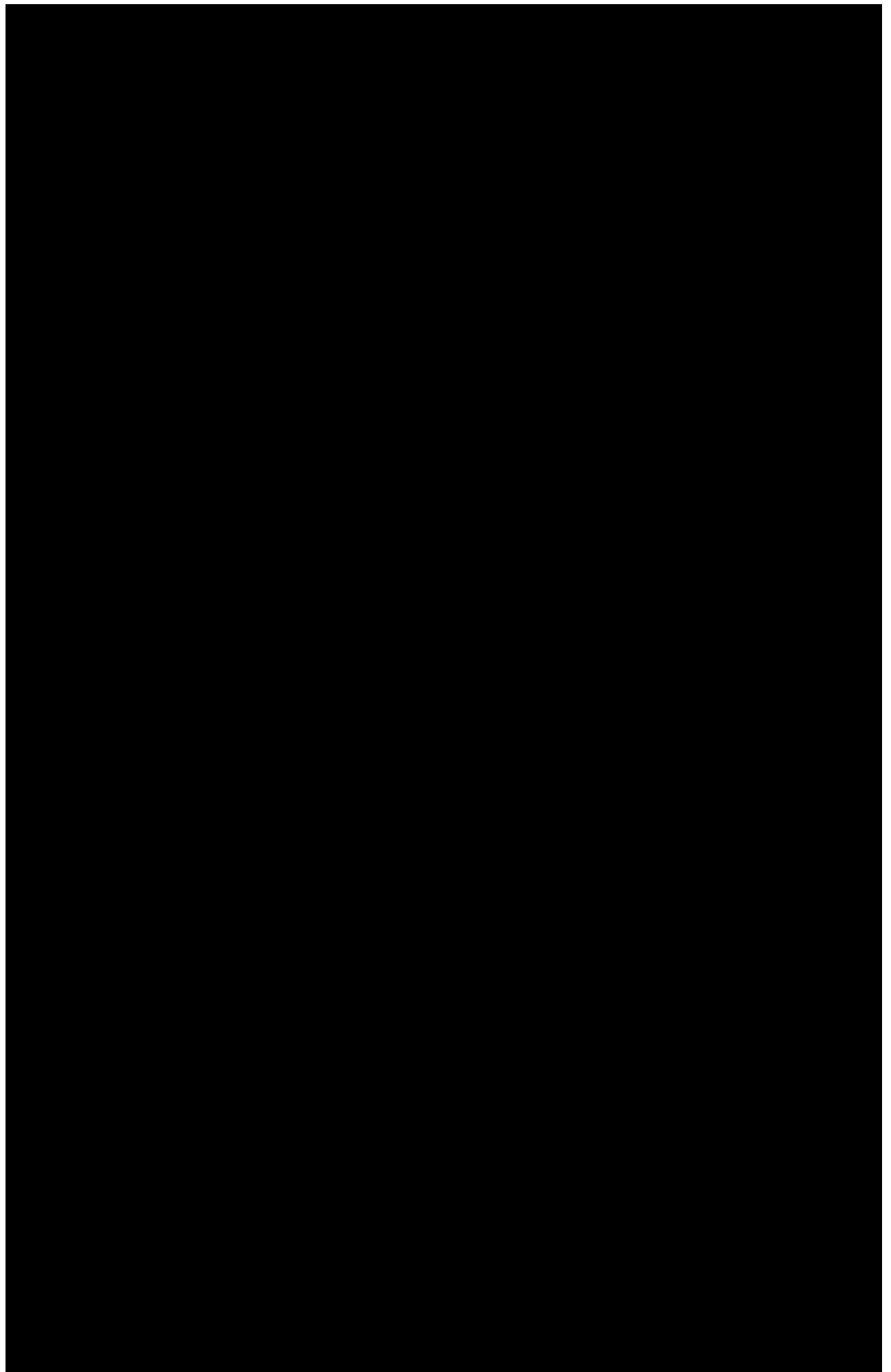
In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

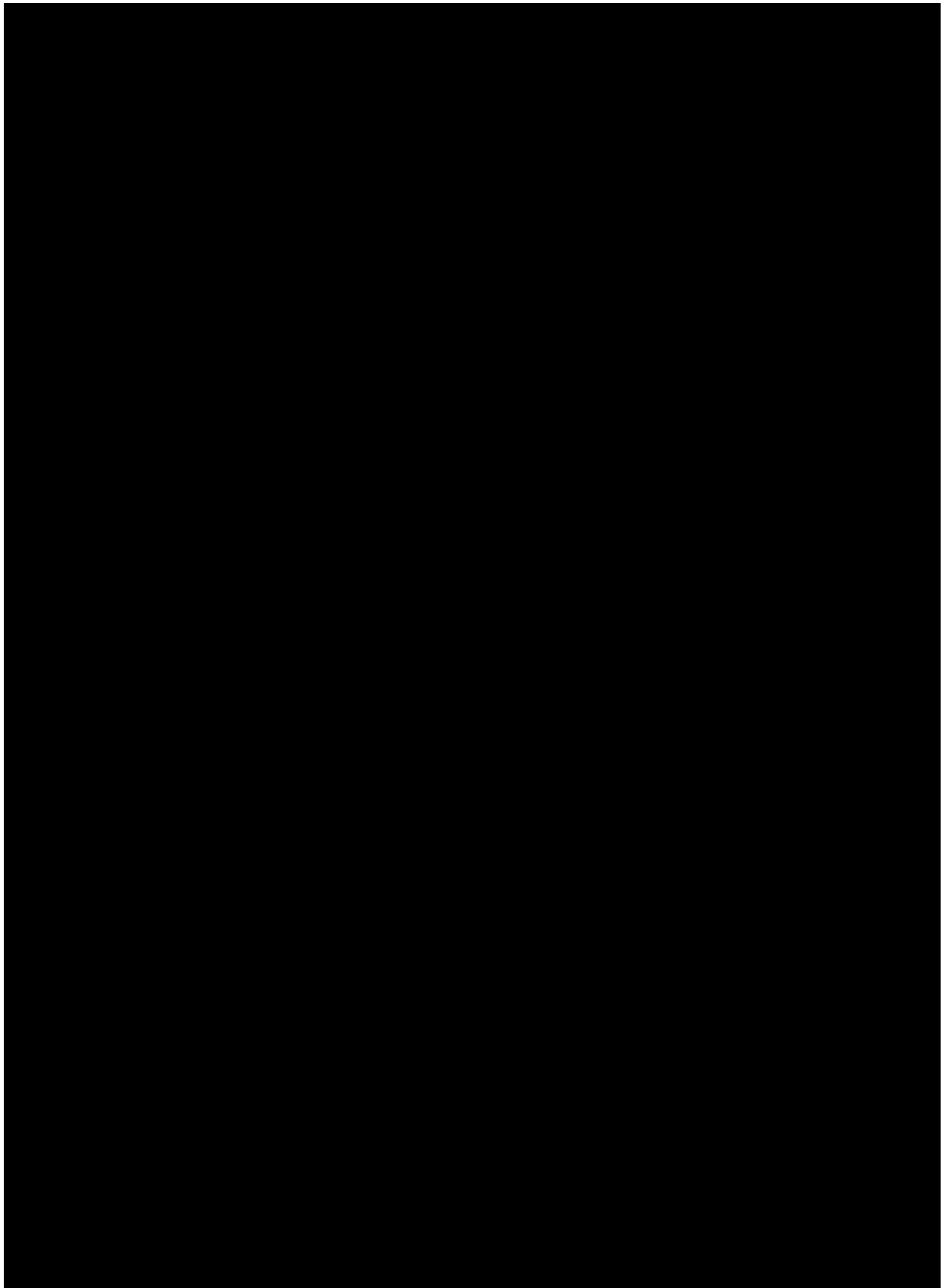
In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

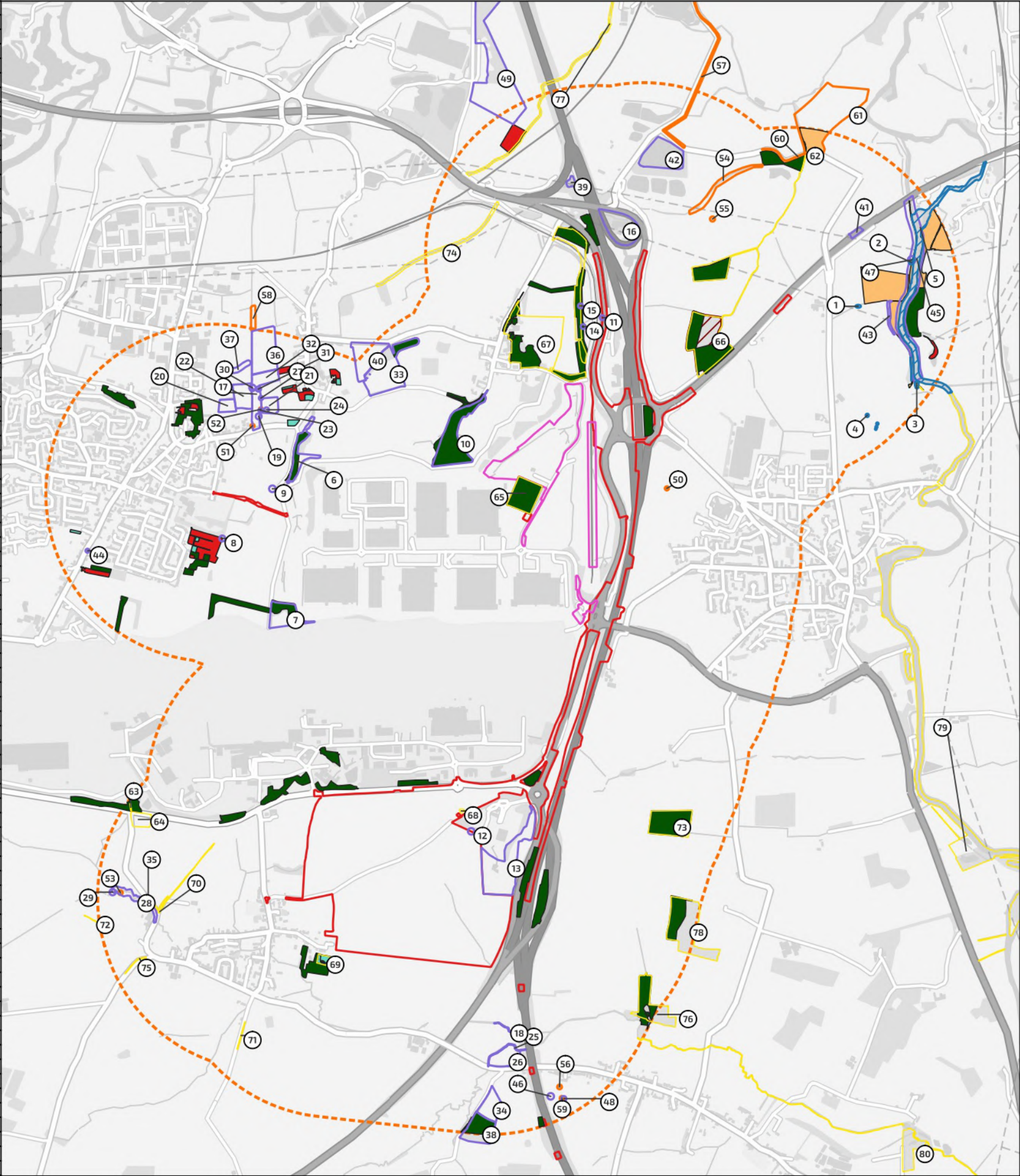
In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].

In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most commonly isolated serotype of *S. flexneri* from patients with acute colitis in the United Kingdom [13].





Label	Name
1	Long Lane Willows, LWS
2	Ratcliffe Bridge willow, LWS
3	Kegworth Bridge Hedge & Willows, LWS
4	Long Lane Mature Trees, LWS
5	River Soar, LWS
6	Castle Donington Pasture, Woodland & Stream, cLWS
7	Castle Donington Grassy Scrub, cLWS
8	Castle Donington Oak 2, cLWS
9	Castle Donington Oak 1, cLWS
10	The Dumps, cLWS
11	Lockington (EMG) Oak 143, cLWS
12	Diseworth, Donington Park Services M1 J23A, ash trees, cLWS
13	M1 J23A Donington Park Services grassland and scrub, cLWS
14	Lockington (EMG) Oak 145, cLWS
15	Lockington (EMG) Oak 144, cLWS
16	M1/A50 Junction Ponds and Grassland, cLWS
17	Hemington Meadow, cLWS
18	Diseworth Brook, cLWS
19	Hemington Pasture Ash 2, cLWS
20	Castle Donington Grassland, cLWS
21	Hemington Grassland, cLWS
22	Castle Donington Pasture, cLWS
23	Hemington Pasture Ash 5, cLWS
24	Hemington Pasture Ash 6, cLWS
25	West Meadow Brook, cLWS
26	Long Whatton Meadow 2, cLWS
27	Hemington Pasture Ash 4, cLWS
28	Diseworth Brook - Woodland, cLWS
29	Diseworth Brook Oak, cLWS
30	Hemington Pasture Oak 2, cLWS
31	Hemington Pasture Oak 1, cLWS
32	Hemington Wet Grassland, cLWS
33	Hemington Grassland, cLWS
34	Long Whatton Meadow, cLWS
35	Diseworth Brook Ash 2, cLWS
36	Hemington Pasture, cLWS
37	Castle Donington, row of Crack Willows and an Oak off Carnival Way, cLWS
38	Long Whatton Woodland, cLWS
39	M1/A50 Junction Pond, cLWS
40	Hemington Pasture, cLWS
41	A453 Viaduct Grassland, cLWS
42	Warren Lane Pond, cLWS
43	Soar Bank Drain, cLWS
44	Castle Donington, Gothic House Lime, cLWS
45	River Soar (W bank) south of A453, cLWS
46	Veteran Ash 2, West End, cLWS
47	Soar Bank White Willow, cLWS
48	Veteran Ash 3, West End, cLWS
49	Land E of Netherfield Lane, cLWS
50	Kegworth, Derby Rd Oak, pLWS
51	Hemington Pasture Ash 1, pLWS
52	Hemington Pasture Ash 3, pLWS
53	Diseworth Brook Ash 1, pLWS
54	Lockington Quarry extension hedgerow and ditch, pLWS
55	Lockington Quarry Oak, pLWS
56	Long Whatton Meadows Ash 4, pLWS
57	Lockington, Warren Lane hedge, pLWS
58	Hemington Scrubby Grassland, pLWS
59	Veteran Ash I, West End, pLWS
60	Ratcliffe Lane Hedge 1, pLWS
61	Ratcliffe Lane Pasture and Stream, pLWS
62	Ratcliffe Lane Willow 1, pLWS
63	Castle Donington, Swan River verge, pLWS.hist
64	Castle Donington, Charnock Hill grassland, pLWS.hist
65	King Street Plantation, pLWS.hist
66	Stream, pLWS.hist
67	Lockington Park, pLWS.hist
68	Pond, pLWS.hist
69	The Paddock - Semi-improved grassland, pLWS.hist
70	Diseworth Green Lane NW of village, pLWS.hist
71	Long Mere Lane - Hedgerow, pLWS.hist
72	Hedgerow, pLWS.hist
73	Mixed plantation, pLWS.hist
74	Stream along edge of arable field, pLWS.hist
75	Hedgerow, pLWS.hist
76	Ash Spinney, pLWS.hist
77	Stream, pLWS.hist
78	His Lordships woodland, pLWS.hist
79	River Soar and floodplain habitats, pLWS.hist
80	Long Whatton Brook, pLWS.hist



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved.
Licence Number: 100019980

Red Line Boundary

- Order Limits EMG1 MCO
- Order Limits EMG2 DCO
- 1km Buffer

Designated Sites

- Local Wildlife Sites (LWS)
- Candidate Local Wildlife Sites (cLWS)
- Potential Local Wildlife Sites (pLWS)
- Potential Historic Local Wildlife Sites (pLWS.hist)
- Ancient & Semi-Natural Woodland

Priority Habitats within 1km of the Site Boundary

- Coastal and floodplain grazing marsh
- Deciduous woodland
- Good quality semi improved grassland
- Lowland fens
- No main habitat but additional habitats present
- Traditional orchard



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

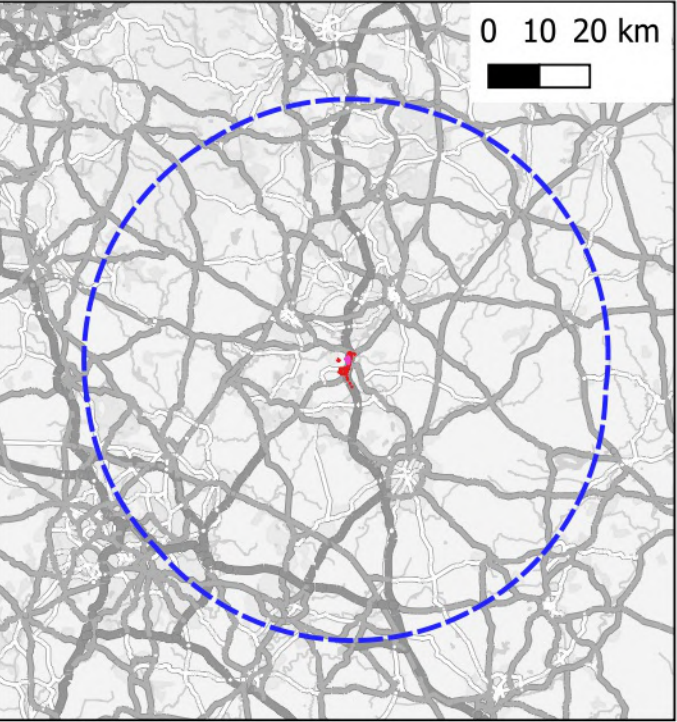
Ordnance Survey material - Crown Copyright. All rights reserved.
Licence Number: 100019980

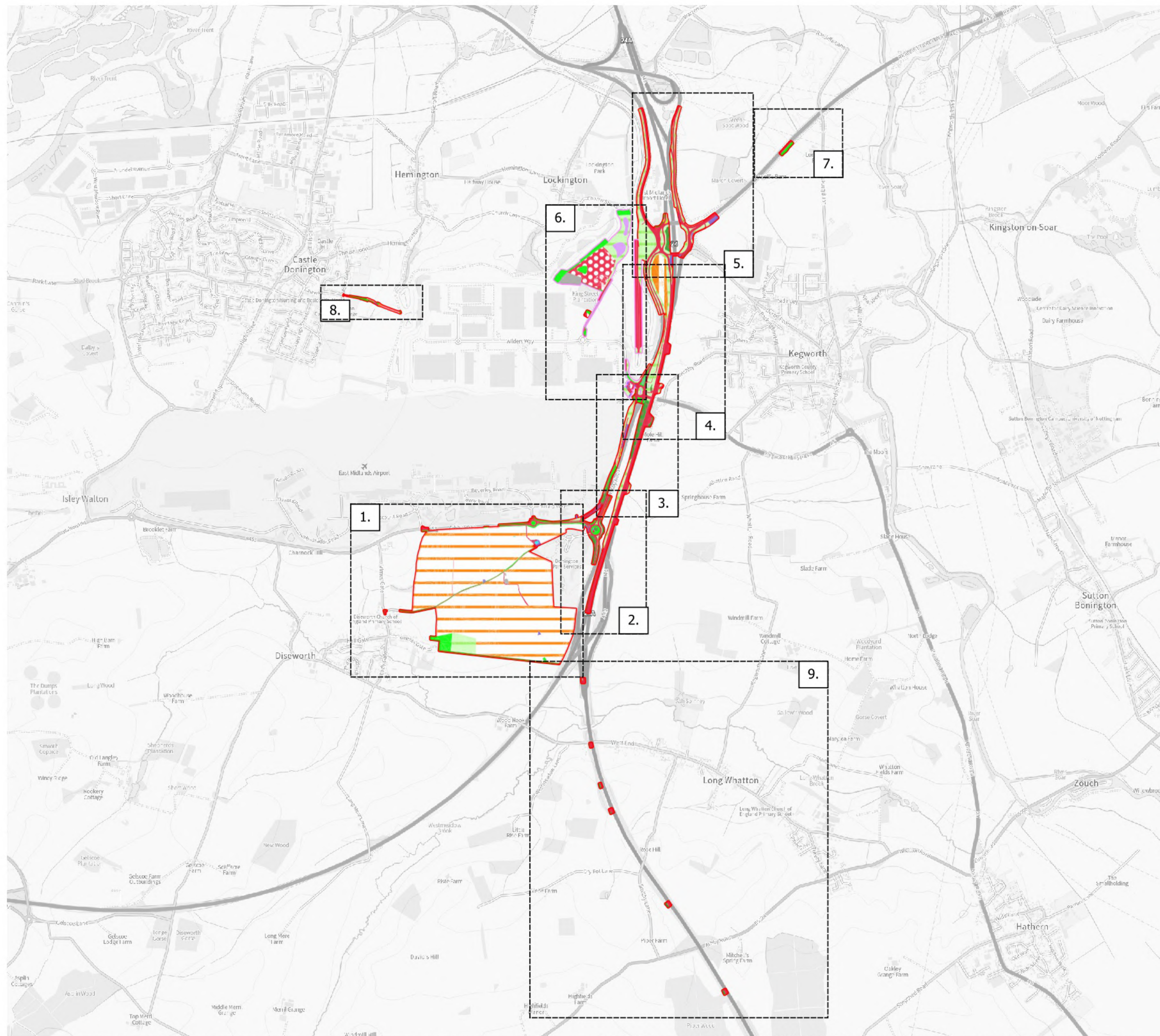
Red Line Boundary

- Order Limits EMG1 MCO
- Order Limits EMG2 DCO
- 2km Buffer
- Order Limits EMG1 MCO 2km Buffer
- 15km Buffer
- 30km Buffer

Designated Sites

- Site of Special Scientific Interest, SSSI
- Special Areas of Conservation, SAC
 - 81 - Lockington Marshes SSSI
 - 82 - Oakley Wood SSSI
 - 83 - Breedon Cloud Wood and Quarry SSSI
 - 84 - Lount Meadows SSSI
 - 85 - Attenborough Gravel Pits SSSI
 - 86 - River Mease SAC





- Order Limits EMG1 MCO
- Order Limits EMG2 DCO
- Habitats Baseline
- Bioswale
- Bramble scrub
- Built linear features
- Cereal crops
- Developed land; sealed surface
- Introduced shrub
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Other woodland; broadleaved
- Ponds (non-priority habitat)
- Sustainable drainage system
- Temporary grass and clover leys
- Tall forbs
- Bare ground

date 29/07/25 drwn/chkd
LE / SJ A

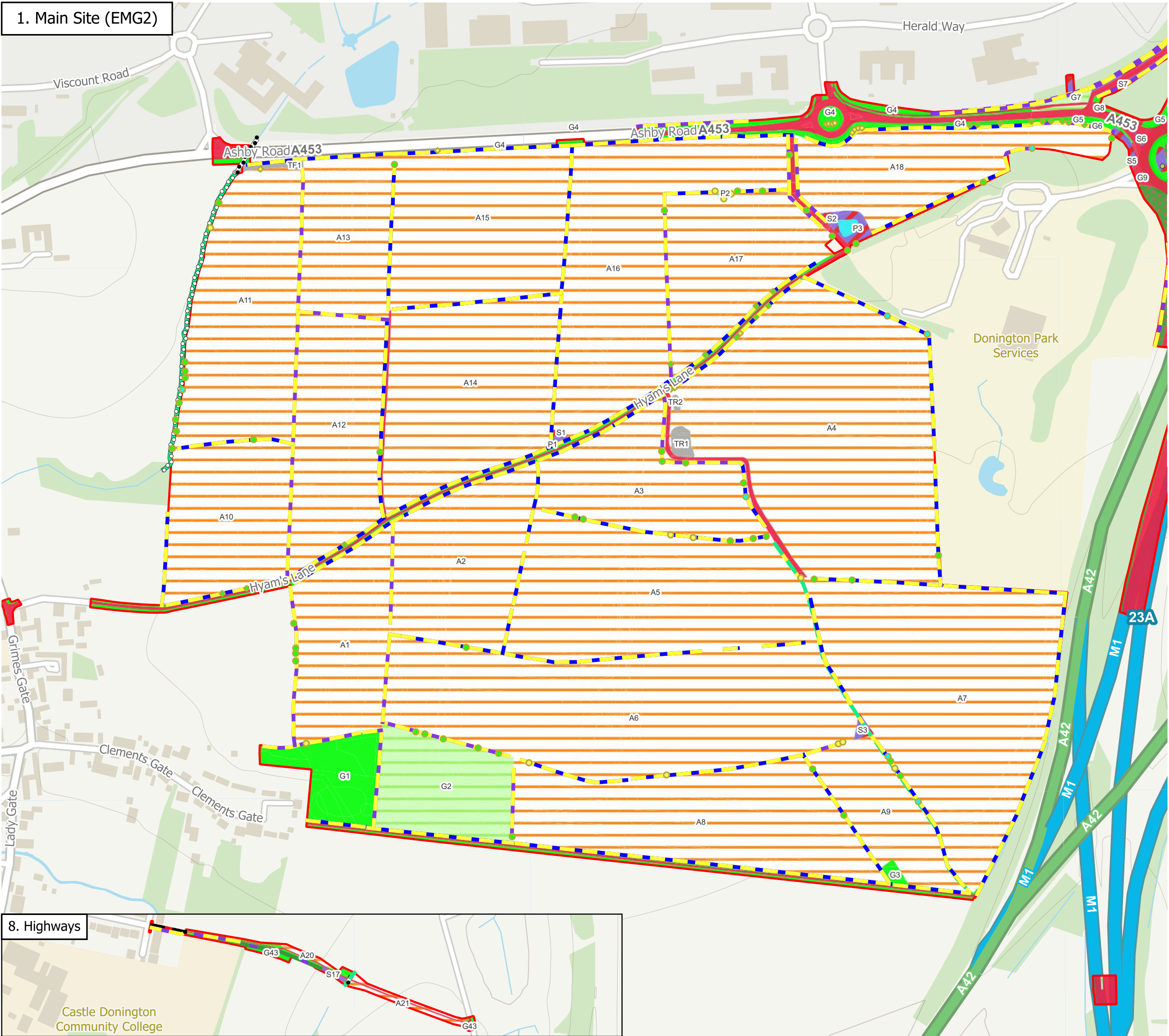
client
SEGRO Properites Ltd and SEGRO (EMG) Ltd
project
East Midlands Gateway Phase 1 & 2 (EMG1 & EMG2)

title SITE LAYOUT PLAN scale
1:29,000 @ A3

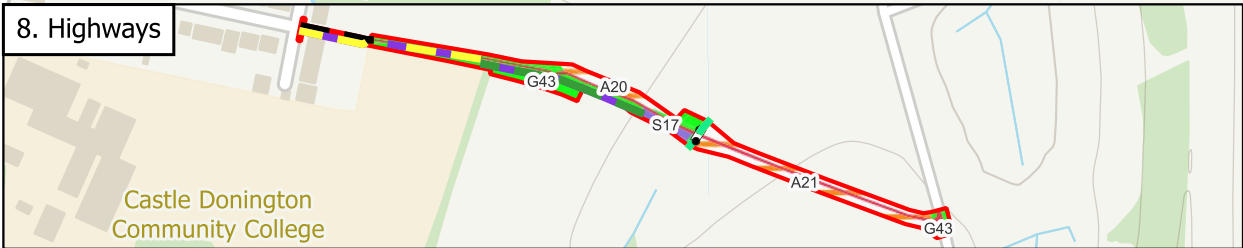
number
FIGURE 3a rev
-

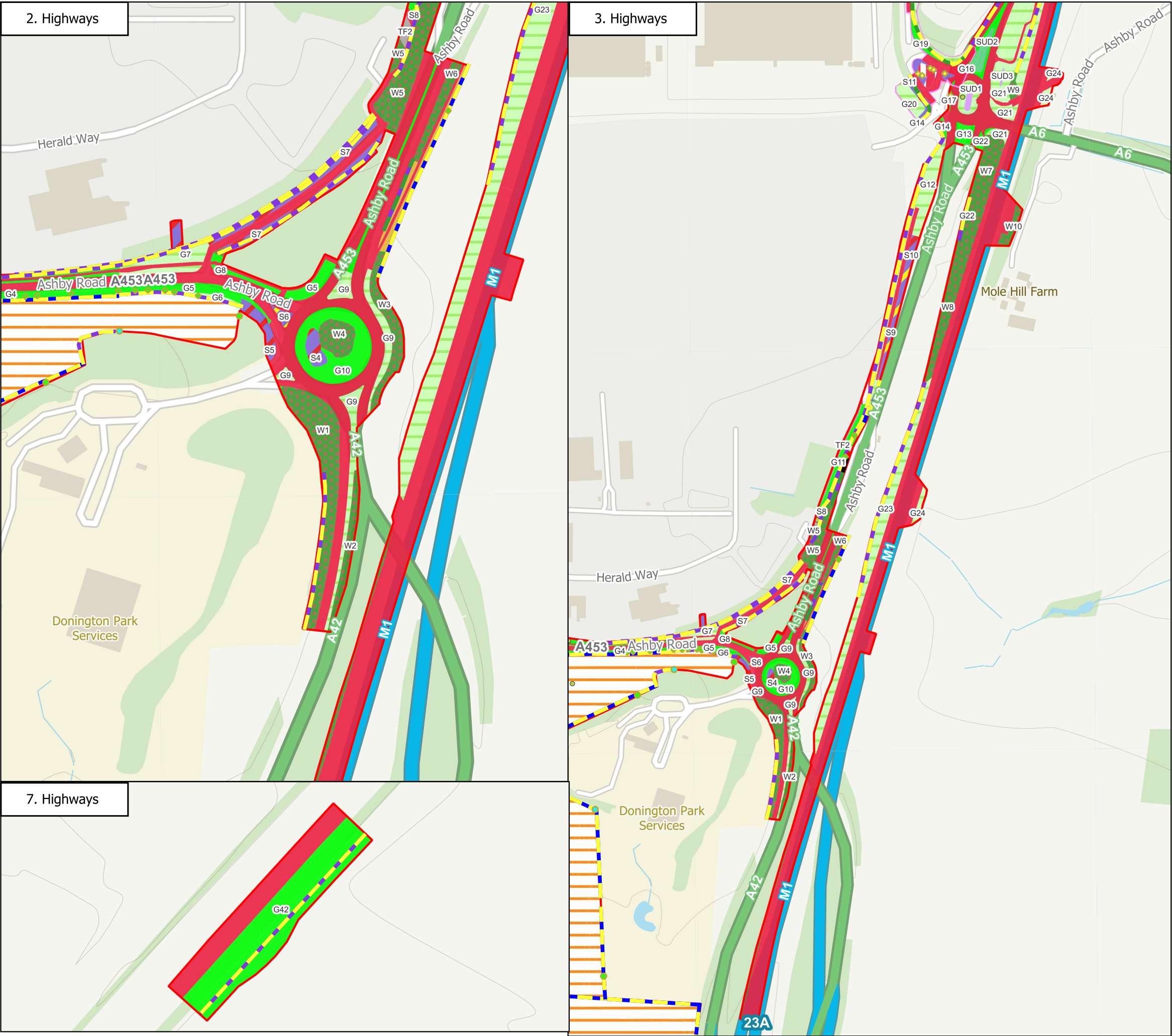
FPCR | environment
& design

1. Main Site (EMG2)



8. Highways



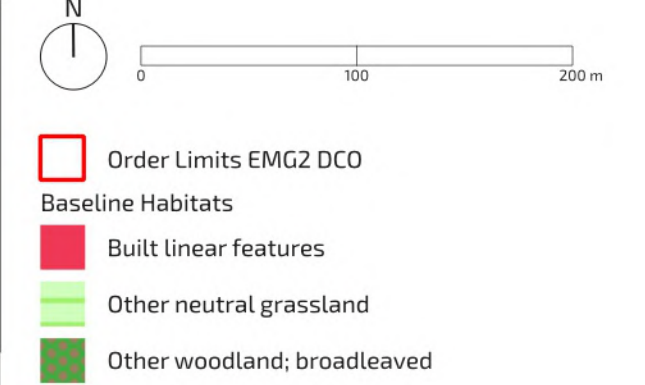
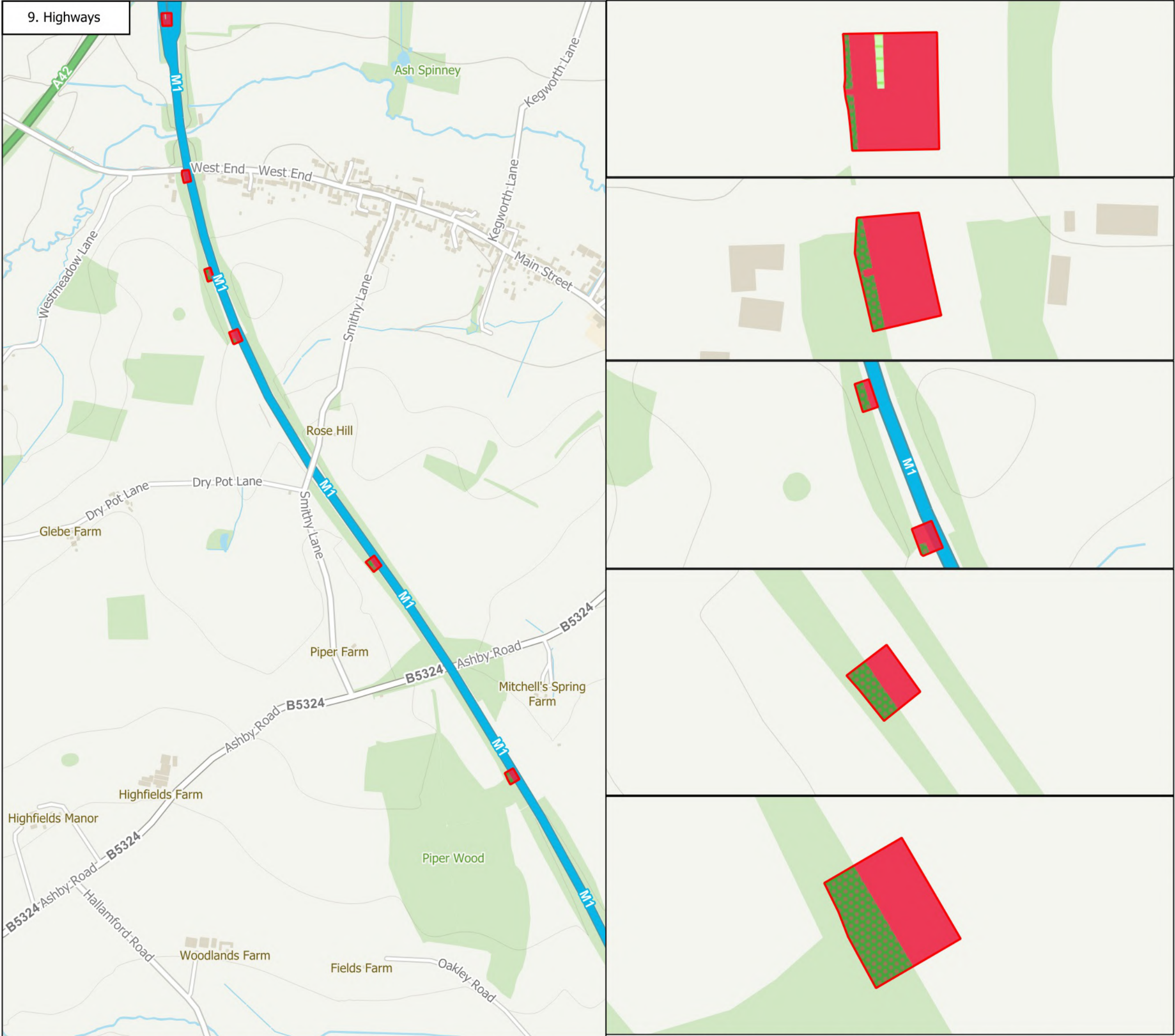


4. Highways

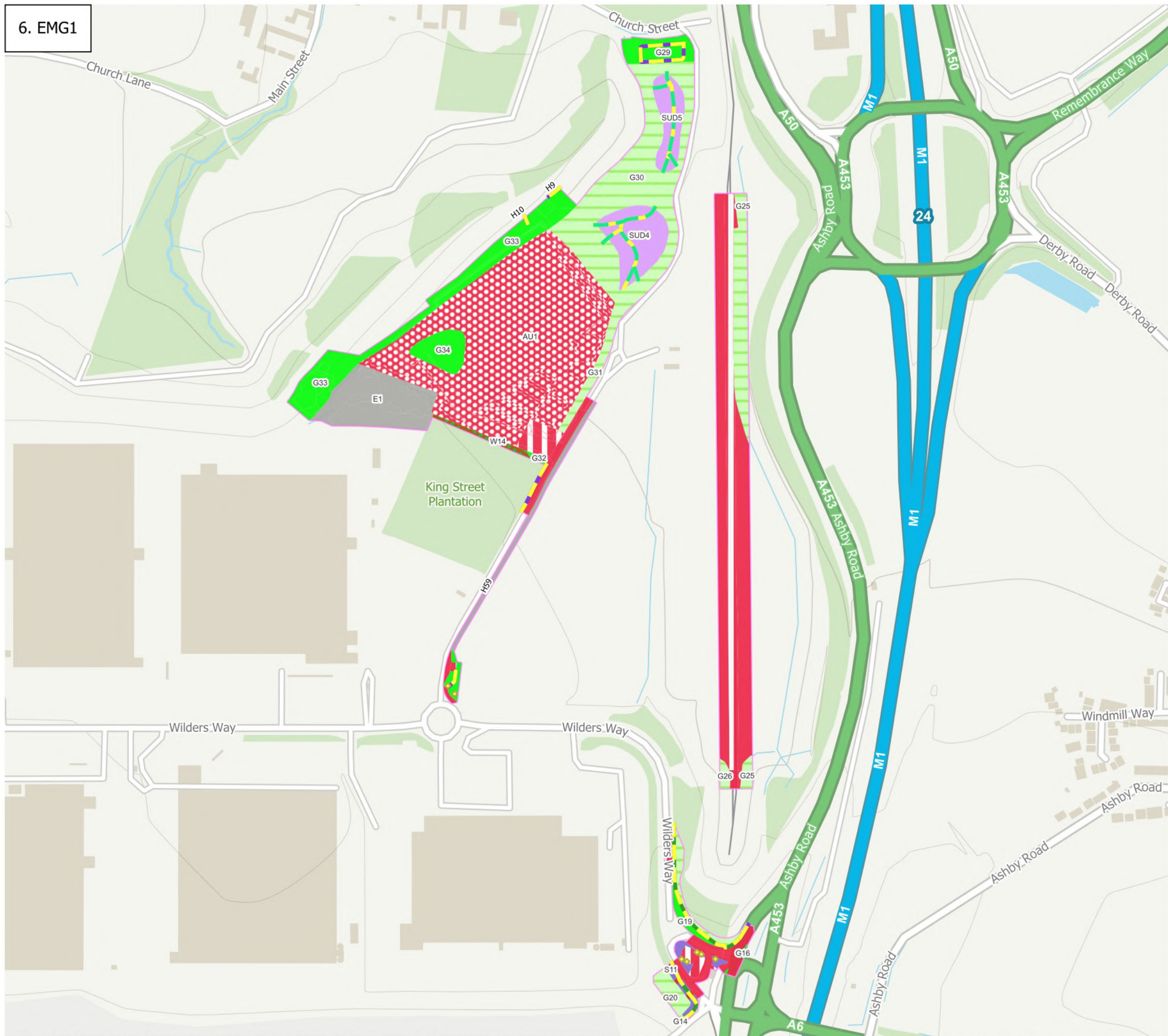
The map shows the M1 motorway running vertically through the center. To the left of the M1, the A453 runs horizontally, and the A6 runs diagonally. The M1 is flanked by several roads, including Wilders Way to the west and Ashby Road to the east. The map also shows several green areas representing parks or reserves, and a blue line representing a river or canal. The map is oriented with North at the top.

[illegible]

t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk



date	26/09/25	drwn/chkd	LE / SJA
client	SEGRO (Properties) Ltd and SEGRO (EMG) Ltd		
project	East Midlands Gateway Phase 2 (EMG2)		
title	BASELINE HABITAT PLAN	scale	1:3,500 @ A3
number	FIGURE 3e	rev	-



6. EMG1



- Order Limits EMG1 MCO
- Habitats Baseline
 - Artificial unvegetated, unsealed surface
 - Built linear features
 - Developed land; sealed surface
 - Introduced shrub
 - Mixed scrub
 - Modified grassland
 - Other neutral grassland
 - Other woodland; mixed
 - Ruderal/Ephemeral
 - Sustainable drainage system
- Hedgerow Baseline
 - Native hedgerow
 - Native hedgerow with trees
- Individual tree Baseline
 - Existing Small Urban Tree
- Watercourse Baseline
 - Ditches

date 26/09/25 drwn/chkd LE / SJA

client SEGRO (Properties) PLC and SEGRO (EMG) Ltd
project

East Midlands Gateway Phase 1 (EMG1)

title BASELINE HABITAT PLAN scale 1:5,500 @ A3

number FIGURE 3f rev -

FPCR | environment & design