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SSE ENERGY SOLUTIONS

ROYSTON SOLAR FARM

PRELIMINARY ECOLOGICAL APPRAISAL

AUGUST 2024

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PRELIMINARY ECOLOGICAL APPRAISAL

August 2024

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APPENDICES

Appendix 1 Legislation and National Policy Summary

DRAWINGS	TITLE	SCALE
GM13215-001-P0.01	Site Location Plan	1:15,000@A3
GM13215-002-P0.02	UKHab Baseline Survey Plan	1:5,000@A3
GM13215-003-P0.03	Badger Survey Result	1:5,000@A3
GM13215-004-P0.01	Waterbody Location Plan	1:12,500@A3

EXECUTIVE SUMMARY

Wardell Armstrong LLP (WA) was commissioned by SSE Energy Solutions to undertake a Preliminary Ecological Appraisal (PEA) in support of a proposed solar farm.

The following conservation sites, habitats, and species (receptors) have been evaluated as being subject to potential adverse effects in the absence of mitigation and/or further survey or assessment:¹:

- Statutory Designated Sites: Site of Special Scientific Interest (SSSI), Local Nature Reserves (LNR);
- Badger;
- Breeding Birds;
- Wintering Birds;
- Bats; and
- Reptiles

Additional assessments, surveys and pre-construction checks have been recommended as necessary to fully inform the planning application:

- Badger survey;
- Breeding bird surveys;
- Wintering bird surveys;
- PWMS reptiles; and
- Avoidance of night time working in relation to bats.

Mitigation² and compensation³ are discussed in section 4 of the report but include the following:

¹ Note: the Preliminary Ecological Appraisal Report provides an overview of likely effects and therefore may not be sufficient to support a planning application on its own. Specialist surveys may be required to fully investigate effects and/or to support an Ecological Impact Assessment (EclA).

² Mitigation are measures required in order to reduce the severity and magnitude of identified effects to an acceptable level.

³ Compensation is required where effects cannot be fully mitigated.

- Vegetation clearance undertaken outside of the bird nesting season, or an inspection carried out by an appropriately qualified ecologist.
- Provision of a Construction Environmental Management Plan for nearby SSSI

In conclusion, given the identified evidence of presence and/or likely presence of ecological constraints, further surveys and/or assessments are required to inform a full evaluation of adverse effects. The results of further protected species surveys and evaluations should be considered within an Ecological Impact Assessment (EclA) report, in line with standard industry practice (CIEEM 2018, updated 2022). This report should include a formal assessment of impacts and will be suitable to fully inform the planning application.

This report is valid for 18 months from the date the habitat survey was undertaken.

1 INTRODUCTION

1.1 Terms of Reference

- 1.1.1 Wardell Armstrong LLP (WA) was commissioned by SSE Energy Solutions in February 2024 to undertake a Preliminary Ecological Appraisal (PEA) in support of a proposed solar farm. The project is located at land north of the A505, Royston, Hertfordshire, SG8 5GX, centred on approximate National Grid Reference (NGR) TL 34066 41786 (hereafter referred to as the 'Site').
- 1.1.2 This report has been produced with reference to current guidelines for UK Habitat (UKHAB) Classification V2 (Butcher et al., 2023), Guidelines for Preliminary Ecological Appraisal (CIEEM 2017⁴) and Biodiversity – Code of Practice for Planning and Development (BSI 2013⁵).
- 1.1.3 The project will involve the creation of a solar farm, including the ground mounted solar arrays themselves, access tracks, sub-station building and perimeter fencing.

1.2 Scope of Report

- 1.2.1 The purpose of the PEAR is in broad terms to undertake the following:
- Identify and report to the project team the likely ecological constraints associated with a project, such that the site design can adequately take account of ecological features;
 - identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'⁶;
 - identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
 - Identify the opportunities offered by a project to deliver ecological enhancement.
- 1.2.2 Certain species, habitats and nature conservation sites receive legislative protection which is detailed fully within Appendix 1. Other species/groups and habitats are notable due to their identification in national and/or local planning policy or via local records. An indicative assessment of potential adverse effects to such receptors is

⁴ Chartered Institute of Ecology and Environmental Management (CIEEM 2017).

⁵ British Standard BS 42020:2013 (BSI 2013).

⁶ As defined in BS 42020:2013 (BSI 2013).

provided, although this is not a substitute for full EcIA (CIEEM 2018) which may be required to fully inform any subsequent planning application along with additional surveys and assessments.

- 1.2.3 Provisional mitigation and enhancement opportunities are also discussed, where appropriate.

1.3 Site Context

- 1.3.1 The Site is situated on the boarder of Hertfordshire and Cambridgeshire as shown on Drawing Number GM13215-001-P0.01 (Site Location Plan).
- 1.3.2 The Site largely comprises of active arable fields in varying stages of use, with active crops in the south-west, crop stubble in the south and eastern fields, and tilled land in the central field. Pockets of woodland are situated within the Site, with field boundary hedgerows throughout. The town of Royston is situated immediately to the south-east, with the wider landscape predominantly consisting of arable and pastoral farmland.

1.4 National Planning Policy Framework (NPPF)

- 1.4.1 The NPPF⁷ requires the Planning Authority to have a responsibility to promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan. In addition, the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological that are more resilient to current and future pressures.

⁷ <https://www.gov.uk/government/publications/national-planning-policy-framework--2> (last updated 20/12/2023).

2 METHODOLOGY

2.1 Desk Study

2.1.1 The desk study was informed by review of existing available information provided by Cambridgeshire and Peterborough Environmental Records Centre (CPERC) and from available internet-based resources for a 2km search radius from the Site boundary. The search area was extended to 5km for bats and 10km for statutory sites designated for bats. Ordnance Survey (OS) and satellite mapping was also used to gain contextual habitat information.

2.1.2 Specific information was sought for:

- Statutory designated sites⁸;
- Locally designated sites;
- Ancient woodland⁹;
- Protected and priority species;
- Priority (s.41) Habitats and Species¹⁰;
- Local Biodiversity Action Plan (LBAP) priority habitats and species.

2.1.3 The ecological desk study was carried out by a competent Ecologist who is a qualifying member of CIEEM, who has completed numerous ecological desk studies.

2.2 Extended UKHab Classification Survey

2.2.1 WA carried out a UK Habitat (UKHab) Classification Survey of the Site on 18th – 20th March 2024. The survey was carried out by an experienced WA ecologist who has completed numerous ecological habitat surveys within the past 6 years.

2.2.2 The survey followed the 'UK Habitat Classification' (Butcher et al., 2020) methodology with each of the main habitats classified according to the relevant criteria including vegetation composition expressed according to the DAFOR¹¹ system.

⁸ Locations provided by MAGIC <http://magic.defra.gov.uk/MagicMap.aspx>

⁹ As defined by Natural England in their Inventory of Ancient Woodlands
http://www.gis.naturalengland.org.uk/pubs/gis/tech_aw.htm

¹⁰ As defined under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

¹¹ D = dominant, A = abundant, F = frequent, O = occasional, R = Rare

- 2.2.3 In addition to the mapping and description of habitats, the survey was 'extended' to include the incidental observations of protected and/or notable species and the potential for such species to occur on Site (and in the surrounding landscape where relevant) were also recorded onto secure digital media for mapping and data collection. The extended element of the survey was based on professional judgement.
- 2.2.4 Specific habitat features are mapped on Drawing Number GM13215-002-P0.02 (UKHab Baseline Survey Plan) with appropriate reference numbers identifying features of particular note.

2.3 Evaluation and Assessment of Features

- 2.3.1 Evaluation of the importance / likely importance of ecological features and the likelihood of impacts affecting important features was made, where possible, using professional judgement in accordance with published guidance (CIEEM 2017).
- 2.3.2 Protected and s.41 species were evaluated in order to identify potential adverse effects in Table 2, based on the following criteria:
- Desk study records;
 - Evidence found during the survey;
 - Presence, extent, quality and viability of suitable on-site habitat;
 - Ecological connectivity to viable off-site habitats; and
 - Perceived impacts of habitat loss/impact to individuals in relation to proposals.
- 2.3.3 A 'traffic light' system is used in Tables 1, 2 and 3 to highlight potential constraints and opportunities whereby:
- **Green**: No constraint or limited constraint unlikely to be of planning and/or legal significance.
 - **Yellow**: Potential constraints which require further survey and/or mitigation and may be of planning and/or legal significance depending on the outcome of further survey/assessment.
 - **Red**: Constraints which have already been identified by the PEA survey/desk-based assessment and are likely to be of planning and/or legal significance.

2.4 Nomenclature

- 2.4.1 Vascular plant names follow ‘*New Flora of the British Isles*’ (Stace 2019) with vernacular names as provided in the Botanical Society of the British Isles website (BSBI, 2013)¹². All other flora and fauna names following the National Biodiversity Network (NBN) Atlas (NBN Atlas Partnership, 2021). The common and scientific name of species/taxa is provided (if available) when first mentioned in the text, with only the vernacular name referred to thereafter.

2.5 Limitations / Deviations

- 2.5.1 Areas of woodland were not accessible at the time of the survey due to the inner sections of them being fenced off. Due to this, some flora as well as signs of notable and protected species may have been missed. However, it is considered that a robust survey was conducted and that the results gathered are an accurate reflection of the habitats within the Site.
- 2.5.2 Ecological surveys are limited by factors that affect the presence of plants and animals such as time of year, weather, migration patterns and behaviour. The survey was undertaken in March (which is outside the optimum recommended survey period for habitat surveys (April to August)). However, it is considered that the survey represents a valid sample of ecological evidence present on that date. The report is not designed, nor is it required to present a complete inventory of flora/fauna.
- 2.5.3 The absence of desk study records is not relied upon to determine absence of a particular species/habitat. Often, the absence of records is a result of under-recording within the given search area and as such the experience of the ecologist concerned together with a range of additional factors, in particular the presence/absence of potentially supporting habitat; is used to infer likely presence/absence of ecological receptors.

2.6 Quality Assurance & Environmental Management

- 2.6.1 The surveys and assessments have been overseen by and the report checked and verified by a full member of CIEEM, who is bound by its code of professional conduct. All surveys and assessments have been undertaken with reference to the recommendations given in British Standard BS 42020, and as stated within specialist guidance, as appropriate and referenced separately.

¹² <http://rbg-web2.rbge.org.uk/BSBI/intro.php>

3 RESULTS AND EVALUATION

3.1 Statutory and Non-Statutory Designated Sites

- 3.1.1 Desk study results for designated sites are evaluated in Table 1, below.
- 3.1.2 Designated sites which are considered potentially sensitive to the development proposals by virtue of their supported species or habitat assemblages, the distance/ecological connectivity to the Site and the nature of the perceived impacts are discussed in detail in the final sections of the report.
- 3.1.3 Designations for which potential adverse effects are not anticipated are excluded from further assessment.

Table 1: Designated Sites Evaluation			
Site Name and Status ¹³	Distance and direction from Site	Reason for Designation/identification	Potential Constraints
Therfield Heath - SSSI, LNR¹³	0.25km South	Designated as considered to be a good example of chalk grassland, a habitat considered to be of high conservation value. The site is reported to contain some of the richest chalk grassland in England. The pasture is dominated by upright brome <i>Bromus erectus</i> and red fescue <i>Festuca rubra</i> . There is a rich assemblage of herbs including such rarities as pasque flower <i>Pulsatilla vulgaris</i> , spotted cat's ear <i>Hypochaeris maculata</i> , wild candytuft <i>Iberis amara</i> , bastard toadflax <i>Thesium humifusum</i> , and lesser meadow-rue <i>Thalictrum minus</i> . The grassland also supports a diverse insect fauna, including the chalk hill blue butterfly <i>Lysandra coridon</i> .	The Site lies wholly outside the designated area, but falls within the Impact Risk Zone (IRZ). Habitats within the Site are not representative to the designated site and is not considered to pose direct constraints as a result of the proposed works. However, indirect impacts such as from dust pollution may result from the proposed works, therefore as a precaution a Construction Environmental Management Plan (CEMP) should be produced.
Holland Hall (Melbourn) Railway Cutting – SSSI¹³	1.78km East	An approximately one kilometre stretch of steep railway cutting through chalk, designated due to the slopes being colonised by a wide range of plants characteristic of chalk grassland. Characteristic plants of this community include the nationally uncommon wild candytuft <i>Iberis amara</i> , with wild carrot <i>Daucus carota</i> , greater knapweed <i>Centaurea scabiosa</i> , mouse-ear hawkweed <i>Pilosella officinarum</i> , basil thyme <i>Acinos arvensis</i> , kidney vetch <i>Anthyllis vulneraria</i> , sainfoin <i>Onobrychis viciifolia</i> and small scabious <i>Scabiosa</i>	The Site lies wholly outside the designated area (all infrastructure will be at least 1 Km distant), with no obvious ecological connectivity. No disturbance impacts are predicted to the SSSI

¹³ **SPA** – Specially Protected Area, **SAC** – Special Area for Conservation, **Ramsar** – site designated under the Ramsar Convention, **SSSI** – Site of Special Scientific Interest, **NNR** – National Nature Reserve, **LNR** – Local Nature Reserve, **CWS** – County Wildlife Site.

Table 1: Designated Sites Evaluation			
Site Name and Status ¹³	Distance and direction from Site	Reason for Designation/identification	Potential Constraints
		<i>columbaria</i> . Of particular interest is the presence of greater pignut <i>Bunium bulbocastanum</i> , a plant species considered nationally rare.	
Royston Road RSV – CWS ¹³	0.90km West	Designated as it supports at least 0.05ha of the NVC community CG3 (upright brome grassland).	The Site lies wholly outside the designated area (all infrastructure will be at least 1 Km distant), with no obvious ecological connectivity. No disturbance impacts are predicted to CWS

3.1.4 The search area is extended to allow for the inclusion of Impact Risk Zones (IRZs) for SSSIs¹⁴. IRZs define areas around SSSIs which could be impacted by development schemes. The zones vary depending on the particular sensitivities of the features for which the SSSI is notified and indicate the types of development proposal which could potentially have adverse impacts. The desk study shows that the Site falls within an IRZ, with all development proposals considered having the potential to adversely affect the SSSI. However, as the habitats within the Site do not correlate to those within the SSSI which it is designated for, it is considered unlikely that the proposed development would have direct impacts.

3.2 Habitats

- 3.2.1 All habitats within the Site are described in Table 2, below, together with an indication of their s.41 status and status and reference within the South Cambridgeshire Local Plan¹⁵.
- 3.2.2 Habitats which could be subject to adverse effects (yellow or red) are discussed in the latter sections of the report. Habitats for which potential adverse effects are not anticipated are excluded from further assessment. The location and extent of habitats are shown on Drawing Number GM13215-002-P0.02 (UKHab Baseline Survey Plan).
- 3.2.3 A review of OS data has identified a single watercourse within 500m of the Site not separated by a major barrier, referring to a roadside ditch off Spring Lane approximately 375m to the north-east at its closest point, as shown on Drawing Number GM13215-P04-P0.01 (Waterbody Location Plan). There are four additional watercourses south of the A505.

¹⁴ <https://data.gov.uk/dataset/sssi-impact-risk-zones>

¹⁵ [South Cambridgeshire Adopted Local Plan 2018 \(scambs.gov.uk\)](https://www.cambs.gov.uk/Document/13215/Final/Version%20No%20AUGUST%202024)

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Cropland</u> Three fields in the south and east of the Site, consisting entirely of crop stubble.	<u>Primary Code</u> Winter Stubble (c1c5)		No	The habitat loss is due to be isolated to this habitat which is of negligible intrinsic value.
<u>Cropland</u> A long strip of tilled arable land centrally within the Site, all of which is bare ground and no vegetation.	<u>Primary Code</u> Arable and Horticulture (c1) <u>Secondary Code</u> Minimum tillage (601)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Cropland</u> A field in the south west of the Site with fresh crop shoots emerging.	<u>Primary Code</u> Other cereal crops (c1c7)		No	It is currently understood that the proposed works are not due to impact this habitat.

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Woodland</u> Four pockets of woodland are situated throughout the Site, three of which were gated off in the centre, with signs that they are used for shooting activity. Canopy species included, Cypress <i>Cupressus sp.</i>, Scots Pine <i>Pinus sylvestris</i>, beech <i>Fagus sylvatica</i>, Ash <i>Fraxinus excelsior</i>, and sycamore <i>Acer pseudoplatanus</i>. Shrub species consisted elder <i>Sambucus nigra</i>, hawthorn <i>Crataegus monogyna</i>, blackthorn <i>Prunus spinosa</i>, dog rose <i>Rosa canina</i>, sycamore, privet <i>Ligustrum</i>	<u>Primary Code</u> Other woodland; mixed (w1h) <u>Secondary Code</u> Semi-natural woodland (30)	 	Yes	It is currently understood that the proposed works are not due to impacts this habitat. Should the proposals change, and this habitat is due to be impacted, then compensation would be required.

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<i>vulgare</i> (in the southern woodland only), as well as an unidentified ornamental evergreen shrub. Ground flora across the woodlands were similar, consisting of garlic mustard <i>Alliaria petiolata</i>, common nettle <i>Urtica dioica</i>, cow parsley <i>Anthriscus sylvestris</i>, ivy <i>Hedera helix</i>, cleavers <i>Galium aparine</i>, and creeping thistle <i>Cirsium arvense</i>. There are also patches of bare earth scattered within.		 		
<u>Hedgerows</u> There are 12 field boundary hedgerows (H) throughout the Site. The following is a description of each in turn:	<u>Primary Code</u> Other native hedgerow (h2a6)		Yes	It is currently understood that the proposed works are not due to impact this habitat. Should the proposals change, and this habitat is due to be

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
H1: 1.5 m high, 1.0 m wide, intact with approximate 2 m gaps every 10 to 20 m. Species consist of hawthorn, elder, blackthorn, holly, and ash (Tree). The base of the hedgerow was a scrub/ ruderal mix, including, bramble <i>Rubus fruticosus</i> , cow parsley, black knapweed <i>Centaurea nigra</i> , common nettle, cleavers, creeping thistle, dandelion <i>Taxacum sp.</i> , and ribwort plantain <i>Plantago lanceolata</i> .				impacted, then compensation would be required.
H2: 1.5 m high, 1.0 m wide, very gappy. Species consist of hawthorn, elder and dog rose. The base of the hedgerow included, common nettle, cleavers, creeping thistle, common hogweed <i>Heracleum sphondylium</i> and broad-leaved dock <i>Rumex obtusifolius</i> .				

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
H3: 2.0 m high, 1.5 m wide, intact. Species included hawthorn, blackthorn, dog rose, elder, and sycamore. The base of the hedgerow included common nettle, cleavers, cow parsley, and creeping thistle.				
H4: 1.5 m high, 0.5 m wide, newly planted, very gappy. Species consist of hawthorn and blackthorn. The base of the hedgerow included common nettle, hogweed, ribwort plantain, cow parsley, creeping thistle, and ragwort <i>Senecio jacobaea</i>.				

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
H5: 2.0 m high, 2.0 m wide, intact, very well managed and evenly trimmed. Species consist of hawthorn, blackthorn, and dog rose. The base of the hedgerow included common nettle, cleavers and creeping thistle.				
H6: 1.5 m high, 1.0 m wide, very gappy. Species consist of hawthorn, blackthorn and dogrose.				
H7: 1.5 m high, 1.0 m wide, very gappy. Species consist of hawthorn.				

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
H8: 2.5 m high, 2.0 m wide, intact. Species consist of hawthorn and elm.				
H9: 2.0 m high, 1.5 m wide, intact. Species consist of Hawthorn, blackthorn, and dog rose. The base of the hedgerow included common nettle, cleavers, and cow parsley.				
H10: 2.5 m high, 1.5 m wide, intact. Species consist of hawthorn, elder, ash, and blackthorn. The base of the hedgerow included cow parsley, common nettle, cleavers, hogweed, creeping thistle, and daffodil <i>Narcissus</i> .				

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
H11: 1.5 m high, 1.0 m wide, intact. Species consist of hawthorn and blackthorn. The base of the hedgerow included cow parsley, common nettle, cleavers, hogweed, and creeping thistle.				
H12: 1.5 height, 1.0 wide, regularly managed and gappy. Species consist of hawthorn, elder and dog rose. The base of the hedgerow included common nettle, and cleavers.				
<u>Line of Trees</u> A line of mature trees situated on the eastern boundary of the southeastern crop field. Species consisted of hawthorn, ash, and elm.	<u>Primary Code</u> Other woodland; broadleaved (w1g) <u>Secondary Code</u> Line of Trees (33)		No	It is currently understood that the proposed works are not due to impact this habitat.

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Individual Trees</u> Nine Individual trees are present along the Site boundary, to the southwest, east, and northwest along field boundaries. Species consist of ash (T1-4 and 6-9) and hawthorn (T5).	<u>Primary Code</u> Other woodland; broadleaved (w1g) <u>Secondary Code</u> Scattered Trees (32)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Ruderal</u> Three sections of ruderal vegetation centrally within the Site, adjacent to woodland. The contents appear to be old crop that has been left to grow out, as well as other ruderal vegetation such as common nettle, and old dead stands of cow parsley and hogweed.	<u>Primary code</u> Non-cereal crop (c1d) <u>Secondary Code</u> Ruderal (81)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Other Neutral Grassland</u> Situated centrally either side of the hard standing road/ track. Species consist of Yorkshire fog <i>Holcus lanatus</i> , perennial rye grass <i>Lolium perenne</i> , daffodil, cleavers, white clover, ribwort plantain, daisy <i>Bellis perennis</i> , dandelion, and hogweed.	<u>Primary code</u> Other Neutral Grassland (g3c)		No	It is currently understood that the proposed works are not due to impact this habitat.

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Modified Grassland</u> Short sward grassland present along the south of the Site, as well as around the southern woodland. Species consist of Yorkshire fog, perennial rye grass, white clover, and daisy.	<u>Primary code</u> Modified Grassland (g4)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Scrub</u> A strip of bramble scrub is present on the northern boundary of the Site, along the dry ditch.	<u>Primary code</u> Bramble scrub (h3d)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Scrub</u> An area of mixed scrub with scattered trees. Species consist of blackthorn, beech, and hawthorn.	<u>Primary code</u> Mixed Scrub (h3h) <u>Secondary codes</u> Scattered Trees (32)		No	It is currently understood that the proposed works are not due to impact this habitat.

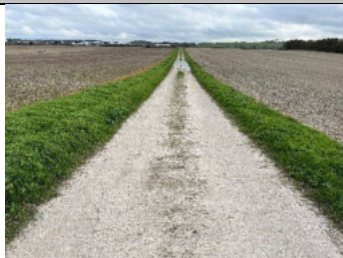
Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Road/ Track</u> Running centrally through the whole Site, separating the different crop fields.	<u>Primary Code</u> Other Developed Land (u1b6) <u>Secondary codes</u> Road (800)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Bare Ground</u> Field boundary footpaths which are void of vegetation are present on the northern boundary of the southern and eastern field.	<u>Primary Code</u> Artificial unvegetated, unsealed surface (u1c) <u>Secondary codes</u> Track (839)		No	It is currently understood that the proposed works are not due to impact this habitat.
<u>Compost Heap</u> A compost heap is situated in the northeastern corner of the eastern field.	<u>Primary Code</u> Artificial unvegetated, unsealed surface (u1c)		No	It is currently understood that the proposed works are not due to impact this habitat.

Table 2: Habitat Descriptions and Evaluation				
Habitat Description	UK Hab Classification	Photograph	Local BAP	Potential Constraints
<u>Dry Ditch</u> Two dry ditches running along the Site boundary in the north and southwest.	<u>Primary Code</u> Canal or ditch (r1e) <u>Secondary codes</u> Dry (500)	 	No	It is currently understood that the proposed works are not due to impact this habitat.

3.3 Species

3.3.1 Protected and s.41 species are evaluated in order to identify potential adverse effects in Table 3 below, based on the following criteria:

- Desk study records;
- Evidence found during the survey;
- Presence, extent, quality, and viability of supporting on-site habitat;
- Ecological connectivity to viable off-site habitats; and
- Perceived impacts of habitat loss/impact to individuals in relation to proposals.

3.3.2 Species for which adverse effects are predicted (yellow or red) are discussed in more detail in the Discussion and Recommendations section. Species/taxa for which potential adverse effects are not anticipated (green) are excluded from further assessment.

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status¹⁶	Supporting Habitat(s) Present	Potential Constraints
Badger <i>Meles meles</i>	✓ ¹⁷	BA	Suitable habitat in the form of crop fields, field boundary hedgerows and woodland for foraging and sett creation. Thirteen setts were identified during the walkover, including a Main Sett.	The proposed works may encroach within 30m of the Main Sett, potentially posing direct impacts. The works may also fragment the mammal paths leading to/ from the Main Sett and other smaller classifications. Additional foraging and sett creation habitat may be impacted by the proposed works.
Bats <i>Chiroptera</i>	There were no recent records in the vicinity of the Site.	EPS, WCA, s.41,	Foraging habitat on Site in the form of boundary hedgerows, woodland and woodland edge have been assessed as providing moderate suitability for bats. Trees with bat roost potential were identified on Site (Table 4). There is potential roosting habitat within the woodlands which were not subject to roost inspections at the time of the PEA due to number of trees within them.	Moderate quality foraging habitat with boundary hedgerows and woodland connected to the wider landscape. Only small sections may be removed to facilitate machinery access.

¹⁶ **EPS** – European Protected Species, **WCA** – Wildlife and Countryside Act, **WCA (9)** – species listed under Schedule 9, **A1** – Annex 1 (Birds Directive), **BA** – Protection of Badgers Act, **s.41** – species listed under section 41 of the NERC Act as species of principal importance, **BoCC** – Birds of Conservation Concern.

¹⁷ Locations of badger activity are confidential due to the sensitivity of this species.

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status¹⁶	Supporting Habitat(s)Present	Potential Constraints
Birds	There were 1764 recent records within 2.0km of the Site. These included a variety of species, including raptors such as barn owl <i>Tyto alba</i> , red kite <i>Milvus milvus</i> , hen harrier <i>Circus cyaneus</i> , and marsh harrier <i>Circus aeruginosus</i> . Records for ground nesting birds were also returned, such as for skylark <i>Alauda arvensis</i> , and lapwing <i>Vanellus vanellus</i> .	s.41, WCA BoCC	Foraging and breeding habitat within the Site for a variety of species with the woodland, scrub and hedgerows present. Of note, red kite were observed over the pockets of woodland within the Site, as well as foraging overhead the crop fields. Additionally, a barn owl box was identified in one of the pockets of woodland.	Potential breeding and wintering habitat may be lost/disturbed by proposals. Foraging habitat may also be lost.
Brown hare <i>Lepus europaeus</i>	There were no recent records within 2km of the Site.	s.41	This species favours open expanses of pastoral farmland and therefore are unlikely to utilise the habitats on Site.	No impacts anticipated.
European hedgehog <i>Erinaceus europaeus</i>	There were 18 recent records within 2km of the Site.	s.41	Hedgerows and scrub are suitable to support this species within the Site.	Adverse effects through minor habitat losses are unlikely to be significant due to the small scale of the development together with the vast availability of equivalent supporting habitats elsewhere in the locality.

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status¹⁶	Supporting Habitat(s) Present	Potential Constraints
Great crested newt <i>Triturus cristatus</i>	There were no recent records within 2km of the Site. A single watercourse was identified within 500m of the Site, situated 375m north-east. Additionally, no EPS Licence reruns were identified within 2km of the Site.	EPS, WCA, s.41	There is suitable foraging and shelter habitats for great crested newt within the Site, such as with the woodland and scrub. However, due to the lack of records and the closest watercourse being situated over 250m from the Site, great crested newt are considered to be likely absent from the Site.	No impacts anticipated.
Common toad <i>Bufo bufo</i>	There were no recent records within 2km of the Site.	s.41	Suitable habitat is present within the Site, with scrub, woodland, however the works are not due to impact these due to breeding habitat being over 250m away.	No impacts anticipated.
Common Reptiles	There were 58 recent records within 2km of the Site, all of which pertained to common lizard <i>Zootoca vivipara</i> .	WCA, s.41	The hedgerows scrub and woodland edge within the Site offers suitable foraging and basking habitat for reptiles.	In the absence of mitigation, the clearance of suitable habitats has the potential to result in incidental harm to reptiles.
Invertebrates (Protected and notable species)	There were 264 recent records of s.41 invertebrate species, including cinnabar <i>Tyria jacobaeae</i> , white-letter hairstreak <i>Satyrrium w-album</i> ,	WCA, s.41	The habitats within the Site do not have sufficient botanical diversity to support notable invertebrate species.	No impacts anticipated.

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status¹⁶	Supporting Habitat(s) Present	Potential Constraints
	and small heath <i>Coenonympha pamphilus pamphilus</i> .			
Hazel dormouse <i>Muscardinus avellanarius</i>	There were no recent records within 2km of the Site.	EPS, WCA, s.41	There are hedgerows connected to woodland and the wider landscape which may support foraging and nesting dormice.	Suitable habitat not due to be impacted. No impacts anticipated.
Otter <i>Lutra lutra</i>	One record within 1.5km of the Site.	EPS, WCA, s.41	There are no suitable watercourses within 100 m of the Site.	No impacts anticipated.
Water vole <i>Arvicola amphibius</i>	There were no recent records within 2km of the Site.	WCA, s.41	There are no suitable watercourses within 30 m of the Site.	No impacts anticipated.
White-clawed crayfish <i>Austropotamobius pallipes</i>	There were no recent records within 2km of the Site.	EPS, WCA, s.41	There are no suitable watercourses within 30 m of the Site.	No impacts anticipated.
Protected and notable plant species	Vascular plant species recorded within 2km of the Site in the last 10 years, including but not limited to: Dwarf Mouse-ear <i>Cerastium pumilum</i> 1.28km from Site	WCA, s.41	No notable plant species were identified during the survey.	No impacts anticipated.

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status ¹⁶	Supporting Habitat(s)Present	Potential Constraints
	- Common Cudweed <i>Filago vulgaris</i> 0.79km from Site - Dropwort <i>Filipendula vulgaris</i> 0.71km from Site - Wild Strawberry <i>Fragaria vesca</i> 1.91km from Site - Henbane <i>Hyoscyamus niger</i> 1.26km from Site - Field Scabious <i>Knautia arvensis</i> 1.08 km from site - Knapweed Broomrape <i>Orobancha elatior</i> 0.65 km from Site - Hoary Plantain <i>Plantago media</i> 0.79 km from Site - Strawberry Clover <i>Trifolium fragiferum</i> 1.08 km from Site			

Table 3: Protected and Notable Species Evaluation				
Receptor (species/taxa)	Desk Study records	Status¹⁶	Supporting Habitat(s)Present	Potential Constraints
	Purple Fescue <i>Vulpia ciliata subsp. ambigua</i> 0.77 km from Site			
Non-native invasive species (INNS)	There were no recent records within 2km of the Site.	WCA (9)	No INNS were observed during the survey.	No impacts anticipated.

3.3.3 Trees within the Site were identified as providing suitability for roosting bats. This is summarised in Table 4.

Table 4: Ground Level Tree Assessment (GLTA) for Roosting Bats					
Tree Number	Species	Location (Grid Reference)	Description & Feature Potential ¹⁸	Photograph	Tree Suitability ¹⁹
T1	Ash	TL 33467 40740	An ash tree within H1. A knot hole is present on the southern aspect, approximately 3 m high, with an entrance of 5 x 5 cm. Should this extend further within the heartwood of the tree there would be enough room for a large number of bats, so given a higher suitability as precaution - (PRF-M)		PRF

¹⁸ **PRF-I** – Potential Roost Feature suitable for individual bats, **PRF-M** – Potential Roost Feature suitable for multiple bats

¹⁹ **PRF** – Potential Roost Feature, **FAR** – Further Assessment Required

Table 4: Ground Level Tree Assessment (GLTA) for Roosting Bats					
Tree Number	Species	Location (Grid Reference)	Description & Feature Potential ¹⁸	Photograph	Tree Suitability ¹⁹
			A cavity is present on the southern aspect at the base of the eastern most self seeded off shoots from the main tree. Should this extend there would be room enough for a small number of bats – PRF-I		PRF

Table 4: Ground Level Tree Assessment (GLTA) for Roosting Bats					
Tree Number	Species	Location (Grid Reference)	Description & Feature Potential ¹⁸	Photograph	Tree Suitability ¹⁹
T2	Ash	TL 33330 41114	Mature ash, ivy clad potentially obscuring additional features.		FAR
T3	Ash	TL 33295 41200	Mature ash, ivy clad potentially obscuring additional features.		FAR

Table 4: Ground Level Tree Assessment (GLTA) for Roosting Bats					
Tree Number	Species	Location (Grid Reference)	Description & Feature Potential ¹⁸	Photograph	Tree Suitability ¹⁹
T4	Hawthorn	TL 34514 41850	A mature hawthorn, with a trunk cavity/ hollow on the southern aspect approximately 1.5 m high, extending into the heartwood of the tree – PRF-M		PRF

Table 4: Ground Level Tree Assessment (GLTA) for Roosting Bats					
Tree Number	Species	Location (Grid Reference)	Description & Feature Potential ¹⁸	Photograph	Tree Suitability ¹⁹
T5	Ash	TL 34301 42370	Mature ash, ivy clad potentially obscuring additional features.		FAR

4 DISCUSSION AND RECOMMENDATIONS

4.1 Sensitive Receptors

4.1.1 The following conservation sites, habitats, and species (receptors) have been evaluated as being subject to potential adverse effects and hence can be constraints to the proposals:

- Statutory Designated Sites;
- Badger;
- Bats;
- Birds; and
- Reptiles

4.1.2 The nature of potential effects, requirements for further surveys and proposed mitigation/compensation are discussed below for each of the identified receptors.

4.2 Statutory Designated Sites

4.2.1 Therfield Heath SSSI and LNR is located within 0.25km of the Site.

4.2.2 There is the potential for adverse effects on this statutory designated site from indirect impacts, such as dust and pollution. The Site falls within the IRZ of this SSSI, therefore it is recommended that a CEMP is produced to minimise the potential impacts to the SSSI.

4.3 Protected Species

Badger

4.3.1 Thirteen active badger setts as well as numerous mammal paths and dung pits/latrines were identified during the survey. Badgers have a highly mobile nature, and as such, sett size, activity and classification can change overnight, as well as additional setts being excavated. It is currently understood that the works are due to commence in 2025. Therefore, a dedicated badger walkout should be conducted prior to the proposed works to gain a comprehensive representation of badger presence within the Site, as well to ensure that no setts have encroached within 30 m of the footprint of the works. Should this be the case, a Precautionary Working Method Statement (PWMS) should be produced in relation to badgers to ensure that no indirect impacts occur as a result of the proposed works.

4.3.2 Should the footprint of the proposed works and excavations be required within proximity of identified active setts (use of heavy machinery within 30 m, use of lighter machinery (particularly for digging) within 20 m, or the use of hand tools (such as for digging or scrub clearance) within 10 m of any active sett entrance) (Badger Trust, 2023) then a licence from Natural England may be required to close the setts for the proposed works to proceed lawfully, as well as additional survey effort to definitively establish the usage of the setts.

4.3.3 Furthermore, should these impacts extend towards the identified main sett, a compensatory sett would be required, and the badgers should be translocated to this new sett before the closure of the main sett would be permitted.

Bats - Activity surveys

4.3.4 The Site has been assessed as providing moderate suitability to foraging and committing bats. However, it is currently understood that no loss of suitable commuting habitat will be lost (such as boundary hedgerows and woodland edges, so no direct impacts are anticipated.

4.3.5 Night work should be avoided so as to not indirectly impact foraging and commuting bats. If this is not possible, then a sensitive lighting scheme should be produced in relating to bats as detailed in 'Guidance Note 8/23 Bats and Artificial Lighting at Night'.

Bats - Buildings/Structures Surveys

4.3.6 It is understood that no trees would require felling as result of the proposed works. Therefore, roosting bats are not considered to pose any constraints.

4.3.7 Five trees were identified as providing suitability for roosting bats, see Table 4. Should these trees, or any other trees which have not been assessed require felling, additional survey effort would be required to establish the presence/ likely absence of roosting bats within them.

4.3.8 Birds

Nesting Birds

4.3.9 It is currently understood that no vegetation removal is required to facilitate the proposed works. However, should this change, any vegetation clearance works should be avoided during breeding bird season (generally March-August inclusive). If such timescales cannot be accommodated, it is recommended that a check for the presence of active nests and nesting birds should be undertaken by a suitably qualified

ecologist no more than 48hrs prior to the commencement of works. Any active nests should be identified and protected subject to the relevant legal provisions until the nesting attempt is complete.

Breeding and Foraging Birds

- 4.3.10 The Site offers a diverse range of suitable breeding habitats for birds. This is inclusive of ground nesting birds within the crop fields where the main footprint of the proposed works is due to impact. This would reduce the availability of breeding habitat to ground nesting birds such as skylark and lapwing, both of which were observed within the Site during the survey, as well as nearby records being returned for them.
- 4.3.11 Foraging raptors including red kite were identified utilising the crop fields, as well as a barn owl box being situated in one of the pockets of woodland. Nearby records of barn owl being were recorded within 700 m, and the proposed works currently involves the loss of foraging habitat of these species.
- 4.3.12 In the first instance breeding bird surveys are recommended. It is recommended that a total of six walked transects are conducted between April and July to establish the usage of birds within the Site (Bird Survey & Assessment Steering Group, 2023).
- 4.3.13 Following this, additional targeted surveys towards barn owl may be required if the initial surveys determine a likely presence and impact from the proposed works.

Wintering Birds

- 4.3.14 There is suitable wintering habitats for birds within this Site, such as cropland that is due to be impacted as a result of the proposed works. This would result in a loss of wintering habitat for some Schedule 1 species, such as red kite, which were observed during the survey.
- 4.3.15 Therefore, it is recommended that wintering bird surveys are undertaken to record the presence, abundance, and distribution of any wintering bird species of conservation concern within the Site. In the first instance, at least one wintering bird survey visit is recommended, in conjunction with local wintering bird records to scope in or out the need for further survey effort. The surveys would follow RSPB and BTO methodologies adapted from generic wintering bird monitoring methods given in Gilbert *et.al.*, (1998).

Common Reptiles

4.3.16 The proposed works are due to be isolated to the crop fields which offer negligible suitability to reptiles. However, the surrounding field margins, hedgerows and woodland do offer suitable for foraging and basking reptiles, so their presence within Site cannot be ruled out.

4.3.17 A PWMS should be produced to avoid indirect impacts to reptiles that may be encountered within the Site.

4.4 General Recommendations

4.4.1 If the Site boundary alters and any other habitats are identified to be lost or affected by the development, then further surveys for habitats and protected species may be required.

4.4.2 Night-time work should be avoided whenever possible to limit the potential for disturbance to nocturnal animals.

5 BIODIVERSITY NET GAIN AND ENHANCEMENTS

5.1 Introduction

5.1.1 Mandatory Biodiversity Net Gain (BNG) was implemented on 12th February 2024, and as such the majority of developments are now subject to provide an increase of 10% net gain on biodiversity.

5.1.2 Percentage gains should be demonstrated by use of the DEFRA Statutory Biodiversity Metric and is recommended that development designs should be biodiversity/landscape-led and an iterative design process, taking account of the Mitigation Hierarchy.

5.2 Habitat Condition Assessment

5.2.1 In order to inform a BNG assessment, each habitat within the Site, will need to be subject to a condition assessment. The condition assessment determines the current condition of each habitat and is broken down into sub-sections, where differences in condition within the wider habitat are recorded. For example, woodland is scattered throughout the Site, some areas would be of a higher condition than other areas, due to age, structure, species diversity etc., even though they are the same broad habitat type.

5.3 Biodiversity Enhancement

5.3.1 In accordance with the requirements of the NPPF and BSI 42020:2013 ecological enhancements should be proposed that are over and above measures required to mitigate effects on biodiversity. Such enhancements could include the provision of the following, in addition to any measures required as mitigation (with exact specifications to be determined at the detailed design stage):

- Bird boxes, including a variety of designs, such as 45mm entrance boxes, 32mm entrance boxes, sparrow terraces, owl/kestrel boxes and swift boxes/house martin cups on trees.
- Bat boxes including for a variety of species and for a variety of seasons, to be installed on retained mature trees.
- Creation of insect and invertebrate houses/hotels, or management of retained standing and fallen deadwood.
- Planting of native trees and shrubs of local provenance which naturally occur within the local area. To include berry, pollen and nectar producing species.

- Areas of green spaces planted with diverse native flora and linked to the wider landscape character.
- Creation of wildlife ponds to provide habitats for invertebrates and amphibians.

5.3.2 It is recommended that all future establishment and management of habitats is detailed within a Landscape and Biodiversity Management Plan (LBMP), with habitat development targets set in accordance with the Target Habitat Condition proposed in the Metric as part of the BNG assessment.

6 CONCLUSION

6.1 Overview

6.1.1 Given the identified evidence of presence and/or likely presence of ecological receptors which may be adversely impacted by the development scheme, further surveys and/or assessments have been recommended in order to inform a full evaluation of adverse effects. Consequently, additional protected species survey and assessment reports will be required to compliment the planning application.

6.2 Report Validity

6.2.1 In general, this report remains valid for a period of 18 months following the date of the habitat survey.

6.2.2 If the Site boundary or layout is subsequently modified and any other habitats are identified to be lost or affected by the development, then further surveys for habitats and protected species may be required.

7 REFERENCES

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APPENDICES

Appendix 1

Legislation and National Policy Summary

Appendix 1 – Legislation and Policy Summary

Legislation for Habitats/Sites

Designated Site/Habitat	Status
Ramsar Sites	Ramsar Sites are wetlands of international importance designated following the Ramsar Convention. RAMSAR sites have the same level of protection as SACs and SPAs under the Wildlife and Countryside Act 1981 (as amended).
SPA (Special Protection Areas)	SPAs seek to protect the habitats of rare and vulnerable European and UK birds. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) protect such sites in the UK.
SAC (Special Areas for Conservation)	SACs are strictly protected areas which represent important and threatened habitats in Europe and the UK. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) protect such sites in the UK.
SSSI (Sites of Special Scientific Interest)	SSSIs protect the best examples of the UK's flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were renotified under the Wildlife and Countryside Act 1981 (as amended). Modified provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000.
NNR (National Nature Reserves)	NNRs are examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. NNRs are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 (as amended). Legal protection of NNRs is provided under the Wildlife and Countryside Act 1981 (as amended).
Hedgerows	All hedgerows are protected by the Hedgerows Regulations 1997, under which it is an offence to remove or destroy certain hedgerows without planning consent or permission from the Local Planning Authority. These regulations do not apply to any hedgerow within the curtilage of, or marking the boundary of the curtilage of, a dwelling house.
LNR (Local Nature Reserves)	Designated by the National Parks and Access to the Countryside Act 1949, LNRs may be declared for nature conservation by local authorities after consultation with the relevant statutory nature conservation agency. Legal protection of LNRs is provided under the Wildlife and Countryside Act 1981 (as amended).

Legislation for Species

Species	Legal Status
Creeping Marshwort, Early Gentian, Fen Orchid, Floating-leaved Water Plantain, Killarney Fern, Lady's Slipper, Shore Dock, Slender Naiad, Yellow Marsh Saxifrage	Under the Conservation of Habitats and Species Regulations 2017 (as amended), it is illegal to deliberately pick, collect, uproot or destroy any such species.
Bats, Dormouse, Otter, Wild Cat, Great Crested Newt, Natterjack Toad, Sand Lizard, Smooth Snake, Large Blue Butterfly	These animals and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 (as amended), which makes it illegal to: • Deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs; • Deliberately disturb²⁰ such an animal; and • Damage or destroy a breeding site or resting place of such an animal. European Protected Species (EPS) licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed, namely: • The development is for reasons of overriding public interest; • There is no satisfactory alternative; and • The favourable conservation status of the species concerned will be maintained and/or enhanced. LPAs must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.
Bats, Dormouse, Great Crested Newt, Heath Fritillary, High Brown Fritillary, Large Blue, Marsh Fritillary, Natterjack Toad, Pine Martin, Otter, Red Squirrel, Sand Lizard, Smooth Snake, Swallowtail, Water Vole, Wildcat	These animals receive full protection under the Wildlife and Countryside Act 1981 (as amended), which makes it illegal (subject to certain exceptions) to: • Intentionally kill, injure or take any such animal; • Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection; and

²⁰ Under the Conservation Regulations, disturbance of protected animals includes in particular any disturbance which is likely to: (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young or to hibernate or migrate; (ii) significantly affect the local distribution or abundance of the species in question.

Species	Legal Status
	Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.
Adder, Common Lizard, Grass Snake, Slow Worm, White-clawed Crayfish	These animals receive partial protection under the Wildlife and Countryside Act 1981 (as amended), which provide protection against intentional killing or injury of any such animal.
Nesting Birds	All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it illegal (subject to exceptions) to: - Intentionally kill, injure or take any wild bird; - Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
Wildlife and Countryside Act 1981 (as amended) Schedule 1 listed Birds	Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.
Badgers	The Protection of Badgers Act 1992 makes it illegal to wilfully kill or injure a Badger, or attempt to do so and to intentionally or recklessly interfere with a Badger sett. This includes: - damaging or destroying an active sett; - obstructing access to a sett; and - disturbing a Badger while it is occupying a sett. Licences can be granted to permit sett closure and/or disturbance between July and November inclusive (i.e. outside the sow pregnancy/birth period).
Wild Mammals	The Wild Mammals (Protection) Act 1996 provides legal protection to all wild mammals (as defined by the act) against the following actions: mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, drown, crush, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
Wildlife and Countryside Act 1981 (as amended) Schedule 9 listed invasive animals (Part 1) and plants (part 2)	Certain species of plants and animals that do not naturally occur in Great Britain have become established in the wild and represent a threat to the natural fauna and flora. Section 14 of the Wildlife and Countryside Act 1981 (as amended) prohibits the release or allowed escape of animals listed in Schedule 9 to the Act and planting, or allowed growth, of any plant listed in Schedule 9 to the Act.

National Policy Summary

Section 40 of the Natural Environment and Rural Communities (NERC) Act imposes a legal duty on Planning Authorities to ‘have regard’ to the conservation of biodiversity when considering planning applications.

Section 41 of the NERC Act requires the Secretary of State to publish a list of species and habitats of principal importance for conserving biodiversity in the UK. Such Biodiversity Action Plan (BAP) Habitats and Species (2007) do not offer the species any specific protection but help to highlight the species importance at a national level. This list is used by Local Planning Authorities to identify the species and habitats that should be afforded priority when applying the requirements of the National Planning Policy Framework (NPPF).

The NPPF underpins the Government’s planning policies for England and how these are to be applied. The central theme of the NPPF is a presumption in favour of sustainable development. This presumption does not apply where development requiring Appropriate Assessment because of its potential impact on a habitats site is being planned or determined.

The NPPF states:

When determining planning applications, local planning authorities should apply the following principles:

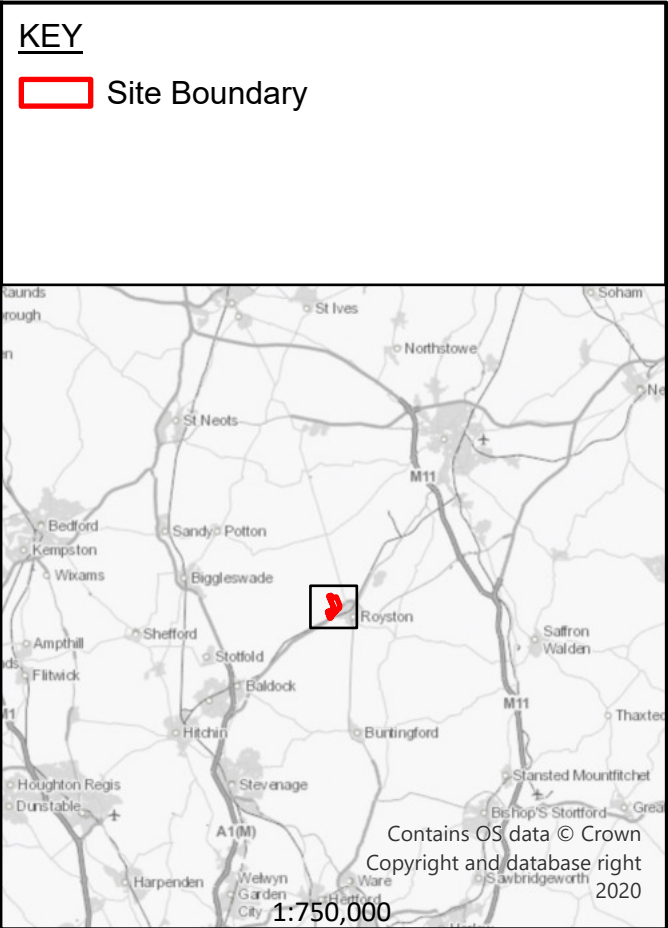
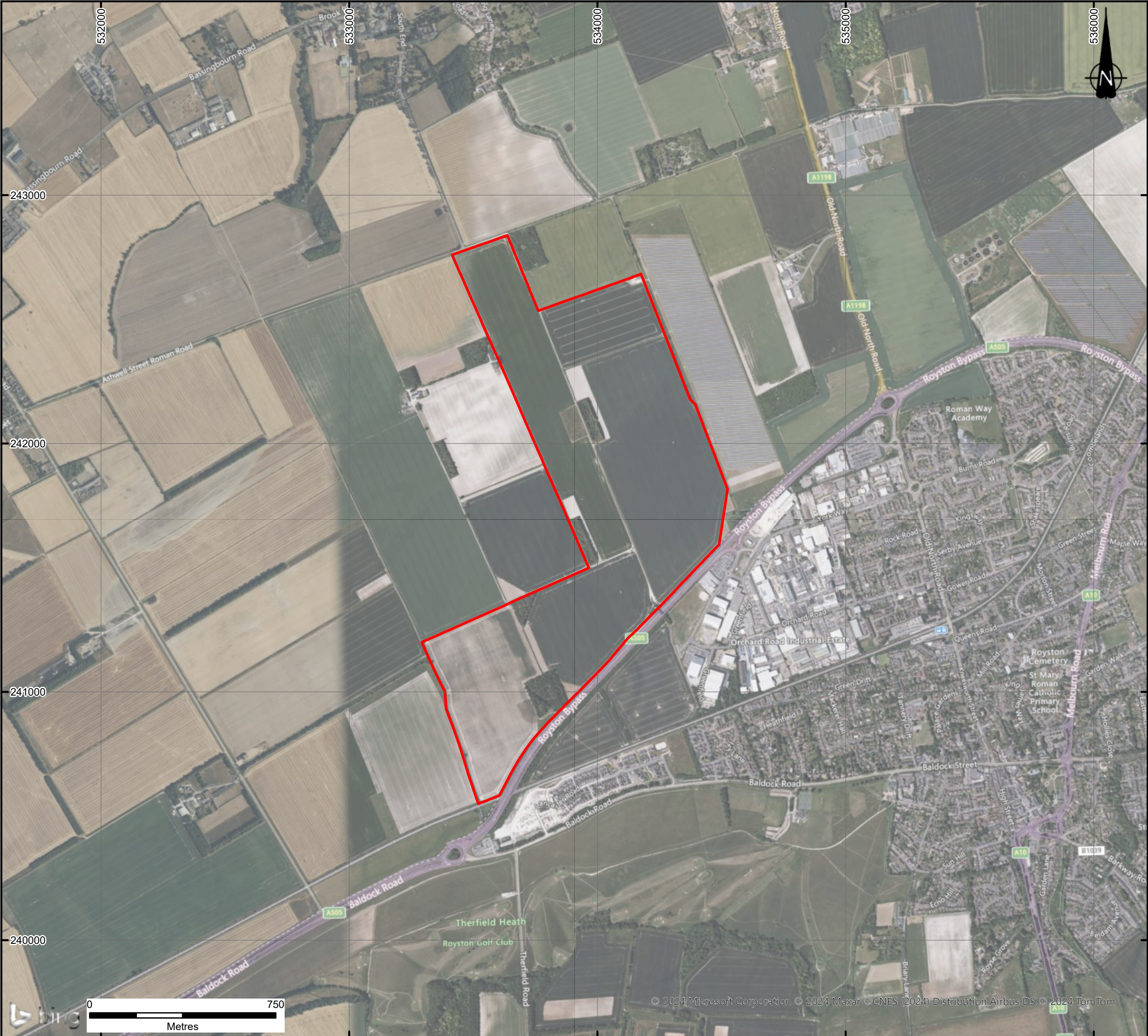
- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- Development on land within or outside a 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;*
- 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 reasons⁶³ and a suitable compensation strategy exists; and*

- *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.*
- *The following should be given the same protection as habitats sites:*
 - a) potential Special Protection Areas and possible Special Areas of Conservation;*
 - b) listed or proposed Ramsar sites; and*
 - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

The NPPF requires the Planning Authority to have a responsibility to promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan. In addition, the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

DRAWINGS



Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

REVISION	DETAILS			DATE	DRAWN
				CHKD	APPD

CLIENT	SSE
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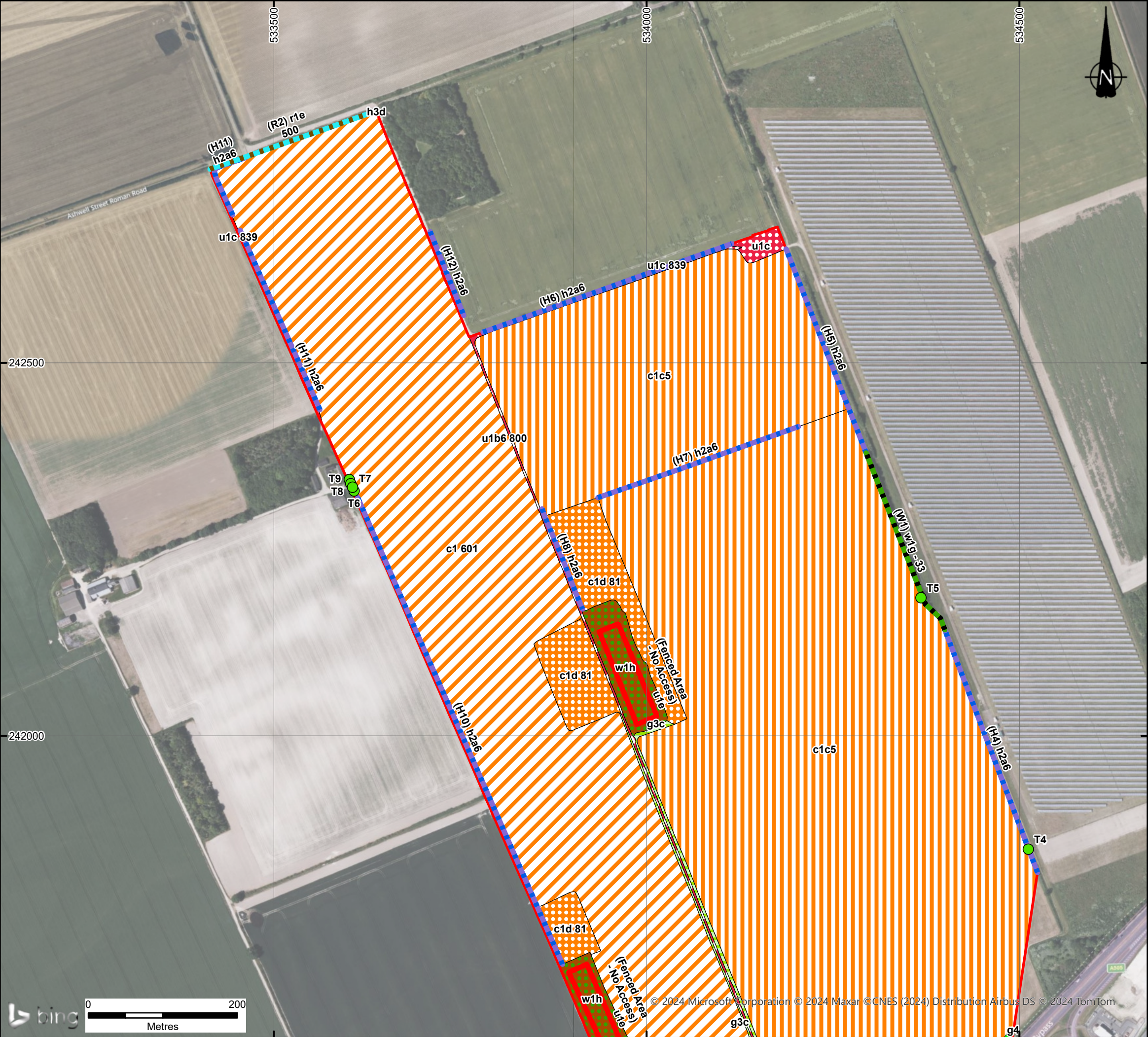
PROJECT	ROYSTON SOLAR FARM
---------	--------------------

DRAWING TITLE	SITE LOCATION PLAN
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DRG No.	GM13215-001	REV	A	SUIT. CODE	---
DRG SIZE	A3	SCALE	1:15,000	DATE	19/08/2024
DRAWN BY	EK	CHECKED BY	RE	APPROVED BY	TA







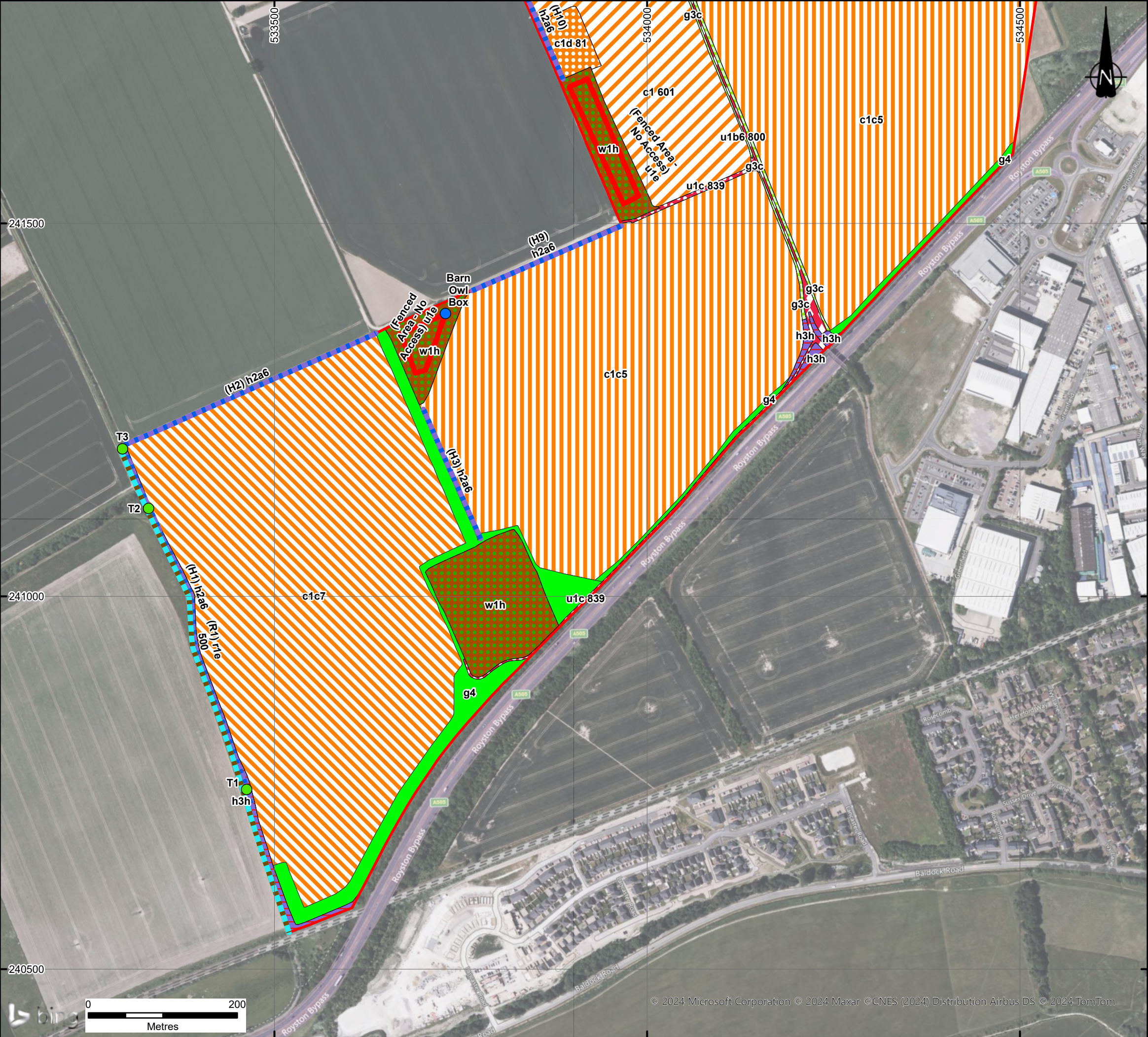
KEY

- Site Boundary
- c1 - Arable and horticulture
- c1c5 - Winter stubble
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3d - Bramble scrub
- u1b6 - Other developed land
- u1c - Artificial unvegetated, unsealed surface
- w1h - Other woodland; mixed
- h2a6 - Other native hedgerow
- r1e - canal or ditch
- u1e - Built linear feature
- Line of trees
- Tree Locations

Notes:

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REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
SSE					
PROJECT					
ROYSTON SOLAR FARM					
DRAWING TITLE					
UKHAB BASELINE SURVEY PLAN NORTH PART SHEET 1 OF 2					
DRG No.		GM13215-001		REV	A
DRG SIZE		A3		SUIT. CODE	---
SCALE		1:5,000		DATE	19/08/2024
DRAWN BY		EK		APPROVED BY	TA



KEY

- Site Boundary
- c1 - Arable and horticulture
- c1c5 - Winter stubble
- c1c7 - Other cereal crops
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b6 - Other developed land
- u1c - Artificial unvegetated, unsealed surface
- w1h - Other woodland; mixed
- h2a6 - Other native hedgerow
- r1e - canal or ditch
- u1e - Built linear feature
- Tree Locations
- Barn Owl Box

Notes:

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REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
SSE					
PROJECT					
ROYSTON SOLAR FARM					
DRAWING TITLE					
UKHAB BASELINE SURVEY PLAN SOUTH PART SHEET 2 OF 2					
DRG No.		GM13215-001		REV	A
DRG SIZE		A3		SUIT. CODE	---
SCALE		1:5,000		DATE	19/08/2024
DRAWN BY		EK		APPROVED BY	TA



KEY

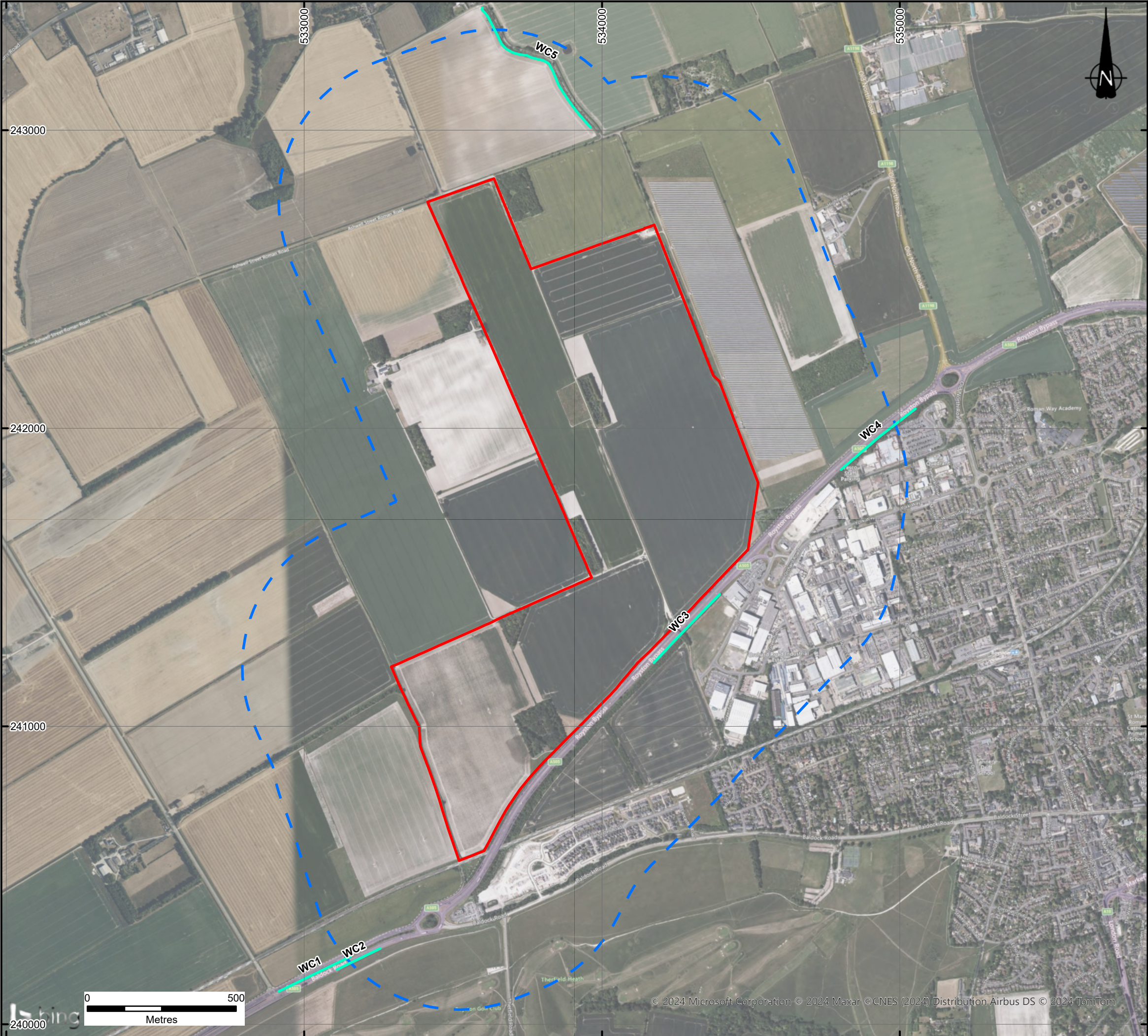
Site Boundary

Non-Accessible Fenced Off Area

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
SSE					
PROJECT					
ROYSTON SOLAR FARM					
DRAWING TITLE					
BADGER SURVEY RESULTS					
DRG No.		GM13215-003		REV	SUIT. CODE
				A	---
DRG SIZE	A3	SCALE	1:5,000	DATE	19/08/2024
DRAWN BY	EK	CHECKED BY	RE	APPROVED BY	TA



KEY

Site Boundary

500m Buffer

Watercourses

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
SSE					
PROJECT					
ROYSTON SOLAR FARM					
DRAWING TITLE					
WATERBODY LOCATION PLAN					
DRG No.		GM13215-004		REV	A
DRG SIZE		A3		SUIT. CODE	---
SCALE		1:12,500		DATE	19/08/2024
DRAWN BY		EK		APPROVED BY	TA
CHECKED BY		RE			

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